

1 Agreement with the internal possessor in Chimane: 2 A mediated locality approach

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3 4 **Abstract**

5 The paper examines a type of clausal construction in Chimane (or Tsimane', un-
6 classified, Bolivia) in which possessors which are apparently internal to patient- or
7 recipient-like possessive phrases can control object agreement on the verb. Various
8 aspects of the construction point to an analysis in which the internal possessor is
9 doubled by an external representation or 'proxy' in the clause which mediates the
10 agreement relation between the possessor and the verb. The construction bears some
11 resemblance to external possessor constructions, albeit with the added complication
12 that the possessor itself remains internal to the possessive phrase while its argument
13 function is borne by the external proxy. The paper examines features of the construc-
14 tion and contrasts it with similar or related phenomena which have been identified in
15 other languages.

16 **1 Introduction**

17 Possessors in attributive possessive constructions have an unusual status in grammar, since
18 they can refer to semantically and information structurally prominent entities, but have
19 a 'lowly' syntactic status, functioning as specifiers or modifiers internal to the phrase
20 headed by the possessed noun. Many languages have a strategy for iconically signalling

²¹ semantically or information structurally prominent possessors, which typically involves

22 ‘raising’¹ of the internal possessor out of the phrase and into a clause-level position (Payne
23 & Barshi 1999). Typically, these ‘external possessors’ (EPs) assume the status of a core
24 argument like subject or object, while the phrase containing the possessed noun is de-
25 moted to the status of an oblique or secondary object argument. This is the case in English
26 external possessor constructions (EPCs) like *I touched John on the arm*,² where the pos-
27 sessor *John* assumes the status of the object and the possessed noun *arm* is demoted to the
28 status of an oblique adjunct. Compare this EPC with its non-EPC counterpart *I touched*
29 *John’s arm*, where the possessor is internal to the phrase head by the possessed noun, and
30 this entire possessive phrase functions as the object of the verb. Since possessors assume
31 an argument status in EPCs, they can participate in clause-level syntactic processes such
32 as predicate-argument agreement.

33 However, EPCs are not the only strategy by which possessor prominence can be sig-
34 nalled. There is also a family of constructions attested in several genetically unrelated
35 languages in which possessors which are apparently internal to the phrase containing
36 the possessed noun can control agreement on the verbal predicate. These may include
37 Tangut (Kepping 1979), Tabassaran (Kibrik & Seleznev 1980; Mel’čuk 2001), Choctaw
38 (Davies 1984), Maithili (Stump & Yadav 1988; Bickel et al. 1999), Magahi (Verma
39 1991), Burushaski (Willson 1996), Jarawara (Dixon 2000), Santali (Neukom 2000),
40 Itelmen (Bobaljik & Wurmbrand 2002), Salish languages (Kiyosawa 2004), Rajbanshi
41 (Wilde 2008), Aleut (Golovko 2009), Chol (Vázquez Álvarez 2011), Tsel’tal (Shklovsky
42 2012), Bajjika (Kashyap 2012), Darai (Dhakal 2015), Mi’gmaq (Hamilton to appear) and
43 Ngumpin-Yapa languages (Meakins & Nordlinger under review).

44 These ‘prominent internal possessor constructions’ (PIPCs) (Nikolaeva 2014b) defy
45 simple explanation, because an element in one syntactic domain (the phrase containing
46 the possessed noun) is somehow able to participate in syntactic processes in another do-
47 main (the clause). This kind of configuration is (at least on initial inspection) in violation

¹This term is used descriptively here, without assuming movement of the possessor.

²The English construction is usually analysed as a possessor raising construction. I used the term ‘external possessor construction’ here and throughout the paper to refer more generally to any construction in any language in which the possessor is external to the phrase headed by the possessed nominal.

48 of constraints in many syntactic theories, which state that syntactic processes like agree-
49 ment can only occur between elements in the same local domain.³ This is in fact the case
50 in many languages. For example, an English sentence like **[Mary_j's children]_i is_j intelli-*
51 *gent*⁴ is ungrammatical because the third person singular internal possessor *Mary* cannot
52 control subject agreement on the verb. Instead the third person plural possessed noun and
53 head of the phrase *children* must necessarily control subject agreement on the verb, hence
54 the grammatical *[Mary_j's children]_i are_i intelligent*. This is due to a strict rule in English
55 grammar that requires that only possessed noun heads of possessive phrases, and not their
56 dependent possessors, can participate in predicate-argument agreement.

57 Analyses of constructions in which internal possessors can apparently control agree-
58 ment on the verb, i.e. PIPCs, must therefore be able to explain the mechanism by which
59 such an agreement relation can occur. This paper focusses on a PIPC in Chimane (or
60 Tsimane', unclassified, Bolivia), and argues that the agreement relation between the verb
61 and internal possessor can be explained by positing a representation or 'proxy' of the
62 internal possessor which stands in for it in the clause, enabling the possessor to con-
63 trol agreement on the verb while remaining internal to the possessive phrase. Essentially,
64 this clause-level representation of the internal possessor 'mediates' (Polinsky 2003) the
65 agreement relation between the possessor and the verb.

66 Consider the clauses in (1), all of which represent an event in which Juan touches
67 Sergio's hand. This kind of event can be expressed in Chimane by a default internal
68 possessor construction (IPC) in which the possessor is internal to the phrase containing
69 the possessed noun, and this entire phrase functions as the object of the verb. The IPC is
70 shown in (1a). As in many languages, this kind of event can also be expressed in Chimane

³A local domain is a syntactic environment in which elements interact with each other morphosyntactically. Some typical examples are the noun phrase, in which a head and its dependents interact with each other and the clause, in which the verb and its arguments interact with each other.

⁴In this example and throughout this study, brackets are used to indicate constituency, though as a reviewer notes, evidence for constituency in Chimane is not clear, so the brackets should be taken primarily as aids to understanding rather than an analysis. Indices are used to show agreement between targets and controllers and coindexing of antecedents and anaphors. As far as possible, possessed nouns and possessive phrases headed by possessed nouns are indicated by a subscript *i*, while possessors are indicated by a subscript *j*, for example *[Mary_j's children]_i*.

71 with an EPC, in which the possessor occurs in a position external to the phrase containing
 72 the possessed noun and functions as the object of the verb. The EPC is shown in (1b).
 73 Unusually, however, the event can also be expressed in Chimane by a third construction
 74 type in which the possessor appears to be internal to the possessive phrase, like its coun-
 75 terpart in the IPC, but can also participate in the clausal syntax by controlling agreement
 76 on the verb, like its counterpart in the EPC. This is the Chimane PIPC, as shown in (1c):⁵

- 77 (1) a. *Juan täj-je-'i* [*un mu' Sergio-s*]_i.
 Juan(M) touch-CLF-3SG.F.O hand(F) the.M Sergio(M)-F
 78 'Juan touched Sergio's hand.' (IPC)
- 79 b. *Juan täj-je-te_j* [*mu' Sergio*]_j [*un=che'*]_i.
 Juan(M) touch-CLF-3SG.M.O the.M Sergio(M) hand(F)=SUPE
 80 'Juan touched Sergio on the hand.' (EPC)
- 81 c. *Juan täj-je-bi-te_j* [*un mu' Sergio-s*]_i.
 Juan(M) touch-CLF-POSS.APPL-3SG.M.O hand(F) the.M Sergio(M)-F
 82 'Juan touched Sergio's hand.' (PIPC) [elicited]

83 In the IPC in (1a), the possessive phrase headed by the feminine possessed noun *un* 'hand'
 84 controls object agreement in gender, number and person on the verb (indicated by the suf-
 85 fix -'). This shows that the possessive phrase bears the object function in this construction,
 86 as only objects can control object agreement in Chimane. The masculine possessor *mu'*
 87 *Sergio* agrees in gender with the feminine possessed noun (indicated by the suffix -s).
 88 This shows that the possessor is a dependent of the possessed noun in this construction,
 89 as only dependents exhibit gender agreement with their heads in Chimane.

90 In the EPC in (1b), the masculine possessor *mu' Sergio* does not exhibit nominal agree-
 91 ment with the feminine possessed noun *un* 'hand'. This indicates that it is not a dependent
 92 of the possessed noun in this case, but is instead an independent nominal. It also controls
 93 object agreement on the verb, indicated by the suffix -te which signals a third person sin-
 94 gular masculine object. This shows that it, and not the possessed noun, functions as the

⁵A list of glossing abbreviations used in this paper can be found immediately following Section 8. The verbs in the examples in (1) also feature verbal classifiers which are glossed as CLF. These are suffixes which obligatorily occur with most verbal roots to create inflectable stems. They have various meanings related to subject control and transitivity – see also Sakel (2004; 2007).

95 object of the verb in this construction. The possessed noun occurs in combination with
96 the superessive *-che'*, indicating that it functions as an oblique adjunct.

97 In the PIPC in (1c), just as in the IPC, the possessor exhibits nominal agreement with
98 the possessed noun (indicated by the *-s* suffix). This shows that it is a dependent of the
99 possessed noun. However, just as in the EPC, it also appears to control object agreement
100 on the verb instead of the possessed noun. The possessive phrase headed by the possessed
101 noun cannot be the controller of agreement here, as there would be a mismatch in gender;
102 the possessed noun is feminine and the as the agreement suffix *-te* indicates a third person
103 singular masculine object. The only other possible controller of this agreement suffix
104 appears to be the masculine internal possessor. The verb also exhibits the applicative
105 suffix *-bi* in the PIPC (the nature of this suffix is discussed in more detail later).

106 As these examples show, the PIPC in (1c) shares features with both the IPC in (1a)
107 and the EPC in (1b). It shares with the IPC the fact that the possessor exhibits nominal
108 agreement with the possessed noun. Meanwhile, it shares with the EPC the fact that the
109 possessor controls object agreement on the verb. The PIPC therefore presents a problem,
110 as the status of the possessor in this construction is not clear. The nominal agreement
111 marking on the possessor suggests that it is internal to the possessive phrase, while the
112 fact that it can control object agreement on the verb suggests that it functions as the object
113 of the verb, and therefore has a realization in the clause external to the possessive phrase.

114 The aim of this paper is to consider this dual status of prominent internal possessors
115 (PIPs) in Chimane, and to show that they require a different kind of analysis from ex-
116 ternal possessors like that in (1b). An additional aim is to compare Chimane PIPs with
117 similar phenomena in other languages. This comparison shows that the Chimane PIPC
118 represents a kind of intermediate stage between fully-fledged EPCs and a different type of
119 construction, termed by Comrie (2003) as 'trigger-happy' agreement, in which agreement
120 does not correlate one-to-one with grammatical functions but can instead be controlled by
121 a range of non-arguments including internal possessors.

122 The paper is structured as follows. In Section 2, some background information on

123 Chimane is given. In Section 3, some information about the data presented in the study
124 is summarised. Section 4 offers some background on Chimane grammar and includes
125 a basic description of the structure of possessive noun phrases and the syntax of simple
126 declarative clauses. The structure of PIPCs and the morphosyntactic status of PIPs are
127 considered in Section 5, and in Section 6 an evaluation of various potential analyses of
128 PIPCs which have been proposed for similar or related constructions in other languages
129 is provided. In Section 7, the proposed analysis of Chimane PIPCs is set out. Finally in
130 Section 8, a summary is given and directions for further research are identified.

131 **2 Language background**

132 This section summarizes some basic facts about the language, including its genetic affili-
133 ation, the area where it is spoken, the number of speakers, its sociolinguistic status and an
134 overview of some previous work on the language. For further information about the Chi-
135 mane people and their language, see Daillant (2003), Sakel (2004) and Huanca (2005),
136 amongst others.

137 **2.1 Language name**

138 The Chimanes' self-designation is *Tsimane'*. When they wish to distinguish themselves
139 from outsiders, they sometimes also refer to themselves as *muntyi'* (*in*) 'person, people'.
140 They refer to their language as *tsunsi' p̄eyacdye'* 'our language', or more commonly just
141 as *tsunsi'c̄an*, literally 'in ours'. In the past the Chimanes have variously been referred
142 to by outsiders as *Chimanisa*, *Chumano*, *Chimani* and *Nawazi-moñtji* (Métraux 1942).
143 Nowadays the most commonly used designation is *Tsimane'*. In this study I use the more
144 traditional spelling variant, following the convention of previous work on the language
145 written in English.

146 **2.2 Genetic affiliation**

147 Chimane is closely related to Mosetén, which has two varieties corresponding to the two
148 villages where it is spoken: Santa Ana and Covendo. According to Sakel (2004), Santa
149 Ana Mosetén shares similarities with both Chimane and Covendo Mosetén, whereas the
150 latter two exhibit more differences. She therefore proposes that the three varieties form
151 a dialect continuum with Chimane at one end, Santa Ana Mosetén in the middle and
152 Covendo Mosetén at the other end. She characterises the continuum as a small language
153 family, calling it Mosetenan. I will not follow this terminology as it seems more likely
154 that what we are dealing with is a single language with three divergent but still partially
155 mutually comprehensible dialects. I will therefore use the term Chimane-Mosetén to refer
156 to the dialect continuum.

157 There have been proposals linking Chimane-Mosetén to other language families.
158 Swadesh (1963) claims that it shares 34% of its vocabulary with Ona and almost as much
159 with Tehuelche, which form part of the Chon family. Suárez (1969) attempts to link it to
160 the Panoan and Tacanan languages, using phonological and lexical correspondences as ev-
161 idence. Suárez (1973) proposes a Macro-Pano-Tacanan stock, linking Chimane-Mosetén
162 and Chon with Panoan and Tacanan languages as well as other languages including Yu-
163 rakaré. Greenberg (1987) proposes an even broader grouping, linking Chimane-Mosetén
164 with Panoan, Tacanan, Jê and Carib languages. All these comparisons are based on the
165 vocabulary lists found in Bibolotti (1917), which Suárez acknowledges as being an unre-
166 liable source due to inconsistencies in the transcription. Kaufman (1990) broadly agrees
167 with these groupings, but they are disputed by Sakel (2004), Van Gijn (2006) and Guil-
168 laume (2008) (amongst others), who point out that Swadesh, Suárez and Greenberg rely
169 too heavily on the comparison of first and second person pronominals, which may in fact
170 be an areal feature as they are also shared by other South American languages. Many of
171 the other lexical similarities they cite are contentious or may be explained as examples of
172 borrowing (Campbell 1997; Adelaar & Muysken 2004). A more detailed reconstruction
173 is required to prove the genetic relationship of Chimane-Mosetén to any other language.

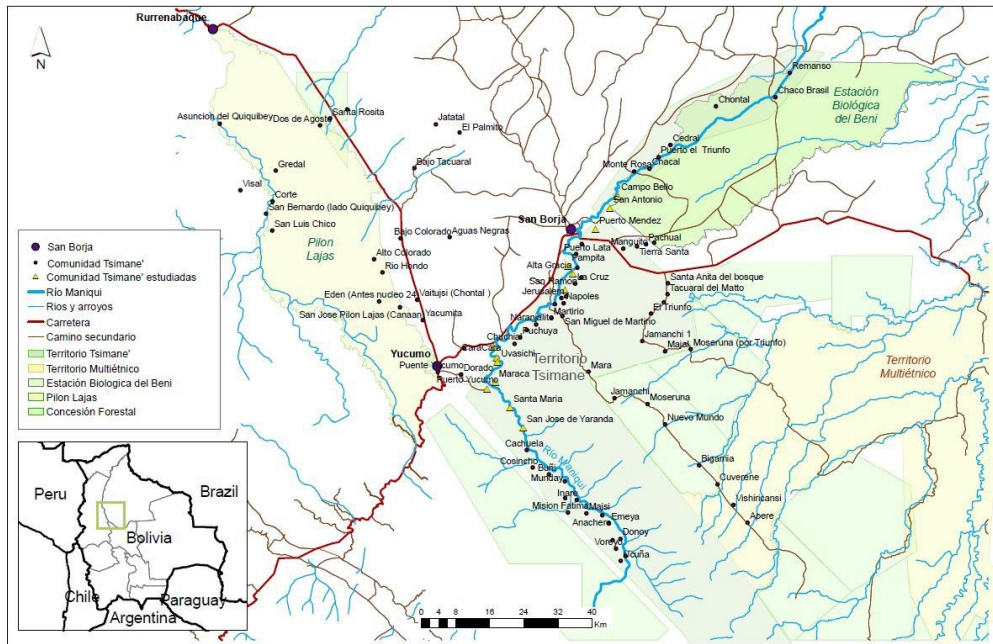


Figure 1: Map of Chimane speaking communities

174 2.3 Geography and demography

175 The Chimanes live in the Amazonian rainforests of northern Bolivia (South America).

176 Their traditional territory was in the forested foothills of the Marimonos and Eva Eva
 177 mountains, but in recent years they have also settled in the savannah extending from
 178 the town of San Borja down the Maniquí river (see Figure 1). Administratively, their
 179 territories fall within the Beni department of Bolivia, though the Chimanes have legal
 180 rights to most of the territories where they live.

181 Most Chimanes still live in traditional communities, though some live in mixed com-
 182 munities with the Andean settlers who also inhabit the area. A small number also live
 183 in San Borja, especially those involved in politics and commerce. There are also a few
 184 outlying communities outside the Beni region, notably Ixiamas in La Paz department and
 185 several communities around the town of Yucumo (Huanca 2005).

186 2.4 The number of speakers

187 Estimates of the number of ethnic Chimanes vary. The latest census (2012) reports 16,958
 188 people. This represents a large increase from the previous census (2001) which reported

189 just 4,331 people. However, it is likely that there were methodological problems in the
190 collection of data for the 2001 census, so while the increase was probably not as dramatic
191 as these figures suggest, the population does appear to have grown significantly in recent
192 years. Unfortunately the census reports do not include information about the number of
193 speakers of the language. In an earlier study, Crevels estimates “...approximately 6,350
194 speakers, amongst 8,615 people” (2009: 297).⁶ According to this estimate, 74% of the
195 people speak the language. Given that nearly all Chimanes are monolingual and do not
196 begin to learn Spanish systematically until their teenage years (if at all, see Section 2.5),
197 the actual figure may be even higher, perhaps as high as 85-90%. Applying these esti-
198 mates to the results of the last census, the number of speakers of the language may be
199 estimated to be somewhere in the region of 12,500 to 15,000. This is a unique situation
200 amongst the indigenous languages of Amazonian Bolivia; no other language has such a
201 high proportion of speakers and such a relatively large population. Most other indigenous
202 languages in the region are either highly endangered or already on the verge of extinction.

203 **2.5 Sociolinguistic situation**

204 Chimane is still the primary means of communication in all spheres of life for the major-
205 ity of the people. Crevels states that “the vitality of the language is very high, especially
206 amongst women and older people, who speak very little Spanish. In some communi-
207 ties, the children do not learn Spanish until they are fifteen years old, unless they attend
208 school in one of the Andean colonists’ communities” (2009: 297). These observations
209 fit well with my experience in the communities. While younger and middle-aged men
210 typically have at least some rudimentary knowledge of Spanish (usually attained through
211 their employment as labourers and farmhands), women, children and older people are typ-
212 ically monolingual speakers of Chimane. Crevels states that Chimane is only ‘potentially
213 endangered’ (or ‘vulnerable’ in the UNESCO terminology). All the other Amazonian Bo-
214 livian languages she cites in the chapter are endangered or worse. Mosetén, for example,

⁶All translations of quotations from non-English sources are my own.

215 has no monolingual speakers and is slowly disappearing (Sakel 2004).

216 **2.6 Environment, subsistence and culture**

217 Chimane communities are typically located along streams and rivers, with a great many
218 strung out along the Maniqui river. The Maniqui has a central place in Chimane life, re-
219 flected in its name *Cojiro*, which is also the generic term for a river. Some communities
220 are located deep in the jungle, with others on the savannah. Rivers are the primary means
221 of transport, with paths and roads of only secondary importance. The altitude varies from
222 around 200 to 1,000 metres above sea level. The climate is tropical with a mean temper-
223 ature of around 26°C. There are two main seasons: the rainy season from December to
224 March and the dry season from June to September. The temperature can drop to as low as
225 10°C during the dry season when cold winds from the south blow up over the Maniqui.

226 The Chimanes' primary means of subsistence are hunting, fishing, gathering wild fruit
227 and vegetables, and slashing and burning areas of the forest to cultivate crops such as
228 plantain, rice and manioc. They also raise livestock including chicken, pigs, and cattle.
229 Some Chimanes take part in the cash economy by selling surplus produce. Many men are
230 also employed as labourers and farmhands by loggers and ranchers.

231 The Chimanes are gentle and non-confrontational in nature and place great value on
232 their relationships. When they are not working, much of their time is spent visiting friends
233 and relatives at their houses. Once appointed on palm mats, guests are offered *shocdye'*
234 or chicha, an alcoholic drink made by boiling and chewing manioc and then leaving it
235 to ferment for a day or two. The chicha is served in a large gourd bowl which is passed
236 around and constantly refilled until everyone is satisfied. While traditionally wary of
237 outsiders, the Chimanes are welcoming and accommodating of non-Chimanes who speak
238 their language. Such people are referred to as *chätidye'* 'kin, relative' rather than by their
239 name.

240 The Chimanes have a complex belief system based around a pantheon of gods who
241 created the world and who shepherd and protect the various plants and animals of the

242 forests and rivers. These gods and the stories relating to them are discussed in detail by
243 Huanca (2005). Central to the Chimane mythos are Dojity and Micha', two brothers who
244 created the world and transformed primordial anthropomorphic beings into the animals of
245 the forest. They also taught humans how to hunt and fish in an appropriate way. Another
246 myth explains the creation of the Milky Way which traverses the Maniqui during the dry
247 season. An old woman cared for a lizard called Noco who taught people how to fish
248 during the dry season to reciprocate. The lizard then transformed himself into a large
249 animal and became the Milky Way which holds up the sky over the Earth.

250 **2.7 History**

251 We know little about the history of the Chimanes prior to their first contacts with Western
252 explorers and colonisers. Archaeological evidence suggests that they or their predeces-
253 sors have been living and hunting in their traditional territories since prehistoric times.
254 Their oral history suggests that their larger communities such as La Cruz and Nápoles
255 developed from hunting grounds and meeting places which offered safe refuge (Huanca
256 2005). The first mention of the Chimanes in the Western tradition is in 1621 by the
257 Franciscan missionary Gregorio de Bolívar, who describes them as “very good people,
258 reasonable, well-dressed and friendly” (de Bolivar 1906, in Métraux 1942: 16). They are
259 mentioned in several further reports of the 17th century as a numerous tribe living in 30
260 to 100 villages.

261 In the 18th and 19th centuries, successive missionary groups established more perma-
262 nent missions in Chimane territories, notably the town of San Borja which was established
263 and destroyed on two separate occasions before becoming more permanently established
264 with the creation of the Beni department in 1842. Despite the missionaries' attempts
265 to convert the Chimanes to Christianity, they have largely retained their own belief sys-
266 tem. The reasons why the missionaries failed to convert them may include their relatively
267 large population size, the difficulty involved in navigating their territory, their collective
268 memory of epidemics brought by white people, injustices done against them by early

269 missionaries, and various aspects of their social organization. They traditionally lived
270 in small mobile groups, allowing them to escape the missionaries. Shamans also held a
271 strong influence over the people, which precluded the imposition of other religious ideas
272 (Huanca 2005).

273 In the 20th century the Chimanes had much more extensive contact with outsiders due
274 to the development of San Borja as a centre of trade, and in 1976 with the opening of roads
275 from the highlands to the Beni department. These transport routes encouraged many more
276 people to settle in the region, who began to exploit the rainforest in a much more extensive
277 and systematic way, clearing large swathes of it to sell timber, raise cattle and establish
278 new towns and villages. These changes have dramatically affected the Chimanes' way
279 of life, as many of their traditional hunting grounds have been depleted or destroyed
280 by the environmental changes. In the 1990s they participated in the Indigenous Land
281 Demand which compelled the Bolivian government to grant them legal rights over their
282 territories. Despite these changes, the incursions of outsiders continue and the Chimanes
283 are adapting to this new reality by assimilating aspects of mainstream Bolivian culture
284 and lifestyle in areas of close contact while retaining their traditional way of life in more
285 remote communities.

286 **2.8 Previous studies**

287 A comprehensive overview of work on Masetén and Chimane carried out in the 19th and
288 20th centuries can be found in Sakel (2004: Section 1.4). A significant early work was
289 by the Italian Franciscan priest Benigno Bibolotti, who went to the mission at Covendo
290 in 1857 and collected extensive lexical and grammatical information on Masetén. This
291 work was later found in a collection of manuscripts at Northeastern University by Rudolph
292 Schuller, who reworked Bibolotti's materials and published them as Bibolotti (1917). This
293 work was the primary source of information on Chimane-Masetén until the arrival of the
294 American Protestant missionary Wayne Gill in the community in the early 1980s.

295 Gill lived with the Chimanes for over 20 years, during which time he devised the or-

296 thography still in use today and produced several works on the language, including a
 297 substantial bidirectional Chimane-English dictionary (Gill 1999a) and a shorter bidirec-
 298 tional Chimane-Spanish version (Gill 1993). The Chimane-English dictionary has over
 299 5,000 entries, with the meaning of each entry explained, exemplified and cross-referenced
 300 to other entries where appropriate. He also wrote a “teach-yourself” guide to Chimane
 301 grammar (Gill 1999b) which organises many aspects of the grammar into lessons intended
 302 for English-speaking learners of the language. Other works by Gill are a complete trans-
 303 lation of the Bible and several pedagogical works including children’s story books with
 304 parallel Chimane-Spanish texts (e.g. Gill 1987).

305 In the 1990s the Argentinean researcher Eusebia H. Martín produced several short
 306 papers dealing with aspects of Chimane grammar (see Sakel 2004: 11 for the full list).
 307 The French linguist Colette Grinevald also produced an alternative orthography as part
 308 of her alphabeticization project for lowland Bolivian languages (Grinevald 1996). This
 309 system was adopted by the Mosetenes but not by the Chimanes, who continue to use Gill’s
 310 orthography. The two systems with IPA equivalents are shown in Table 1.

Vowels			Plosives			Fric./Affr.			Nas./Tr./Appr.		
IPA	Chi.	Mos.	IPA	Chi.	Mos.	IPA	Chi.	Mos.	IPA	Chi.	Mos.
i ~ ĩ	i ~ i	i ~ ĩ	p	p	p	f	f	f	m	m	m
i ~ ĩ	u ~ u	–	p ^h	ḡ	ph	s	s	s	ṅ	n	n
e ~ ẽ	e ~ e	e ~ ẽ	ṭ	t	t	S	sh	sh	ŋ	n	n
@ ~ @̃	ã ~ ã	ae ~ ãe	ṭ	t	t	h	j	j	ñ	ñ	ñ
a ~ ã	a ~ a	a ~ ã	ṭ ^j	ty	ty	ts	ts	ts	r	r	r
o ~ õ	o ~ o	o ~ õ	k	c, qu	k	tS ^h	tʃ	tsh	V	v	w
			k ^h	ĉ, qu	kh	tʃ	ch	ch	j	y	y
			P	’	’	tS ^h	ĉh	chh			
			b	b	b						
			ḡ	d	d						
			d	d	d						
			d ^j	dy	dy						

Table 1: Comparison of Chimane and Mosetén writing systems with IPA

311 In 1999, the German linguist Jeanette Sakel began a research project on Mosestén. She
312 carried out fieldwork with the community in Covendo and has produced a series of works
313 on the language, including a reference grammar (Sakel 2004) and papers on gender agree-
314 ment (Sakel 2002), clusivity⁷ (Sakel 2005), verbal classes (Sakel 2007) and argument
315 coding (Sakel 2011). She also produced a grammatical sketch of Mosestén and Chimane
316 in Spanish (Sakel 2009). In 2012, a team of American cognitive scientists led by Ted
317 Gibson began investigating Chimane children's development and mastery of number and
318 colour concepts. They have published papers on the trajectory of Chimane children's ac-
319 quisition of number words (Piantadosi et al. 2014; Jara-Ettinger et al. 2015; Jara-Ettinger
320 et al. in press) and have a number of other papers in preparation.

321 **3 The data**

322 The data presented in this paper come from several sources. The primary source is ma-
323 terials collected and developed in the course of my own fieldwork, which I conducted in
324 Chimane communities from September to December 2012, June to July 2013 and June
325 to September 2014. Approximately six hours of this data was transcribed, translated and
326 interlinearized with morpheme-level glosses, which along with around 2,000 elicited ex-
327 ample sentences make up the main body of the corpus used for the analysis. Secondary
328 sources include Gill's grammar (1999b), the Chimane-English dictionary (1999a) and
329 various Chimane texts published by Gill and other authors. All the data presented in the
330 thesis have been checked with several native speakers and the grammaticality judgements
331 presented are theirs.

332 Throughout my time in the field I used Spanish to conduct elicitation sessions. Though
333 I have tried to draw on naturalistic data as far as possible, in many cases the examples
334 presented here come from the more artificial parts of the corpus, i.e. elicited translations

⁷Clusivity is the distinction between inclusive and exclusive first person pronouns, i.e. whether or not the addressee(s) are included in or excluded from the reference of first person pronouns (e.g. Filimonova 2005).

335 of Spanish sentences or (un)grammatical sentences of Chimane constructed by me. This
336 is due to the nature of the investigation, which relies on speakers' judgements of the
337 grammaticality of constructions which contain PIPs.

338 **3.1 Elicitation**

339 Elicitation data was gathered using the following methods. First I devised sentences in
340 Spanish and asked the consultants to translate them into Chimane. I then manipulated
341 the translated sentences, adding, removing or changing words or suffixes or changing
342 their order. I then asked for grammaticality judgements of the new constructions. If the
343 constructed examples were deemed to be grammatical, I asked for translations of them
344 back into Spanish. I compared these with the original Spanish sentences and devise new
345 sentences in Spanish in order to draw out further distinctions or to clarify the meaning of
346 the Chimane sentences.

347 In order to check the validity of the consultants' grammaticality judgements, I cross-
348 checked the sentences with other native speakers. In cases of differences of opinion, I
349 would discuss the alternatives with my primary consultants and we would decide whether
350 their original judgements were valid or alternatively whether the construction in question
351 was marginally acceptable, or only acceptable in the speech of certain (usually older)
352 speakers. I also compared the elicited and constructed examples with naturalistic ex-
353 amples from the documentary corpus. This latter method allowed me to see how the
354 consultants' grammaticality judgements matched up with what is found in spontaneous
355 speech. In cases of discrepancies between the consultants' judgements and examples from
356 the corpus, I played the original recordings back to the consultants and asked them about
357 their meaning. In some cases this would lead to refinement of the elicited data, and in
358 other cases it would throw up new structures which usually had different meanings from
359 the target structures.

360 **3.2 Picture description tasks**

361 PIPCs and IPCs alternate in discourse, but speakers' motivations for selecting between the
362 two types of construction are not immediately apparent. Both semantic and information
363 structural factors may be at work in influencing speakers' choice of construction. there-
364 fore it was necessary to gain some quantifiable data on the alternation between PIPCs and
365 IPCs in discourse. To this end, I designed two picture description tasks which involved
366 participants either describing or answering questions about pictures of people or animals
367 acting on their own or other people or animals' possessions. These materials were devel-
368 oped following recommendations for the creation of linguistic stimuli in Majid (2012).
369 The two tasks were designed to draw out some common splits in the use of PIPCs versus
370 IPCs, in particular inalienability, animacy and topicality.

371 **3.3 Other stimulus materials**

372 In order to gain some stimulus-based data which is comparable to that collected for studies
373 on other languages, I also made use of some well-known stimulus materials including the
374 Pear Story film (Chafe 1980), the Frog Story (Mayer 1969), the Circle of Dirt picture
375 description task (Eisenbeiss et al. 1999) and the Staged Events video clips (Van Staden
376 et al. 2001). These tasks were carried out with a small number of participants.

377 **3.4 Corpus**

378 The corpus data consists of transcriptions and translations of audio and video recordings
379 of native speakers telling folktales and myths; their personal histories and memories of
380 the past; observations about Chimane society and traditions, and procedural texts such as
381 recipes. It also includes some examples of free conversation and a transcription of the
382 film which I made in collaboration with the community in Puerto Mendez about their
383 way of life. This film includes many speech genres, including descriptions of important
384 cultural items and practices by people 'in situ', and also voice-over descriptions of the

385 events in the film which were recorded after the film was edited together. The recordings
386 were transcribed either by me or by a consultant and then translated into Spanish by a
387 consultant. Complicated constructions or sections were identified and we worked together
388 on them to achieve better transcriptions and translations.

389 **3.5 Glossing and example naming conventions**

390 All the examples in Chimane are written in a slightly modified version of the orthography
391 developed by Gill and glossed with lexical equivalents in English or functional glosses
392 which are based on the Leipzig Glossing Rules (Bickel et al. 2004). For glossing of
393 pronominals, I have chosen to use English pronominal equivalents rather than feature-
394 based glosses, so for example the Chimane first singular pronoun *yɯ* is glossed as ‘I’,
395 ‘me’, or ‘my’ rather than ‘1SG’. The use of the nominative, accusative and genitive
396 English pronouns in the gloss is purely for the sake of clarity and to aid the reader’s
397 understanding of the grammatical functions of the Chimane pronominals in each context.

398 Like all nominals in Chimane, pronominals do not exhibit any variance in their form
399 depending on the grammatical function which they bear (i.e. casemarking).

400 Elicited examples are marked as such. Corpus examples are accompanied by an al-
401 phanumeric code which indicates their origin. This code is based on the example naming
402 system developed by McGill (2009). The code is composed of six letters followed by two
403 sets of three numbers. The first letter indicates the example type according to the typology
404 of language documentation materials developed by Himmelmann (1998), which ranks
405 materials according to their naturalness and spontaneity. The three text types indicated
406 are staged, stimulated and observed. Staged recordings are those in which native speakers
407 offered or were asked to talk about a topic or recount a narrative etc. ‘on camera’. They
408 are indicated by an ‘s’. Stimulated recordings are those in which native speakers were
409 shown some audiovisual stimulus such as a film or picture book and asked to respond to
410 it either through explicit questions or a more general request to recount the story depicted
411 or discuss the stimulus in another way. They are indicated by a ‘t’. Observed recordings

412 are those in which native speakers did not offer or were not asked to perform any kind
413 of linguistic task or performance ‘on camera’. Instead, in observed recordings they talk
414 freely in a manner similar to how they might talk ‘off camera’. Observed recordings are
415 indicated by an ‘o’.

416 The second letter indicates the type of recording (and therefore also the modality). The
417 three types are audio recordings (indicated by an ‘a’), video recordings (indicated by a ‘v’)
418 and written texts (indicated by a ‘w’). Audio and video recordings are always of spoken
419 language. The last four letters are an abbreviation of the contributor’s name, for example
420 Margarita Lero Cuata is indicated by the abbreviation ‘malc’. The first three numbers
421 indicate the session number of that particular contributor. The second three numbers after
422 the full stop (.) indicate the clause number from the session. (2) is an example code:

423 (2) s- v- malc- 003 .009
staged video of Margarita Lero Cuata number 3 clause 9

424 All the staged, stimulated and observed examples cited in this thesis can therefore be
425 traced back to their original recording and transcription, which will be available from the
426 Endangered Languages Archive at the School of Oriental and African Studies in London.⁸
427 The elicitation materials may also be made available at a later date.

428 **4 Grammar background**

429 Chimane shares certain features with other Amazonian languages; the following is a partial
430 comparison with the features listed in Dixon & Aikhenvald (1999: 8-9).

431 The language is head marking and is predominantly agglutinative, with only a few
432 cases of fusion. It features the close central unrounded vowel /ɪ/ and exhibits contrastive
433 nasality in the vowel system. Bound pronominal forms marking possessors have the same
434 form as bound pronominals marking arguments in the clause. It is predominantly suffix-
435 ing, with only a single prefix position on the verbal predicate. Subordinate clauses typi-

⁸The corpus will be available at: <http://elar.soas.ac.uk/deposit/0348>

436 cally involve nominalized verbs. In other respects, Chimane is distinctly un-Amazonian.
437 It does not have a complex classifier or gender system, but instead features a simple bi-
438 nary split between masculine and feminine gender. It also has an extensive oblique case-
439 marking system (core case-marking does not occur) and an elaborate predicate-argument
440 agreement system in which one or more agreement suffixes cross-reference both argu-
441 ments of a transitive verb. It does not feature any incorporation of nouns, adverbs or
442 adpositions. It also has a large class of numerals following a decimal system.

443 4.1 Possessive noun phrase

444 Noun phrases consist of a head and optional dependents. In possessive noun phrases,
445 the head of the phrase corresponds to the possessed noun. Determiners and modifiers,
446 including possessors, agree with the gender of the head noun (see also Sakel (2002) for
447 more information on the gender agreement paradigms). This is shown in (3), where the
448 determiners, possessors, and adjectives exhibit nominal agreement with the feminine head
449 *ococo* and the masculine head *.itsiquij*:

- 450 (3) a. *mɔ' Juan-si' dār-si' ococo*
the.F Juan(M)-F big-F frog(F)
451 'Juan's big frog'
- 452 b. *mu' Juan-tyi' dār-tyi' .itsiquij*
the.M Juan(M)-M big-M jaguar(M)
453 'Juan's big jaguar' [elicited]

454 The fact that possessors exhibit the same nominal agreement suffixes as adjectives (*-si'/-s*
455 for feminine heads and *-tyi'/-ty* for masculine heads), along with the fact that they can co-
456 occur with determiners in the phrase, suggests that they are modifiers rather than specifiers
457 – i.e. Chimane is 'adjectival-genitive' as opposed to 'determiner-genitive' in the sense of
458 Lyons (1986).

459 With respect to constraints on the linear order of constituents in the NP, the only real
460 restriction appears to be that heads and modifiers cannot precede determiners:

- 461 (4) a. **ococo mɔ' mu'-si'*
frog(F) the.F his-F
462 ('his frog')
- 463 b. **mu'-si' mɔ' ococo*
his-F the.F frog(F)
464 ('his frog')
- 465 c. **där-si' mɔ' ococo*
big-F the.F frog(F)
466 ('the big frog') [elicited]

467 This restriction seems to indicate that the NP is a constituent with some internal structure.

468 Apart from this 'determiner-first' restriction, the other constituents can occur in any order.

469 The examples in (5) are all possible orderings of the constituents of the phrase in (3a).

470 This suggests that the rest of the NP apart from the determiner has a flat structure.

- 471 (5) a. *mɔ' ococo Juansi' darsi'*
- 472 b. *mɔ' ococo darsi' Juansi'*
- 473 c. *mɔ' Juansi' ococo darsi'*
- 474 d. *mɔ' darsi' ococo Juansi'*
- 475 e. *mɔ' Juansi' darsi' ococo*
- 476 f. *mɔ' darsi' Juansi' ococo*
- 477 'Juan's big frog.' [elicited]

478 All the examples of possessors cited so far are what will be termed here 'free' possessors

479 – nominal or pronominal possessors which agree with the gender of the possessed noun

480 and can occur anywhere in the NP except preceding the determiner. There is also a type

481 of bound possessor expression: pronominals which must attach to some NP constituent

482 and do not agree in gender with their head. This can occur with first, second and third

483 person pronominals which have the same form as freestanding pronouns. Compare the

484 examples in (6). In (6a), the pronominal possessor =*mu'* 'his' does not exhibit agreement

485 with the head noun. It only agrees with its third person singular masculine antecedent.

486 By contrast, in (6b), which is an example of a free pronominal possessor, the possessor

487 agrees with both its antecedent and with the feminine possessed noun, as indicated by the
 488 gender agreement suffix *-si'*. The bound possessor in (6a) also necessarily follows the
 489 head, while this is not a requirement for free possessors like that in (6b):

- 490 (6) a. *ococo=mu' / *mu' ococo*
 frog(F)=his / his frog(F)
- 491 b. *ococo mu'-si' / mu'-si' ococo*
 frog(F) his-F / his-F frog(F)
 492 'his frog' [elicited]

493 The alternation between free and bound pronominal possessors in discourse appears to
 494 depend (at least in part) on whether the possessor referent is contrasted with another
 495 referent. For example, it is pragmatically infelicitous to use a bound possessor in a context
 496 like that in (7), in which the possessor in the answer is contrasted with that in the question:

- 497 (7) a. *¿Cav-i-bu-ti' ca' ococo=yu?*
 see-CLF-APPL-2SG>1SG INTERR frog(F)=my
 498 'Have you seen my frog?'
- 499 b. *Jam, cav-e-bi-te ococo mu'-si' / #ococo=mu'.*
 No see-CLF-APPL-3SG.M.O frog(F) his-F / frog(F)=his
 500 'No, I saw HIS frog.' [elicited]

501 Bound possessors can also co-occur with both nominal and pronominal free possessors.
 502 In (8), bound possessor expressions co-occur with and are coreferential with the free
 503 possessor expressions:

- 504 (8) a. *Juan-si' ococo=mu'*
 Juan(M)-F frog(F)=his
 505 'Juan's frog'
- 506 b. *mu'-si' ococo=mu'*
 his-F frog(F)=his
 507 'his frog' [elicited]

508 Bound possessors which co-occur with free possessors will be termed 'doubling posses-
 509 sors' here, as they double the features of the free possessor (and possibly function as

510 representations of it in the clause, see Section 7).

511 The alternation in discourse between possessive phrases featuring both free and bound
512 possessors and those featuring only free possessors is complex, involving a number of
513 contributing semantic and information structural factors, including the relationship of
514 coreference between the subject and the internal possessor and the information structure
515 role of the internal possessor (see Section 6.4).

516 4.2 Clitic status of bound possessors

517 Bound possessors, determiners and third person singular personal pronouns all have the
518 same form: *mɔ'/=mɔ'* for feminine and *mu'/=mu'* for masculine possessors, determiners
519 and pronouns. (9) illustrates the three functions of this element:⁹

520 (9) ***Mu'*** *ca* *ɕhi'ba-qui* [***=mu'*** *v.i'* ***=mu'***]
521 **he** HRSY shoot.arrow.CLF-REFL.POSS.M.S **=the.M** brother.in.law(M)=his
521 'He shot his brother-in-law with an arrow.'

522 [svmalc012.264]

523 In (9), the same form *mu'* fulfils the functions of a third person singular masculine
524 pronoun, a determiner of the masculine head *v.i'* 'brother-in-law' and a bound possessor.
525 Various kinds of evidence suggest that in all of these functions, this element has the mor-
526 phosyntactic status of a clitic. For example, it exhibits 'promiscuous attachment' (Zwicky
527 & Pullum 1983: 503), i.e. it is not limited to attaching to a single type of word. In (9), the
528 determiner attaches to the verb and the bound possessor attaches to the possessed noun,
529 while in (10), the pronouns *=mɔ'* 'she' and *=mi* 'you' (here realised in a phonologically
530 reduced form as *=m*) attach to the hearsay evidential *ca* and the verb respectively:

⁹The first instance of this item is a freestanding pronoun and the other two are enclitics. Each instance is glossed differently to show the different functions of this item., though as a reviewer notes it is likely that it is a single polyfunctional item.

- 531 (10) *Juj-yi-' ca=**mɔ'** jäm-i-j ra' ji'-siñ-i-ti=**m**.*
 accept-CLF-F.S HRSY=**she** get.ready-CLF-M.S IRR CAUS-shrink-CLF-REFL.M.S=**you**
 532 'She accepted, "But you need to get ready to shrink yourself." she said.'
 533 [svmalc021-2.151]

534 This promiscuity can also be seen in the ability of bound possessors to 'float' within the
 535 possessive phrase. They can freely attach to any element in the possessive phrase apart
 536 from the determiner (see Section 5 on the restriction with the determiner):

- 537 (11) a. *mɔ' Juan-si' dār-si' ococo=**mu'** shandye-s*
 the.F name(M)-F big-F frog(F)=**his** green-F
 538 b. *mɔ' Juansi' dārsi'=**mu'** ococo shandyes*
 539 c. *mɔ' Juansi'=**mu'** dārsi' ococo shandyes*
 540 'Juan's big green frog' [elicited]

541 These examples show that it is possible for the bound possessor =*mu'* to attach to the
 542 head (11a), to an adjective (11b) or to the free possessor (11c).

543 Another property of clitics argued for by Zwicky & Pullum (1983) is that they do
 544 not show the kind of morphophonological idiosyncrasies which are commonly associated
 545 with affixes. This can be seen in Chimane in the ability of verbal suffixes ending in the
 546 high front vowel /i/ to trigger vowel harmony in the verb stem, a property which clitics
 547 ending in this vowel do not share. In (12a), the inflectional suffix *-ti'* triggers vowel
 548 harmony in the stem (the basic form of this stem is *ɸeye-*), but in (12b) the pronominal
 549 clitic =*mi* does not trigger this process:

- 550 (12) a. *Mi ɸi-yi-ti'=yɸ.*
 you speak-CLF-2SG>1SG=**me**
 551 'You talk to me.'
 552 b. *Yɸ ɸe-ye-ye=**mi**.*
 I speak-CLF-1SG>2SG=**you**
 553 'I talk to you.' [elicited]

554 Zwicky and Pullum also argue that clitics can attach to material which already contains
555 clitics, while affixes cannot exhibit this behaviour. This property can be seen in (13),
556 where the general plural clitic =*in* can attach to the verb which already hosts the first
557 singular clitic =*yɨ*:

558 (13) *Dam' ŷuin' jām'-si' p̄eyacdye' so'm-i-n=yɨ=in.*
 little now good-F word(F) give-CLF-3>1SG=**me=they**
559 'Though now they've taught me the Good Word.' [svsahm001.031]

560 It would be strictly ungrammatical, for example, for the inflectional affix *-n* to attach to
561 the verb after the first singular clitic in (13), while other clitics like =*in* can exhibit this
562 behaviour. Taken together, all these properties of the pronominal forms, including in their
563 function as possessors, seem to indicate that they have the status of clitics.

564 4.3 Clausal syntax

565 There is no case marking of core arguments in Chimane. However, the grammatical func-
566 tions of subject and object do appear to exist in the language and can be identified by a
567 number of coding and behavioural properties. Subjects in Chimane control subject agree-
568 ment on intransitive and transitive verbs, they can be the antecedent of anaphoric pro-
569 nouns in coordinate structures and finite dependent clauses, they cannot be the antecedent
570 of non-reflexive pronouns within clauses, they function as targets in control constructions
571 and they correspond to the addressee in imperative constructions. Objects in Chimane
572 control object agreement on transitive verbs (though object agreement may be absent un-
573 der certain conditions) and they can be the antecedent of subjects of lower clauses in
574 object control constructions.

575 Features of subjects and objects of transitive verbs are cross-referenced by a complex
576 verbal agreement paradigm. Depending on the combination of subject and object, one or
577 two suffixes are used to indicate person, number, gender and clusivity features of the two
578 arguments. Some suffixes uniquely identify both arguments, while others do not identify

579 either the subject or object argument, for example the third person object suffixes *-te* and
 580 *-'* are used with a number of different subjects, and the third person subject suffixes *-n*
 581 can be used with both first and second person objects, as indicated in Table 2. There are
 582 also several cases of syncretism in the paradigm. Table 2 shows combinations of subjects
 583 and objects and the forms that are used to identify them.¹⁰

subject	object							
	1SG	2SG	3SG.M	3SG.F	1PL.EXCL	1PL.INCL	2PL	3PL
1SG		<i>-ye</i>					<i>-yac</i>	
2SG	<i>-ti'</i>		<i>-te</i>	<i>-'</i>	<i>-tiêa'</i>	<i>-ti(-')</i>		<i>-csi(-')</i>
1PL.EXCL		<i>-yac</i>					<i>-yac</i>	
1PL.INCL		<i>-tiêa'</i>	<i>-ja</i>	<i>-ja-'</i>			<i>-tiêa'</i>	<i>-cse-ja'</i>
2PL	<i>-tiêa'</i>		<i>-tinte</i>	<i>-tiñe'</i>	<i>-tiêa'</i>	<i>-ti(-')</i>		<i>-csi(-')</i>
3		<i>-n</i>	<i>-te</i>	<i>-'</i>	<i>-n</i>	<i>-sin'</i>	<i>-nac</i>	

Table 2: Chimane transitive agreement paradigm

584 There are some examples of syncretism in Table 2, for example the *-yac* suffix which is
 585 used to mark 1SG>2PL and 1PL.EXCL>2 relations. Glottal plosives¹¹ identifying femi-
 586 nine subjects are shown in parentheses.

587 In double object constructions, it is invariably the non-patient-like argument (e.g. the
 588 recipient, goal or beneficiary) which controls object agreement on the verb. In (14a),
 589 the monotransitive verb *tu-* ‘bring’ exhibits object agreement with the feminine patient-
 590 like argument. When a primary object argument expressing a beneficiary is added to the
 591 argument structure of this verb by the benefactive applicative *-ye*, as in (14b), the verb
 592 exhibits agreement with this argument:

¹⁰The grey cells are combinations which have reflexive meanings. These are indicated by dedicated reflexive verbal morphology and are therefore not considered part of the transitive agreement paradigm.

¹¹Glottal plosives are written with an apostrophe <'> in Chimane orthography.

- 593 (14) a. *Judyeya' mɔ' qui jejmitidye' tu-i-'=in.*
and the.F so cooked.food(F) bring-CLF-3SG.F.O=they
594 'And they brought hot food.'
- 595 b. *Judyeya' qui ca jejmitidye' tu-ye-te=in.*
and so HRSY cooked.food(F) bring.CLF-BEN-3SG.M.O=they
596 'And they brought him hot food.'

597 [svmalc021-1.021,076]

598 It would be ungrammatical for the ditransitive verb in (14b) to agree with the patient-
599 like argument *jejmitidye'* 'hot food'. Thus Chimane exhibits secundative alignment with
600 respect to agreement between verbs and patient- and non-patient-like arguments.

601 Apart from not being able to control object agreement, the patient-like argument in
602 ditransitive constructions continues to feature other object properties identified above,
603 indicating that it retains the status of an object. In this paper, the object which controls
604 agreement on the verb in a ditransitive construction will be termed the primary object,
605 while the non-agreement-controlling object will be termed the secondary object. The
606 primary object is the 'direct' (i.e. patient-like) object of a monotransitive verb or the
607 'indirect' (i.e. non-patient-like object) object of a ditransitive verb or , while the secondary
608 object is the direct/patient-like object of a ditransitive verb (e.g. Bresnan 1982; Dryer
609 1986).

610 Finally with respect to background information on Chimane grammar, it is important
611 to note for the purposes of this study that the language exhibits many features associated
612 with non-configurational syntax, including pragmatically determined word order, discon-
613 tinuous constituents and extensive pro-drop (Hale 1983).

614 **5 Prominent internal possessor construction**

615 This section provides an introduction to some features of the Chimane PIPC. The cru-
616 cial feature which differentiates the PIPC from the EPC in Chimane is the fact that the
617 possessor appears to be internal to the phrase headed by the possessed noun, while the
618 external possessor (EP) is by definition external to this phrase. There are several kinds of

619 evidence which can be used to show that possessors in PIPCs are internal to the phrase:
 620 they exhibit nominal agreement with the possessed noun head of the possessive phrase,
 621 they exhibit certain positional restrictions within the phrase, and they cannot undergo syn-
 622 tactic processes like passivization separately from the possessive phrase. These properties
 623 are discussed in more detail in Section 5.2. Before that, a summary of previous work on
 624 PIPCs in Chimane and Mosestén is given in Section 5.1.

625 5.1 Previous analyses of PIPCs in Chimane-Mosestén

626 Gill (1999b: 105-6) provides some interesting insights into the structure and function of
 627 Chimane PIPCs. He identifies the disjoint relation between subject and possessor, call-
 628 ing the *-bi* suffix the “another’s possession” suffix. He also notes the neutral semantics
 629 of the suffix, stating that it may have a benefactive/malefactive meaning, but this is not
 630 necessarily the case. He identifies the alternation in argument structure, stating that the
 631 (formerly direct) object becomes an ‘indirect object’. He further notes the morphophono-
 632 logical change which the suffix undergoes preceding other suffixes – see e.g. (22), and
 633 the unusual ordering of the suffix in combination with the agreement suffix *-cse* (3PL.O)
 634 – see e.g. (35).

635 Sakel (2004) states the *-bi* suffix in the disjoint PIPC in Mosestén “expresses that an
 636 action is carried out to a possession of the person in object position, against the will of
 637 this person” (2004: 323), citing the following example:

638 (15) *Khäki waemtyi'=mi me'ki' wae-wa'-ki-n yi-'=mi*
 because husband=your like.that beat-PROG-PROG.TR-3>2SG say-F.S=you
 639 *yi-bi-ti' yäe yij mi.*
 say-POSS.APPL-2SG>1SG my footprint you
 640 ‘Because your husband is beating you like that, you said, you said to my foot-
 641 print.’ (Sakel 2004: 323-324)

642 Sakel does not provide any further explanation of this construction, but the implication
 643 seems to be that the action of talking to the speaker’s footprint is done against their

644 will. Sakel also notes the unique function of the suffix, stating that unlike other valency-
 645 changing morphology, it does not also double as a verbal classifier, and the unusual or-
 646 dering of the *-bi* suffix.

647 5.2 NP-internal status of possessors in PIPCs

648 The primary piece of evidence which indicates that possessors in PIPCs are internal is
 649 the fact that they exhibit nominal agreement with the possessed noun, while EPs do not.
 650 This is an obligatory property of possessors in PIPCs; they cannot control agreement
 651 on the verb if they do not exhibit nominal agreement with the possessed noun. In (16),
 652 the possessor obligatorily exhibits nominal agreement with the feminine possessed noun
 653 *ococo* ‘frog’, indicated by the suffix *-si’*:

654 (16) *Yɔ nɔij-bi-tej* [mɔ’ ococo Juan_j-si’]_i / *mɔ’ ococo Juan
 I see-POSS.APPL-3SG.M.O the.F frog(F) Juan(M)-F the.F frog(F) Juan(M)
 655 ‘I saw Juan’s frog.’ [elicited]

656 This is a strong indication that possessors in PIPCs are internal to the possessive phrase,
 657 as only internal modifiers can exhibit nominal agreement with the head of the phrase.

658 Another test which can be used to show whether possessors are internal or not is word
 659 order: if the possessor and possessed noun occur in a fixed order, or cannot be separated by
 660 another clausal element, then this shows that they form a constituent. However, these tests
 661 cannot be applied in Chimane, as the language has non-configurational syntax, including
 662 free word order and discontinuous constituents. (17a) and (17b) show that possessors and
 663 possessed nouns in PIPCs can occur in either possessed-possessor or possessor-possessed
 664 order, while (17c) shows that possessors can occur discontinuously from the rest of the
 665 possessive NP in the clause. There is no difference in meaning between this sentence and
 666 the variants with continuous possessive phrases in (17a) and (17b):

- 667 (17) a. *Yɔ nɔij-bi-te_j [mɔ' ococo miquity_j-si']_i.*
 I see-POSS.APPL-3SG.M.O the.F frog(F) boy(M)-F
- 668 b. *Yɔ nɔij-bi-te_j [mɔ' miquity_j-si' ococo]_i.*
 I see-POSS.APPL-3SG.M.O the.F boy(M)-F frog(F)
- 669 c. *Yɔ [miquity_j-si']_i nɔij-bi-te_j [mɔ' ococo]_i.*
 I boy(M)-F see-POSS.APPL-3SG.M.O the.F frog(F)
- 670 'I saw the boy's frog.' [elicited]

671 Note that even when the possessor is separated from the rest of the possessive phrase
 672 by other clausal elements, it still exhibits nominal agreement with the possessed noun.
 673 This indicates that it is still a dependent of the possessed noun, despite being separated
 674 from it by other clausal constituents. These examples show that neither the linear order
 675 of possessors and possessed nouns in continuous possessive phrases, nor discontinuity of
 676 elements of the possessive phrase in the clause, can be used as tests to determine whether
 677 the possessor is internal in PIPCs.

678 However, there are some other types of restrictions on the order of elements within
 679 continuous possessive phrases which may provide further evidence that possessors are in-
 680 ternal. Recall from Section 4.1 that possessors can co-occur with determiners in the pos-
 681 sessive phrase (i.e. Chimane is adjectival-genitive) and that the determiner must always
 682 precede all other phrasal constituents. There are also cases in which nominal posses-
 683 sors occur in a possessive phrase featuring a determiner, and the nominal possessor also
 684 combines with its own determiner. An example of this can be seen in (18a), where the
 685 masculine possessed noun *cas* 'knee' combines with the masculine determiner *mu'* and
 686 the feminine possessor *Isabeltyi'* 'Isabel's' combines with the feminine determiner *mɔ'*.
 687 The possessive phrase in (18a) can be literally translated as '[the knee [the Isabel's]]'.
 688 When possessors combine with their own determiners in a phrase in which the possessed
 689 noun also combines with a determiner, the possessor expression can only occur in certain
 690 positions within the phrase. They can occur in a phrase-final position, as in (18a), but they
 691 cannot immediately follow the higher level determiner of the entire possessive phrase, as
 692 in (18b):

- 693 (18) a. *Maria täj-je-bi-'* [*mu' cas[=mø' Isabel-tyi']_j]_i*
 Maria(F) touch-CLF-POSS.APPL-3SG.F.O the.M knee(M)=the.F Isabel(F)-M
 694 'Maria touched Isabel's knee.'
- 695 b. **Maria täj-je-bi-'* [*mu'[=mø' Isabel-tyi'] cas*].
 Maria(F) touch-CLF-POSS.APPL-3SG.F.O the.M=the.F Isabel(F)-M knee(M)
 696 ('Maria touched Isabel's knee.')
- 697 [elicited]

698 (18b) shows that it is impossible for the possessor to immediately follow the determiner of
 699 the whole possessive phrase when it also combines with its own determiner. The fact that
 700 possessors which combine with determiners cannot immediately follow the determiner
 701 indicates that possessive phrases in PIPCs have the same internal structure as the posses-
 702 sive phrases discussed in Section 4.1, with the determiner occupying a higher position and
 703 the other constituents of the phrase occupying a lower position. These restrictions also
 704 provide further evidence that possessors in PIPCs are internal to the possessive phrase.

705 Another test which may indicate that possessors in PIPCs are internal to the possessive
 706 phrase is the fact that they are not accessible to passivization. Dalrymple & Nikolaeva
 707 (2011: 24) state that passivization is not always a clear test of objecthood, as the object
 708 of a basic transitive verb does not necessarily correspond to the subject of a passive verb.
 709 However, this test is often used as a diagnostic for objecthood, and can therefore be used
 710 to show whether a possessor which controls agreement on the verb is an object or not.
 711 Exactly this kind of test is used by Stump & Yadav (1988) to show that possessors which
 712 control agreement on the verb are internal to the possessive phrase in Maithili (Indo-
 713 Aryan).

714 In Maithili, the verb agrees with the controlling NP in person and honorific grade: the
 715 grades are High-Honorific, Honorific, Mid-Honorific, and Non-Honorific (Yadav 1996).
 716 Agreement with the subject is obligatory, but in addition Maithili exhibits a secondary
 717 type of agreement. This secondary agreement is optional and is controlled by a non-
 718 subject NP. The grammatical function of this element may vary: in (19a) it is a direct
 719 object, in (19b) it is an oblique instrumental object, and in (19c) it is an indirect object.

- 720 (19) a. *dekhalthun_{i,j}*
 saw.3H.2MH
 721 ‘He (honorific) saw you (mid-honorific).’
- 722 b. *tō_i hunka:-sa_j kiæ khisiæ_l chahun_{i,j}*
 you him.H-INSTR why angry be.2MH.3H
 723 ‘Why are you (mid-honorific) angry with him (honorific)?’
- 724 c. *h@m_i to-ra_j kitab_k d-@it ch-i@uk_{i,j}*
 I you.NH-OBJ book give-PTCP be-1.2NH
 725 ‘I gave a book to you (non-honorific).’ (Stump & Yadav 1988: 306-7)

726 Sub-clausal constituents such as objects of postpositions generally cannot control sec-
 727 ondary agreement on the verb, but crucially, secondary agreement is possible with the
 728 internal possessor, as in the examples in (20) where possessors internal to subject and
 729 object arguments control the secondary agreement on the verb:

- 730 (20) a. [*tohar_j ba:bu*]_i *Mohan-ke_k dekhalthun_{i,j}*
 your father Mohan-OBJ saw.3H.2NH
 731 ‘Your (non-honorific) father saw Mohan.’
- 732 b. *o_i [tora:_k ba:p-ke]_j dekhalthun_{i,k}*
 he.H your.NH father-OBJ saw.3H.2NH
 733 ‘He saw your (non-honorific) father.’ (Stump & Yadav 1988: 309, 317)

734 In (20a), the verb agrees with the possessed noun *ba:bu* ‘father’ and the possessor *tohar*
 735 ‘your’, both of which are internal the subject NP. In (20b), the verb agrees with the subject
 736 *o* ‘he’ and the possessor *tora:* ‘your’ which is internal to the object NP.

737 The only possible passive for (20b) is (21a), where the subject corresponds to the entire
 738 possessive phrase which bears the object function in (20b). Example (20b) cannot have a
 739 passive variant such as (21b) whose subject is the former possessor:

- 740 (21) a. [*tohar_j ba:p*]_i *dekh_{al} gel_i*
 your father seen went.3NH
 741 ‘Your (non-honorific) father was seen.’
- 742 b. **tō ba:p(-ke) dekh_{al} gele*
 you.NOM father-OBJ seen went.2NH
 743 (‘Your (non-honorific) father was seen.’) (Stump & Yadav 1988: 317)

744 In (21a), the auxiliary verb *gel* exhibits agreement with the possessive phrase headed
 745 by the the third person non-honorific possessed noun *ba:p* ‘father’. The possessor also
 746 stands in the genitive case in (21a). An example like (21b), where the possessor stands
 747 in the nominative and the auxiliary exhibits agreement with the possessor, is ungrammat-
 748 ical. Stump & Yadav argue that this shows that the possessor which controls secondary
 749 agreement in (20b) does not bear an argument function in the clause, but is internal to the
 750 possessive phrase headed by the possessed noun.

751 Passivization of PIPCs is different in Chimane, as the possessor appears (at least on
 752 initial inspection) to be able to function as the subject of the passive, as shown in (22a),¹²
 753 where the passive verb exhibits subject agreement with the feminine possessor.¹³ How-
 754 ever, in a similar way to Maithili, where the possessor must stand in the genitive case,
 755 in Chimane, the possessor must exhibit nominal concord with the head noun in this con-
 756 struction, as shown by the ungrammaticality of (22b):

- 757 (22) a. [*Maria*_j-*ty vojity*]_i=*mo*_j *ja’-cat-bu-ti-’*_j (*Juan*)_k
 758 *Maria*(F)-M brother(M)=*she* PASS-hit-POSS.APPL-PASS-F.S *Juan*(M)
 759 *Maria’s brother was hit (by Juan).’*
- 759 b. **Maria vojity ja’-cat-bu-ti-’* (*Juan*)
 760 *Maria*(F) brother(M) PASS-hit-POSS.APPL-PASS-F.S *Juan*(M)
 760 (*Maria’s brother was hit by Juan.’*) [elicited]

761 The fact that possessors must exhibit nominal concord with the possessed noun in passive
 762 PIPCs provides some indication that they cannot function as independent arguments in
 763 syntactic processes such as passivization. This provides further evidence that possessors
 764 in PIPCs are internal to the possessive phrase.

765 The tests outlined here all indicate that possessors in PIPCs are internal to the posses-
 766 sive phrase just like their counterparts in the default IPC construction. Before moving on
 767 to look at potential analyses of PIPCs and then the proposed analysis of the construction,

¹²The applicative suffix *-bi* is realised as *-bu* in these examples due to a morphophonological rule which entails that high vowels in verbal suffixes are lowered when they are followed by other suffixes which also feature a high vowel.

¹³In fact, as argued later, it is not the internal possessor which functions as the subject of the passive verb in (22a), but rather an external proxy of the internal possessor.

768 one other distinctive aspect of it – the *-bi* suffix which occurs on the verb – is considered
769 in Section 5.3.

770 **5.3 Applicative *-bi***

771 In Chimane, when non-patient-like arguments control object agreement on semantically
772 monotransitive verbs, applicative morphology also typically appears on the verb. This is
773 also the case in the PIPC; when the non-patient-like possessor controls object agreement
774 on the verb instead of the possessive phrase headed by the the patient-like possessed noun,
775 the *-bi* suffix obligatorily occurs. Therefore this suffix appears to have an applicative-like
776 function. However, applicatives are typically a means by which an adjunct or peripheral
777 argument can function as a core object argument (Peterson 2007). This ‘promotion’ of
778 adjunct or peripheral argument to object function also results in some rearrangement of
779 the mapping between grammatical functions and semantic roles, with the applied object
780 typically bearing a non-patient-like role like beneficiary, recipient or goal etc. This def-
781 inition of applicatives has two key components. First, that the applied argument is an
782 object, and second that it maps to some semantic role in the argument structure of the
783 verb. On initial inspection, PIPs do not appear to meet either of these criteria, as they do
784 not appear to function as independent arguments in the clause, and it is not clear whether
785 they always map to a semantic role distinct from that borne by the possessed noun. These
786 two properties are considered in turn here.

787 It is useful to contrast the *-bi* suffix with other more typical examples of applicatives
788 in the language. For example, the benefactive applicative is a classical object-inserting
789 operation. In benefactive applicative constructions, an object is inserted into the argument
790 structure of the verb which maps to the beneficiary role. This operation is illustrated by
791 the default transitive construction in (23a) and the benefactive applicative construction in
792 (23b):

- 793 (23) a. *Yu quev-e-' ococo (miquity=dye-s).*
 I look.for-CLF-3SG.F.O frog(F) boy(M)=BEN-F
 794 'I looked for the frog (for the boy).'
- 795 b. *Yu quev-e-ye-te ococo miquity.*
 I look.for-CLF-BEN-3SG.M.O frog(F) boy(M)
 796 'I looked for the frog for the boy.' [elicited]

797 In (23a), the beneficiary is expressed by an oblique nominal *miquitydyes* 'for the boy'.¹⁴
 798 The patient-like argument *ococo* 'frog' controls object agreement on the verb and is there-
 799 fore assumed to bear the object function. In (23b), the verb exhibits the benefactive ap-
 800 plicative suffix *-ye* and the beneficiary *miquity* 'boy' controls object agreement on the
 801 verb. It is therefore assumed that the latter functions as the primary object while the pa-
 802 tient *ococo* 'frog' functions as the secondary object of the derived ditransitive verb. Both
 803 the object inserting property of the applicative and the alternative mapping between argu-
 804 ment structure and grammatical functions can be observed in this construction versus the
 805 default.

806 Applying these properties to the *-bi* suffix in PIPCs, the fact that the possessor con-
 807 trols object agreement seems to indicate that the suffix enables it to function in a similar
 808 way to the beneficiary in benefactive applicative constructions, taking over the primary
 809 object function and demoting the possessive phrase headed by the possessed noun to
 810 a secondary object status. However, unlike in the benefactive applicative construction,
 811 where the absence of the benefactive marking on the nominal bearing the beneficiary role
 812 clearly indicates its promotion to argument status, it is not clear how the *-bi* suffix enables
 813 the possessor to function as the primary object in the PIPC, since there is no comparable
 814 change in its marking with respect to its counterpart in the default construction. Examples
 815 (1a) and (1c) are repeated in (24) to illustrate this point:

¹⁴The benefactive *=dye-* in (23a) agrees with the feminine gender of the object *ococo* 'frog'. It is not entirely clear why this is the case. Sakel (2002: 294) states that "...the benefactive case marking might agree in gender with an established topic...", while in the Mosetén grammar she states that "the benefactive element ... can be interpreted as a secondary predication of the object noun phrase" (2004: 110-11). Both these proposals are dubious and are not backed up by any further argumentation. Further research is required to show why this agreement pattern occurs.

- 816 (24) a. *Juan täj-je-'i* [un mu' Sergio_j-s]_i.
 Juan(M) touch-CLF-3SG.F.O hand(F) the.M Sergio(M)-F
 817 'Juan touched Sergio's hand.'
- 818 b. *Juan täj-je-bi-te_j* [un mu' Sergio_j-s]_i.
 Juan(M) touch-CLF-POSS.APPL-3SG.M.O hand(F) the.M Sergio(M)-F
 819 'Juan touched Sergio's hand.' [elicited]

820 Unlike the beneficiary in the benefactive applicative construction, the possessor in the
 821 PIPC exhibits the same marking as its counterpart in the default transitive construction,
 822 and as has been shown in Section 5.2, various kinds of evidence show that the possessor
 823 is internal to the possessive phrase in the PIPC.

824 As well as not exhibiting the marking usually associated with independent arguments,
 825 it is also not clear whether PIPs always map to a semantic role different from the possessed
 826 noun like the beneficiary in benefactive constructions. Gill (1999b) observes that the
 827 possessor can have a beneficiary or maleficiary role in the PIPC; he notes that the action
 828 expressed by the verb is done “against [the possessor referent’s] consent” (1999b: 125).
 829 Sakel (2004) also states for the construction in Mosestén that the action is done “against
 830 the will of [the possessor referent]” (2004: 323). While this beneficiary/maleficiary role
 831 may be assigned to the possessor in some cases, it is important to note that this is not the
 832 only possibility, and in many cases it is not clear that PIPs are assigned any semantic role
 833 – (Gill 1999b: 105) also makes this observation. Some examples which help to illustrate
 834 this point are considered here.

835 Shklovsky (2012) compares a PIPC-like construction in Tseltal (Mayan) with certain
 836 well-established features of EPCs, and makes a series of observations from which he
 837 concludes that possessors are not assigned a semantic role in the Tseltal construction. In
 838 EPCs, some kind of ‘affectee’ role is often assigned to the EP, and the integration of the
 839 EP into the clausal syntax is the means by which some languages signal this role (cf.
 840 Shibatani 1994). Shklovsky shows that this is not the case in Tseltal, and his tests can
 841 also be usefully applied to the PIPC in Chimane. First of all, the construction can occur
 842 with so-called ‘non-affecting’ predicates like ‘see’. Example (16), repeated here in (25),

843 shows that PIPs can also occur with non-affecting predicates in Chimane.

- 844 (25) *Yu naji-bi-te* *mɔ' ococo Juan-si'*
 I see-POSS.APPL-3SG.M.O the.F frog(F) Juan(M)-F
 845 'I saw Juan's frog.' [elicited]

846 PIPs can also be inanimate objects, as in (26) where the possessor *mesa* 'table' is an
 847 inanimate object and yet can control agreement on the verb:

- 848 (26) *Juan cäts-je-bi-'* *yuj mesa-s*
 Juan(M) hack-CLF-POSS.APPL-3SG.F.O leg(F) table(F)-F
 849 'Juan cut the table's leg.' [elicited]

850 EPCs are also often limited to occurring with certain types of possessors (Payne & Barshi
 851 1999). There is no such restriction with PIPCs in Chimane; any kind of possessive re-
 852 lationship can feature a PIP, including alienable possessors. Possessors of body parts
 853 (27a), kin (27b), alienable possessions (27c), and even non-specific possessors (27d) can
 854 all occur in the construction.

- 855 (27) a. *Juan çat-bi-te* *un' mu' Sergio-s*
 Juan(M) cut-POSS.APPL-3SG.M.O hand(F) the.M Sergio(M)-F
 856 'Juan cut Sergio's hand.'
- 857 b. *Juan pus-je-p-te* *Sergio-s voji'=mu'*
 Juan(M) kiss-CLF-POSS.APPL-3SG.M.O Sergio(M)-F sister(F)=his
 858 'Juan kissed Sergio's sister.'
- 859 c. *Maria jäc-bi-'* *ts̃j̃ mɔ' achu-ty*
 Maria(F) remove-POSS.APPL-3SG.F.O louse(M) the.F dog(F)-M
 860 'Maria picked the dog's fleas.'
- 861 d. *Maria quev-bi-te* *mɔ' majitidye' son-si'*
 Maria(M) look.for-POSS.APPL-3SG.M.O the.F love(F)-M man(M)-F
 862 'Maria was looking for a (non-specific) man's love.' [elicited]

863 This is contrast to the Chimane EPC, which appears to be limited to occurring with body
 864 part possessive relationships (further research is required to definitively show this but
 865 EPCs only occur with body part relationships in my corpus). Example (1b) is repeated in
 866 (28) to illustrate the Chimane EPC:

867 (28) *Juan täj-je-te; [mu' Sergio]_j [un=che']_i.*
 Juan(M) touch-CLF-3SG.M.O the.M Sergio(M) hand(F)=SUPE
 868 'Juan touched Sergio on the hand.' [elicited]

869 EPCs are also sometimes limited to only occurring with dynamic verbs (Payne & Barshi
 870 1999). Again this is not the case with PIPs in Chimane, which can occur even with highly
 871 stative predicates such as *ch.i-* 'know':

872 (29) *Yu chi-ye-bi-' pendye' Maria-ty*
 I know-CLF-POSS.APPL-3SG.F.O friend(M) name(F)-M
 873 'I know Maria's friend.' [elicited]

874 These examples indicate that while PIPs may be assigned an 'affectee' type role in some
 875 cases, this does not appear to be a definitional function of the *-bi* suffix. I will therefore
 876 follow Shklovsky's analysis of Tseltal and analyse the *-bi* suffix as a non-semantic role-
 877 assigning applicative.

878 These data indicate that while the *-bi* suffix clearly has some role to play in enabling
 879 the PIP to control object agreement, it does not have the typical properties associated with
 880 applicatives, as the applied object appears to correspond to an internal possessor which
 881 does not appear to be associated with any particular semantic role.

882 The observations made in this section lead me to conclude that the possessor in the
 883 PIPC is internal to the possessive phrase, and that the applicative *-bi* increases the va-
 884 lency of the verb such that the internal possessor is promoted to the primary agreement-
 885 controlling object function in the clause. However, there is no change in the marking of
 886 the possessor despite this promotion, and the possessor is also not necessarily assigned
 887 a semantic role different from the possessive phrase which it is internal to. This there-
 888 fore begs the question of how this construction should be analysed, as crosslinguistically
 889 (and also everywhere else in Chimane grammar) NP-internal elements typically cannot
 890 bear argument functions or participate in clause-level syntactic processes like predicate-
 891 argument agreement. Some potential analyses of the PIPC are considered in Section 6,
 892 before the proposed analysis is set out in Section 7.

893 **6 Potential analyses**

894 As outlined in Section 5.2, various types of evidence indicate that an analysis in which the
895 possessor itself is external to the possessive phrase is not appropriate for the PIPC. There
896 are several other potential analyses of the construction which have been proposed for
897 similar or related constructions in other languages. The possibilities can be summarized
898 as follows:

- 899 a. The possessor takes on the function of the head of the possessive phrase (head-
900 dependent reversal – Dixon 2000).
- 901 b. The possessor is not the head but occurs in a privileged syntactic position in
902 the possessive phrase which enables it to function as the argument (prominent
903 NP-internal position – Nikolaeva 2005; 2014a).
- 904 c. The head of the possessive phrase is incorporated into the verb (incorporation –
905 Shklovsky 2012).
- 906 d. The possessor is internal to the possessive phrase but has an external representa-
907 tion or ‘proxy’ in the clause which functions as the argument (mediated locality
908 – Polinsky 2003; Le Sourd 2014).
- 909 e. Predicate-‘argument’ agreement does not correlate one-to-one with grammati-
910 cal functions but is pragmatically determined and can be controlled by topical
911 or topic-worthy non-arguments including internal possessors (topic agreement –
912 Dalrymple & Nikolaeva 2011).

913 Apart from the final possibility, the differences between these potential analyses all centre
914 around the status, position and grammatical function of the internal possessor. In terms of
915 its status, it is either the head of the phrase or not. In terms of its position, it is either in a
916 prominent syntactic position in the phrase or not, and either has a clause-level representa-
917 tion or not. In terms of its grammatical function, it (or its external representation if it has
918 one) is either an argument of the verb or not. If the possessor is neither the head of the

919 phrase, nor has a privileged syntactic position in the phrase nor a clause-level proxy, then
 920 it is necessary to consider the final possibility – that internal possessors can control agree-
 921 ment when they are semantically or information structurally prominent, and this is the
 922 only factor that affects agreement.¹⁵ The data offer little in the way of evidence for some
 923 of the potential analyses listed above, so these can be relatively uncontroversially rejected.
 924 However, there are two potential analyses of the PIPC for which there does seem to be
 925 some supporting evidence: that the internal possessor has a clause-level representation,
 926 and that agreement is sensitive to the topicality of the possessor.

927 In the following sections, each of the potential analyses listed above is considered in
 928 turn. In many cases, these analyses have been proposed for other languages which exhibit
 929 PIPCs or related constructions, so the relevant data and arguments from those studies is
 930 considered alongside (mostly elicited) data from Chimane.

931 6.1 Head-dependent reversal

932 In Jarawara (Arawan), internal possessors can control agreement on the verb under certain
 933 circumstances (Dixon 2000). For example, in the following text fragment, the verb agrees
 934 with first person plural topic in all four clauses, even though the latter corresponds to the
 935 internal possessor in (30b) and (30c):¹⁶

- 936 (30) a. *mee-inamati era* \emptyset *wete na*
 PL-spirit us.INCL 3SG.A bind AUX.F
 937 ‘the evil spirits bound us (with string)’
- 938 b. [*ee_j* *mano*]_i \emptyset *soki kasa_j*
 our.INCL(F) arm(M) 3.INAN.S tie ALL.AT.ONCE.F
 939 ‘our arms were tied together’
- 940 c. [*ee_j* *iso*]_i \emptyset *soki kasa_j*
 our.INCL(F) leg(M) 3.INAN.S tie ALL.AT.ONCE.F
 941 ‘our legs were tied together’

¹⁵Semantics and information structure can also play a role in the other potential analyses, but only indirectly through syntax.

¹⁶In all the examples in (30), the feature of the first person plural pronoun which is expressed on the verb is its feminine gender. However, this does not mean that the referents are necessarily feminine. According to Dixon all pronouns in Jarawara are feminine.

942 d. *mee-inamati era Ø wete na*
PL-spirit us.INCL 3SG.A bind AUX.F
943 ‘the evil spirits bound us.’ (Dixon 2000: 506)

944 Dixon proposes that this agreement pattern occurs because the relationship between the
945 head (the possessed noun) and the dependent (the possessor) in possessive phrase like
946 those in (30) is reversed. He argues that as in many languages, the gender of an NP in
947 Jarawara is determined by its head. In alienable possessive NPs, the head is the possessed
948 noun, but according to Dixon, in inalienable possessive NPs like those in (30b) and (30c),
949 the possessor is the head. An argument in favour of this analysis comes from adjectival
950 agreement in the possessive phrase. For example, in (31), the adjective *bite* ‘small’ agrees
951 with the feminine gender of the first person plural pronoun *ee* rather than the masculine
952 gender of the possessed noun *teme* ‘foot’:

953 (31) *ee teme bite*
our.INCL(F) foot(M) small.F
954 ‘our small feet’ (Dixon 2000: 507)

955 It is important to note here that even though the adjective agrees with the possessor, it
956 modifies the possessed noun *teme* ‘foot’, and not the possessor. This leads Dixon to
957 conclude that inalienable possessors head their possessive phrase.

958 PIPs in Chimane do not seem to share this property. It is not possible for possessors
959 to control agreement on other constituents of the possessive phrase like adjectives, as
960 they can in Jarawara. The issue is slightly clouded by the fact that nominal agreement in
961 Chimane is only in gender, and only third person nominals and pronominals have an (in-
962 herent) gender feature.¹⁷ It is therefore possible for a nominal (and therefore necessarily
963 third person) PIP to be modified by an adjective. However, there is a very clear distinc-
964 tion in the meaning of sentences in which adjectives modify PIPs versus those in which
965 they modify possessed nouns. For example, in (32a), the adjective *där-* ‘big’ can only be
966 interpreted as modifying the possessed noun, while in (32b) it can only be interpreted as

¹⁷First and second person pronouns also have a context-dependent gender feature which is determined by the sex of the speech act participants.

967 modifying the PIP:

- 968 (32) a. *Yü nāj-bi-te* [mɔ' ococo dār-si' [miquity-si']].
 I see-POSS.APPL-3SG.M.O the.F frog(F) big-F boy(M)-F
 969 'I saw the boy's big frog.' / *'I saw the big boy's frog.'
- 970 b. *Yü nāj-bi-te* [mɔ' ococo [miquity-si' dār-tyi']].
 I see-POSS.APPL-3SG.M.O the.F frog(F) boy(M)-F big-M
 971 'I saw the big boy's frog.' / *'I saw the boy's big frog.' [elicited]

972 Apart from the restriction that the determiner must precede all other constituents of the
 973 possessive phrase, the other constituents of the phrase in (32a) can occur in any order, as
 974 shown in Section 4.1. However, when the adjective modifies the possessor, as in (32b),
 975 there is a preference for the adjective to either precede or follow the possessor. This
 976 indicates that this adjective is internal to the NP headed by the possessor. In any case,
 977 the starred interpretation of (32b) is impossible, which shows that the possessor cannot
 978 control agreement on an adjective which modifies the head noun.

979 Beyond the inability of PIPs to control agreement on adjectives which modify the
 980 possessed noun, they also lack several other properties of heads. Following a set of def-
 981 initions developed by Zwicky (1985), Fraser et al. (1992) list the following properties of
 982 heads which are important in many languages:¹⁸

- 983 a. The constituent is the semantic argument.
 984 b. The constituent is the determinant of agreement.
 985 c. The constituent is the morphosyntactic locus (of case marking).
 986 d. The constituent is subcategorized by the verb.
 987 e. The constituent is the distributional equivalent of its phrase.
 988 f. The constituent is obligatory. (Fraser et al. 1992: 1-2)

989 Taking each of these properties in turn, it is possible to show more definitively that the
 990 possessor is not the head of the possessive phrase in PIPCs. First of all, the possessor

¹⁸The full list also includes other properties which are not relevant to the present discussion.

991 is not the semantic argument of the verb. As discussed in Section 5.3, it is possible for
 992 the possessor to bear a beneficiary- or maleficiary-like role in the PIPC, but this is by no
 993 means a requirement and it is more common that the possessor is not assigned a semantic
 994 role different from that assigned to the possessive phrase headed by the possessed noun.
 995 Second, as has just been discussed, it is clear from the example in (32) that the possessor
 996 is not the determinant of nominal agreement in the possessive phrase. This property is
 997 retained by the possessed noun. However, the possessor is the determinant of agreement
 998 on the verb. This is an important point which I will return to later. The third property, that
 999 the head is the morphosyntactic locus of case marking, cannot be applied in Chimane as
 1000 there is no case marking of core arguments and PIPs can only control object agreement
 1001 when they function as core arguments. However, it is possible for possessors to host a
 1002 case-like clitic when the possessive phrase bears an oblique function, as in (33) where the
 1003 possessor, rather than the possessed noun, bears the locative =*ya'*:

1004 (33) *¿Jam buty mi ji-yi Juan-si'=ya' aca'=mu'?*
 1005 NEG Q you pass-CLF.M.S Juan(M)-F=LOC house(F)=his [elicited]
 'Haven't you passed by Juan's house?'

1006 However, this appears to be a general property of phrasal morphosyntax; when a head
 1007 combines with a modifier, there is a distinct preference for the modifier to host the case-
 1008 like clitic. The examples in (34) show the superessive =*che'* being hosted by adjectives
 1009 and numerals respectively:

1010 (34) a. *Mq' dära' jə' cha-i-' poroma-s=che' aca' tšə-i-'.*
 1011 the.F tree(F) fall-CLF-F.S old-F=SUPE house(F) land-CLF-F.S
 'The tree fell on the old house.'
 1012 b. *Yü çəsh-i pärä'=che' jubij.*
 1013 I sleep-CLF.M.S two=SUPE bed(F) [elicited]
 'I sleep on two beds.'

1014 These examples indicate that the locus of case marking cannot be taken as evidence that
 1015 a phrasal constituent is the head in Chimane.

1016 The fourth property of heads is that they are subcategorized by the verb. While the verb
 1017 in the PIPC does exhibit object agreement with the possessor, and this is strong evidence
 1018 that the possessor functions as the object of the verb, it seems that the possessive phrase
 1019 headed by the possessed noun is also subcategorized by the verb as a secondary object (see
 1020 Section 6.4 for further discussion of this point). Fifth, the possessed noun does appear to
 1021 be the distributional equivalent of the possessive phrase. This can be seen in repetitions of
 1022 similar sentences featuring PIPCs in naturalistic speech. For example, in (35), the anaphor
 1023 of the possessive phrase in (35a) is the possessed noun and not the possessor in (35b):

- 1024 (35) a. *Ch.i-ya-cse-bi* *mɔ' dyijyedye'=mu'in mu'in-si'=in.*
 know-CLF-3PL.O-POSS.APPL.M.S the.F thought(F)=their.M their.M-F=PL
 1025 'He knew their thoughts.'
- 1026 b. *Ch.i-ya-cse-bi* *mɔ' dyijyedye' paj qui jam*
 know-CLF-3PL.O-POSS.APPL.M.S the.F thought(F) so.that so NEG
 1027 *ji'-dyä-que-te=in.*
 CAUS-stop-CLF-3SG.M.O=they
 1028 'He knew (their) thoughts so they wouldn't be able to stop him.'

1029 [svfemr002.029-030]

1030 The possessive referent 'their thoughts' is realized by a full possessive phrase *mo. ' dy-*
 1031 *ijyedye' mu'in mu'in-si' in* in (35a), but only by the possessed noun *mo. ' dyijyedye'* in
 1032 (35b),¹⁹ indicating that the latter is the distributional equivalent of the phrase. Finally,
 1033 the possessed noun does appear to be obligatory in PIPCs. While it is possible for the
 1034 possessor to be omitted in a PIPC, as in (35b), it is not possible to omit the possessed
 1035 noun in a non-elliptical context.

1036 The fact that the possessed noun retains all of these properties in the PIPC seems to
 1037 imply that the possessor does not function as the head of the possessive phrase in PIPCs,
 1038 as Dixon argues for Jarawara. Therefore a head-dependent reversal-type analysis does not
 1039 appear to be appropriate for the construction.

¹⁹In (35b), the agreement is with the null possessor rather than the possessed noun.

1040 **6.2 Structurally prominent NP-internal possessor**

1041 Another possibility is that the possessor does not head the possessive phrase but has a
 1042 prominent or peripheral structural position within it, and this peripheral position is what
 1043 makes it ‘visible’ to predicate-argument agreement. There are no analyses of PIPCs along
 1044 these lines, but there are analyses of other types of constructions which exhibit unusual
 1045 behaviour in terms of agreement between elements in different syntactic domains. For
 1046 example, this type of analysis has been proposed for a type of long-distance agreement
 1047 (LDA) construction in Tsez (Nakh-Daghestanian) by Polinsky & Potsdam (2001). In
 1048 Tsez, a verb can agree with an argument in a subordinate clause, as in (36b), where the
 1049 verb *-ixyo* ‘know’ exhibits agreement with the class III nominal *magalu* ‘bread’ which
 1050 functions as an argument in the subordinate clause.

- 1051 (36) a. *enir_i [užā_k magalu_m bāc’ruṭi]_j r_j-ixyo*
 mother [boy bread.III.ABS ate].IV IV-know
- 1052 b. *enir_i [užā_k **magalu_m** bāc’ruṭi]_j **b_m**-ixyo*
 mother [boy **bread.III.ABS** ate].IV **III**-know
 1053 ‘The mother knows the boy ate the bread.’

1054 (Polinsky & Potsdam 2001: 584)

1055 In (36a), the verb agrees with the class of the entire subordinate clause which functions as
 1056 its complement, as shown by the agreement prefix *r-*. (36b) shows that it is also possible
 1057 for the verb to agree with an argument internal to this subordinate clause, here the object
 1058 of the verb in the subordinate clause *magalu* ‘bread’. This kind of agreement pattern is
 1059 comparable to PIPCs, i.e. constructions in which verbs agree with internal possessors,
 1060 because in both cases the agreement target (the verb) and controller (the argument in
 1061 the subordinate clause or the possessor) are not in the same local domain. Polinsky &
 1062 Potsdam argue that the argument in the subordinate clause can control predicate-argument
 1063 agreement when it is syntactically ‘close’ to the verb. Their proposal involves movement
 1064 of the agreement controller to a peripheral position (specifically the specifier position of
 1065 a Topic Phrase in the left periphery of the subordinate clause) which is sufficiently close

1066 to the verb in the matrix clause as to make the controller ‘visible’ to the verb.

1067 In a similar way, Nikolaeva (2014a) argues that only internal possessors which occupy
1068 a structurally prominent position within the NP can participate in clause-level syntactic
1069 processes in Tundra Nenets (Uralic). In that language, the possessor can optionally control
1070 possessive agreement on the possessed noun, and in such cases, it appears to be associated
1071 with a different structural position within the NP. This can be seen in the linear order of
1072 constituents in possessive phrases. Consider the examples in (37). When the possessed
1073 noun does not agree with the possessor, the latter must follow determiners such as the
1074 demonstrative, as in (37a), where the possessor *Werah* ‘Wera’s’ follows the determiner
1075 *t’uku°* ‘this’. When the possessed noun does agree with the possessor, the latter must
1076 precede the determiner, as in (37b). (37c) shows that the possessor cannot follow the
1077 determiner if the possessed noun exhibits agreement, and (37d) shows that the possessor
1078 cannot precede the determiner if the possessed noun does not exhibit agreement.

- 1079 (37) a. *t’uku° Wera-h ti*
 this Wera-GEN reindeer
 ‘this reindeer of Wera’s’
1080
- 1081 b. *Wera-h t’uku° te-da*
 Wera-GEN this reindeer-3SG
 ‘this reindeer of Wera’s’
1082
- 1083 c. **t’uku° Wera-h te-da*
 this Wera-GEN reindeer-3SG
 (‘this reindeer of Wera’s’)
1084
- 1085 d. **Wera-h t’uku° ti*
 Wera-GEN this reindeer
 (‘this reindeer of Wera’s’) (Nikolaeva 2014a: 143)
1086

1087 Nikolaeva shows that possessors which control agreement on the possessed noun exhibit
1088 a range of morphosyntactic properties which indicate that their functional prominence is
1089 mirrored by their syntactic prominence.

1090 There does not seem to be any evidence for this type of configuration in Chimane.
1091 While PIPs can occur in positions discontinuous from the rest of the possessive phrase
1092 due to the non-configurational nature of Chimane syntax, my consultants found PIPCs in

1093 which a free PIP immediately precedes the determiner to be strange:

1094 (38) ?*Maria täj-je-bi-' Isabel-tyi' mu' cas.*
name(F) touch-CLF-POSS.APPL-3SG.F.O name(F)-M the.M knee(M)
1095 ('Maria touched Isabel's knee.')

[elicited]

1096 It should be noted that there was some disagreement amongst the consultants about this
1097 construction, with one saying that it is acceptable. This difference in opinion may be
1098 attributed to a difference in the interpretation of the possessive phrase as continuous or
1099 discontinuous. The consultants were however unanimous in their judgements of construc-
1100 tions in which the PIP controls agreement on the head nominal, which they considered
1101 strictly ungrammatical:

1102 (39) **Maria täj-je-bi-' mu' cas-si' Isabel-tyi'.*
name(F) touch-CLF-POSS.APPL-3SG.F.O the.M knee(M)-F name(F)-M
1103 ('Maria touched Isabel's knee.')

[elicited]

1104 These judgements seem to indicate that the possessor does not have a privileged syntac-
1105 tic status within the phrase, and therefore the idea the possessor can control predicate-
1106 argument agreement because it is syntactically 'closer' to the verb does not seem to be
1107 applicable to the PIPC in Chimane.

1108 6.3 Incorporation

1109 Another analysis which has been proposed for a very similar construction to the Chimane
1110 PIPC is that the possessor is incorporated into the verb. The term 'incorporation' is used
1111 here in the transformationalist sense of an adjoining of two functional heads. This analysis
1112 is developed by Shklovsky (2012) to account for what he terms the external possession
1113 construction in Tseltal. In Tseltal, agreement between the verb and an internal possessor
1114 is possible in the presence of an applicative, just as in Chimane. The regular transitive
1115 construction is shown in (40a) and the construction in which the verb agrees with the
1116 internal possessor is shown in (40b):

- 1117 (40) a. *lah a-we'i [k_j-waj]_i*
 PFV ERG2-eat.ABS3 my-tortilla
 1118 'You ate my tortilla.'
- 1119 b. *lah a-we'-bon_j [k_j-waj]_i*
 PFV ERG2-eat-APPL.ABS1 my-tortilla
 1120 'You ate my tortilla.' (Shklovsky 2012: 47-8)

1121 Working in the minimalist framework, Shklovsky assumes that applicatives project their
 1122 own phrase. He argues that the possessive phrase is incorporated in this phrase, meaning
 1123 that the internal possessor can control the absolutive agreement on the verb.

1124 While I do not follow Shklovsky in assuming that applicatives project their own phrase,
 1125 there is evidence that PIPs may be incorporated into the verb in at least some cases. In
 1126 many cases of PIPCs, there is no overt expression of the possessor. Bresnan & Mchombo
 1127 (1987) argue for Chichewa that in cases in which there is no overt realization of an argu-
 1128 ment, the marking of this argument on the verb has the status of an incorporated pronoun
 1129 rather than agreement. This kind of argument could be applied to PIPCs in cases in which
 1130 there is no overt realization of the possessor. For example, the sentence in (41) comes
 1131 from a picture description task in which the participant describes a picture of a monkey
 1132 dropping a girl's bag that it has previously stolen from her. There is no overt expression
 1133 of the possessor (or the subject) in this sentence:

- 1134 (41) *Chat jitop-je-bi-' sara'ij.*
 then throw.away-CLF-POSS.APPL-3SG.F.O bag(F)
 1135 'Then (it) threw away (her) bag.' [tarovs001.025]

1136 In this sentence, the suffix -' indicates a third person singular feminine object. Follow-
 1137 ing Bresnan and Mchombo's approach, it could be argued that this suffix functions as
 1138 an incorporated pronoun in this example, as there is no other referential element which
 1139 corresponds to the possessor. In this way, Shklovsky's analysis of the agreement pattern
 1140 in Tselal as a kind of incorporation of the possessor may be applicable in at least some
 1141 cases of PIPCs in Chimane. This idea will be developed further in Section 7.

1142 **6.4 Mediated locality**

1143 Another potential analysis of PIPCs for which there may be some evidence is the idea that
 1144 the PIP has a representation or ‘proxy’ in the clause which stands in for it and functions as
 1145 the object, and this is what enables the possessor to control object agreement. Again this
 1146 idea has not been developed for PIPCs but appears in some analyses of LDA construc-
 1147 tions. Polinsky (2003) and Le Sourd (2014) both argue that LDA between a verb and an
 1148 argument in a subordinate clause is enabled by a proxy which doubles the argument of the
 1149 subordinate clause in the matrix clause. Both Polinsky and Le Sourd show evidence for a
 1150 free referential expression, either pronominal or nominal, which functions as an argument
 1151 of a main clause and either binds an argument in a subordinate clause or ‘raises’ out of
 1152 the subordinate clause (the term ‘raising’ is used descriptively, no movement is assumed
 1153 in either Polinsky’s or Le Sourd’s analysis).

1154 Polinsky cites several examples from Algonquian languages which seem to provide
 1155 evidence of this proxy. For example, in Blackfoot, it is possible for the verb in the matrix
 1156 clause²⁰ to agree with an argument in an embedded clause. Consider the examples in
 1157 (42). In (42a), the verb in the matrix clause does not exhibit object agreement. This is
 1158 the default construction. In (42b), the verb in the matrix clause exhibits object agreement
 1159 with the subject of the verb in the embedded clause *noxkówa* ‘myson’.

- 1160 (42) a. *nit-wikixtaa* [*n-oxko-wa m-áxk-a’po’takizsi*]
 1161 1.SUBJ-want.INTR 1-son-3 3.SUBJ-might-work
 ‘I want my son to work.’
- 1162 b. *nit-wikixtatwaa-wa_i [n-oxko-wa_i m-áxk-a’po’takizsi]*
 1163 1.SUBJ-want.TR-3.OBJ 1-son-3 3.SUBJ-might-work
 ‘I want my son to work.’
- 1164 c. pro-1SG want pro-3SG_i [my son-3SG_i work] (Polinsky 2003: 285)

1165 Polinsky proposes that the agreement relation in (42b) between the verb in the matrix
 1166 clause and the argument in the subordinate clause is ‘mediated’ by a proxy which stands

²⁰Polinsky uses the term ‘embedding clause’ to refer to the clause which contains the agreement target, i.e. the verb of the matrix clause.

1167 in for the argument of the embedded clause in the matrix clause. She schematizes this
 1168 analysis as in (42c), where the proxy is represented by the ‘pro-3SG’ element, and the
 1169 coreferential relationship between the proxy and the argument in the embedded clause is
 1170 represented by the indices on both elements.

1171 The PIPC in Chimane exhibits one particular feature which may support a this type of
 1172 analysis involving a proxy which mediates the agreement relationship between the verb
 1173 and the PIP. It is a common feature of PIPCs that the PIP is doubled by a bound possessor.

1174 (43) is an example of such a construction:

1175 (43) *Mi n̄aj-bi-te_j [ococo Juan_j-si’]_i=**mu**’_j.*
 you see-POSS.APPL-3SG.M.O frog(F) Juan(M)-F =him
 1176 ‘You saw Juan’s frog.’ [elicited]

1177 It is possible that the doubling possessor in (43) is an overt expression of a proxy of the
 1178 internal possessor in the clause. If this is the case, and it is this element which functions
 1179 as the object of the verb, then it is possible to predict that this element can only occur
 1180 in PIPCs and not in the corresponding IPC. In fact, this prediction appears to be borne
 1181 out; the bound pronominal cannot easily occur in the default IPC. Its insertion in the IPC
 1182 equivalent of (43) is considered strange or ungrammatical by my consultants:

1183 (44) *Mi n̄aj-tye-’_i [ococo Juan_j-si’]_i(?*=**mu**’).*
 you see-CLF-3SG.F.O frog(F) Juan(M)-F =him
 1184 (‘You saw Juan’s frog.’) [elicited]

1185 This seems to indicate that the doubling possessor might be an external clause-level proxy
 1186 of the internal possessor in the PIPC. The doubling possessor cannot easily occur in the
 1187 IPC because it has no argument slot to fill in the clause, but it can in the PIPC because
 1188 there is such an argument slot in that construction. In order to test this hypothesis, the
 1189 properties of the doubling possessor in the PIPC require further consideration.

1190 Let us return to Polinsky’s definition of proxies: “(i) the proxy ... is in the local domain
 1191 of the agreeing verb, and (ii) the proxy is a free referential expression, not a pronominal

1192 copy of the embedded representation” (2003: 284). With respect to the first part of this
 1193 definition, in the case of LDA, the local domain is the matrix clause, while with PIPCs, it
 1194 is the clause containing the possessive phrase. It is not entirely clear whether the doubling
 1195 pronoun is in the local domain of the verb. (45) shows that the bound possessor can occur
 1196 in a position separate from the rest of the possessive phrase, and this might be taken as
 1197 evidence that it is external to it and functions as a clause-level element:

1198 (45) *Mi n̄ajj-bi-te_j [ococo Juan_j-si']_i munja=mu'_j.*
 you see-POSS.APPL-3SG.M.O frog(F) Juan(M)-F yesterday=his
 1199 ‘You saw Juan’s frog yesterday.’ [elicited]

1200 In (45), the bound possessor is separated from the possessive phrase by a clause-level
 1201 adverb. However, as has already been discussed, discontinuity of constituents of the pos-
 1202 sessive phrase (and NPs generally) cannot necessarily be taken as evidence that they do
 1203 not function as dependents of the phrasal head in a non-configurational language like Chi-
 1204 mane. But the clitic does have some properties which seem to indicate that it does not
 1205 have the same status as a discontinuous dependent of the possessive phrase. For example,
 1206 while the clitic can potentially occur in other positions within the clause, e.g. it is possible
 1207 for it to attach to the verb or any of the constituents of the possessive phrase (see Section
 1208 4.1), there is a distinct preference for it to attach to the final element of the clause, as in
 1209 (45) where it attaches to the clause-final adverb. This preference is not shared by other
 1210 discontinuous phrasal constituents, which usually precede and follow the verb and parti-
 1211 cles, as in (46) and (47) where the possessors and possessed nouns occur on either side of
 1212 the verbs:

1213 (46) *Yu-ty na are'-yi pa'tyi'.*
 my-M FOC hurt-CLF.GNL.M.S fingernail(M)
 1214 ‘My fingernails hurt.’ [svroma003.084]

1215 (47) *Chime'dyeca sh.i'-si' ca tu-qui-j bätäj.*
 also HRSY tapir(M)-F HRSY bring-POSS.REFL-M.S hump(F)
 1216 ‘Again he brought them tapir’s hump.’ [svmalc012.025]

1217 This different distribution seems to indicate that the doubling possessor has a different
 1218 status from discontinuous dependents of the possessive phrase, i.e. that it may bear a
 1219 clause-level argument function, rather than being internal to the possessive phrase. The
 1220 implications of this are discussed further in Section 7.

1221 The second part of Polinsky’s definition also initially seems to go against the analysis
 1222 of the doubling possessor as a clause-level proxy. She explicitly states that the proxy must
 1223 be a free referential expression and not a pronominal copy of the internal representation
 1224 of the argument. The bound possessor seems to fail on this test, as it does appear to be
 1225 merely a pronominal copy of the internal possessor.

1226 Another type of evidence which seems to go against an analysis of the doubling posses-
 1227 sor as a clause-level proxy is its distribution in other types of IPCs. In reflexive IPCs, i.e.
 1228 constructions in which the possessed noun controls object agreement and the possessor
 1229 is anaphorically bound by the subject, the occurrence of the bound possessor is preferred
 1230 and is possibly required. My consultants questioned whether the construction in (48) was
 1231 acceptable without the doubling possessor:

1232 (48) *Maria_j çat-je-te_i [çu_i’-tyi’ vojity]_i ?(=*mø*’)_j.*
 1233 *Maria(F) hit-CLF-3SG.M.O self-M brother(M) =her*
 ‘Maria hit her own brother.’ [elicited]

1234 In (48), the possessed noun controls predicate-argument agreement and the subject binds
 1235 the reflexive possessor *çu_i’tyi’* ‘own’. In this type of construction, the occurrence of the
 1236 bound possessor is preferred over its omission. Recall that the bound possessor cannot
 1237 easily occur in disjoint IPCs, as demonstrated by (44). This was taken as evidence that
 1238 the doubling pronoun in the PIPC might function as a clause-level proxy of the internal
 1239 possessor; the fact that it cannot occur in the disjoint IPC seems to indicate that there is
 1240 no argument slot for it to fill. However, (48) is also a type of IPC, and is therefore also
 1241 presumed to have no argument slot for an external proxy, because predicate-argument
 1242 agreement indicates that the possessive phrase functions as the object. And yet here the
 1243 occurrence of the doubling possessor is preferred. If there is no argument slot for a clause-

1244 level proxy of the internal possessor in the reflexive IPC, then the doubling possessor
 1245 must have some other status there, possibly as a kind of topic marker. And if it is the
 1246 case that the doubling possessor has the status of a topic marker and not an argument
 1247 in the reflexive PIPC, it could be argued that this is also the most appropriate analysis
 1248 for the doubling possessor in the PIPC. However, there are several aspects of the PIPC
 1249 which seem to support an analysis of the doubling possessor as a clause-level proxy of
 1250 the internal possessor, despite the problems which have been set out here.

1251 The main argument in favour of a mediated locality-type analysis of the Chimane PIPC
 1252 is the fact that agreement between the possessor and the verb is restricted to only occur-
 1253 ring with objects. This is not the case in other languages which exhibit agreement be-
 1254 tween verbs and internal possessors. In Tabassaran (Nakh-Daghestanian), for example,
 1255 possessors internal to any argument, and even possessors internal to non-arguments, can
 1256 optionally control agreement on the verb:

- 1257 (49) a. [jas_j agaji]_i dumu uṽcun-uv_i / uṽcun-as_j
 my father.ERG he.NOM beat-3 / beat-1SG.GEN
 1258 ‘My father has beaten him.’
- 1259 b. duRu [jas_j agaji-s]_i k’až ik’v-uv_i / ik’n-as_j
 he.ERG my father-DAT letter.NOM write-3 / write-1SG.GEN
 1260 ‘He wrote a letter to my father.’
- 1261 c. baj [jas_j č^huka-q^h]_i hit’ik’n-uv_i / hit’ik’n-as_j
 boy my shed-POSTESS hide-3 / hide-1SG.GEN
 1262 ‘The boy hid behind my shed.’
- 1263 d. duq’ari [jas_j jak’u-xi]_i hit’urd-uv_i / hit’urd-as_j
 they.ERG my axe-COM cut-3 / cut-1SG.GEN
 1264 ‘They are cutting (wood) with my axe.’

1265 (Kibrik & Seleznev 1980: 23-24)

1266 In all the examples in (49), agreement with the first person singular internal possessor is
 1267 indicated by the first person singular genitive agreement affix *-as*. This agreement suffix is
 1268 controlled by the possessor of the ergative subject in (49a), by the possessor of the dative
 1269 recipient in (49b), by the possessor of the postessive NP in (49c), and by the possessor of
 1270 the comitative NP in (49d). This is not possible in Chimane. For example, it is impossible

1271 for a possessor internal to a subject NP to control predicate-argument agreement:²¹

- 1272 (50) a. **Mu' vojity=yu n̄aj-bi-ye mi.*
 the.M brother(M)=my see-POSS.APPL-1SG>2SG you
- 1273 b. **Mu' vojity=yu n̄aj-tye-ye mi.*
 the.M brother(M)=my see-CLF-1SG>2SG you
- 1274 ('My brother saw you.') [elicited]

1275 Agreement between the verb and a possessor internal to a subject NP is ungrammatical,
 1276 whether the *-bi* suffix is present, as in (50a), or not, as in (50b). This is also the case
 1277 for all other argument and non-argument functions apart from objects. Another feature
 1278 of agreement systems like that in Tabassaran is that the internal possessor can control
 1279 agreement on the verb with no requirement for additional morphology. Again this is
 1280 impossible in Chimane. The agreement pattern can only occur in the presence of the *-bi*
 1281 suffix:

- 1282 (51) **Maria täj-je-'j [cas=m̄o'j]i.*
 name(F) touch-CLF-3SG.F.O knee(M)=her
- 1283 ('Maria touched her (someone else's) knee.') [elicited]

1284 In (51), the verb agrees with the possessor but the *-bi* suffix does not occur. This kind of
 1285 construction is strictly ungrammatical.

1286 Unlike languages like Tabassaran, Chimane exhibits a restricted paradigm of agree-
 1287 ment between verbs and internal possessors, and these restrictions do seem to be syn-
 1288 tactic in nature. As discussed in Section 5.3, Chimane PIPCs are akin to applicative
 1289 constructions in that a non-argument (either the possessor or an oblique adjunct) in the
 1290 default counterpart of the construction (the IPC or a monotransitive construction) appears
 1291 to function as the object in the applicative construction. If the PIPC is akin to applicative
 1292 constructions in these respects, then it also seems plausible to assume that the doubling
 1293 possessor does represent some kind of clause-level proxy of the internal possessor which

²¹Possessors of subjects of passive applicative verbs can control agreement. I return to this point in Section 7.

1294 functions similarly to an applied object in an applicative construction.

1295 Further evidence that the PIPC may be similar to applicative constructions comes from
1296 its use with ditransitive verbs. Recall from Section 4.3 that the non-patient-like argument
1297 (i.e. the recipient or beneficiary etc.) invariably controls object agreement in double
1298 object constructions. In cases of ditransitive verbs featuring the *-bi* suffix, this argument
1299 appears to correspond to the possessor. The following example comes from a description
1300 of a picture of a girl giving a monkey its baby back after taking it away:

1301 (52) *Ji'-cañ-e-bi-baj-te;* *qui ava'i.*
CAUS-return-CLF-POSS.APPL-again-3SG.M.O so baby(F)
1302 'So she [the girl] gives it [the monkey] back its baby.' [tapact001.028]

1303 In (52), the ditransitive verb exhibits the *-bi* suffix and the null masculine possessor con-
1304 trols object agreement. In all the examples of PIPCs discussed so far, PIPs control object
1305 agreement despite being internal to the single patient-like argument of a monotransitive
1306 verb. In (52), meanwhile, the possessor appears to correspond to the recipient-like argu-
1307 ment of the ditransitive verb. This suggests that the possessor is an object of this verb as
1308 well as functioning as the possessor of the possessive patient-like argument, and that the
1309 possessor and possessive phrase may be associated with different object functions. In this
1310 scenario, the possessor functions as the primary object, as here it controls agreement and
1311 bears the recipient-like role, and the possessive phrase bears the secondary object func-
1312 tion, as it does not control agreement and has a patient-like role. This configuration with
1313 ditransitives may indicate that in fact all verbs in PIPCs subcategorize for both a primary
1314 and secondary object function, with the possessor bearing the primary object function and
1315 the possessed noun the secondary object function. This also helps to explain two aspects
1316 of the construction. First the preference for the doubling pronoun in PIPCs versus its
1317 ungrammaticality in (non-reflexive) IPCs; if the external representation of the possessor
1318 is functioning as the agreement controlling primary object, then the doubling possessor
1319 is an overt expression of this clause-level argument. Second the obligatory occurrence
1320 of the *-bi* suffix even with verbs which are clearly not semantically ditransitive; despite

1321 the fact that the possessor does not always bear a distinct semantic role in such cases, the
1322 suffix nevertheless alters the valency of the verb such that the clause-level representation
1323 of the possessor functions as the primary object and the possessive phrase headed by the
1324 possessed noun function as the secondary object.

1325 **7 Proposed analysis**

1326 To summarize the conclusions drawn about the syntactic structure of the PIPC so far: PIPs
1327 do not appear to be external to the possessive phrase, nor do they have any morphosyn-
1328 tactic properties which suggest that they function as the head of the possessive phrase or
1329 that they occupy a more prominent position within the phrase. However, there is some
1330 evidence from the optional occurrence of the doubling possessor in the construction, from
1331 the obligatory occurrence of the *-bi* suffix which seems to have some properties of an ap-
1332 plicative, and from the semantic role of the PIP in ditransitive PIPCs that the possessor has
1333 an external representation which functions as the applied object of the applicative verb.
1334 This is the analysis which will be assumed for the PIPC in this study.

1335 The first point to note about this analysis is that the external representation of the PIP
1336 is not necessarily overtly expressed. Many of the examples of PIPCs presented in this
1337 study do not feature the doubling possessor which appears to be an overt expression of
1338 the external representation. Therefore, as discussed in Section 6.3, I will follow Bresnan
1339 & Mchombo (1987) in assuming that the agreement morphology on the verb functions
1340 as an incorporated pronoun and bears the grammatical function instead of the doubling
1341 possessor in such cases. A second point is the correspondence between PIPs and their
1342 external representations. As discussed in Section 6.4, when overt, the doubling possessor
1343 must match the features of the PIP one-to-one. Therefore, this element will be analysed
1344 as being anaphorically controlled by the PIP.

1345 Taking all these features of the analysis of the PIPC together, it is possible to provide
1346 a representation of the construction following the representation of LDA constructions in

1347 Algonquian languages proposed by Polinsky (2003). She schematizes mediated locality
 1348 in LDA constructions as in (53), where Agr_i indicates predicate-argument agreement con-
 1349 trolled by the proxy NP, which is in turn coindexed with the NP in the embedded clause:

1350 (53) [_{IP} Subject V + Agr_i NP_i [_{CP/IP} ... NP_i ...]] (Polinsky 2003: 284)

1351 The analysis of Chimane presented here will follow this schema with some additions.
 1352 Since the analysis relies on alternative mappings between the various clausal constituents
 1353 and grammatical functions, the correspondences between these two are also indicated in
 1354 the representation. As well as the familiar subject, object and oblique functions, the ele-
 1355 ments bearing the possessor and possessed noun functions are also represented as PSR and
 1356 PSE respectively, though it is important to note that these functions are not subcategorized
 1357 by the verb. Representations of the IPC and EPC are shown first in (54) and (55), as they
 1358 both provide useful points for comparison with the PIPC.

1359 (54) *Juan täj-je-'i* [*un mu' Sergio_j-s*]_i.
 1360 Juan(M) touch-CLF-3SG.F.O hand(F) the.M Sergio(M)-F
 'Juan touched Sergio's hand.' [elicited]

1361 [_S NP V + Agr_i [_{NP} N NP_j ...]_i]
 | | |
 SUBJ OBJ PSE PSR

1362 (54) is a representation of the structure of the default IPC. As this representation makes
 1363 explicit, I assume that in this construction, the possessive phrase headed by the possessed
 1364 noun bears the object function and the internal possessor has no external representation in
 1365 the clause. This explains why the doubling possessor cannot occur in the IPC. Apart from
 1366 the more complex internal structure of the possessive phrase, the default IPC has exactly
 1367 the same structure as basic transitive clauses in Chimane.

1368 The EPC also has the basic structure of a default transitive clause, in this case with the
 1369 possessor functioning as the object and the possessed noun as an oblique adjunct. Here
 1370 the relationship of possession is not expressed by any syntactic means.

1371 (55) *Juan täj-je-te_j [mu' Sergio]_j [un=che']_i.*
 Juan(M) touch-CLF-3SG.M.O the.M Sergio(M) hand(F)=SUPE
 1372 'Juan touched Sergio on the hand.' [elicited]

1373

[_S	NP	V + Agr _j	[_{NP}	N	...	]_j	[_{NP}	NP	...	]_i
	SUBJ		OBJ	PSR			OBL	PSE		

1374 The IPC and EPC can be analysed simply as transitive constructions in which either the
 1375 possessive phrase headed by the possessed noun or the external possessor bears the func-
 1376 tion of the single object of a monotransitive verb.

1377 Turning now to the PIPC, the first type which will be considered is that featuring the
 1378 doubling possessor. As argued above, the doubling possessor is analysed in this study
 1379 as an overt realization of a clause-level representation of the PIP which functions as the
 1380 primary object of the verb. The possessive phrase headed by the possessed noun is anal-
 1381 ysed as bearing a secondary object function, but otherwise has the same internal structure
 1382 as that in the default IPC. The anaphoric control of the doubling possessor by the PIP is
 1383 shown by the indices.

1384 (56) *Mi nāj-bi-te_j [ococo Juan_j-si']_i =mu'_j.*
 you see-POSS.APPL-3SG.M.O frog(F) Juan(M)-F =his
 1385 'You saw Juan's frog.' [elicited]

1386

[_S	NP	V + Appl + Agr _j	[_{NP}	N	NP _j	...	]_i	Clitic _j]
	SUBJ		OBJ2	PSE	PSR			OBJ1	

1387 As shown in Section 5, free PIPs can occur discontinuously from the rest of the possessive
 1388 phrase. However, the fact that the PIP can be separated from the rest of the possessive
 1389 phrase does not imply that it is external to it. Following Austin & Bresnan (1996) *inter*
 1390 *alia*, I will assume that constituents of discontinuous NPs are dominated by identical²²
 1391 NPs. The structure of a phrase with a discontinuous PIP can therefore be represented as
 1392 in (57), where the identical NPs are coindexed and bear the same grammatical function:

²²The term 'identical' is used here to indicate that although the constituents of an NP are discontinuous, they are both dominated by the same NP.

1393 (57) *Yɔ [miqity_j-si']_i nɔij-bi-te_j [mɔ' ococo]_i.*
 I boy(M)-F see-POSS.APPL-3SG.M.O the.F frog(F)
 1394 'I saw the boy's frog.' [elicited]

1395

[_s	NP	[_{NP}	NP _j	]_i	V + Appl + Agr _j	[_{NP}	N	...] _i
	SUBJ	OBJ2	PSR		OBJ1	OBJ2	PSE	

1396 Here the NP headed by the PIP is dominated by another NP which is identical to that
 1397 dominating the possessed noun. As this representation makes explicit, it is not assumed
 1398 here that the discontinuous PIP bears the object function, unlike the doubling possessor in
 1399 (56). Instead, as discussed in Section 6.3, it is assumed that the agreement marker on the
 1400 verb functions as an incorporated pronoun which bears the object function in cases like
 1401 this where there is no overt doubling possessor.

1402 One other potential issue with the analysis is the fact that PIPs can also be realized as
 1403 bound pronouns (see Section 4.1). This element cannot bear both the object and possessor
 1404 functions as a referential expression cannot bear more than one grammatical function in
 1405 a clause. I assume in such cases that the bound PIP does not have the same status as
 1406 the doubling possessor. Instead, it bears the possessor function and the object function is
 1407 borne by the incorporated pronoun on the verb, just as it is in (57).

1408 (58) *Yɔ nɔij-bi-te_j [ococo=mu'_j]_i.*
 I see-POSS.APPL-3SG.M.O frog(F)=his
 1409 'I saw his frog.' [elicited]

1410

[_s	NP	V + Appl + Agr _j	[_{NP}	N	... Clitic _j	]_i
	SUBJ	OBJ1	OBJ2	PSE	PSR	

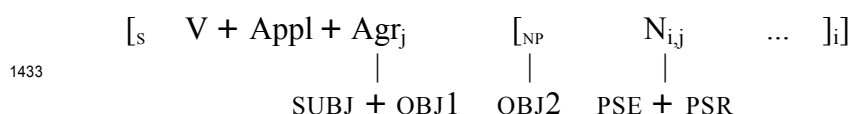
1411 It may also be the case that the bound PIP bears the object function and the possessor
 1412 function is incorporated into the possessed noun (as in example (60) below). However,
 1413 given that the bound possessor can also occur in the IPC, in which it is assumed that the
 1414 possessive phrase bears the object function, this analysis seems less plausible. One con-
 1415 sultant also doubted the grammaticality of a sentence such as (59), in which the bound PIP

1416 attaches to a clause-level adverb. This seems to indicate that the bound PIP is a phrase-
 1417 level clitic, rather than a clause-level clitic like the doubling possessor. It is represented
 1418 as such in (58).

1419 (59) *?*Yu nɔij-bi-te* *ococo munja'=mu'*.
 I see-POSS.APPL-3SG.M.O frog(F) yesterday=his
 1420 ('I saw his frog yesterday. ') [elicited]

1421 Clauses with no expression of the PIP as a nominal or clitic also require further expla-
 1422 nation. Analogously to the way that the incorporated pronoun bears the object function
 1423 when there is no expression of the PIP in the clause, I will assume that the possessor func-
 1424 tion is incorporated into the possessed noun when there is no expression of the PIP in the
 1425 possessive phrase. The structure of a clause with no overt expression of the PIP can be
 1426 represented as follows. The clause-level adverb *chat* is not represented and it is assumed
 1427 that the agreement marker on the verb is a portmanteau which also bears the subject func-
 1428 tion as well as the object function. The possessed noun is a kind of 'portmanteau' which
 1429 bears both the possessed noun and the internal possessor function (represented by PSE +
 1430 PSR).

1431 (60) *Chat jitop-je-bi-'j* *sara'ij.*
 then throw.away-CLF-POSS.APPL-3SG.F.O bag(F)
 1432 'Then (it) threw away (her) bag.' [tarovs001.025]



1434 One other type of PIPC which requires further explanation is the passive variant. The
 1435 subject of the verb in a passive PIPC corresponds to the object of the non-passive variant.
 1436 Following the analysis proposed here, this element would be the external representation
 1437 of the PIP which bears the object function in the non-passive variant. In this case, two
 1438 valency changing processes occur. The applicative increases the valency by adding the
 1439 PIP as the primary object and demoting the possessive phrase to the secondary object

1440 function. Then the passive decreases the valency by promoting the primary object to the
 1441 subject. Therefore as well as subcategorizing for this subject argument, the verb in such
 1442 construction retains its secondary object function, and this function continues to be borne
 1443 by the possessive phrase:

1444 (61) *[Maria_i-tyvojity]_i =mɔ'j ja'-cat-bu-ti-'j Juan*
 name(F)-M brother(M) =her PASS-hit-POSS.APPL-PASS-F.S name(M)
 1445 Maria's brother was hit by Juan.' [elicited]

1446
$$\begin{array}{ccccccccccc} [s & [_{NP} & N & NP_j & \dots &]_i & Clitic_j & V + Pass + Appl + Agr_j & NP &] \\ & | & | & | & & & | & & | & \\ & OBJ2 & PSE & PSR & & & SUBJ & & OBL & \end{array}$$

1447 (61) shows that the doubling possessor bears the subject function of the passive verb,
 1448 while the possessive phrase bears the secondary object function. Meanwhile the former
 1449 subject of the non-passive verb is demoted to the status of an oblique adjunct (agents in
 1450 passive constructions are not marked by any oblique marking in Chimane).

1451 To summarise, an analysis of PIPCs in Chimane has been provided in which it is ar-
 1452 gued that PIPs have an clause-level representation which can be optionally realized by
 1453 the doubling possessor. When the external representation is not realized by the doubling
 1454 possessor, I assume that the agreement marking on the verb functions as an incorporated
 1455 pronoun and bears the object function in place of the clause-level representation of the
 1456 PIP. The latter is assigned the primary object function, while the possessive phrase headed
 1457 by the possessed noun bears the secondary object function. Following this analysis, the
 1458 structure of the various types of PIPC discussed in this study can be accounted for in a
 1459 unified way.

1460 8 Summary and further questions

1461 This study has shown that agreement between the verb and the internal possessor in Chi-
 1462 mane can be accounted for by assuming that the agreement is mediated by a clause-level

1463 element which bears the object function in the clause and is anaphorically controlled by
1464 the internal possessor. This mediated locality-type analysis helps to explain how PIPs
1465 can control agreement on a target which is not in their local domain. If this analysis is
1466 correct, then this explains why the PIPC seems to share features in common with both
1467 IPCs and EPCs; while it seems to be superficially similar to the IPC in terms of the mark-
1468 ing of possessors, it is in fact much closer to EPCs, in particular those in which the EP
1469 is promoted to object status via an applicativization-like process, as has been argued for
1470 example in Oluta Popoluca (Mixean) by Zavala (1999). The only complication in Chi-
1471 mane is that rather than the PIP itself being promoted to primary object status, an element
1472 which is anaphorically bound by the PIP is promoted to this function instead. The use of
1473 this process in ditransitive constructions is revealing in this regard, since in those cases,
1474 the referent of the possessor is bearing two distinct but not mutually exclusive semantic
1475 roles: one as the non-patient-like argument (the recipient or beneficiary etc.), and one
1476 as the possessor of the patient-like argument. In fact, it may well be the case that the
1477 more semantically bleached uses of the PIPC, for example with non-affecting predicates
1478 like ‘see’ and stative predicates like ‘know’, in which there is no clear non-patient-like
1479 semantic role, developed by analogy from this more semantically motivated use in ditran-
1480 sitive constructions.

1481 Unfortunately there are no historical texts for Chimane, therefore it is difficult to re-
1482 construct earlier stages of the language. However, it seems plausible to assume that the
1483 more widespread contemporary use of the PIPC did develop in this way. But this begs
1484 the question of why the use of the PIPC was extended to verbs in which there is no non-
1485 patient-like semantic role for the PIP to map to. In the introduction I briefly alluded to
1486 the fact that PIPCs alternate with IPCs in discourse, and that the alternation is motivated
1487 by the semantic and/or information structural role which is borne by the possessor. In the
1488 case of a ditransitive construction in which the possessor bears a recipient or beneficiary
1489 role, it is clear to see why the PIPC is preferred over the IPC, as it signals that the PIP
1490 bears a semantic role (and an argument function) which is different from the possessive

1491 phrase headed by the possessed noun. However, in cases in which the possessor does not
1492 have a semantic role different from the possessive phrase, then there must be a different
1493 motivation for choosing between the PIPC and the IPC. It is beyond the scope of this
1494 study to go into detail on the discourse function of the PIPC, but initial evidence seems to
1495 suggest that the PIPC is preferred when the possessor bears a topical information structure
1496 role in the wider discourse. More specifically, since only PIPs in object NPs can control
1497 agreement on the verb, and subjects usually (but not always) bear the primary topic role
1498 in discourse, it seems to be the case that the PIPC is preferred when the possessor bears
1499 the secondary topic role, defined as “an entity such that the utterance is construed to be
1500 ABOUT the relationship between it and the primary topic” (Nikolaeva 2001: 26). A de-
1501 tailed investigation of the discourse function of the PIPC is therefore required to provide
1502 a more complete picture of this complex phenomenon.

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1516 Abbreviations

.	fused meaning	INTR	intransitive
-	affix boundary	IPC	internal possessor construction
=	clitic boundary	IRR	irrealis
(x)	inherent feature	LDA	long distance agreement
>	direction of action	LOC	locative
1	first person	M	masculine
2	second person	N	neuter
3	third person	NEG	negative
ABS	absolutive	NH	non-honorific
APPL	applicative	NOM	nominative
BEN	benefactive	O/OBJ	object
CLF	classifier	OBL	oblique
CAUS	causative	PASS	passive
COM	comitative	PFV	perfective
DAT	dative	PIP	prominent internal possessor
DIM	diminutive	PIPC	prominent internal possessor construction
EP	external possessor	PL	plural
EPC	external possessor construction	POSS	possessive
EPEN	epenthetic	POSTESS	postessive
ERG	ergative	PROG	progressive
EXCL	exclusive	PSE	possessed noun
F	feminine	PSR	possessor
FOC	focus	Q	question
GEN	genitive	REFL	reflexive
GNL	general meaning	S/SUBJ	subject
H	honorific	SG	singular
HRSY	hearsay	SUPE	superessive
INCL	inclusive	TR	transitive
INTERR	interrogative		

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