

The hispanization of Chamacoco syntax

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This paper investigates contact-driven syntactic change in Chamacoco (a.k.a. *Ishir ahwoso*), a Zamucoan language with about 2,000 speakers in Paraguay. Chamacoco syntax was originally characterized by a low number of conjunctions, like its cognate Ayoreo. Although Chamacoco shows transfers from other neighboring languages, a turning point in language change was the beginning of regular contacts with Western society around the year 1885. Since then, Spanish has exerted a growing influence on Chamacoco, affecting all levels of linguistic analysis. Most speakers are today Chamacoco-Spanish bilingual, and the language is endangered. Chamacoco has borrowed some conjunctions from Spanish, and new clause combining strategies have replaced older syntactic structures. Other function words introduced from Spanish include temporal adverbs, discourse markers, quantifiers and prepositions. I discuss their uses, the reasons for their borrowing and their interaction with original Chamacoco function words. Some borrowed function words can combine with autochthonous conjunctions to create new subordinators that are calques from Spanish compound subordinating conjunctions. This resulted in remarkable syntactic complexification. Chamacoco comparatives, modeled on the Spanish ones, are also likely instances of contact-induced complexification, since there are reasons to surmise that Chamacoco originally lacked dedicated comparative structures.

KEYWORDS: Chamacoco, clause combining, comparatives, coordination, function words, language contact, South American Indigenous languages, subordination, syntax, Zamucoan.

1. Introduction

This study analyzes the influence exerted by Spanish on the syntax of Chamacoco, a Zamucoan language of northern Paraguay. After introducing the language, I briefly address the contact history of this population, which can be divided into two phases: (i) the first period, characterized by relationships with surrounding indigenous populations over the centuries (§2); (ii) the second period, which began with the irruption of the Western world, which has deeply changed Chamacoco society (§3). This event, which took place at the turn of the 19th century, resulted in the hispanization of the language. Chamacoco has borrowed a number of

conjunctions from Spanish, and consequently has replaced some original syntactic structures (§4). Chamacoco has also borrowed other function words, which include temporal adverbs and discourse markers (§5), quantifiers (§6) and prepositions (§7): these elements can combine with the autochthonous polyfunctional subordinator *uje* to form semantically more specific compound subordinators. In addition, comparative constructions are modeled on Spanish comparatives (§8).

Chamacoco is spoken in the department of Alto Paraguay by about 2,000 people. It is divided into two dialects, *Ebitoso* (also known as *Hbitoso*, *Ybytosos*)¹ and *Tomaraho*. In this study, I only refer to the former, which in 2012 was spoken by about 1,915 people, while only 152 people spoke Tomaraho (DGEEC 2014). Both groups used to share the same culture, but their present-day socio-cultural situation is different: the Ebitoso have lost many elements of their cultural tradition, which are still preserved among the Tomaraho. This is a consequence of the two groups' different attitudes towards Bolivian and Paraguayan settlers, who arrived in their traditional territory in the late 19th century. The ancestors of today's Ebitoso soon established contacts with the newcomers, while the Tomaraho tried to avoid them, thus having a longer period of isolation.² For this reason, the Ebitoso have lost many if not most elements of their original culture, and one can observe many Spanish borrowings in the grammar and lexicon of their dialect. Even though the language is now the main cultural element characterizing the Chamacoco Ebitoso identity, the influence of Spanish is growing in the younger generations of speakers, so that the language will continue to change, losing even more Zamucoan elements. Considering that the language is still in vigorous use in Chamacoco communities, where it is taught to the children, the loss of autochthonous elements is, at least for the next generations, the biggest threat to the language.

Chamacoco belongs to the Zamucoan family along with †Old Zamuco and Ayoreo. Old Zamuco is now extinct and was documented in the 18th century in the mission of *San Ignacio de Zamucos*. In all likelihood, the mission was located close to the boundary between Bolivia and Paraguay (Chomé 1958; Ciucci 2018). Ayoreo, with about 4,500 speakers, was traditionally spoken in an area of northern Paraguay and south-eastern Bolivia that was contiguous to the ancestral territory of the Chamacoco, with whom they were at war from time to time. Ayoreo and Old Zamuco are very close from the lexical point of view (Kelm 1964; Ciucci 2016). However, Ayoreo is not a direct descendant of Old Zamuco, but rather of one or more sister languages spoken at the time of the Jesuits. Chamacoco, by contrast, is the most innovative Zamucoan language, and only shares no more than 30% of lexicon with Old Zamuco and Ayoreo (Ciucci & Bertinetto 2015; 2017), which form a different branch from that

of Chamacoco. Unless indicated otherwise, the data for this study come from several periods of fieldwork carried out between 2009 and 2019. I adopt here the orthographic transcription generally used for Chamacoco (Ebitoso). For an analysis of Chamacoco orthography, see Ciucci (2016: 42-44, 57-65). The innovations of Chamacoco have occurred in two different phases, which are dealt with in the following sections: (i) the first one, characterized by contact between Chamacoco and other indigenous languages (§2); (ii) the second one, in which Spanish is the main source of change (§3).

2. The first wave of contact-induced innovations in Chamacoco

The first phase of contact covers a very long period of Chamacoco history. It begins with the split of Chamacoco from the Old Zamuco/Ayoreo branch and ends in 1885. In this period, the Chamacoco were influenced by other indigenous populations. This produced remarkable cultural and linguistic changes. This also explains why the Ayoreo and the Chamacoco have a similar material culture, but their traditional cosmology is fairly different. By contrast, there are remarkable cultural similarities between Ayoreo and Old Zamuco (Ciucci 2019). The Chamacoco people have changed their non-material culture, possibly owing to the influence of Jê or related populations, such as the Bororo (Cordeu 1997), but other ethnic groups must also have played a role.³ Sušnik (1969) identifies cultural influences by the Chiquitano. The present-day Chamacoco are still aware of past contacts with Guaná (Enlhet-Enenlhet), and my informants mentioned fights between the shamans of the two tribes. Hannes Kalisch (personal communication) also notes some analogies between the Chamacoco and Guaná culture. The relationship between Chamacoco and Kadiwéu (Guaycuruan) is a special case, because it is historically well documented (Boggiani 1894: 47-49) and is a recurring theme in Chamacoco traditional stories. The Kadiwéu, who in the late 19th century inhabited the eastern bank of the Paraguay River in the Brazilian state of Mato Grosso do Sul, were the traditional enemy of the Chamacoco. They were militarily stronger than the surrounding populations, from which they used to take prisoners who were incorporated into the tribe, and many of them were Chamacoco (Oberg 1949).

At a linguistic level, this long period of contact between Chamacoco and the neighboring languages is possibly the main reason for its lexical differences with respect to Ayoreo and Old Zamuco. The above-mentioned estimate of 30% lexical similarity between Ayoreo/Old Zamuco and Chamacoco almost exclusively refers to the indigenous lexicon.

So far, however, only a few borrowings from other languages have been identified in Chamacoco, and almost all of them are from Kadiwéu (Ciucci 2014: 37-40). This is not surprising given the depth of time involved and the fact that the contacts may have involved languages or varieties which are no longer spoken.⁴ Chamacoco has serial verb constructions (SVC), which are absent in Ayoreo and Old Zamuco. By contrast, SVCs are found in some Guaycuruan languages, including Kadiwéu (Sandaló 1995: 93-107). A comparison of the SVCs in both languages suggests that Chamacoco might have borrowed SVCs from Kadiwéu (Aikhenvald 2018: 211-12). However, linguistic transfer was not monodirectional, because two rare linguistic features of Kadiwéu come in all likelihood from Chamacoco (Ciucci 2020a). They are: (i) the gender marking on possessive classifiers (Ciucci & Bertinetto 2019); (ii) the pluralizer prefix *o-*, which precedes the third person prefix, violating the universal tendency according to which number affixes follow person prefixes (Trommer 2003; Bertinetto 2011): *o-ts-ahmur* (PL-3-love) ‘they love’. There are also grammatical transfers from other languages: for instance, Chamacoco has introduced an inclusive-exclusive distinction, which is not found in Ayoreo and Old Zamuco. Clusivity must have been imported from a Mataguayan or, more likely, a Guaraní language (Ciucci & Bertinetto 2015). In the inclusive person of verbs and free pronouns, as well as in the second person of free pronouns, Chamacoco distinguishes two non-singular values: plural, for more than one entity, and greater plural, referring to an abundance of entities or their totality (Ciucci 2020a). Typologically, the greater plural is unusual, but is also found in Nivaçle (Mataguayan), from which it was possibly borrowed. This is interesting from a historical point of view, because such linguistic data indicate a past contact between Chamacoco and Nivaçle that has so far been little investigated (Ciucci 2014; 2020a).⁵

3. *The second phase of contact*

The second wave of innovations began in 1885, when a Bolivian company founded Puerto Pacheco, a settlement on the Paraguay River, in the Chaco area inhabited by the Chamacoco. Here stable contacts between the Chamacoco and Western people were first established, as we learn from Boggiani (1894: 27), who a few years later founded two settlements in the Chamacoco territory: Puerto Esperanza and Puerto 14 de Mayo. Another Italian traveler, Luigi Balzan, reports to have met the Chamacoco in Puerto Pacheco in 1892 (López Beltrán 2008: 257). Puerto Pacheco, which was then contended between Paraguay and Bolivia, is now a Paraguayan municipality called Bahía Negra. The indigenous com-

munity of Puerto Diana (*Nyana* in Chamacoco) is very close to the town.

The Tomaraho retain many elements of their traditional culture, and their Chamacoco variety is much less affected by Spanish in grammar and lexicon than the Ebitoso one, because they had fewer contacts with Paraguayan society. Not only were the Tomaraho contacted later, but their traces were lost after the Chaco War in the 1930s. They were then considered extinct, until a group of about eighty people re-emerged at the beginning of the 1980s (Richard 2008: 426-433). According to Baldus, who worked with the Ebitoso and Tomaraho in the 1920s, the split between present-day Ebitoso and Tomaraho had taken place no more than 50 years before his study (Baldus 1932: 376), so that the *terminus post quem* is around the years 1880-1882. Although one could try to identify the Tomaraho with the Timinaha, a Zamucoan tribe mentioned by the Jesuits in the 18th century (Sušnik 1969: 14-15), Combès (2009: 105-107) convincingly argues that the differentiation of the Chamacoco into two groups is a relatively recent event, chronologically corresponding to the establishment of Puerto Pacheco. Although the breach of religious taboos was said to be the cause of the split (Baldus 1932: 276), Combès points out that the split occurred when the Chamacoco had to decide which attitude to take towards the foreigners. If this is so, the arrival of Western settlers had a crucial impact on the Chamacoco from the very beginning.⁶

The cultural and linguistic change among the Chamacoco Ebitoso happened slowly at first, then there was an acceleration in the second half of the 20th century, owing to the Evangelical missionaries and to schools, where Spanish was the only language of education under Stroessner's dictatorship (1954-1989). A turning point was 1956, when the ceremony in which young men were initiated into the secrets of Chamacoco religion ceased (Blaser 2013: 91-92). One generation later, the anthropologist Branislava Sušnik (1969) wrote a book on how the cultural change had been affecting the Chamacoco, particularly between her first fieldwork in 1954-1955, when she documented the initiation ritual, which was still being performed, and her last fieldwork with them in 1968. Nowadays, all Chamacoco are bilingual, except for very old people who have always lived within the community. Moreover, some community members are also fluent in Paraguayan Guaraní, the second official language of Paraguay. In addition, the Chamacoco are exposed to Portuguese, considering that the Paraguay River is the only boundary between most Chamacoco communities and Brazil. The language is now the main element of the Chamacoco cultural identity: Chamacoco is still taught to the children, and it will presumably be transmitted to the next generations as long as the Chamacoco live in their communities. In the foreseeable future, language endangerment mostly concerns the hispanization of Chamacoco,

that is, the ongoing replacement of original structures and lexicon by Spanish elements. The role played by Paraguayan Guaraní and Portuguese is, by contrast, negligible.⁷ The current sociolinguistic situation of Chamacoco is very different from that of Ayoreo, whose speakers are generally less integrated in society and have a lower level of bilingualism. This is because regular contacts between the Ayoreo and Western people began in 1947, and today there are still small groups of uncontacted Ayoreo in Paraguay. As a result, the influence of Spanish on Ayoreo is limited to lexical borrowing of items unknown in their traditional culture. By contrast, not only has Chamacoco introduced Spanish loanwords to fill a gap in the language, but there are also a good number of luxury loanwords⁸ that are replacing the original Chamacoco lexicon. Some of them are featured in Table 1, where, for the sake of clarity, nominal and verbal forms are not provided with morpheme-per-morpheme glosses.⁹ These forms co-exist and are in free variation. However, one has to consider that it is very likely that the informants who talk with a researcher, such as the present author, tend to use older forms more often than they do in their everyday life, because they want the researcher to record the archaic forms that are perceived as endangered, being used less and less by the younger generations. The older forms are still preferred to Spanish borrowings when the Chamacoco do not want to be understood by the other Paraguayans (Ciucci *forthcoming*).

Not all words which now tend to be replaced by Spanish borrowings are autochthonous. This is because Chamacoco in the first phase of contact-induced change (§2) replaced a large proportion of its Zamucoan lexicon, although in the vast majority of cases one cannot identify the donor language. For example, in Table 1, the word for ‘water’, *nihyokot*, was borrowed from Kadiwéu *nij:ogo* (Sandalo 1995: 250), while *kalapita* comes from Portuguese *garrafa* ‘bottle’ through Kadiwéu *galaapa* (Boggiani 1929: 160). There is also a Spanish loanword, *okiyuta* / *okiyutit*, now perceived as archaic, which is in competition with what is possibly a more recently borrowed form of the same Spanish word ‘galleta’. Contact with Spanish has also resulted in a simplification of morphology, particularly in loanwords. In the case of ‘child, son’, the Chamacoco term *aap* is inflected for possessor, properly designating someone’s child/son. To refer to a child in general, Chamacoco has created a new unpossessed term, *pikihnint*, from the Spanish adjective *pequeño* ‘small’. Another loanword competing with *aap*, *ijit* (M) / *ijita* (F), was introduced to indicate that the child is the son/daughter of someone. The very form *aap* is singular epicene and is only used for nominal predication. The word most likely had the masculine and feminine forms **aabit* (M) and **aabita* (F), used with

non-predicative function. This gap in the paradigm is very likely connected with the introduction of *ijit* (M) / *ijita* (F), which have replaced **aabit* (M) and **aabita* (F) in their context of use (see Ciucci 2016 for more details).

		OLDER FORM	BORROWED TERM FROM SPANISH	SPANISH LEXICAL SOURCE
HUMAN CLASSIFICATION AND KINSHIP	‘aunt’	<i>nahnta</i> / <i>lateemcha</i>	<i>tia</i> / <i>tiya</i>	<i>tía</i>
	‘boy/girl’	<i>disibich</i> (M) / <i>disibicha</i> (F)	<i>boshesht</i> (M) / <i>bosheshta</i> (F)	<i>muchacho</i> (M) / <i>muchacha</i> (F)
	‘child’	<i>aap</i> (M/F)	<i>pikihhint</i> (M) / <i>pikihninta</i> (F)	<i>pequeño</i> (M) / <i>pequeña</i> (F) ‘little’
	‘child’, ‘son/daughter’	<i>aap</i> (M/F)	<i>ijit</i> (M) / <i>ijita</i> (F)	<i>hijo</i> (M) / <i>hija</i> (F)
	‘grandmother’	<i>dekuta</i> / <i>lekuta</i>	<i>abwela</i> / <i>abwelta</i>	<i>abuela</i>
ARTIFACTS	‘bottle’	<i>kalapita</i>	<i>boteylta</i>	<i>botella</i>
	‘canoe’	<i>keshiwot</i> / <i>keshuwut</i>	<i>kenuut</i> / <i>kenuwa</i>	<i>canoas</i>
FOOD AND WATER	‘banana’	<i>poshikinta</i>	<i>mananta</i>	<i>banana</i>
	‘simple and long-lasting type of bread’	<i>okiyuta</i> / <i>okiyutit</i>	<i>keyetit</i>	<i>galleta</i>
	‘water’	<i>nihyokot</i>	<i>awit</i>	<i>agua</i>
GEOGRAPHY	‘woodland’	<i>ormit</i>	<i>hmont</i> / <i>hmontit</i>	<i>monte</i> ‘woodland’
MOTION	‘to fall’ (‘s/he falls’)	<i>beshi(hi)</i>	<i>kay</i>	<i>cae</i>
ATTENTION	‘to remember’ (‘s/he remembers’)	<i>eyucha</i>	<i>ekwerta</i> ¹⁰	<i>recuerda</i>

Table 1. Borrowed forms from Spanish *vs* older forms.

Table 1 also shows verb borrowing from Spanish. This is an example of ‘direct insertion’, whereby the “borrowed verb stem is simply used like a native one without any morphosyntactic adaptation” (Wohlgemuth 2009: 293). Although direct insertion was not considered possible in Moravcsik’s (1975) seminal paper on verb borrowing, it is crosslinguistically the most common strategy employed to borrow verbs. Verbs bor-

rowed in Chamacoco belong to the group of defective verbs, which only receive pluralizer affixes (Ciucci 2016: 203-206); Chamacoco defective verbs include both loans and autochthonous verbs.

In the rest of this paper, I discuss the structural changes Chamacoco is undergoing, which are particularly evident in the syntax, with the borrowing of function words and the creation of new subordinators.

4. Syntactic change: subordination and function words

Syntactic change happens relatively quickly in a situation of language contact (cf. Aikhenvald 2006: 5). This is evident in the connectors of Chamacoco, which are analyzed in the rest of the paper. Since some borrowed subordinators consist of a Spanish function word + *uje*, the analysis of some of them permits us to analyze also the transfer of function words of the same kind in Chamacoco: the following sections address temporal adverbs and discourse markers (§5), universal quantifiers (§6), borrowed prepositions and final formulae (§7). Finally, comparative constructions are discussed (§8).

Table 2 features the connectors of Ayoreo and Chamacoco. Ayoreo has a small inventory of subordinators. By contrast, Chamacoco has a richer inventory of connectors, with some elements borrowed from Spanish (indicated in the table).

Chamacoco has two adversative coordinators, *mahn* and *per*. The first is the autochthonous adversative conjunction (Table 2), while the second, from Spanish *pero* ‘but’ (1), now occurs more frequently than *mahn*. No pragmatic differences have emerged so far between *mahn* and *pero*.

- (1) *Ēhe*, *p-iji-ta*, *bu*; *per* *a-bey* *owa!*
 yes 1SG-daughter-F.SG.AF [2SG]go but 2SG-be careful 2SG
 ‘Yes, my daughter, go but be careful!’ (Bertinetto & Ciucci 2012: 96)

The disjunctive coordinator *o* ‘or’ is also borrowed from Spanish. In NP disjunction, *kimiji* (lit. ‘perhaps’) introduces the first disjunct, *o kimiji* (lit. ‘or perhaps’) the second (2).

- (2) *Kimiji* *Santiago* *o* *kimiji* *Beni* *o-hno* *o-tir* *Asunsyon*
 perhaps Santiago or perhaps Beni PL-3.go PL-3.go_to Asunción
ō-yya *uu* *permo*
 PL-[3]accompany ART.M.SG sick
 ‘(Perhaps) Santiago or (perhaps) Beni will go to Asunción accompanying the sick person.’
 Ulrich & Ulrich 1990: 160)

	AYOREO	CHAMACOCO
COORDINATORS		
conjunctive	(e)nga [only interclausal]	hn; ich [only VP]
adversative	mu	mahn; per [Spanish: pero] [ex. 1]
disjunctive	jeonga; poga	o [Spanish: o] (kimiji) [ex. 2-4]
negative	–	hnii [Spanish: ni] [ex. 5]
SUBORDINATORS		
complement clause	uje [realis]; ujetiga [irrealis] ¹¹	uje; kimiji [indirect polar interrogatives]
relative	uje	uje; waa uje [for feminine singular common argument]
causal	uje	pork [Spanish: porque] [ex. 6]; yeji [archaic]
when-clause	uje	uje / (uje) ehn; namiji [prospective]
after-clause	uje e; noun + quigade	(depwe [Spanish: después]) uje [§5, ex. 14]; namiji [prospective]
until-clause	jeaja	nehech; a(s)ta [Spanish: hasta] uje [§7, ex. 27]
before-clause	uje cama	uje (ehn) ya(ha)paa / ehn ya(ha)paa [ex. 10]; nakaha; jenehe; ante [Spanish: antes] uje [ex. 11]
since-clause	–	shiyeh (uje)
whenever-clause	–	kal [Spanish: cada] uje [§6, ex. 22]
final	ujetiga	par [Spanish: para] (uje) [ex. 7-9]
hypothetical	ujetiga	uje / kimiji [possibility]; kerēhe / kēhe [contrafactuality]
concessive	(ujetiga...) maringa	ahni

Table 2. Ayoreo and Chamacoco connectors (adapted from Bertinetto & Ciucci 2012: 94).

Kimiji is also the subordinator for hypothetical and indirect interrogative clauses, which are the disjuncts in (3), where *o* introduces the second disjunct. Before the second disjunct, either *kimiji* or *o* can be omitted. Examples (2) and (3) suggest that, before introducing Spanish *o*, Chamacoco lacked a specific morpheme for ‘or’, and correlative constructions with *kimiji* expressed disjunction. However, the frequent association between *o* and *kimiji* has given rise to the compound disjunctive conjunction

o kimiji (4). In (4), *kimiji* does not introduce a complement clause, so that it is not necessary and cannot be analyzed separately from *o*, which can occur alone.

- (3) *Esee = hna ye oy-iraha kimij(i) t-aāch = hna o kimij(i)*
 DM = RETR NEG 1PL.EXCL-know COMP 3-come = RETR or COMP
ye t-aāchi = pe
 NEG 3-come = NEG
 ‘Then, we do not know whether he came or not.’ (lit. ‘or whether he did not come’)
- (4) *Je akir o (kimiji) shi a-lehet? Shi t-iyehē*
 INT [2SG]sit_down or DUR 2SG-stand DUR 1SG-stand_upright
 ‘Do you sit down, or do you stand? I will just stand.’

The situation of Chamacoco confirms the borrowing hierarchy ‘but’ > ‘or’ > ‘and’ (Matras 2009: 158).¹² As one can see in Table 2, this combination of indigenous and borrowed elements has also given rise to other conjunctions: the negative conjunctive disjunction *hnii* comes from Spanish *ni* (5). Indeed, the phonological adaptation of Spanish words can involve the partial devoicing of the nasal consonant.

- (5) *Ye d-oho yuk-īr = pe, ye t-aak = po = pe.*
 NEG 3.IRR-drink alcoholic_drink-M.PL.IF = NEG NEG 3-eat = again = NEG
Nihyok naa o-pos-o, hnii nihyoko-t, hnii
 NEG.EXIST NEG GF-food-M.PL CONJ.NEG water-M.SG.AF CONJ.NEG
yuki-ch
 alcoholic_drink-M.SG.AF
 ‘He does not drink alcoholic drinks, he does not eat. There is neither food, nor water, nor alcohol.’ (Ciucci 2016: 659, ex. 206)¹³

Causal subordinate clauses are introduced by the subordinator *pork*, from Spanish *porque*. However, there is still an indigenous subordinator for causal clauses, *yeji*, but it is rarely used. Stolz & Stolz (1996) noted that, for Mesoamerican languages in contact with Spanish, the borrowing of *porque* implies that of *pero*. This also applies to Chamacoco.

- (6) *Ye uhu kōhor-t purho e-lo, pork owa hnakirbit-ak*
 NEG [2SG]do sleep-M.SG.AF break 2SG-body because 2SG young_man-M.SG.PF
 ‘Do not let sleep break your body [i.e., do not oversleep], because you are a young man.’
 (Ciucci 2016: 608-609, ex. 108)

A number of subordinators result from the combination of two or more grammatical words: the Spanish influence has produced hybrid subordinators consisting of a borrowed function word followed by *uje*, which is a polyfunctional subordinator of Zamucoan origin (cf. Table 2). These new Chamacoco subordinators correspond to the combination of preposition/adverb + *que* in Spanish: *para que* ‘in order to’, *antes que* ‘before’, *después que* ‘after (that)’, etc. The similarity between Spanish *que* and Chamacoco *uje* was crucial in order to originate these new subordinators, which are examples of grammatical accommodation. Indeed, the existence of a look-alike often facilitates the development of similar structures (Aikhenvald 2006: 24, 33). Among languages in contact with Spanish, grammatical accommodation has been documented in the Uto-Aztecan languages Pipil (Campbell 1987: 263-264) and Nahuatl (Hill & Hill 1986: 293-334; Heine & Kuteva 2005: 246-247). Grammatical accommodation in Chamacoco can be exemplified by final clauses, introduced by *par*, from Spanish *para*, plus *uje* (7). *Par uje* is an example of calque from Spanish *para que*, with matter borrowing of the first element.

- (7) *Waa ir irāha-ta ch-iyuhu posh-t par_uje*
 ART.F.SG 3SG [3]wife-F.SG.AF 3-extract [3]food-M.SG.AF in_order_to
ir t-aak
 3SG 3-eat
 ‘His wife takes the food so that he can eat.’

In *par uje*, the second element is not obligatory and can be omitted, without any change in meaning, as in (8). While connectives borrowed in Chamacoco are often in competition with the autochthonous ones, we do not know how final clauses were expressed before contact with Spanish.

- (8) *Je ahmur t-irmas owa komisaria par t-uu*
 INT [2SG]like 1SG-let_get_off 2SG police_station in_order_to 1SG-let
o-l-iyeru owa?
 PL-3.IRR-bind 2SG
 ‘Do you want me to let you get off (the bus) at the police station to let (them) arrest you?’

In negative final clauses, *par* or *par uje* can be followed by the standard negation *ye*, but in some cases I have also documented the use of *par* with the negation *no* or *naa*, as in (9).¹⁴ These negators from Spanish still have low frequency compared with autochthonous *ye*. It is not completely clear whether *no* and *naa* are etymologically the same element: indeed, while *no* is the Spanish negator, *naa* is a phonological alteration of Spanish *no* ‘not’ or *nada* ‘nothing’; the form *naa* results from ad hoc phonological manipulation, so that its Spanish source is more difficult to recognize

(Ciucci *forthcoming*). In Chamacoco, *no* has holophrastic uses so far not attested with *naa*, so that they might be different elements.

- (9) *T-ibit(e) olaa eyu-wo par naa e-key-lo*
 1SG-set 2PL thought-M.PL in_order_to NEG 2-forget-PL
 ‘I teach you (this), so that you do not forget.’ (lit. ‘I set your thoughts’)

Temporal clauses show autochthonous subordinators consisting of more elements, such as *uje ehn* ‘when’ or *uje ehn yapaa* ‘before’ (lit. ‘when not yet’), used in (10), so that one might surmise that this tendency preceded the contact with Spanish, and facilitated the transfer.¹⁵ In (10), instead of *uje ehn yapaa*, one could also use *ante uje* ‘before’, as in (11). Note that *ante* can turn into *ant*, owing to deletion of unstressed final vowel, which frequently occurs in Chamacoco (Ciucci 2020b).

- (10) *Uje_ehn_yapaa deey-ch tokole, ich ihi kiis-ta*
 before sun-M.SG.AF [3]rise and [3]drink tereré-F.SG.AF
 ‘Before the sun rises, he drinks tereré (typical Paraguayan drink).’

- (11) *Ant_uje o-ch-ish wahach pi-t, ich o-le*
 before PL-3-reach there side-M.SG.AF and PL-3.EXIST
onoo-t(a) ehe-t
 river-F.SG.AF [3]middle-M.SG.AF
 ‘Before they reach there the (other) side, they are in the middle of the river.’

Ante uje is also a possible calque from Spanish *antes que* ‘before’. Like Spanish *antes*, Chamacoco *ant(e)* is a temporal adverb meaning ‘before’ (12).

- (12) *Ant = kite Ishir o-le wahacha du-t*
 before = RETR Chamacoco[M.PL] PL-3.EXIST there town-M.SG.AF
pi-t uje otsii Don_Bosco
 part-M.SG.AF SUB 3PL.QUOT Don_Bosco
 ‘Before, the Chamacoco lived there in the part of the town that is called *Don Bosco*.’¹⁶

In the adaptation of *antes* into *ant(e)*, one has to consider two phenomena that also occur in other Spanish borrowings dealt with in this paper: (i) In Paraguayan Spanish, as in most Spanish varieties of the Southern Cone, there is frequent weakening of syllable-final /s/ (Lipski 1984; Fontanella de Weinberg 1992: 136-138). This results in the deletion of /s/ in the Chamacoco word, which is systematic word-finally (13a-b) and frequent, although unpredictable, word-internally (13b-c). (ii) In Chamacoco, the unstressed final vowel is often deleted. This is also unpredictable and explains the alternation between *ante* and *ant* (13a), *ata* and *at* (13a, c).

- (13) a. ‘before’ Spanish *antes* > Chamacoco *ante* or *ant*
 b. ‘after, afterward’ Spanish *después* > Chamacoco *depwe* [de’pwe] (cf. §5)
 c. ‘up to, until’ Spanish *hasta* > Chamacoco *asta*, *ata* or *at* (cf. §7)

The following sections (§5-7) describe other compound subordinators, according to the type of borrowed function word that combines with *uje*. This gives occasion to discuss similar function words or adverbs that have been borrowed from Spanish.

5. Depwe uje, temporal adverbs and discourse markers

Depwe uje ‘after (that)’ (14) comes from Spanish *después que*. *Depwe* is also used as an adverb meaning ‘after, afterward’ (15), like its Spanish source *después*. Other temporal adverbs borrowed from Spanish are *awr(a)* ‘now’ (Spanish: *ahora*), *awrit* ‘right now’ (Spanish: *ahorita*), *oy* ‘today’ (Spanish: *hoy*), *syempir* ‘always’ (Spanish: *siempre*) and *ya* ‘already’ (Spanish: *ya*).¹⁷ For these temporal adverbs, I have only found the indigenous equivalent of ‘always’, which is *shish*.

- (14) *Depwe uje t-aak hn ukurb-o masaha ir=po*
 after 3-eat and [3]strength-M.PL [3]enter 3SG = again
 ‘After he ate, his strength come back.’ (lit. ‘entered him again’) (Ulrich & Ulrich 2000: 531)

- (15) *Depwe ana timchar-rza late ij-o òr*
 afterward this.F.SG woman-F.SG.AF poor.F.SG.AF 3.child-M.PL 3PL
tre=ni iteēt-o
 three = RETR male-M.PL
 ‘Afterward, the children of this poor woman were three males.’

In Chamacoco narratives, a new paragraph is introduced by the discourse marker *esee* (16), which can be followed by a prospective/retrospective marker (16a, cf. ex. 3, §4) and/or by a copulative conjunction, *ich* or *hn* (16b). The use of the conjunction after the discourse marker is optional, and *ich* or *hn* are in free alternation in this context. The Chamacoco discourse marker is changing, because *depwe* is gradually replacing *esee* (17), which nowadays has almost completely substituted its archaic form *eseeep* (see Ulrich & Ulrich 1990: 2).

- (16) a. *Esee=ki nos o-ym: Emiyör-rza iim=ike,*
 DM = RETR all PL-[3]leave Paraguayan_woman-F.SG.AF [3]leave = RETR
chofer iim=ike, komisari iim.
 driver [3]leave = RETR commissary [3]leave
 ‘Then everyone left: the Paraguayan woman left, the driver left, the commissary left.’
 (Ciucci 2016: 753)

- b. *Esee hn waa boshesh-ta ch-ishew waa muyeki-ta*
 DM and ART.F.SG girl-F.SG.AF 3-grab ART.F.SG doll-F.SG.AF
 ‘Then, the girl grabbed the doll.’

- (17) a. *Depwe hn uu Boggiani lishi to=ni*
 afterward and ART.M.SG Boggiani poor.M.SG [3]die=RETR
 ‘Afterward/then, the poor Boggiani died.’

- b. *Depwe=ni hn ese Nehmurc tsol: – Hiiya –*
 afterward=RETR and that.M.SG Nehmurc 3.QUOT hurrah
 ‘Then Nehmurc said: – Hurrah! –’

Temporal expressions frequently appear at the beginning of a sentence (15), optionally followed by *hn* (18) or *ich*. Since a sentence and a short paragraph can coincide, there is often no clear-cut distinction between the uses of *depwe* as a temporal adverb or as a discourse marker meaning ‘then, so’ (17), unless one considers the context (not reported in 17). The main indicator of *depwe* as a discourse marker is its frequency. The repeated occurrence of *depwe* in a text indicates that it is being used as a discourse marker, which is needed for each new paragraph. The use of *depwe* as a discourse marker is typical of younger speakers. Another innovation one observes mostly in young speakers is the use of the Spanish preposition *de* before *esee*: they are two phonological words, but one grammatical word (19). This is possibly because *de allí* ‘from there’ is the Spanish phrase the speakers associate with *esee*, as emerges in their translations.

- (18) *Dihürbi-t hn t-ish owa*
 morning-M.SG.AF and 1SG-meet 2SG
 ‘I meet you in the morning.’ (Ciucci 2016: 648)

- (19) *De esee=ni ich oy-itkër=ye=chi, pero yok ijaap=ni*
 DM=RETR and 1PL.EXCL-talk=RECP=there but 1SG little[M.SG.PF]=RETR
 ‘Then we talked to each other there, but I was little.’

Other Chamacoco discourse markers, which do not have the specific function of introducing a new paragraph, are borrowed: *entons(e)* ‘so, and then, next’ from Spanish *entonces* ‘so, then’ (20) and *weno* ‘well’, from Spanish *bueno* (21).

- (20) *Hap a-nem yoo, entonse hap tak-aha t-itir*
 at_once 2SG-wait 1SG then at_once 1SG-go 1SG-go_to
p-ihyu-ch, hap t-itim mama uje ich
 1SG-house-M.SG.AF at_once 1SG-tell 1SG.mother COMP EMPH
tak-aha
 1SG-go

‘Wait for me now, then I will immediately go home and I will immediately tell my mother that I go (with you).’

- (21) *Weno, deeychole t-iyem owa*
 well tomorrow 1SG-wait 2SG
 ‘Well, I will wait for you tomorrow.’

6. Kal uje and universal quantifiers

Kal uje ‘whenever’ (22) is possibly a simplification of *cada vez que* ‘whenever’ or, more literally, ‘every time that’. Spanish *cada* ‘every, each’ turns into Chamacoco *kal* ‘every, each’. The drop of unstressed final vowels is frequent in Chamacoco (ex. 13; cf. Ciucci 2020b); moreover, Spanish /d/ is often adapted as /l/ into Chamacoco. In *kal*, the lateral is also necessary, because /d/ cannot occur word-finally. *Kal* (23) is also used alone as a distributive universal quantifier; in (23), the NP head of ‘every/each animal’ is in the plural, while in the same context Spanish *cada* modifies a noun in the singular. Other universal quantifiers are *pur* ‘all’ (24), from Spanish *puro* ‘pure’ or ‘only, just’, and *todo* from Spanish *todo* ‘all’.

- (22) *Kal uje d-eshib-o o-y ospib-o=ho*
 whenever REFL-brother-M.PL PL-3.go_to_get honey-M.PL=PREP
ormi-t, ich ch-imit ir=to par hno
 forest-M.SG.AF and 3-get_ready 3SG=too in_order_to 3.go
t-eyāha ospib=to
 3-look_for honey[M.PL]=too
 ‘Whenever their brothers go to get honey in the forest, he gets ready too to go to look for honey.’

- (23) *Otsü kal loship-o ich keytikër*
 3PL.QUOT every/each animal-M.PL EMPH [3]talk
 ‘They say that he talked to every/each animal.’ (Balbuena 1993: 13)

- (24) *Ye o-n-ahmur o-l-ishew uu òr hnakirbit-o=pe,*
 NEG PL-3.IRR-want PL-3.IRR-catch ART.PL 3PL young_man-M.PL=NEG
shi o-hnoy pur òr de-yo
 only PL-3.take all 3PL big-M.PL
 ‘They did not want to catch the young men, they only take all of the mature men’ [to send them to the front].

Chamacoco also has an autochthonous universal quantifier, *nos* ‘all’ (25), which still occurs frequently in texts. In (26), *nos* alternates with the borrowed *todo*.

- (25) *Je inaapo ese pwert ehe-t? Yehe wir*
 INT how that.M.SG house [3]inside-M.SG.AF still ART.PL
a-sujār-o nos de
 2SG-thing-M.PL all 3.EXIST
 ‘How is the house inside? There are still all your things.’ (Ciucci 2016: 752, ex. 228)

- (26) *T-ish todo lošip-o. Nos tik-iraha ii-yo.*
 1SG-meet all animal-M.PL all 1SG-know [3]name-M.PL
 ‘I have met all animals. I know all their names.’ (Balbuena 1993: 16)

The Chamacoco universal quantifier *nos* ‘all’ (25-26) corresponds to Old Zamuco *nes* ‘all’ and Ayoreo *jnese* ‘all’, so that it can be traced back to Proto-Zamucoan, which only had one universal quantifier. For this reason, the borrowing of *kal* ‘every, each’ fills a gap, since this universal quantifier has distributive value, while *pur* and *todo* ‘all’ can be seen as luxury loans.

7. A(s)ta uje, borrowed prepositions and final formulae

A(s)ta uje ‘until’ (27) corresponds to Spanish *hasta que*; /s/ is in parentheses, because both *asta* and *ata* are found in Chamacoco. Owing to the possible dropping of the unstressed final vowel, *asta* or *ata* can turn into *at* (§4, ex. 13), so that the compound subordinator can be *asta uje*, *ata uje* or *at uje*.¹⁸ In some cases, it can be used as a preposition (28). Chamacoco has only two prepositions: the polyfunctional preposition =*ihi*, and *hōr/ōr* ‘with’. In Chamacoco, the functions of adpositions are often performed by relational nouns, but none is equivalent to Spanish *hasta* ‘up to, until’. Another Spanish preposition sometimes used in Chamacoco is *con* ‘with’ (29) (*kon* in Chamacoco orthography). The latter seems to be a luxury loan: while the other Zamucoan languages have no specific preposition for ‘with’, Chamacoco has already developed *hōr/ōr*, out of the 3PL pronoun *ōr*.¹⁹

- (27) *S., uhu wir o-n-ihyōr ese pwerti-t ata uje o-n-ihne!*
 S. [2SG]do 3PL PL-3.IRR-make that.M.SG house-M.SG.AF until PL-3.IRR-finish
 ‘S., watch that they build that house until they finish!’ (lit. ‘let them build that house, until...’)

- (28) *Oy-uko oy-uuje, oy-uushi ata wahacha*
 1PL.EXCL-go 1PL.EXCL-run 1PL.EXCL-run up_to there
 ‘We go running, we run up to there.’

- (29) *Ye p-iluu mihnuu kon ōr-ir=pe, ye pawjār*
 NEG 1SG-manner[F.PL] bad[F.PL] with 3PL=NEG NEG foul_mouthed
kon ōr-ir=pe
 with 3PL=NEG
 ‘I do not have bad manners with them, I am not foul-mouthed with them.’

The preposition *a(s)ta* is also found in formulae at the end of stories. There are some examples in (30).

- (30) a. *Shi at ele*
 only up_to this.M.SG
 ‘Only up to this’

- b. *Shi at ele t-iita*
 only up_to this.M.SG 1SG-narrate
 'I only narrate up to this.'
- c. *Shi at ele t-itim owa*
 only up_to this.M.SG 1SG-narrate_to 2SG
 'I only narrate up to this to you.'
- d. *Shi ata ele no_ma uje t-iita*
 only up_to this.M.SG only REL 1SG-narrate
 'What I narrate is only up to this.'
- e. *Shi ata, shi ata ahnu no_ma uje t-iita*
 only up_to only up_to this.M.PL only REL 1SG-narrate
 'What I narrate is only up to these things.'

These formulae involve the use of the focusing adverb *shi* 'only', which can also be combined with *no ma* 'only', borrowed from Spanish *nomás* 'only'.²⁰ The lack of final /s/ in the Chamacoco adaptation reflects the final /s/ weakening of Paraguayan Spanish (see §4, ex. 13). Other final formulae do not include the preposition *ata*, but revolve around the correlation of *shi* and *no ma*, as in (31). In (31a) is the shortest formula, and the one recurring most frequently in my corpus. This is an example of lexical parallelism (Aikhenvald 2006: 25): *no ma* has the same meaning as *shi*, but both occur together. For other examples of parallel structures in language contact, see Hajek (2006) and Aikhenvald (2007). On the one hand, the preservation of *shi* makes the structure more obscure to Spanish speakers, while *no ma* strengthens *shi*, which can also have other functions depending on the context: for instance, it can indicate durativity, as in (4), §4, or can function as a topic marker (32).

- (31) a. *Shi ese no_ma*
 only that.M.SG only
 'Only that'
- b. *Shi ahnuwo no_ma uje t-iita, uje tik-iraha*
 only this.M.PL only REL 1SG-narrate REL 1SG-know
 'What I narrate, what I know are only these things.'
- c. *Ich yuwir=ke ich shi ele no_ma uje t-iita*
 and finish=RETR and only this.M.SG only REL 1SG-narrate
 'And it is finished, and it is only this what I narrate.'
- (32) *Nahu shi yok p-ahw-o*
 this.M.PL TOP 1SG 1SG-lip-M.PL
 'This is my mouth.' (lit. 'these are my lips')

The demonstratives *ese* ‘that’ (31a) and *ele* ‘this’ (31c) also look like borrowings. Indeed, they resemble the Spanish demonstrative *ese* ‘that’ (M.SG) and the definite article *el* (M.SG) (or the pronoun *él* [3.M.SG]), as well as the Portuguese personal pronoun *ele* (3.M.SG). This seems to be just a coincidence, considering that the borrowing of deictics and articles is cross-linguistically infrequent (Matras 2009: 203, 216). Indeed, in the earliest attestations of Chamacoco, when Spanish had little or no influence on the language, there are similar deictics. In a posthumous paper by Boggiani, who died in 1902, one finds [el'le] and [es], both translated as ‘there he is’ (Boggiani 1929: 159).²¹ Baldus (1932: 393) reports the demonstratives *as/asá*, the feminine of *ese*, and *ele* ‘this’ (M.SG), which was documented by Voitěch Frič at the beginning of the 20th century (Baldus 1932: 386).

8. Comparative constructions

Syntactic change also involves comparative constructions expressing superiority. Chamacoco has monoclausal comparatives, where the parameter of comparison is introduced by *ma* ‘more’ and the standard of comparison by *je* ‘than’ (33). The comparative markers *ma* and *je* are clearly borrowed from the Spanish *más* ‘more’ and *que* ‘than’, which perform the same functions, as one can see in the Spanish translation of (33). The Spanish comparative particle *que*, homophonous with the subordinator, is adapted as *je*, thus differing from the canonical realization of the Chamacoco subordinator *uje*. The final consonant of Spanish *más*, like *nomás* (formed by *no* ‘not’ and *más*), is usually not pronounced in the local Spanish variety, so that it is adapted as *ma*. The main difference between the two languages is that the parameter of comparison, such as ‘tall’ in (33), in Spanish is the copula complement, while in Chamacoco it carries out nominal predication without copula. In the case of Chamacoco, it is hard to say how comparison was expressed before contact with Spanish.

- (33) *P-ijì-t* *uu* *S. ma* *berz-ak* *je* *uu* *d-eshib-o*
 1SG-son-M.SG.AF ART.M.SG S. more tall-M.SG.PF than ART.PL REFL-brother-M.PL
 ‘My son S. is taller than his brothers’, Spanish: ‘Mi hijo S. es más alto que sus hermanos.’

Spanish has frequently influenced comparative constructions of Amerindian and Austronesian languages with which it was in contact (Stolz & Stolz 2001). However, the borrowing of both comparative markers *más* and *que* is less common (Stolz & Stolz 2001: 43). Finally, Chamacoco *ma* ‘more’ is not restricted to comparatives, but it can also be used as an independent adverb (34).

- (34) a. *O-hyōk ma loshi-yo*
 3PL-catch more fish-M.PL
 'They catch more fish.'
- b. *Tok-osh(i) ow(a) ma ekstra*
 1SG-pay 2SG more bonus
 'I pay you more bonus.'

It is unknown how the comparative of superiority was expressed before contact with Spanish. Indeed, many small societies place little value on competition, so that comparison is rarely employed (Aikhenvald 2015: 302; Aikhenvald *et al. forthcoming* 2021). If this was the case in Chamacoco society, it could help explain the adoption of Spanish comparatives.

9. Conclusions

In this paper, I have discussed the syntactic changes occurring in Chamacoco under the influence of Spanish. Chamacoco is, in many respects, the most innovative Zamucoan language, and this is due to contact-induced change. One can identify two layers of contact that have contributed to differentiate Chamacoco from the other Zamucoan languages. The first layer is the result of a long period of contact with other indigenous languages after the split from the rest of its family. The second layer almost exclusively consists of transfers from Spanish, which have entered the language in a relatively short time frame, with 1885 as *terminus post quem*. Language change went together with cultural change, a process first analyzed by Sušnik (1969).

The comparison with Ayoreo clause linking strategies shows how pervasive the influence of Spanish on Chamacoco syntax has been. At an early stage, Zamucoan languages were characterized by paucity of conjunctions, as in present-day Ayoreo (Table 2, §4), then Chamacoco created new conjunctions combining indigenous elements: e.g., *uje ehn* 'when', *uje ehn yapaa* 'before'. Finally, Chamacoco introduced function words from Spanish, which were combined with the polyfunctional subordinator *uje*, which resembles Spanish *que*, so that borrowing goes together with accommodation. Indeed such a similarity greatly helped the formation of new compound subordinators, consisting of a Spanish function word plus Chamacoco *uje*, such as *ante uje* 'before', *depwe uje* 'after (that)', *kal uje* 'whenever', etc. These new Chamacoco subordinators are often a calque from Spanish compound subordinating conjunctions.

As noted by Stolz & Stolz (1996) for Mesoamerica, although the autochthonous languages of the area are very different from each other, they

tend to converge in the adoption of Spanish function words; this also applies to Chamacoco and Guaraní languages (Dietrich 2011). Although Spanish has exercised less influence on the Tomaraho dialect of Chamacoco than on the Ebitoso one analyzed here (§1), in the available data for Tomaraho (Ñuhwýt Fretes *et al.* 2013), one can observe the use of *porq* (< Spanish *porque*) for causal clauses and *par* (< Spanish *para*) for final clauses. Even though Spanish function words have increased the syntactic complexity of Chamacoco, often they do not fill a gap in the language (as shown for lexical borrowing, cf. Table 1, §3), and their use is due to prestige factors, as in Mesoamerican languages in contact with Spanish (Stolz & Stolz 1996).

The changes highlighted here for the Ebitoso dialect of Chamacoco affect all generations of speakers: even though loanwords are more frequent among younger speakers, the use of Spanish lexicon and function words is well established among late middle-aged speakers, and in some cases (e.g. in final clauses) Spanish markers are the only available option. However, although remarkable change affected Chamacoco, one has to note the preservation of a syntactic configuration that precedes the contact with Spanish, the so-called para-hypotaxis. This structure involves the presence of a coordinating conjunction between dependent and main clause (Bertinetto & Ciucci 2012; Ross *et al.* 2018), as in (35).

- (35) [Uje ye t-uu_{leeych},] [ich ese aahn-t ts-erz yoo]
 SUB NEG 1SG-fight and that.M.SG evil spirit-M.SG.AF 3-win 1SG
 ‘When/if I don’t fight, (and) that evil spirit will defeat me.’ (Bertinetto & Ciucci 2012: 98)

Para-hypotaxis is also present in Ayoreo and is a possible areal feature of Chaco languages, so that it could be the result of a remote transfer before contact with Spanish (Ciucci 2014: 28-30). Although the use of the coordinating conjunction *ich* in (35) could look redundant, in that there is no apparent functional need for it, this is still preserved in Chamacoco. The preservation of para-hypotaxis might reflect the subconscious need to maintain some older features perceived as autochthonous, as a reaction to the increasing hispanization of the language.

Abbreviations

1, 2, 3 = first, second, third person; AF = argument form; ART = article; COMP = complementizer; CONJ = conjunction; DM = discourse marker; DUR = durative; EMPH = emphatic; EXCL = exclusive; EXIST = existential; F = feminine; GF = generic form; IF = indeterminate form; INT = interrogative; IRR = irrealis; M = masculine; M/F = epicene; NEG = negation; PL = plural; PF = predicative form; PREP = preposition; QUOT = quotative; RECP = reciprocal; REFL = reflexive; REL = relative; RETR = retrospective; SG = singular; SUB = subordinator; SVC = serial verb construction; TOP = topic.

Acknowledgements

I would like to express my gratitude to Alexandra Y. Aikhenvald, Pier Marco Bertinetto, Tracey Carro Noya, Biera Cubilla Zadovsky, Wolf Dietrich, R. M. W. Dixon, Brigitta Flick, Péter Maitz, Fernando Zúñiga and one anonymous reviewer.

Notes

¹ For reasons of simplicity, I have used here the hispanized form *Ebitoso*, as done by other scholars (e.g. Sušnik 1969; Blaser 2013). However, in their own language, the *Ebitoso* are properly called *Ĥbitoso*, which is also spelled *Ybytoso* following a different orthography (cf. Sequera 2006).

² On Tomaraho, see Sequera (2006), Escobar (2007) and Ñuhwýt Fretes *et al.* (2013).

³ Cordeu (1997) stresses the fact that the Chamacoco religion, despite some similarities, differs sharply from that of the other Chaco populations.

⁴ A similar situation is found in Amuesha: this Arawak language of Peru has a number of innovations due to contact, but for many of them it is not possible to identify the source, often an extinct language (Aikhenvald 2006: 9).

⁵ Cordeu (1989-1992) does not address possible cultural similarities between the Chamacoco and Mataguayan people, owing to scarcity of data on the latter populations.

⁶ Boggiani (1894: 21-24) did not identify any Chamacoco group within the populations met by the Jesuits, but he wrote that the two groups had been fighting for a long time as of his writing.

⁷ According to Fabre (2007: 55-56), there is also a very small Chamacoco community in Brazil. There is no information on the influence exerted by Portuguese on their language.

⁸ I refer to the distinction between *Bedürfnislehnwort* ‘necessity loanword’ and *Luxuslehnwort* ‘luxury loanword’, introduced by Tappolet (1913: 54-58). On this concept, see also Clark (1982).

⁹ The reader interested in the morphological analysis can consult Ciucci (2016).

¹⁰ Both *eyucha* and *ekwerta* have nominal morphology and they are used as nominal predicates (Ciucci 2016: 410-412).

¹¹ For the variants of *ujetiga*, see Bertinetto (2014).

¹² In actual fact, also *ich* ‘and’ was possibly borrowed from Wichí (Mataguayan) (Ciucci 2014: 29), but it belongs to the layer preceding contact with Spanish and, as such, is now perceived as an autochthonous element by the speakers.

¹³ On this example, see also Ciucci (2016: 399, fn. 272).

¹⁴ The negator *naa* is also observed in example (5) after the negative existential *nĩhyok*, which is usually followed by *ye* (NEG).

¹⁵ *Namiji* and *kimiji* (Table 2) might also derive from a merger of **uje* > *iji* with another unknown form. This hypothesis cannot be confirmed, because the first element of these subordinators is not transparent.

¹⁶ Don Bosco is a neighborhood in the town of Fuerte Olimpo (Paraguay).

¹⁷ The Spanish form for ‘already’ was borrowed, but not the one for ‘still’, and this follows the borrowing hierarchy ‘already’ > ‘still’ (Matras 2009: 161).

¹⁸ The same occurs in *ante*, which can turn into *ant* (11-12).

¹⁹ In (29), the third person plural is expressed by a compound personal pronoun consisting of *õr* (3PL) + *ĩr(e)* (3SG).

²⁰ No Spanish loanword for ‘too’ is found. This follows the borrowing hierarchy ‘only’ > ‘too’ (Matras 2009: 161).

²¹ Translations in earlier sources are approximate, especially in Boggiani, who was the first to study the language.

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