

Article

Grammaticalization, Language Contact, and the Emergence of a Hortative in Guaraché, a New Mixed Language in Paraguay

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Abstract: This paper discusses the emergence of a hortative marker in Guaraché, a new mixed language in Paraguay, the result of language mixing of the Indigenous Aché language and Paraguayan Guaraní. After settlement on reservations, the formerly nomadic Aché hunter-gatherers began shifting to the national language Guaraní, resulting in Guaraché, which is currently learned by children as their first language. Guaraché speakers have incorporated parts of the lexicon and morphology from Aché and Guaraní into their verbal repertoires, including parts of the Guaraní inflectional morphology. Thereby, they are modeling their use of the Guaraní 1PL.IN marker *ja-/ña-* on a specific function that it has in Guaraní, hortative mood. Neither Aché nor Guaraní have grammatical hortative markers. Such a reanalysis and transfer of only one function of *ja-/ña-* suggests that a novel grammatical distinction is emerging between *ja-/ña-* for the hortative and the free pronoun *ñande/nande* for all other cases of 1PL.IN. This paper analyzes hortative constructions in a corpus of recordings of naturally occurring interactions from children and adults. This case of grammaticalization is a strong indicator of a gradual transformation of Guaraché from language-mixing practices into a new mixed language.

Keywords: language contact; grammaticalization; language fusion; language mixing; hortative; Paraguay



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1. Introduction

The emergence of new language varieties from practices of language mixing or codeswitching has received increasing attention in recent years (e.g., Auer 2014; Auer and Hakimov 2021; McConvell and Meakins 2005; Meakins 2012; O'Shannessy 2005, 2012). Among the questions that this research seeks to answer is at what point does it make sense to characterize the alternating use of elements from different languages in a given speech community as a new language or variety, i.e., when does language mixing turn into a mixed language? One diagnostic of languageness is the emergence of unique forms and structures.

In this paper, I discuss the emergence of a hortative marker in Guaraché, a new mixed language spoken in the Indigenous Aché communities in eastern Paraguay, resulting from language contact of the Aché heritage language and the national language Paraguayan Guaraní. After settlement on reservations in the 1960s and 1970s, the formerly nomadic Aché began shifting to Guaraní. Widespread language mixing due to incomplete shift to Guaraní led to the emergence of Guaraché, currently learned by children as their first language.

Guaraché speakers have incorporated parts of the lexicon and morphology from Aché as well as Guaraní into their repertoire. Guaraní is known for its complex verbal agreement paradigms, which Aché lacks. At large, Guaraché does not mark verbal agreement either, but speakers have incorporated some of the Guaraní inflectional prefixes. Thereby, their use of a person marker from Aché or from Guaraní is not random but serves different functions. The Guaraní 1PL.IN marker *ja-/ña-* in particular is used specifically for hortative mood. Neither Aché nor Guaraní have grammatical hortative markers. An example of a Guaraché hortative is given in (1), when one child summons another to touch and examine a dead rodent that an Aché hunter has just brought back from a hunt and left on the forest floor in the middle of the camp as is customary.¹

- (1) *Djapoko*
 dja-poko
 1PL.IN-touch
 ‘Let’s touch [it]’

Literally meaning ‘We(+) touch,’² the Guaraní first-person inclusive prefix *ja-* (with voiced postalveolar affricate onset [dʒ], common in Aché³) is used here to convey hortative mood, i.e., to encourage the other child to come and join the speaker in touching the dead animal: ‘Let’s(+) touch [it]!’ While the same use is also common in Guaraní (Estigarribia 2020, pp. 183–84), in this paper, I suggest that this use is becoming restricted to hortative mood in Guaraché. The use of Guaraní *dja-* for hortative contrasts with the use of the Aché 1PL.IN free pronoun *nande* for non-hortative moods in Guaraché, such as in Example (2).

- (2) *Nande pytata ko’ape*
 nande pyta-ta ko’ape
 1PL.IN stay-PROSP here
 ‘We(+)’re going to stay here’

This difference in use of the Aché and Guaraní versions of 1PL.IN indicates reanalysis and transfer of but one function of Guaraní *ja-/ña-* to Guaraché *dja-*.

Drawing on data from a large corpus of video recordings of naturally occurring talk-in-interaction, I analyze this construction in discourse from children and adults. The corpus was collected by the author during 14 months of fieldwork, conducted in three periods between 2013 and 2015. Research centered on eight focal children between the ages of 2 and 10 as well as their extended peer group and caregivers. A wide range of different situations and activities were filmed, including play and household activities in the reservation communities, classroom interactions in the primary schools, as well as hunting and foraging on extended multi-day hunting treks in a nearby forest reserve. A total of 173 hours of video were recorded, 30 hours of which have been transcribed and analyzed for the present study. All transcriptions and translations were done with the ELAN software and are time-aligned.⁴

2. A Contact Language in Contact

Guaraché is the result of language contact between Guaraní and Aché, two closely related languages of the Tupi-Guaranian language family. Guaraní is a national and official language of Paraguay, spoken by over six million people there, in Brazil, Argentina, and Bolivia. Originally the native language of the Indigenous people of the same name, owing to Paraguay’s particular history (see Ganson 2003; Gynan 2001; Melià 1986), Guaraní is today also spoken by the majority of Paraguay’s non-Indigenous population, alongside Spanish. In contrast to other South American countries, where Indigenous languages are confined to ethnic or regional minorities, most Paraguayans are bilingual in Spanish and Guaraní.

Aché is the heritage language of a small group of former hunter-gatherers, the Aché (formerly known as Guayaki), who lived as nomadic foragers in the subtropical rainforests of what is today eastern Paraguay. It has likely emerged through a language contact scenario in pre-Columbian history. Almost all of the lexicon of the Aché language is cognate with Guaraní, and both languages share the bulk of their phonological inventory. But Aché also presents a number of morphosyntactic features that are atypical of Guaraní and other Tupi-Guaranian languages. They suggest its origin in a contact situation between a group of speakers of some early variety of Guaraní with those of a different linguistic affiliation, possibly Gê (Dietrich 1990; Rodrigues 2000; Roessler 2008, 2015, 2018; Susnik 1974). The accurate historical period when that contact had taken place, the type of contact, and whether or not it was peaceful or sustained are still uncertain.

Linguistic evidence of contact notwithstanding, in the intervening centuries, at least since the time of the European conquest, the Aché likely did not sustain any peaceful relations, such as intermarriage or trade with other groups (Melià and Münzel 1973, p. 10; Hill and Hurtado 1996, pp. 58–60). If there was any, such non-hostile contact was infrequent and probably the result of population movement resulting from the expansion of the colonial frontier and later from Paraguayan expeditions into Indigenous territories (Mayntzhusen 1911). The Aché language thus remained mostly isolated until the twentieth century.

The advancing colonial frontier in the early twentieth century brought the Aché in contact with the Paraguayan national society. Persecutions by Paraguayans and contact-related diseases eventually forced all Aché bands onto reservations in the 1960s and 1970s (Clastres 1998; Hill and Hurtado 1996; Melià and Münzel 1973; Münzel 1983). This process entailed dramatic changes of socio-cultural structure and everyday life, among them adoption of small-scale agriculture as the main form of subsistence, conversion to evangelical Christianity, and language shift. The usefulness of the Aché language, highly adapted to nomadic life in the forest as many lexical items and constructions were associated with hunting and gathering practices, was suddenly very limited. In the newly established camps and settlements, knowledge of Guaraní, even if rudimentary, was important for communication with Paraguayans and thus also one of the key advantages of those Aché already settled over newly arriving groups (Clastres 1998; Münzel 1983). In this way, the emergent hierarchy of languages was perpetuated within the Aché population and a process of rapid language shift began.

3. Emergence of Guaraché

Guaraché is the result of the dynamics of this shift process. Language mixing was attested in communication with Paraguayans already in the 1960s. Clastres (1998, p. 105), who visited them in 1963, reports “a strange and confusing mixture” of Aché and Paraguayan Guaraní that the administrator of the reservation used when talking to the Aché, which, according to Clastres, “only three or four” of them were able to understand at that time. Over time and with sustained contact with Paraguayans, the Aché became more fluent in Guaraní and began incorporating Guaraní elements into their discourse.

Settlement of the various Aché subgroups was not a one-time event but a slow process that spanned two decades. From the settlement of the first group in 1959 until the last 24 individuals appeared in 1978, at least fourteen groups of different sizes surrendered one by one to those already settled. Cultural orientations compelled captured Aché to learn the cultural and linguistic habits of their captors (Hauck 2018; Thompson 2019). As the captors were second-language learners themselves, their competence in Guaraní was still limited. Newcomers began orienting toward those practices, and as the years on the reservations went by, no longer Guaraní, but the language mixing practices that later sedimented into Guaraché became the “target” of language shift (see Baker 1990; Jourdan 1991; cf. Chaudenson 2001, for a parallel argument regarding the genesis of certain creoles.) Thus, Guaraché must be seen as the result of both, incomplete shift as the result of imperfect learning (Thomason and Kaufman 1988, pp. 37–50) of Guaraní on part of the earliest settled speakers, as well as the deliberate acquisition of those (mixed) patterns by subsequent generations (Baker 1990; Jourdan 1991). An emergent function of Guaraché for community-internal indexing of identity and increasing degrees of focusing that come with it (Le Page and Tabouret-Keller 1985) further helped consolidate the patterns observable today. The origin of Guaraché thus resembles that of other languages that emerged from practices of language mixing (Auer 2014; Auer and Hakimov 2021), in particular, that of the two Australian Indigenous mixed languages, Light Warlpiri (O’Shannessy 2005, 2012, 2021) and Gurindji Kriol (McConvell and Meakins 2005; Meakins 2012).

Children growing up in the Aché communities today acquire Guaraché as their first language (Hauck 2016); they have internalized mixed input from caregivers as a single system (McConvell and Meakins 2005; Meakins 2012; O’Shannessy 2012, 2021). There is

nonetheless still a lot of variation internal to the speech community, which correlates with family origin, age, discursive domain, and social and natural environments. There is also a lot of free variation where no sociolinguistic correlates are clearly discernible. Some semantically equivalent Guaraní and Aché words are used interchangeably in Guaraché. Moreover, given the close genetic proximity of Aché and Guaraní and largely overlapping lexicon, in many cases it is virtually impossible to identify whether a given morpheme in use in everyday Guaraché was incorporated from Aché or Guaraní. I use Woolard's (1998) concept of "bivalency" to describe "words or segments that could 'belong' equally, descriptively and even prescriptively, to both codes" (Woolard 1998, p. 7), tagged as B in the transcripts.

This is not to say that distinctions between Aché and Guaraní do not ever matter in the communities. Scholars of codeswitching and language contact generally agree that there are "marked" and "unmarked" kinds of language alternation in bilingual and language contact settings (Myers-Scott 1993). Marked codeswitches are those that have a distinct pragmatic or indexical function and are thus "locally meaningful" (Auer 1999, p. 310) to participants, signaling a change in register or "footing" (Goffman 1979). In the Aché communities, adults sometimes do use normative Guaraní or Aché constructions in certain situations. Current concerns about language endangerment of Aché and language revitalization activities, including heritage language classes in school, have contributed to heightened metalinguistic awareness of linguistic distinctions that might have previously gone unnoticed. Especially in culturally salient contexts, such as a radio show or certain kinds of public oratory, adults switch into a traditional and relatively "pure" (and highly marked) Aché register, otherwise no longer used in the communities. Conversely, most middle-aged adults also are able to switch to (standard) Paraguayan Guaraní with ease when talking to outsiders.

Even within Guaraché, certain features and constructions are pragmatically salient (Errington 1988, p. 18) as belonging to Aché or Guaraní, respectively, and can act as "register shibboleths" (Silverstein 2003, p. 212), i.e., as conversational cues that a given stretch of discourse is supposed to be heard as being in one or the other "language"—irrespective of the "actual" composition of the remaining elements of the utterance. For instance, in regular (unmarked) Guaraché, the Guaraní 1SG free pronoun *che* [ʃe] is used overwhelmingly, whereas its Aché equivalent *cho* [tʃo] is highly restricted to certain cultural performances and as an index of a mocking genre—usually accompanied by an overarticulation of the initial voiceless postalveolar affricate [tʃ].⁵ Such use of some Aché or Guaraní elements is pragmatically salient and highly marked.

Most of the time, however, the alternating use of Aché or Guaraní in discourse has no indexical signaling function. While the global practice may be indexically meaningful for group identification (Alvarez-Cáccamo 1998, pp. 36–37), the individual items are not, and switching between them is the "unmarked choice" (Myers-Scott 1993, pp. 80–83). Auer (1999) suggests thinking about practices of language alternation as situated on a spectrum. One end is "codeswitching," i.e., "cases in which the juxtaposition of two codes (languages) is perceived and interpreted as a locally meaningful event by participants." "Language mixing" is the midpoint and "fused lects" is the other end, in both of which "the use of two languages is meaningful (to participants) not in a local but only in a more global sense" (Auer 1999, p. 310). Guaraché falls somewhere on that latter half of the spectrum and is moving toward a fully fused lect as I discuss in what follows (Auer 2014). Auer distinguishes between language mixing (LM) and fused lects (FL) in terms of degrees of variation and grammaticalization.

While LM by definition allows variation (languages may be juxtaposed, but they need not be), the use of one "language" or the other for certain constituents is obligatory in FLs; it is part of their grammar, and speakers have no choice. Thus, structural sedimentation (grammaticalization sensu Givón 1979) of LM into a FL presupposes a loss of variation and the stabilization of function-form relationships. (Auer 1999, p. 310; see also Backus 1999; Auer 2014; Auer and Hakimov 2021; and below)

Among the indicators that language mixing patterns are consolidating into a mixed language are the appearance of unique forms and structures not present in the source languages and the development of new functions or distributions of forms from the source languages (Meakins 2012, p. 120). Meakins (2012, pp. 123–24) shows an asymmetrical serial verb construction that has emerged in Gurindji Kriol, which is present in neither of the source languages Gurindji and Kriol. O’Shannessy (2013) documents the emergence of an innovative auxiliary system in Light Warlpiri that shows a new modal distinction of realis/irrealis, which does not replicate distinctions in the source languages Warlpiri, Kriol, and English. This distinction “can be traced to elements in the multiple source varieties, which were recombined and reanalyzed” (O’Shannessy 2013, p. 345).

As Auer (1999, p. 310) points out, “structures from language A and B which are more or less equivalent in mono-lingual use may develop specialized uses in the fused lect AB.” In this paper, I discuss a case of incorporation of similar forms from different source languages, which have acquired (or are in the process of acquiring) specialized uses in Guaraché. I analyze two 1PL.IN person markers from Aché and Guaraní, respectively, which mark a modal distinction in Guaraché. While the Aché 1PL.IN free pronoun *nande* continues to be used for indicative mood, the Guaraní 1PL.IN prefix *ja-* is being grammaticalized as a hortative.

4. Person Marking in Aché, Guaraní, and Guaraché

As is common in Tupi-Guaranian languages, Guaraní has two sets of person markers. Set 1 is used for agent-like subjects, i.e., the subjects of transitive verbs and of intransitive verbs of the inergative type. Set 2 is used for more patient-like arguments, marking unaccusative subjects and the direct objects of transitive verbs (Jensen 1998). There is still controversy among linguists about the exact status of Guaraní set 2; some claim they are weak pronouns or pronominal clitics, others suggest analyzing them as object agreement markers (see Gregores and Suárez 1967; Roessler 2019; Rose 2015; Velázquez-Castillo 1991).

Aché, by contrast, has no person–number agreement and verb stems are not inflected, an inflectional erosion that is likely one result of (pre-Columbian) language contact. Person and number are expressed exclusively through free pronouns. These correspond to a set of free pronouns in Guaraní, which are historically related to the set 2 markers but are functionally distinct. Alongside agreement, Aché has also lost other inflectional morphology, such as tense–aspect–mood marking, relational agreement marking, as well as morphological elements linked to valency, reflexives, reciprocals, and causatives. This lack of functional morphology is a common feature of contact languages and understood as a direct result of contact-induced change in Aché (Roessler 2015, 2018).

In Guaraché, person and number are expressed through free pronouns. Here, Guaraché mostly follows Aché, although the particular morphophonemic shape of some of the pronouns is adopted from Guaraní. In particular, 1SG and 3PL resemble their Guaraní forms. 1PL.IN occurs sometimes as *ñande* (Guaraní), at other times as *nande* (Aché, as in example 2 above). They seem to be in free variation (save some contextualizing function in certain contexts). 1PL.EX and 2PL are identical in Guaraní and Aché or “bivalent” (Woolard 1998), and 2SG is different from Guaraní only insofar as the Aché (and Guaraché) version has little to no prenasalization and that there is no nasal allomorph. There is generally less prenasalization of voiced plosives [d] and [b] in Aché and Guaraché. For 3SG, the Aché version *idja* is retained in Guaraché. Table 1 compares pronouns and agreement markers for Guaraní, Guaraché, and Aché.

Table 1. Person markers and pronouns in Aché, Guaraní, and Guaraché.

	Guaraní Agreement Markers		Guaraní Free Pronouns	Guaraché Free Pronouns	Aché Free Pronouns
	Set 1	Set 2			
1SG	a-	çhe-	çhe	çhe/che	cho
1PL.IN	ja-/ña-	ñane-	ñande	ñande/nande	nande
1PL.EX	ro-	ore-	ore	ore	ore
2SG	re-	ne-	nde/ne	de	de
2PL	pe-	pene-	pene	pene	pene
3SG	o-	i-	ha'e	idja	idja
3PL	o-	i-	ha'ekuéra	ha'ekuéra	idja

The three examples that follow illustrate the use of Guaraní and Aché person markers in everyday Guaraché discourse. The extracts would be identified as non-normative by speakers of Guaraní and Aché alike. The line below the glosses marks whether the item has been incorporated from Aché (A), Guaraní (G), or Spanish (S). Aché–Guaraní bivalent (Woolard 1998) items are tagged with B.⁶ Normative (constructed) Aché and Guaraní versions are provided below the examples.

(3) 'I'm gonna go home.'

- a. *Çhe hotama çhe ogape* Guaraché
 Çhe ho-ta-ma çhe oga-pe
 1SG go-PROSP-IAM 1SG house-LOC
 G G-G-B G G-B
- b. *Ahátama çhe rógape* Guaraní, constructed
 A-ha-ta-ma çhe r-óga-pe
 1SG-go-PROSP-IAM 1SG RELN-house-LOC
- c. *Cho owerama cho tapype* Aché, constructed
 Cho o-wera-ma cho tapy-pe
 1SG go-PROSP-IAM 1SG house-LOC

Example (3) a. was produced by a six-year-old girl. While most elements are either in Guaraní or bivalent, as marked on the morpheme level in the line below the glosses, the lack of Guaraní inflectional morphology is immediately visible when comparing it to (3) b. In this case, in Guaraní, one would inflect the verb by using the pronominal prefix *a-* of set 1 (see table 1), not the free pronoun *çhe*. Furthermore, the Guaraní verb *ho* is irregular with two root allomorphs, *ho* and *ha*. Inflection with *a-* causes vowel alternation of the root to *ha*, which is used for 1SG (as well as 1PL.IN) such that the utterance would be *a-ha-ta-ma*. By contrast, in the Guaraché example, here the speaker uses the free Guaraní pronoun *çhe* to mark first person and thus no vowel alternation occurs. As a pronoun, *çhe* could be used in Guaraní in addition to the prefix, for example, to mark contrastive focus as in *çhe a-ha-ta-ma* 'I [not you or someone else] am going,' but not alone. Structurally then, the utterance is closer to Aché, which does not inflect the (cognate) root of 'go,' *o*, shown in (3) c.

The other two morphemes are *-ta*, which marks prospective aspect in Guaraní, and *-ma*, which is used in both Guaraní and Aché for what some have called iamitive aspect, close in meaning to the English expression "already" (Olsson 2013). *Çhe ho-ta-ma* thus means 'I'm gonna go' or 'I am already going.'

The final constituent *çhe oga-pe*, while likewise being composed primarily of Guaraní elements, diverges from normative Guaraní usage as well. Some Guaraní roots, including *óga* 'house,' require a relational prefix *r-* when they are possessed (Estigarribia 2020, pp. 63–69). These prefixes are consistently omitted in Guaraché. The first question that children in all Aché communities will ask a newly arriving stranger is *Baiçha de hera* 'What's your name?,' using the (bivalent) pronoun *de* and the noun *era* 'name' which is seemingly inflected with

the relational prefix *h-*. However, from a normative Guaraní perspective, this is wrong insofar as *h-* is reserved for third person. *Mba'é-icha-pa h-era* (what-like-Q RELN.3-name) means 'What's his/her name?' The correct form for second person would be *mba'é-icha-pa nde r-era* (what-like-Q 2SG RELN-name). In Guaraché, *h-* has been reanalyzed as part of the root of the noun for 'name.'

A similar reanalysis is present in Example (4).

(4) 'We(+) eat the skin.'

- | | | |
|----|---|----------------------|
| a. | <i>Ñande o'u pire</i>
ñande o'u pire
1PL.IN eat skin
G G B | Guaraché |
| b. | <i>Ja'u pire</i>
ja-'u pire
1PL.IN-eat skin | Guaraní, constructed |
| c. | <i>Nande u pire</i>
nande u pire
1PL.IN eat skin | Achέ, constructed |

First-person plural inclusive is expressed in Guaraní by the set 1 inflectional prefix *ja-*, whereas Guaraché uses a free pronoun—in this example not the Achέ version *nande* but Guaraní *ñande*, which appear to be in free variation in Guaraché and are used interchangeably for non-hortative 1PL.IN. This in and of itself should lead to *ñande/nande u pire*. However, the verb 'u 'eat' is modified with the prefix *o-*, which corresponds to the Guaraní set 1 third-person prefix. The correct 1PL.IN prefix is *ja-*. But even third person would require a different form in Guaraní, because the verb 'u is irregular and demands different allomorph prefixes for different persons; in the case of 3PL, *ho-* is used instead of *o-*. Here, the question arises whether *o-* in *o'u* has also been reanalyzed as part of the root in Guaraché. I have collected instances of *o'u* used with first-, second-, and third-person pronouns in my corpus. Nonetheless, regular (Achέ) 'u is also used at least as frequently. Thus, either speakers have not yet agreed on which form to use, or the presence of *o-* has some additional function.

(5) 'She's not going to eat more later.'

- | | | |
|----|---|----------------------|
| a. | <i>Idja no uvema gobu</i>
idja no u-ve-ma gobu
3SG NEG eat-more-IAM then
A G/S B-G-B A | Guaraché |
| b. | <i>Ndo'uvéima upéi</i>
nd-o-'u-ve-i-ma upéi
NEG-3-eat-more-NEG-IAM then | Guaraní, constructed |
| c. | <i>Idja ullāwerama gobu</i>
idja u-llā-wera-ma gobu
3 eat-NEG-PROSP-IAM then | Achέ, constructed |

Example (5) shows the use of the Achέ 3SG free pronoun *idja*. To express negation, instead of the Achέ suffix *-llā*, Guaraché speakers use *no*, a form of the Guaraní prefix *n(d)-* but without allomorphic variation due to nasal or vowel harmony. Simplifying it to *no* (in Guaraní reserved for third-person negation of nasal verbs) is likely due to Spanish influence, because the form is identical with the Spanish adverb *no*. The example also shows use of the Guaraní comparative suffix *-ve* 'more' and the Achέ discourse marker *gobu* 'then/later.'

The three examples demonstrate that while Guaraché speakers have incorporated many lexical items and morphological elements from Guaraní, they have omitted the inflectional prefixes marking person and number. They do, however, use the Guaraní 1PL.IN inflectional prefix for hortative mood, which the remainder of the paper explores.

5. Grammaticalization of a Hortative

Grammaticalization refers to processes by which lexical elements acquire grammatical functions and by which already grammaticalized items develop new grammatical functions (Hopper and Traugott 2003). It is generally thought to be a unidirectional process, i.e., already grammaticalized elements generally do not lose their grammatical function (but see the critical discussion in Campbell 2000). Grammaticalization is understood to be a ubiquitous phenomenon across the world's languages and to follow universal principles of language change. For instance, in many languages, verbs denoting movement, "going" in particular, are frequently grammaticalized into marking some kind of future aspect or tense.

Grammaticalization has frequently been discussed in relation to language contact (Heine and Kuteva 2010). In particular, there is now a considerable body of literature on grammaticalization in pidgins and creoles (Bruyn 2008). If creoles are, by definition, elaborate pidgins, i.e., pidgins with "more" grammar, then grammaticalization can provide an answer to where that grammar is coming from. Scholars have sought to distinguish language-internal from contact-induced processes of grammaticalization, although a clear distinction may in most cases be difficult to establish given that "structure and use, cognitive and social factors continually interact" in language change (Hopper and Traugott 2003, p. 213). They are certainly not mutually exclusive and "may work in conspiracy with each other" (Heine and Kuteva 2010, p. 87).

This paper discusses the grammaticalization of a grammatical item with the general function of 1PL.IN to become restricted to a more specific grammatical function, hortative, under conditions of language contact. Hortative mood is used to encourage, discourage, or otherwise exhort someone to carry out (or not carry out) an action (van der Auwera et al. 2005). It is sometimes called "cohortative" for first-person plural, i.e., for a group that includes the speaker. A number of languages have dedicated hortative morphemes.

There are several cases of grammaticalization of lexical items into hortative markers, in particular, "come" and "leave" verbs (Heine and Kuteva 2002, pp. 70, 190–93). The English "let's" is a frequently cited example of this grammaticalization path (Hopper and Traugott 2003, pp. 10–13). Lovstrand (2018) discusses the grammaticalization of a first-person dative suffix to a suffix dedicated to first-person hortative in the East Chadic language Barayin. I am not aware of any case of grammaticalization of a personal pronoun into a hortative marker.

Neither Guaraní nor Aché has grammatical hortative markers. In Guaraní, hortative mood is conveyed through the use of the first-person inclusive prefix *ja-/ña-* (Estigarribia 2020, pp. 183–84). Indeed, the cohortative use of the construction *jaha* (1PL.IN-go) in the sense of 'let's go' is widespread even in Paraguayan Spanish and among speakers who know little to no Guaraní. But in normative Guaraní discourse, *ja-/ña-* is used for generic 1PL.IN, hortative function being discernible only through pragmatic inference. In Aché, parallel use of the free pronoun *nande* for hortative is not attested. One of my informants told me that in the forest prior to settlement, instead of explicitly summoning others, a leader would simply say *cho oma* 'I'm already going,' which functioned as a pragmatic cue for others to follow (see Thompson 2019, pp. 63–65, on the dynamic of leaders and followers among the Aché).

However, today, the Aché have detected a need for hortative mood and adopted the Guaraní prefix *ja-* for that purpose, stylized to *dja-* with voiced postalveolar affricate onset [dʒ], common in Aché and Indigenous varieties of Guaraní. Its use is ubiquitous in all Aché communities. In what follows, I will provide a number of examples to illustrate different use cases. As in the previous examples, whether a morpheme is from Aché (A), Guaraní (G), Spanish (S), or is bivalent (B) is marked below the glosses. Spanish items that are

phonologically integrated into Guaraní are marked as S/G (such as *kasõ*, originally from Spanish *calzón*).

- (6) *Djaha djawechy, djaha atu djawechy.*
- | | | | |
|----------------|-----------------|----------------|----------------------|
| dja-ha | dja-wechy | dja-ha | katu dja-wechy |
| 1PL.IN.HORT-go | 1PL.IN.HORT-fry | 1PL.IN.HORT-go | EMPH 1PL.IN.HORT-fry |
| G-G | G-A | G-G | G G-A |
- ‘Let’s go let’s fry [it], let’s just go let’s fry [it].’

In Example (6), a child exhorts another to go and fry a piece of meat over a fire. This example is fairly straightforward; *dja-* is used to invite someone to join in an action, first with the Guaraní verb ‘go’ and then the Aché verb ‘fry.’ This is evidence for the fact that *dja-* is a fully integrated productive morpheme in Guaraché, i.e., it is no longer merely part of borrowed Guaraní constructions (Auer 2014, p. 318). In the second repetition, further emphasis is put to the suggestion with the Guaraní emphatic marker *atu* (short for *katu*).

- (7) *Djamoïke ñande kasõ ko’anga.*
- | | | |
|-----------------------|--------------|---------|
| dja-moï-ke | ñande kasõ | ko’anga |
| 1PL.IN.HORT-put-INTNS | 1PL.IN pants | now |
| G-G-G | G S/G | G |
- ‘Let’s put on our pants now.’

In Example (7), a child summons others to put on their pants in preparation to get ready for the next trek to a new campsite by using *dja-* with the Guaraní stem *moï* ‘put.’ Note that this construction also shows the lack of nasal spread in Guaraché. In Guaraní, the nasality of the vowel [ĩ] in the stem *moï* would spread leftward, calling for *ña-*, the nasal allomorph of 1PL.IN, resulting in *ña-moï*. By contrast, while Guaraché *dja-* is without a doubt derived from Guaraní *ja-*, it has no nasal allomorph, being used indiscriminately with nasal and non-nasal roots. The Guaraní suffix *-ke* is added as an intensifier, which is normally used in imperative contexts. The next two examples illustrate two other frequent uses of *dja-* among children.

- (8) *Dja’uga patiro.*
- | | |
|------------------|---------|
| dja’uga | partido |
| 1PL.IN.HORT-play | game |
| G-S/G | S |
- ‘Let’s play a match (of soccer).’

- (9) *Eme’ẽ miçhĩ. Dja’u, dja’u miçhĩ.*
- | | | | | |
|----------|--------|-----------------|-----------------|--------|
| e-me’ẽ | miçhĩ | dja’u | dja’u | miçhĩ |
| IMP-give | little | 1PL.IN.HORT-eat | 1PL.IN.HORT-eat | little |
| G-B | G | G-S/G | G-S/G | G |
- ‘Give me a little. Let’s eat, let’s eat a little.’

Example (8), ‘Let’s play a match (of soccer),’ uses the Spanish verb *jugar* incorporated into Guaraní as *huga’uga* and via Guaraní into Guaraché. Example (9) uses the same form to formulate a polite request for food with the bivalent root ‘u’eat.’ The speaker, an eleven-year-old girl, asks another child to share a piece of palm heart, a much coveted delicacy. She begins in imperative mood, constructed with the Guaraní imperative prefix *e-* and the bivalent verb *me’ẽ*, downgrading her entitlement somewhat with Guaraní *miçhĩ* ‘little.’ But then she self-repairs and provides an alternative formulation using the hortative 1PL.IN instead. Here, instead of simply asking for the piece of palm heart, she frames it as a joint endeavor, ‘let’s eat together’ (‘together’ being implied by the use of the inclusive form), thus camouflaging her request and upgrading benefactive stance (Clayman and Heritage 2014).

The foregoing examples were all produced by children—arguably the first native speakers of Guaraché. Adults learned Aché as their first language while growing up in the forest and began to incorporate Guaraní in their teenage years or young adulthood after settling on reservations. There is thus greater variation in adults' speech overall, sometimes resembling more normative Guaraní constructions, at other times oscillating toward more traditional Aché forms, depending on context and situation. And yet, their use of *dja-* parallels that of children fairly consistently. The following three examples are produced by middle-aged adults, all native speakers of Aché.

(10) *Tambe imbina, djaa djadjwa'a mynga.*

tambe	imbi-na	dja-ha	dja-djwa'a	mynga
ax	sharpen-REQ	1PL.IN.HORT-go	1PL.IN.HORT-cut	honey
A	A-G	G-G	G-A	A

'Sharpen the ax, let's go let's collect some honey.'

In Example (10), a hunter asks another to sharpen an ax to go and get honey. The noun *tambe* 'ax' is from Aché, as well as the verb *imbi* 'sharpen,' which is modified with the Guaraní requestative suffix *-na*. This construction is followed by two exhortations. The hortative *dja-* appears first with the Guaraní stem 'go' and then with the Aché stem *djwa'a* 'cut,' used to indicate the action of cutting down or cutting a hole into a tree in order to extract *mynga* 'honey,' another Aché noun.

(11) *Ñande mynga mumbubu, djamama arã.*

ñande	mynga	mumbu-bu	dja-mama	arã
1PL.IN	honey	pierce-COND	1PL.IN.HORT-encircle	must
G	A	A-A	G-A	G

'While we get the honey, let's check out the surroundings.'

Example (11) illustrates the emerging distinction between indicative and hortative uses of the different markers for 1PL.IN. A hunter suggests they all check the surrounding forest for game while they get honey by 'piercing' the tree in which the bees have built their hive. The conditional clause starts with the free pronoun *ñande*. The predicate consists of the Aché noun *mynga* 'honey' followed by the Aché verb *mumbu* 'pierce' with the Aché conditional postposition *-bu*, here marking temporal aspect, 'while we get the honey.' The main clause uses the hortative 1PL.IN *dja-* with the Aché verb *mama* 'encircle,' as well as the obligative (or debitive) future marking postposition *arã* 'must' (short for Guaraní *va'erã*). This postposition lends further urgency or emphasis to the exhortation.

Example (12) provides another case where the use of *dja-* is combined with a postposition, the regular prospective marker *-ta*. A hunter is suggesting to set up camp a little further along the way.

(12) *Djahaveta äty.*

dja-ha-ve-ta	äty
1PL.IN.HORT-go-more-PROSP	over.there
G-G-G-G	A

'Let's go further that way.'

To be sure, we might also analyze this as a non-hortative use of *dja-* with the meaning 'we will go further,' which it would have in normative Guaraní. However, there are other aspects of the utterance that support a hortative reading: The hunter is sitting on the forest floor and makes a head gesture in the direction he wants everyone to go simultaneously with his utterance, while also throwing a piece of stone or wood in that same direction. Immediately, other adults chime in, endorsing his suggestion with *djahana* 'let's go' and *djahavena* 'let's go further,' both constructed with the requestative suffix *-na*. This suggests the speaker's original utterance was heard as an exhortation. Therefore, it seems that *dja-*

functions as a hortative also in cases where additional aspectual modifiers are present. I will return to this issue at the end of this section.

To further illustrate the distinction between hortative *dja-* and non-hortative *ñande/nande*, let us finally examine occurrences of both in the sequential contexts of larger stretches of discourse that demonstrate their contrastive use. The first is from a conversation among children at a campfire in the forest. The children are discussing the distribution of a piece of meat, currently in possession of seven-year-old boy Pikygi, who reluctantly shares some of it with his peers.

(13) *Children discussing the distribution of a piece of meat from Pikygi*

- 1 KANDJEGI: *Piky dja'u* ((to Pikygi, asking for a piece of his meat))
 Piky dja-'u
 Piky 1PL.IN.HORT-eat
 – G-B
 'Piky let's(+) eat'
- 2 *Gobu çe me'ëta ai,*
 gobu çe me'ë-ta avei
 then 1SG give-PROSP as.well
 A G B-G G
 'Then I will give you some as well.'
- 3 *Gobu ñande uta ñondiwe.*
 gobu ñande u-ta oñondive
 then 1PL.IN eat-PROSP together
 A G B-G G
 'Then we(+) will eat together.'
- 4 KWACHINGI: *Aguela dja'u.* ((asking an adult for a different food item))
 abuela dja-'u
 grandma 1PL.IN.HORT-eat
 S G-B
 'Grandma let's(+) eat.'
- 5 RYTAGI: *Piky dja'u, de ipopegua cha'a.* ((to Pikygi))
 Piky dja-'u de ipo-pegua cha'a
 Piky 1PL.IN.HORT-eat 2SG hand-from my.friend
 – G-B A A-G G
 'Piky let's(+) eat, what you have in your hand my friend.'
- 6 PIKYGI: ((hands Kandjegi a piece of meat))
- 7 *Do vece de me'ëdjeyta çepe.*
 dos veces de me'ë-djey-ta çe-pe
 two times 2SG give-again-PROSP 1SG-DOM
 S S A B-B-G G-A
 'You will give me double in return.'

Kandjegi uses the hortative *dja-* in line 1 to formulate a polite request for Pikygi's piece of meat, as we have already seen in Example (9). Kandjegi follows it with a promise to give Pikygi some later as well so that they will then 'all eat together.' His use, in line 3, of the non-hortative free 1PL.IN pronoun *ñande* for the propositional statement that they will eat together contrasts with his hortative use of *dja-* in line 1, which is echoed by other children in the following lines. This contrastive use by the same speaker of the two 1PL.IN markers gives further evidence of a grammatical distinction emerging.

The final Example (14) is a conversation among adults on a hunting trek in a forest reserve, early in the morning, at the campsite where we had stayed overnight. The discussion revolves around the plans for the day, where the hunters are going to hunt, and the route

women and children are supposed to take to the next campsite. The adults were all born in the forest with the exception of Sara, who was born in the early years on the reservation.

(14) *Discussion among adults at campfire over where to go hunting*

- 1 PASCUALA: *Pende watawā amete, wedjana.*
 pende wata-wā amete wedja-na
 2PL go-PURP over.there leave-REQ
 B A-A G A-G
 ‘For you to go that way, you have to leave us here.’
- 2 ROCÍO: *Gope o’o warā.*
 gope o’o va’erā
 there go must
 A A G
 ‘(You) must go there.’
- 3 SIMÓN: *Gope djaha ypape.*
 gope dja-ha ypa-pe
 there 1PL.IN.HORT-go lagoon-LOC
 A G-G B-B
 ‘Let’s go there to the lagoon.’
- 4 DOROTEA: *Ypape.*
 ypa-pe
 lagoon-LOC
 B-B
 ‘To the lagoon.’
- 5 PASCUALA: *Ani raa.*
 ani raha
 PROH take
 G G
 ‘Don’t take that.’
- 6 SERGIO: *Djaa ypape.*
 dja-ha ypa-pe
 1PL.IN.HORT-go lagoon-LOC
 G-G B-B
 ‘Let’s go to the lagoon.’
- 7 EUGENIO: *Gope djaha arā, pllā porā eho.*
 gope dja-ha va’erā pllā porā e-ho
 there 1PL.IN.HORT-go must clear.out well IMP-go
 A G-G G A G G-G
 ‘That way let’s go, go while clearing out the path well.’
- 8 CLORINDA: *Pytu’u oho arā.*
 pytu’u oho va’erā
 rest go must
 G G G
 ‘We must take breaks.’
- 9 SERGIO: *Pytu’u ñande hota.*
 pytu’u ñande ho-ta
 rest 1PL.IN go-PROSP
 G G G-G
 ‘We will take breaks as we go.’

- 10 PASCUALA: *Ytuwype pyta warã.*
 y-tuwy-pe pyta va'erã
 water-clear-LOC stay must
 B-A-B B G
 'At the clear water we have to rest.'
- 11 CLORINDA: *Go no y chapai.*
 go no y chapai-i
 DEM NEG water crooked-NEG
 A G/S B A-G
 'That water is not crooked.'
- 12 ELISEO: *Chávaro djaata gobu.*
 sábado dja-ha-ta gobu
 Saturday 1PL.IN.HORT-go-PROSP then
 S G-G-G A
 'Then let's go back Saturday.'
- 13 SARA: *Go y aguĩ.*
 go y aguĩ
 DEM water nearby
 A B G
 'That water is nearby.'
- 14 SERGIO: *Ko'embu ñande hota.*
 kwembu ñande ho-ta
 tomorrow 1PL.IN go-PROSP
 A G G-G
 'Tomorrow we'll go.'

In this conversation, the first instance of the hortative is Simón's suggestion in line 3, *djaha ypape* 'let's go to the lagoon,' echoed in lines 6 and 7 by other hunters. In line 7, Eugenio adds weight with the obligative *arã* 'must' (short for Guaraní *va'erã*) as we have seen in Example (11). These hortative uses of *dja-* contrast with the non-hortative use of 1PL.IN *ñande* by Sergio in lines 9 and 14. Here, Sergio uses the free pronoun to indicate that we will take breaks as we go (line 9) and to announce that we will return tomorrow (line 14). The last statement is made matter-of-factly, providing a conclusion to the discussion, not merely adding another suggestion. This is further supported by the fact that Sergio is one of the most experienced hunters and has the role of leader of the group, a position that enables him to establish a certain course of action as more viable than alternatives.

In the intervening turns, there is one instance in line 12 where Eliseo uses *dja-* with the prospective suffix *-ta*, similar to Example (12). As discussed above, this construction may also be analyzed as a non-hortative use of *dja-*, in this case with the meaning 'Saturday we will then go back' instead of 'Then let's go back Saturday' as I have translated it. In the corpus analyzed so far, there are indeed a number of ambiguous cases of *dja-* that cooccur with other aspectual modifiers, such as the prospective suffix *-ta* that may be read as non-hortative. However, *-ta* cooccurs far more often with the 1PL.IN free pronoun *nande/ñande*. Moreover, all of the ambiguous cases are from the speech of adults. Grammaticalization is a gradual process (Heine and Kuteva 2005) and older forms often persist for some time (Hopper and Traugott 2003, p. 124). As I have mentioned above, there is far more variation in adults' speech, most of whom have grown up speaking Aché and have learned Guaraní as their second language once settled on reservations. It may be that there are cases where they are indeed using *dja-* as it is used in Guaraní for non-hortative moods. However, I have yet to encounter an instance of a non-hortative use of *dja-* in children's data. It seems, then, that the first native speakers of Guaraché have consolidated the variable patterns they may still be observing in their parents' and grandparents' speech.

6. Discussion

As the foregoing examples show, Guaraché speakers are modeling their use of the 1PL.IN marker *dja-* on the hortative function that it has in Guaraní. Such a reanalysis and transfer of only one function of Guaraní *ja-/ña-* to Guaraché *dja-* suggests that a novel grammatical distinction is emerging between *dja-* for hortative and the free pronoun *nande/ñande* for all other cases of 1PL.IN. This is the result of a process of grammaticalization of *dja-* from a fairly general non-modal grammatical function of 1PL.IN to specifically indicating (co-)hortative mood. While Guaraní did not directly provide a grammatical hortative marker, Guaraché speakers could model Guaraní hortative use of *ja-/ña-* and then reanalyze it, i.e., further grammaticalize an already grammaticalized element (Heine and Kuteva 2003; Hopper and Traugott 2003). Such specialization is a common phenomenon in processes of language fusion where structures from two languages in contact “which are more or less equivalent in mono-lingual use may develop specialized uses in the fused lect” (Auer 1999, p. 310).

Auer (2014) specifies the process of language fusion as the conventionalization and grammaticalization of mixing patterns. He suggests that different kinds of mixed languages can be traced back to different patterns of insertional codeswitching and language mixing, where minimal insertion patterns (of uninflected stems) lead to mixed languages with split subsystems (e.g., grammar from language A, lexicon from language B), while maximal insertion patterns (of items together with accompanying grammatical markers) lead to grammatical merging. But even in the latter case, it is mostly one source language that provides the basic grammatical patterns into which material from the other source language is being integrated.

Auer further notes that while theoretically “language fusion should occur regardless of whether the two languages in contact are genetically related” or not, most cases analyzed “come from language contact between unrelated or genetically hugely distant languages” (Auer 2014, p. 296). Because genetic distance constrains the kinds of mixing that can occur, such cases more clearly lead to the two distinct types of insertional mixing that provide the starting point for language fusion, which is not the case for structurally very close varieties. By contrast, genetically close varieties allow for many more forms of mixing, which may lead to a greater variety of patterns (Auer 2014, p. 330).

I would like to suggest here that despite the fact that Guaraní and Aché are genetically extremely close languages (Aché being a Guaraní-derived contact language), we can observe a similar fusion process to that analyzed by Auer. There is massive borrowing of Guaraní lexical items into a still largely Aché grammatical matrix. Only very few of the Guaraní functional suffixes are adopted (some of them merely replacing Aché suffixes that were already present) and none of the prefixes with the exception of *dja-* and a few other markers.⁷ Guaraché also remains more isolating in comparison to the polysynthetic Guaraní, just as Aché (Roessler 2015, 2018).

What is interesting is that unlike many of the well-known cases of mixed languages, the matrix language for Guaraché is the less dominant in-group language, Aché. In this regard, the emergence of Guaraché may have more in common with that of certain creoles (Baker 1990; Jourdan 1991; Chaudenson 2001; Hopper and Traugott 2003; Heine and Kuteva 2003; Bruyn 2008). In the early years on the reservations, as gradually more and more Aché settled and oriented toward the linguistic habits of Paraguayans and already settled Aché (Hauck 2018), language mixing became the “target” of language shift. It seems reasonable to assume that in those initial phases, Guaraní *ja-/ña-* for 1PL.IN was incorporated fairly quickly into everyday discourse as part of different constructions, especially hortative ones. It is not hard to imagine Paraguayan reservation officials in the early years bossing reluctant Aché around with *jaha* ‘let’s go’ here and *jaha* ‘let’s go’ there. The lack of a hortative category in Aché and the frequent use of this and similar constructions in Guaraní, such as *ja’u* ‘let’s eat,’ likely provided the avenue for the emergence of *dja-* as a grammatical hortative in Guaraché.

Auer (2014, p. 318) suggests that “once a sufficient number of borrowed words of the same type are available, speakers distill a constructional pattern out of them, which can then become productive,” such that *dja-* is used today not only with Guaraní and bivalent roots but also with Aché roots, as we have seen in examples (6), (10), and (11). As is the case with other mixed languages (McConvell and Meakins 2005; Meakins 2012; O’Shannessy 2005, 2012, 2021), as first native speakers of Guaraché, children were the ones driving this process, internalizing and regularizing the use of *dja-* and *nande/nande* that they observed in the mixed speech of adults.

The question remains whether *dja-* was borrowed from the very start only as a hortative—a kind of partial “polysemy copying” (Heine and Kuteva 2003)—or whether it was borrowed as 1PL.IN and used interchangeably with *nande/nande*, only with time undergoing grammaticalization and specialization. Both hypotheses have some plausibility. The fact that in adults’ speech there is more variation, including a number of ambiguous cases where *dja-* does not unequivocally signal hortative as discussed above, may hint at the latter. However, this would require an explanation as to why only 1PL.IN has been borrowed and none of the other Guaraní person-marking prefixes are in use. If *dja-* was incorporated directly in its restricted hortative function, this may be due to its prevalence as part of highly frequent and perceptually salient constructions such as *jaha* ‘let’s go’ or *ja’u* ‘let’s eat’ as part of mixed communicative patterns in the early years on the Aché reservations. Future comparative research on historical recordings from the 1960s and 1970s will hopefully allow for a more precise answer.

In either case, the grammaticalization of *dja-* shows the interaction of contact-induced and language-internal processes (Heine and Kuteva 2010, p. 87). While Guaraché speakers did not replicate any grammaticalization process that they could have observed in either Guaraní or Aché, because neither has a distinct form for hortative mood, grammaticalization of *dja-* was nonetheless induced by language contact as it was the availability of two different forms from each of the source languages alongside the hortative use of *ja-/ña-* in Guaraní pragmatics that provided an avenue for a grammatical distinction to emerge in Guaraché. Whatever its precise historical trajectory, today *dja-* is ubiquitous in the Aché communities and shows that Guaraché is developing “unique forms and structures which are not present in either source language” (Meakins 2012, p. 135), which warrants its (emergent) status as a new mixed language.

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Notes

- ¹ Glossing conventions follow the Leipzig Glossing Rules. Abbreviations used: 1 ‘first person,’ 2 ‘second person,’ 3 ‘third person,’ SG ‘singular,’ PL ‘plural,’ IN ‘inclusive,’ EX ‘exclusive,’ COND ‘conditional,’ DEM ‘demonstrative,’ EMPH ‘emphasis,’ HORT ‘hortative,’ IMP ‘imperative,’ INTNS ‘intensifier,’ LOC ‘locative,’ IAM ‘iamitive,’ REQ ‘requestative,’ NEG ‘negative,’ Q ‘question marker,’ PROH ‘prohibitive,’ PROSP ‘prospective,’ PURP ‘purposive,’ RELN ‘relational prefix.’ In Guaraché examples a third tier identifies the source of a morpheme as either from Aché (A), Guaraní (G), or Spanish (S). B indicates items that are “bivalent” in the sense of Woolard (1998), i.e., they could belong to both, Aché or Guaraní (although not Spanish). Transcriptions use established orthographic conventions for Aché and Guaraní with the exception of the grapheme ⟨ch⟩. In the respective standard orthographies this grapheme represents two different sounds, [tʃ] in Aché and [ʃ] in Guaraní. Since this ethnophonetic distinction is pragmatically salient as indexical of either Guaraní or Aché, to capture the difference I depart from standard Guaraní orthography and transcribe [ʃ] with the grapheme ⟨çh⟩ (using a ‘c’ with cedilla as used in French and Portuguese). I retain ⟨ch⟩ to represent [tʃ] in Aché words.
- ² I use (+) in translations to distinguish inclusive from exclusive (–) first person plural pronouns.
- ³ This is also common in Indigenous varieties of Guaraní. In Aché orthography, it is represented by ⟨dj⟩.
- ⁴ One reviewer suggested to complement corpus evidence for *dja-* as a grammatical hortative with negative evidence from grammaticality judgements of native speakers of Guaraché. The difficulty here is that Guaraché is not (yet?) perceived as a “language” but merely “incorrect” language mixing in local language ideologies. Grammaticality judgements from ordinary speakers will be difficult to elicit for Guaraché. Nonetheless, elicitation sessions with some younger adults who are aware of distinct norms of use in different domains are planned for my next field visit, which had to be postponed due to the COVID-19 pandemic.
- ⁵ In order to mark the (ethno-)phonetic distinction between the voiceless palatal fricative [ʃ], which is indexically associated with Guaraní, and the voiceless palato-alveolar affricate [tʃ] associated with Aché, I am departing from standard Guaraní orthography and transcribe [ʃ] with the grapheme ⟨çh⟩, using a ‘c’ with cedilla, reserving ⟨ch⟩ for the Aché affricate [tʃ] (see also endnote 1). In Guaraché, the Guaraní 1SG pronoun is sometimes rendered as *che* [tʃe], as is also common in Guaraní varieties spoken by Indigenous Guaraní groups.
- ⁶ Deciding between A, G, and B is not always straightforward, and in some cases, there are only minor phonetic differences of otherwise bivalent morphemes that determine the assignment of the A and G labels.
- ⁷ Aside from *dja-*, the prepositional imperative (*e-*) and prohibitive (*ani*) markers are also adopted from Guaraní—the Aché postposition *eme* for prohibitive is now obsolete—as well as a simplified version of the negative circumfix *no- ... -i* as shown in Example (5).

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