Accepted in published in Contact varieties of Spanish and Spanish-lexified contact varieties in the Handbooks for Linguistics and Communication Science series published by De Gruyter Mouton. 2022. Please cite the published version once available

Media Lengua in the Ecuadorian Andes

1 Introduction

Media Lengua (ISO-639-3: mue, Glottocode: medi1245), also known as *Chaupi-shimi* or *Chaupi-lengua* (literally translating to "*half-language*"), is broadly described as a mixed language with Spanish-origin lexicon and Quichua (Kichwa)-origin morphosyntax (see Example (1)) with the bolded elements from Spanish). It is spoken by approximately 1,204 people in the Ecuadorian province of Imbabura in several Kichwa-Kayambi communities near Lago San Pablo. Recently, it has also been documented that approximately 1,703 people in the Ecuadorian province of Cotopaxi still speak Media Lengua in several Kichwa-Cotopaxi communities (Stewart, Gonza Inlago, and Prado Ayala 2023). The goal of this chapter is to summarize the scientific literature on Media Lengua, focusing especially on the last 15 years, since Pieter Muysken's pivotal work on the language in the 1980s and 90s. It specifically centers on recent advancements in psycholinguistic, phonological, and sociolinguistic work and highlights some of the controversies therein. It also provides information about possible origins of Media Lengua and recent documentation and revitalization efforts. Beforehand, this chapter provides background information and a brief sketch of Media Lengua as it is spoken primarily in Imbabura, specifically Pijal Bajo (0.17°, -78.19°).

(1) ***Mañana i**grinajun **cerca**ta **pinta**ngapa.*

ML	**maɲana**	**i**-ɡɾi-naxu-n		**serka**-ta	**pinta**-ngapa
	tomorrow	go-FUT-RECP-3[1]		fence-ACC	paint-SS.PURP
	Kaya rikrinahun kinchata llunchinkapak.				
Q	kaja	ɾi-ɡɾi-naxu-n		kinʧa-da	ʒun-ʧi-ngapak
	tomorrow	go-FUT-RECP-3		fence-ACC	paint-CAU-SS.PURP
	Mañana vamos a pintar la cerca.				
Sp	**maɲana**	**ba-mos**	**a**	**pint-aɾ**	**la**	**seɾka**
	tomorrow	go-1P	PREP	paint-INF	DET.F	fence

'Tomorrow [they] are going to go paint the fence.' (Stewart et al. 2020:578)

2 Background

Media Lengua was originally documented in the Ecuadorian province of Cotopaxi in the outskirts of the town of Salcedo (-1.05°, -78.58°) by Pieter Muysken (see 1979, 1980, 1981, 1997). Until recently, there was purportedly no active use of the language in this region with only a handful of speakers (Lipski 2019; Müller 2011; Shappeck 2011; Stewart 2011). However, during the write up of this chapter, it was revealed that Media Lengua is still spoken in Cotopaxi where the number of speakers might actually outweigh those in Imbabura (Stewart et al. 2023). The Imbabura variety of Media Lengua was documented in the outskirts of the town of San Pablo (0.19, -78.18) by Jorge

[1] See section 3.2 for glosses.

Gómez Rendón (2005, 2008). Research by Stewart (2011; 2023) in both regions revealed numerous other communities where Media Lengua is currently spoken (Pijal & Cajas in Imbabura; Playa, Capilla, Rayoloma, Tuglin, Cuturivi Grande, Cuturivi Chico, Cachi Alto, Cachi San Francisco, Macas, Sara Ucsha, Chucu Toro, Rumipungo, & Yanaurco in Cotopaxi).

The term Media Lengua is used to refer to a number of mixed varieties comparable to the mixed language described in this chapter (see for example Arends, Muysken, and Smith 1994; for Salcedo Media Lengua & Saraguro Media Lengua see Muysken 1997, for Imbabura Media Lengua see Gómez Rendón 2005, 2008 & Stewart, 2011). Similarly, Catalangu is another mixed variety documented outside of the Parish of Cañar (-2.55°, -78.93°) (Muysken 1997). The varieties of Media Lengua spoken in Imbabura are collectively referred to as Imbabura Media Lengua (Gómez Rendón 2005, 2008) and more specifically, the dialects within Imbabura are referred to as Pijal Media Lengua and Angla Media Lengua (Stewart 2011). To complicate matters, many speakers of Media Lengua do not actually refer to their language as 'Media Lengua', but rather with descriptors such as *chapushca-shimi* 'mixed language', *nuestru dialecto* 'our dialect', *nuestru quichua* 'our Quichua' or with the pejorative *llanga-shimi* 'nothing language', which itself is often used to refer to Quichua in other communities (Stewart 2011:129). Stewart states that it was not until after several visits to Pijal that members started calling the language *Chaupi-shimi* (Media Lengua in Quichua), likely to humor him. Müller (2011:7) also had a similar experience in Cotopaxi where speakers did not have a specific denomination for Media Lengua and instead referred to it as a form of Quichua or simply as Quichua. Recent fieldwork in Cotopaxi revealed additional designations including *Tuglín Castillano* 'Castilian from Tuglín', *Tuglín Quichua* 'Quichua from Tuglín' and *chaupi chaupi* 'half-half' (Stewart et al. 2023).[2] If this were not enough to confuse eager researchers, the term 'Media Lengua' is also used colloquially throughout Ecuador by speakers of Quichua to refer to Spanish borrowings in their language (author's fieldwork in 2009, Lipski, 2017:237), though this is not the mixed language described herein.

Typologically, Media Lengua is broadly classified as a 'structural mix' (Meakins 2013; Meakins and Stewart 2022) and more specifically as a 'lexicon-grammar' mixed language in the literature (Bakker 2003) due to its clear division between roots (content words) and suffixes (functional elements). Media Lengua, like other mixed languages, was created quickly, likely within a single generation, by bilinguals proficient in both source languages. The structure of the language also reflects the speakers' bilingualism as there is little in the way of lexical or grammatical simplification, which is common in Pidgin and Creole languages.

In terms of lexicon, speakers often describe the entire vocabulary as Spanish in origin. In practice, the percentage of Spanish-origin lexicon hovers around 90%[3] (Lipski 2016; Muysken 1997; Stewart 2011, Stewart et al. 2020). Some of this discrepancy can be traced to the fact that Media Lengua's vocabulary would be more precisely described as *Rural* Spanish in origin, which itself contains a substantial number of Quichua borrowings, which were likely reintegrated into Media Lengua (e.g., *guagua* [wawa] 'baby/ young child'). The process responsible for the mass

[2] The latter two designations were documented by John Lipski (personal communication).

[3] Gómez Rendón (2005) suggests the number is lower, around 75% or even 59% (2021). His method for calculating these percentages is detailed in Section 6. However, the recently published Media Lengua dictionary (Stewart, Prado Ayala, Gonza Inlago, 2020), primarily gathered from conversational data from Pijal, shows the number of borrowings at 89%.

borrowing and relabeling of lexical entries is referred to as *relexification* (Lefebvre 2005, 2006; Lefebvre and Therrien 2007; Muysken 1981). In its simplest form, relexification involves the replacement of the phonological 'shell' or 'shape' of a word, leaving the semantics and functional properties unchanged from the base language. For example, the Spanish verb *quer-er* 'to want, to love' in example (2) takes the semantic features of the Quichua verb *muna-na* 'to want, to like, to enjoy, to love' in Media Lengua as *quere-na* [kẹˈɾẹna].

(2) ***Yo**ca, **miyo marido**ta **cosquillas**ta **atsi**nata **quere**ne.*

ML	jọ=ka	miọ	maɾidọ-ta	kọskiʒas-ta	azi-na-ta	kẹɾẹ-ni
	1=TOP[4]	1.POSS	husband-ACC	tickle-ACC	do-NOM-ACC	like-1

Ñukapak kusata chikichikta ruranata munani.

Q	∅	ɲuka-pax	kusa-da	*chikichi*-k-da	ʐuʐa-na-da	muna-ni
		1-POSS	husband-ACC	tickle-NOM-ACC	do-NOM-ACC	like-1

Me gusta hacer cosquillas a mi esposo.

Sp	me	gusta	as-er	koskiʎas	a	mi	esposo
	1.OBJ	like.3	do-INF	tickle	PREP	1.POSS	husband

'I like to tickle my husband.' (Stewart, et al, 2020:777)

3 Basic Language Description

While Media Lengua does not have a published grammar, there are a number of sketches that describe many of the grammatical aspects of the language. These primarily include Muysken (1997), Gómez Rendón (2005, 2008), Stewart (2011, 2015b), and Stewart et al. (2020). The following description is primarily based on the latter (freely available through the Creative Commons Attribution 4.0 International License), but also includes information from other sources.

3.1 Phonology

3.1.1 Consonants

The phoneme inventory for the Media Lengua dialect spoken in Pijal is presented in Table 1. When non-native speakers of Quichua hear Media Lengua for the first time, they often assume they are listening to a variety of Quichua. This is likely due to the fact that Media Lengua prosody and rhythm essentially conform to that of Quichua with some minor innovations in pitch accent height (see Section 3.1.3). Moreover, the Spanish vocabulary in Media Lengua often conforms to Quichua phonotactics (e.g., intervocalic voicing in ML *atsina* [azina] 'do/make' vs. Sp *hacer* [aseɾ] 'do/make'), though not always; many stop-liquid onset clusters are maintained from Spanish (e.g., *flaco* [flakọ] 'skinny'), which do not appear in native Quichua words (see Lipski 2020a for additional examples). Additionally, several phonemes from Spanish have also transferred to Media Lengua, likely to help maintain contrasts in the Spanish vocabulary (see Stewart and Meakins 2021). For example, in Quichua, phonemically voiced obstruents are exceedingly rare (with the

[4] See section 3.2 for glosses.

exception of borrowings) and typically only appear allophonically in the post-sonorant positions (e.g., *tanta* [tanda] ‘bread’), though Lipski (2020a) points out a few possible exceptions like the /g/ in *pugyu* [pugju] ‘well spring’ (p. 338). Contrarily, voiced stops are both phonemic and abound in Media Lengua (e.g., *col* [kǫl] ‘cabbage’ vs. *gol* [gǫl] (Stewart 2015b, 2018a).

Table 1: Phonemic inventory of Media Lengua spoken in Pijal, including affricates and /w/ presented under their initial place of articulation. Common allophones are found in brackets (based on Stewart et al. (2020))

	Labial			Coronal					Doral			Laryngeal
	Bilabial	Labial dental	Dental	Alveolar	P. Alveolar	Retroflex	Palatal	Velar	Glottal			
Nasal	m		n				ɲ	[ŋ]				
Plosive	p b		t d					k g				
Fricative	ɸ	f		s z	ʃ ʒ	ʐ		x	[h]			
Affricate				ʧ								
Approx	w						j					
Tap				ɾ								
L. Approx			l									

Unlike most dialects of Imbabura Quichua, Imbabura Media Lengua does not follow the post-sonorant voicing rule for stops in most non-verbal morphology. For example, in the Quichua phrase, *kuchakunamanta* [kuʧa**g**unaman**d**a] ‘from the lakes’, the /k/ in the plural morpheme, *-kuna* and the /t/ in the ablative morpheme, *-manta* are voiced, while in Media Lengua, they remain voiceless, *lagunacunamanta* [laguna**k**unaman**t**a] ‘from the lakes’. Yet, post-sonorant voicing appears in the verbal morphology of both languages: Quichua, *rikukrinki* [ʐikuɡɾiɡi] ‘you’re going to see’; Media Lengua, *vigringui* [bi**g**ɾi**g**i] ‘you’re going to see’. Interestingly, this was also the case in the Cotopaxi variety of Media Lengua (henceforth Salcedo Media Lengua) documented by Muysken (1997:365). However, in the recently documented variety of Cotopaxi Media Lengua (Henceforth Yacubamba Media Lengua), all post-sonorant stops appear to be voiced no matter if they appear in verbal or non-verbal morphology (e.g., *granogunada* [gɾano**g**una**d**a] ‘the grains.ACC’ & *comingabo* [kǫmin**g**a**b**ǫ] ‘in order to eat’).

Like many varieties of Imbabura Quichua, Imbabura Media Lengua also makes use of a voiceless bilabial fricative [ɸ] where more central dialects of Quichua (including Cotopaxi) use an aspirated bilabial stop ([pʰ]). For example, *puyu* [ɸuju] ‘cloud’ in Imbabura Quichua (Gómez Rendón 2007:483) is [pʰuju] in Cotopaxi Quichua (Kohlberger 2010:58). In Imbabura Media Lengua, both *puyu* and *nobe* are used for ‘cloud’, with *puyu* pronounced as [ɸuju], and spelled with an <f> (*fuyo*) (Stewart et al. 2020:1207). This sound has even made its way into Spanish-origin words like *limfiana* [limɸiana] ‘to clean’, from Spanish *limpiar* (p. 1516), and *tafial* [taɸial] ‘dirt wall’, from Spanish *tapial* (p. 2365), among others. Interestingly, in both Cotopaxi varieties of Media Lengua (Salcedo & Yacubamba), the voiceless bilabial fricative is used frequently (Muysken 1997:381; Stewart et al. 2023) in lieu of the aspirated bilabial. For example, when the Quichua word *piti* ‘a little bit’ is used in Yacubamba Media Lengua it is produced as [ɸiti] (Stewart et al. 2023) whereas in Cotopaxi Quichua, it is typically produced as [pʰiti] (personal database).

Additionally, in both Imbabura and Yacubamba Media Lengua[5] through the influence of Quichua, the Spanish trill (/r/) is produced as /ʐ/ and the Spanish palatal lateral approximant (/ʎ/) is produced as /ʒ/; both appearing in the Imbabura Media Lengua word *carretilla* [kaʐɐ̟tiʒa] 'wheelbarrow' vs. Spanish [karetiʎa] (Stewart 2020). Finally, like Salcedo Media Lengua (Muysken 1997:372), the Imbabura variety also preserves the archaic word-initial /x/ (<h>) in several Spanish borrowings (Stewart 2011:71). For example, *hacha* [xaʧa] 'axe' and *habas* [xaβas] 'fava beans' vs. modern Spanish [aʧa] and [aβas], respectively. This has yet to be documented in Yacubamba Media Lengua, though the few instances of the word *habas* 'fava beans' that were produced, did not contain an initial fricative ([∅aβas]).

3.1.2 Vowels

Both the Quichua (see e.g., Guion 2003; Lipski 2015; Stewart 2011, 2014) and Media Lengua vowel systems have received a rather large amount of attention in the literature (van Gijn 2009; Gómez Rendón 2005, 2008; Muysken 1997; Onosson and Stewart 2021b, 2021a, 2023; Stewart 2011, 2014, 2018b; Stewart and Onosson 2023) as impressionistic observations often leave researchers wondering if their ears are playing tricks on them. This is due to the complex organization of both a Spanish-like five vowel system (/i, u, e, o, a/), which overlaps with a Quichua-like three system (/i, u, a/) in acoustic space (see Stewart 2011, 2014). For all intents and purposes, the Imbabura Media Lengua system is shaped like the Imbabura Quichua system but adopts mid-vowel categories, which are substantially raised in acoustic space resulting in the overlap. To show this, Stewart uses a raised diacritic under the mid-vowels ([e̝] & [o̝]) in phonetic transcriptions. A preliminary acoustic analysis of the Cotopaxi vowel system, from two speakers, revealed that /i/ and /e/ had a large degree of separation while /u/ was substantially lower compared to Imbabura Media Lengua /u/, occupying a region typically associated with mid-vowels (Stewart and Onosson 2023). Because of this, I use [u̝] with a lowered diacritic to represent this vowel in phonetic transcriptions. To further add to the complexities of the system, high vowels in both Media Lengua and Quichua can be produced with a wide range of F1 frequencies as Spanish-origin mid-vowels do not constrain the size of these categories, but rather overlap with them. Therefore, high vowels are habitually produced in regions that would normally be occupied by a mid-vowel in a prototypical five-vowel system (Lipski 2015; Stewart 2011, 2014).

Table 2: Media Lengua vowels based on Stewart (2011, 2014).Quichua-origin vowels are bolded.

	Front	Back
High	i **i**	**u** u
	e̝	o̝
Low		**a** a

[5] There is no mention of how these sounds are produced in Salcedo Media Lengua in Muysken (1997).

Nearly all vowel sequencies (essentially diphthongs) from Spanish have also been adapted to fit the Imbabura Media Lengua vowel space. These include: /ae, ea, oa, ei, ie, oe, ue, ao, eo, io, oi, eu, uo/ and the sequencies /ia, ua, ai, ui, au, iu/, which appear in both Quichua and Spanish (Onosson and Stewart 2021b). As might be expected, due to the overlapping mid- and high vowel categories, vowel sequencies often resemble monophthongs. However, changes in the formant trajectories, albeit small, differ from true monophthongs in most cases (e.g., the F2 in /e̯i/ increases in frequency between the target vowels in *reina* [ze̯ina] 'laugh' whereas the F2 in /ie̯/ decreases in frequency between the target vowels in *acienda* [asie̯nda] 'ranch, farm').

It should be noted that the system, while overlapping, is essentially stratified with statistical evidence showing that, on average, Spanish-origin mid-vowels are produced lower in acoustic space than both Spanish-origin and Quichua-origin high vowels. However, orthographically, speakers often use mid- and high vowels interchangeably. See example (3) from Prado Ayala et al. (2021:3) with written vowels that differ from their source language bolded in the interlinear gloss. Of the 2283 lemmas containing mid-vowels in the Media Lengua dictionary, (71% of the total headwords) 24% show variation in <i>-<e>, and <u>-<o> (e.g., *pensana* & *pinsana* 'think' p. 1942). This implies that the functional load of mid- and high vowel contrasts is quite low, which coupled with the overlapping vowel mid- and high vowel categories, might suggest why descriptive accounts of Media Lengua vowel production vary (see Gómez Rendón 2005, 2008; Muysken 1997) and theoretical accounts (see van Gijn 2009; Muysken 2013) point to a non-stratified system.

(3) *Ya mol**i**shcata poner**e**n**e** uno platopi o ajisero**p**e y picar**e**n ese mol**i**shcapi cebolla largata, culantrota ya listomi com**i**nalla.*

Ya	mol**i**-shca-ta	pone-r**e**-n**e**	uno	plato-pi	o	ajisero-p**e**	y	pica-r**e**-n	ese
then	grind-PERF-ACC	put-REFL-1	a	plate-LOC	or	chile dish-LOC	and	cut-REFL-3	DET

mol**i**-shca-pi	cebolla	larga-ta	culantro-ta	ya listo=mi	com**i**-na-lla
grind-PERF-LOC	onion	long-ACC	cilantro-ACC	and ready=VAL	eat-INF-LIM

'Next, I put the ground [seeds] on a plate or in a chilli dish then one chops up green onions and cilantro and adds them to the ground [seeds] and then it's ready to eat.'

3.1.3 Prosody

Nearly all prosodic events in Imbabura Media Lengua are conserved from Quichua. Stewart (2015a:234) shows that, like other Quechuan languages, Media Lengua is a quality sensitive language that has fixed primary stress (or pitch accent) on the penultimate syllable. This is consistent with descriptions of both Imbabura Quichua (Cole 1982:210) and Media Lengua from Cotopaxi (alluded to in Muysken 1997:378) showing that stress, in the vast majority of words, is penultimate no matter the number of morphemes attached to a word (e.g., *casami* [kaˈ**sa**mi] 'house=VAL' and *casacunami* [kasakuˈ**na**mi] 'house-PL=VAL'). However, there are a few exceptions, like interjections (e.g., *achachay!* [aʧaˈ**ʧai̯**] 'it's cold!'), the nuclear pitch accent in surprisal utterances (e.g., *Ah! Ese dos chiquito wawakunachu gemelakuna!?* [a e̯se̯ do̯s ʧi̯kito̯ wawakunaʧu xe̯me̯lakuˈ**na**] 'Oh! Those two little kids are twins?!' (Stewart 2015a:253)), and in certain words that maintain ultimate stress in Spanish (e.g., *mujer* [muˈ**xeɾʃ**] 'woman'); which, as noted by Muysken (1997:378), might be a reason why Quichua *warmi* 'woman' is more common

than Spanish *mujer* 'woman' in Media Lengua. Additionally, Stewart (2015a:240) shows that words with optional clitics (e.g., the topic marker *-ca* and validator marker *=mi*) may be extrametrical, and therefore shift stress to the antepenultimate syllable (e.g., *collogoca* [kǫˈʒǫgǫca] 'plant shoots').

Stewart (2015a), who provides an autosegmental-metrical account of Media Lengua intonation, shows a high-low (L+H*) pitch accent associated with the penultimate syllable of each prosodic word in an utterance. He also highlights that one possible innovation, not common in Pijal Quichua, is the prevalence of emphatic pitch accents (L+^H*), which can reach frequencies up to 3 times as high as normal PAs, giving the language a sing-song quality. With respect to boundary tones, nearly every utterance type ends in a low (L%) apart from clarifying utterances and tag questions, which end in a high (H%).

3.2 Morphosyntax

Like Quichua, Media Lengua is an agglutinating language with highly regular compounding suffixation and regular fusional verb inflections. In parallel, nearly all functional elements in Media Lengua pattern along the grammatical frame supplied by its local Quichua dialect. Multiple studies have also shown that word order is predominantly (subject-)object-verb (SOV). Using 3159 utterances from a video description task collected from Imbabura (including both the San Pablo communities and Pijal), Deibel (2020a, 2021) calculated that 82% patterned as OV and 18% as VO. These results are in line with Muysken's (1981, 1997) calculations based on conversational data from Cotopaxi (79% OV to 21% VO) and an analysis of neighboring object-verb/ verb-object pairs in Stewart's forthcoming archive with multiple speech acts including: narrations (81% OV & 19% VO), conversations (79% OV & 21% VO), and more formal elicited translations (84% OV & 16% VO). It should also be mentioned that while Gómez Rendón (2005:54) does not provide a percentage, he states that speakers under 40 produce SVO at a rate of 3 to 1 compared to those over 40 and that word order is more flexible in Media Lengua than in the local Quichua variety.

The results of Deibel's (2020a, 2021) studies on word order suggest that pragmatic factors related to topicality, rather than influence from Spanish, dictate word order. For example, persistence and the animacy of an object referent significantly increases the probability of VO word order in the main clause (2021:181), which is a common crosslinguistic pattern and reflects trends in the local Quichua varieties (2021:183). Additionally, there was no significant difference in word order preference in the three communities where she conducted the experiment (Angla, Caso Valenzuela, & Pijal) (2021:172). Given that Pijal is currently undergoing a substantial shift toward Spanish, one could surmise that if Spanish were an influencing factor, more frequent VO structures might be found in the Pijal data (2021:181). She also found that other possible evidence that might be tied to contact induced language change, such as dropping of accusative marker *-ta*, or language of origin of the verb root, did not influence the placement of the object (2021:182-3).

3.2.1 Constituent order

Like Quichua, constituent order within subordinate clauses in Media Lengua (from Pijal) generally follows a conservative OV word order as observed in (4). In this example, the embedded clause,

sandwiched between the subject (*yoca* 'I=TOP') and verb (*yarcani* 'think-PST-1') of the main clause, contains its own subject (*ellaca* 'she=TOP'), object (in the form of the noun phrase *bente añota* 'twenty years old'), and the verb (*tinishca* 'have' inflected with the perfective marker *-shca*). Attempts to elicit embedded verbs, like *tinishca* in (4), before the object often result in ungrammatical or questionable judgements by native speakers.

(4) *Yoca [ellaca vente añota tinishca] yarcani.*

jǫ=ka	ɐʒa=ka	bɐntɐ	aɲo-ta	tini-ʃka	ja-ɾka-ni
I=TOP	she=TOP	twenty	year-ACC	have-PERF	think-PST-1
SUBJECT	SUBJECT	OBJECT		VERB	VERB

'I thought that she was twenty years old.' E.EG44

Modifiers in Media Lengua, like Quichua, typically precede the elements that they modify. Example (5) shows adjective-noun alignment and (7) shows possessor-noun alignment. However, likely due to influence from Spanish, this is not always the case, especially with respect to adjectives as shown in noun-adjective alignment in example (6). Example (7) also shows that determiners (e.g., *ese* 'the/that') precede the noun they modify (in this case *mamapa* 'woman-POSS'). Additionally, example (7) shows that in dropped-copulative utterances, adjectives appear in clause-final position. In instances when the copula (*cana* 'be') is present, it appears in clause-final position, and the adjective maintains any suffixed grammatical elements, as observed in (8).

(5) *[Grande maltatamy] nestany aguata cargangapa.*

gɾandɐ	malta-ta=mi	nɐsta-ni	awa-ta	karga-ngapa
large	clay.pot-ACC=VAL	need-1	water-ACC	carry-SS.PURP
ADJECTIVE	NOUN			

'I need a large clay pot to carry water.' E.MT2.6

(6) *[Malta grandetamy] nestany aguata guardangapa.*

malta	gɾandɐ-ta=mi	nɐsta-ni	awa-ta	guaɾda-ngapa
clay.pot	large-ACC=VAL	need-1	water-ACC	keep-SS.PURP
NOUN	ADJECTIVE			

'I need a large clay pot to carry water.' E.MT2.6

(7) *Ese mamapa barrigaca grande grandemy.*

ɐsɐ	mama-pa	bazɻga=ka	gɾandɐ	gɾandɐ=mi
DET	woman-POSS	stomach=TOP	large	large=VAL
DET	POSSESSOR	NOUN	ADJECTIVES	

'That woman has a large stomach.' E.MT2.6

(8) *Miyo sandaliasca ajustadomy can.*

miǫ	sandalias=ka	axustadǫ=mi	ka-n
1.POSS	sandal.PL=TOP	tight=VAL	be-3
SUBJECT		ADJECTIVE	COPULA

'My sandals are tight.' E.MT2.1

Quantifiers (and by extension distributives & numerals (9)) of both Spanish and Quichua origin, such as *cada* 'each', *tucuy* 'all', *arshto* 'many', *ambos* 'both', *demas* 'a lot/ more, too much', *poco* 'few/little', *todo* 'all', *mucho* 'a lot', *cinco* 'five' etc., typically precede the noun that they modify (10).

(9) *Aquipica [cada uno] [tres linguata] hablanchi.*

aki-pi=ka	**kada**	unọ	trẹs	lingua-ta	abla-nʧi
here-LOC=TOP	**each**	one	three	language-ACC	speak-1P
	QUANT$_i$	NOUN$_i$	QUANT$_j$	NOUN$_j$	

'Here, each person speaks three languages.' E.JMA

(10) *[Mucho tragota] tomay mal igadopak.*

mutʃọ	tragọ-ta	tọma-i	mal	igadọ-pax
a.lot	alcohol	drink-INF	bad	liver-BEN
QUANT	NOUN			

'Drinking a lot of alcohol is bad for the liver.' E.JMA

Similarly, interrogative determiners such as *cual* 'which', *cuanto* 'how much', and *que* 'what' also precede the nouns that they modify (see (11)). When functioning as a modifier, the question marker *-ta* suffixes to final element of the NP as an enclitic instead of the question word.

(11) *[Cual esferotata] kiringui?*

kual	ẹsfẹrọ-ta=**ta**	kiri-ngi
which	pen-ACC=**Q.CON**	want-2
MOD	NOUN	

'Which pen do you want?' E.LG2.3

Qualifiers (adverbs) as modifiers typically precede the element that they modify, as observed in (12). However, this is not always the case as observed in (13) where the reduplicated adverbs *juizi juizota* 'quickly' follow the verb, *corrijorcami* 'ran'. When acting as a verb modifier, the accusative marker typically[6] suffixes to the final adverb in the verb phrase, as observed in both (12) and (13). In addition to the accusative marker, evidentials are often suffixed to adverb modifiers, as observed in (12) with the validator =mi. However, there were a limited number of instances in our dataset where the adverbial simply took an evidential, absent of the accusative marker (as in (14)), or was completely unmarked (as in (15)). The preferred form is likely dependent on the pragmatic context of the utterance.

(12) *Yoca [artotamy gastagriny] utilesta comprashpaca.*

jọ=ka	arʃtọ-ta=mi	gaʃta-gri-ni	utilẹs-ta	compra-ʃpa=ka
I=TOP	a lot-ACC	spend-FUT-1	school.supplies-ACC	buy-SS.CONV=TOP
	MOD	VERB		

'I am going to spend a lot of money on school supplies.' E.MT2.4

(13) *Ese caballoca [corrijorcami juizi juizota].*

ẹsẹ	kabaʒọ=ka	kọzį-xọ-ra=mi	xuizi	xuizọ-ta
DET	horse=TOP	run-PROG-PST=VAL	quickly	quickly-ACC
		VERB	MOD	

'The horse was running really quickly.' E.MT2

(14) *Ese caracolcunaca [despaciomi andan].*

ẹsẹ	karakọl-kuna=ka	dẹspasiọ=mi	anda-n
DET	snail-PL=TOP	slow=VAL	go-3

[6] 62% of all cases in the data set of elicited examples.

	MOD	VERB

'Those snails move slowly.' E.LG2.4

(15) *Elca [demasiado trabajagrijun] ese otro killata.*

ẹl=ka	dẹmasiadọ	trabaxa-gɾi-xu-n	ẹsẹ	ọtrọ	kiʒa-ta
he=TOP	too much	work-FUT-PROG-3	DET	other	month-ACC
	MOD	VERB			

'He is going to be working way too much next month.' E.AM2

When modifying an adjective, adverbs such has *muy* 'very', *mal* 'bad', and *bien* 'very/ well', precede the modified element, as was the case in every instance in our dataset (see (16) & (17)). However unlike verbal modifiers, adjective modifiers do not appear to take grammatical morphology. Elicitations of such formations were considered ungrammatical by our consultants, as observed in (18). Any grammatical information in an adjective phrase appeared solely on the adjective as observed in (16) and (17) with the validator morpheme, =mi.

(16) *Miyo sobrinoca muy jovenme.*

miọ	sọbɾinọ=ka	mui	xọβẹn-mẹ
my	nephew=TOP	very	young=VAL
		MOD	ADJECTIVE

'My nephew is very young.' E.LG3.7

(17) *Loteria vendedorca bien buenomy.*

lọtẹɾia	bẹndẹdọɾʃ=ka	biẹn	buẹnọ=mi
lottery	seller=TOP	very	good=VAL
		MOD	ADJECTIVE

'The lottery ticket seller is really nice.' E.LG3.7

(18) **Miyo mujerca bienmi valiente.*

miọ	muxẹɾ=ka	biẹn=mi	baliẹntẹ
my	wife=TOP	very=VAL	brave
		MOD	ADJECTIVE

'My wife is very brave.' ✓LG

3.2.1 Gender

Given that Quichua does not have grammatical gender and Media Lengua's grammatical frame is essentially Quichua, it is of little surprise that Media Lengua has not adopted Spanish gender as part of its own grammatical frame. However, there are some instances where gender agreement takes place. These primarily occur in two situations, the first with temporal expressions, which function more like instances of code-switching or transferred collocations (22) in Media Lengua (also in Quichua) (see (19)), and the second involves instances of adjectives agreeing with semantically male/female referents (see (20)). However, on occasion, agreement can be seen with inanimate nouns as well (see (21)).

(19) *Elca todos los diasmi trabajan.*

ẹl=ka	tod-**ọ**-s	l-**ọ-s**	dia-**s**=mi	trabaxa-n
he=TOP	all-**M-PL**	the-**M-PL**	day.M-PL=VAL	work-3

‘He works every day’. (Stewart, et al, 2020:2362)

(20) *Ese maestraca buename.*
ẹsẹ maẹstɾ-**a**=ka buẹn-**a**=mi
DET teacher-**F**=TOP good-**F**=VAL
‘The teacher is good.’ (Stewart, et al, 2020:1583)

(21) *Ellaca buena voluntadtamy tenin.*
ẹʒa=ka buẹn-**a** bọlunt**ad**-ta=mi tẹni-n
she=TOP good-**F** intention.**F**-ACC=VAL have-3
‘She has good intentions.’ (Stewart, et al, 2020:407)

(22) *Esepish servicio turistacunapa abegrijun pesca deportiva.*
ẹsẹ=piʃ serβisio turista-kuna-pa aβẹ-gɾi-xu-n pẹsk-**a** dẹpọɾtiβ-**a**
that-CONJ service tourist-PL-BEN have-FUT-PROG-3 fish-**F** sport-**F**
‘There will be a sport-fishing service for tourists as well.’ (Stewart, et al, 2020:888)

However, gender agreement with inanimate nouns (as seen in (21)) is not the norm with the majority of articles, possessive pronouns, demonstratives, and adjectives appearing in their original masculine form from Spanish (Stewart 2015b:27). This is even the case when they modify grammatically marked Spanish-origin feminine nouns (see (23) & (24)), which enter Media Lengua conserving the final *-a* (e.g., *casa* [kasa] ‘house’). The bolded glossed elements in (23) & (24) simply highlight the frozen Spanish gender in Media Lengua; these elements should not be taken as productive in the language.

(23) *Yoca vestina cani nuevo ropata.*
jọ=ka bẹsti-na ka-ni nuẹβ-**o** zọp-**a**-ta
I=TOP dress-INF be-1 new-**M** cloth-**F**-ACC
‘I have to wear new clothes.’ (Stewart, et al, 2020:2550)

(24) *Onolla plantahuata tenercani.*
ọn-**ọ**=ʒa plant-**a**-wa-ta tẹnẹ-ɾka-ni
one-**M**-LIM plant-**F**-DIM.WA-ACC have-PST-1
‘I only had one little plant.’ (Stewart, et al, 2020:1972)

With respect to the pronominal system, Muysken (1997:381) describes *el* as the only third person singular pronoun; a clear case of relexification where *el* maps directly onto the semantics of the non-gendered third person pronoun in Quichua, *pay*. Yet in Imbabura Media Lengua both *el* and *ella* function as gendered pronouns (see Section 3.2.2). Though, there are some cases (usually with possessives[7]) where *el* is used with a female referent in Imbabura (see example (25)).

(25) *Elpa terrenopimi vivijuni.*
ẹl-pa tẹzẹnọ-pi=mi biβi-xu-ni
she-POSS land-LOC=VAL live-PROG-1
‘I am living on her land.’ Ref: her mother-in-law (Stewart 2013:66)

[7] *El* as a female referent is mostly found with the possessive marker *-pa*, which might reflect the fact that Spanish does not have a gender or number contrast in the third person possessive (e.g., *su/ sus* ‘his, her/ their’).

3.2.2 Pronominal system(s)

The pronominal system in Media Lengua (see Table 3) shows a rather high degree of variation, ranging from a more conservative, Quichua-like system in Salcedo Cotopaxi (Muysken 1997:381) to a more flexible, innovative, but still Quichua-like system in the Imbabura communities (Gómez Rendón 2008:39; Stewart 2011:60). Quichua's influence can especially be seen in how pronouns are modified for case and number. For example, second- and third-person plural pronouns attach the plural suffix *-cuna* to their respective singular forms, object pronouns suffix the accusative marker *-ta*, and possessives are marked with *-pa*. For the latter, there are three additional options in Imbabura with *mio* 'my' in first person singular, *tuyo* 'your' in second person singular, and *suyo* 'your' in second person singular formal. While at first glance these appear to be equivalents of the Spanish possessive pronouns, *mío* 'mine', *tuyo/ suyo* 'yours', in Media Lengua they are used to possess nouns, which is not the case in Spanish (e.g., <u>*Mio nietaca*</u> *abrasota dahuan.* '<u>*My granddaughter*</u> gives me a hug.').

The Imbabura pronominal system shows more complexity than the Cotopaxi system with several options available for first person plural. These include *nosotros*, reduced forms *nustro* and *nuestro* (not to be confused with the possessive), and Quichua *ñucanchi*. Third person, as previously mentioned, has separate masculine (*el*) and feminine (*ella*) pronouns and second person has both *vos*, and *voste;* the latter is likely a portmanteau of *vos* (Spanish 2nd person informal) and *usted* (Spanish 2nd person formal) or a contracted form of the archaic Spanish phrase *vuestra merced* 'your grace'. Additionally, Gómez Rendón (2008:39) states that in the San Pablo communities, *miu* and *ami* also function as subject pronouns, which can take accusative, directional, and ablative markers (e.g., <u>*Miu-**ta***</u> *kabeza-ta doli-xu-n. 'My head is hurting* <u>***me***</u>*.* (<u>***Me***</u> *está doliendo la cabeza*)'. However, I have not attested these forms being used this way in Pijal (except for the double possessive *mio-pa* 'my-POSS'). Interestingly, Gómez Rendón (2005, 2008) makes no mention of *tuyo* or *suyo*, which suggests some degree of variation and innovation across the Media Lengua speaking communities in Imbabura.

Table 3: Media Lengua pronominal system

	Imbabura		**Salcedo**	**Quichua**	**Ecuadorian Spanish**	
	subject	*possessive*	*subject*	*subject*	*subject*	*possessive*
1	yo (miu*, ami*)	mio/ yopa	yo/ ami	ñuka	yo	mi/ mio/ mia
2.INFORM	vos	tuyo†/ vospa	bos	kan	tú, vos	tu/ tuyo/ tuya
2.FORM	voste	suyo†/ vostepa		kikin	usted	su/ suyo/ suya
3.M	el	+pa	el	pay	él	
3.F	ella				ella	
1P	nosotros, nuestro, ñucanchi		nustru	ñucanchik	nosotros	nuestro/ nuestra
2P.IF	voscuna		boskuna	kankuna	ustedes	su/ suyo/ suya
2P.FOR	vostecuna			kikinkuna		
3P.M	elcuna		elkuna	paykuna	ellos/ ellas	
3P.F	ellacuna					

*Not attested in Pijal; † Not documented in the San Pablo communities

3.2.3 Verbal Morphology

Like Quichua, Media Lengua has no irregular verbal morphology and inflects to a root to inform tense, aspect, and subject agreement (nominative-accusative alignment). To inflect a verb, the

infinitive marker, *-na*[8] is removed and the inflections in Table 4 are suffixed. The list in Table 4 is not exhaustive but provides basic verbal constructions commonly found in the language.

Table 4: Media Lengua verbal morphology, based on Stewart et al (2020).

Hablana [ablana] 'to speak'

Switch-reference Converbs[9]
Same-subject gerund: habla-shpa
Different-subject gerund: habla-cpi
Same-subject purposive: habla-ngapa
Different-subject purposive: habla-chun

Imperatives
Informal: habla-y
Formal: habla-pa-y
Respectful: habla-pa-ngui(-chi)
Suggestive: habla-ychi

Nominalizers
Agentive: habla-dor
Agentive: habla-c

Subordinate nominalizers[10]
Past: habla-shca-ta
Present: habla-y-ta
Future: habla-na-ta

Participle/Perfective
habla-shca

1st Person singular object
habla-hua-ngui

Person	**Present**	**Past *-rca***	**Future I *-gri***	**Future II**	**Continuous *–ju***
1	habla-ni	habla-rca-ni	habla-gri-ni	habla-sha	habla-ju-ni
2	habla-ngui	habla-rca-ngui	habla-gri-ngui	–	habla-ju-ngui
3S/P[11]	habla-n	habla-rca-∅	habla-gri-n	habla-nga	habla-ju-n
1P	habla-nchi	habla-rca-nchi	habla-gri-nchi	habla-shun	habla-ju-nchi
2P	habla-ngui-chi	habla-rca-ngui-chi	habla-gri-ngui-chi	–	habla-ju-ngui-chi

Person	**Habitual – ria**	**Reflexive *–ri***	**Desiderative *–naya***	**Reciprocal *–naju***
1	habla-ria-ni	habla-ri-ni	habla-naya-ni	–
2	habla-ria-ngui	habla-ri-ngui	habla-naya-ngui	–
3S/P	habla-ria-n	habla-ri-n	habla-naya-n	habla-naju-n
1P	habla-ria-nchi	habla-ri-nchi	habla-naya-nchi	habla-naju-nchi
2P	habla-ria-ngui-chi	habla-ri-ngui-chi	habla-naya-ngui-chi	habla-naju-ngui-chi

Person	**Causative *-chi***	**Deontic**	**Present Perfect *-shca*[12]**	**Past Perfect *-shca*[13]**
1	habla-chi-ni	habla-na ca-ni	habla-shca-ni	habla-shca-rca-ni
2	habla-chi-ngui	habla-na ca-ngui	habla-shca-ngui	habla-shca-rca-ngui
3S/P	habla-chi-n	habla-na ca-n	habla-shca-∅	habla-shca-ca-rca-∅
1P	habla-chi-nchi	habla-na ca-nchi	habla-shca-nchi	habla-shca-rca-nchi
2P	habla-chi-ngui-chi	habla-na ca-ngui-chi	habla-shca-ngui-chi	habla-shca-rca-ngui-chi

Person	**Conditional Past**	**Remote Past**
1	habla-nca-rca-ni	habla-rca-rca-ni
2	habla-nca-rca-ngui	habla-rca-rca-ngui
3S/P	habla-nca-rca-∅	habla-rca-rca-∅
1P	habla-nca-rca-nchi	habla-rca-rca-nchi
2P	habla-nca-rca-ngui-chi	habla-rca-rca-nguichi

[8] This is also interpreted as a nominalizer (see Cole (1982) and section 3.2.6.3).
[9] See Bruil (2011) for more information on the Imbabura Quichua converb system.
[10] See Hermon (1984) for more information in Imbabura Quichua nominalized and infinitival suffixes.
[11] Imbabura Media Lengua amalgamates 3rd person singular and plural with *-n*. Yacubamba Media Lengua differentiates singular from plural with *-n* for 3rd person singular and *-nguna* for 3rd person plural.
[12] These are considered contracted forms with the full form made with the verb inflected with *-shca* followed by *cana* with tense and person agreement inflection (e.g., *hablashca cani* 'I have spoken').
[13] These are considered contracted forms with the full form made with the verb inflected with *-shca* followed by *cana* with tense and person agreement inflection (e.g., *hablashca carcani* 'I had spoken'). Cleary-Camp (2013) describes the contracted form in Imbabura Quichua is also used to indicate past-perfect.

3.2.4 Non-verbal Morphology

Non-verbal morphology in Media Lengua encodes case and number in virtually the same way it occurs in the local Quichua varieties. The list in Table 5 contains nearly all the nominal suffixes found in Imbabura Media Lengua.

Table 5: Non-verbal morphology, based on Stewart et al (2020).

Morpheme	**Description**	**Gloss**
-cuna	plural	PL
-ta	object	OBJ/ ACC
-gu	diminutive 1	DIM.1
-hua	diminutive 2	DIM.2
-huan	instrumental/ comitative	INST
-cama(n)	terminative	TERM
-man	directional (allative)	DIR
-manta	ablative	ABL
-ndi(n)	inclusive/ comitative	COM
-pa	possessive (genitive)	POSS/ BEN
-pa(c)man	orientative	ORI
-paya	depreciative/ pejorative	PEJ.F
-pi	locative	LOC
-pura	intrative (among)	INTRA
-rucu	depreciative/ pejorative	PEJ.M
-sapa	augmentative	AUG
-na	future nominalizer	NOM.FUT
-y	present nominalizer	NOM.PRES
-shca	perfective nominalizer	NOM.PERF

3.2.5 Enclitics

Enclitics are considered separate from verbal and non-verbal morphology given that they appear suffixed to both verbs, nouns, and other parts of speech. Additionally, they tend to appear in word-final position after verbal and non-verbal morphology. Media Lengua, like Quichua, also makes use of grammatical evidentiality to provide evidence of a given statement.

Table 6: Media Lengua enclitics, based on Stewart et al (2020).

Enclitic	**Description**	**Gloss**
=ca	topic/ focus	TOP
=pish/=pash	conjunction (additive)	CONJ
=shna	semblative (equative)	SEMB
=pacha	superlative	SUPER
=ima	et cetera	ETC
=lla	limitative	LIM
=llata	totality (same)	TOT
Validators (Evidentials)		
=mi	firsthand information	VAL
=ma(ri)	emphatic firsthand information (affirmative)	AFF
=shi	conjecture	CJTR
=cha(ri)	dubitative	DUB
=ya(ri)	supposition	SUP
=chu	negation	NEG

Question Clitics

=chu	polar (yes/no) questions	Q.POL
=ta(c)	content ('wh') questions	Q.CON

3.2.6 Subordination

Clause subordination in both Media Lengua and Quichua is highly complex, making an in-depth analysis beyond the scope of this chapter. Therefore, the following descriptions simply provide examples of some of the more predominant strategies used in subordinate constructions.

3.2.6.1 Adverbial Clauses

Traditionally, the verb of a subordinate clause in Quichua is described as "non-finite" given the absence of subject-verb agreement (Cole 1982:60). Instead, subordination is marked by various suffixes and clitics that reveal information about the clause such has reference, time, manner, purpose, and the order of events. Common subordinate suffixes are illustrated in Table 7.

Table 7: Common non-finite suffixes used in clause subordination.

		Verb Root		**Simultaneity**		**Same Subject**	**Different Subject**
Time, Manner	**Gerund**	comi-	+	-ju	+	-shpa	-cpi
	Perfective					-shca	
Purpose						-ngapa	-chun

For instance, *-shpa* in (26) provides both aspectual information in the form of a gerund and referential information in the form of "same-subject" (meaning the subject of the main clause and subordinate clause are the same). At the same time, the progressive marker *-ju* indicates that both events happened simultaneously (e.g., I fell down *as* I was playing) rather than sequentially. While the tense of the subordinate clause is not marked, it is understood to have taken place in the past as indicated by the tense of the verb in the main clause.

(26) *Yoca jogajushpa caercani.*
jo=ka [xoga-**xu**-**ʃpa**] kae-ɾka-ni
I=TOP play-**PROG-SS.CONV** fell-PST-1
'I fell down as I was playing.' E.LG43.2.3

In Example (27) *-cpi* provides similar aspectual information as in (26) but marks the subject of the main clause as different from that of the subordinate clause. The lack of the progressive marker also suggests that the events happened sequentially (e.g., Firstly, the fire was lit, and secondly the forest burned down). Both events are understood to have taken place in the past by the tense marked on the verb.

(27) *Ayerca lombrita prendichicpimi bosque quemajorca.*
ajeɾʃ=ka [lombɾi-ta pɾendi-ʧi-**kpi**=mi] boske kema-xu-ɾka
yesterday=TOP fire-ACC light-CAU-**DS.CONV**=VAL forest burn-PROG-PST
'Yesterday, someone lit a fire that was burning down the forest.' E.LG43.2.3

The suffix *-shca* is multifunctional. One such function involves the adjectivization of verbs to form a participle, similar to Spanish *-ado/ -ido* (*cansana* 'to tire' → *cansashca* 'tired'). It can also be used to give a perfective reading in periphrastic constructions (e.g., *hablashca cani* 'I have spoken' or its contracted form *hablashcani*). Others (e.g., Adelaar and Muysken 2004:223) also note that *-shca* (or variants of the same morpheme e.g., *-sqa* in other Quechuan languages) carries some degree of mirativity (surprisal), which has also carried over to Media Lengua (see Stewart, et al. 2020:953).[14] In Imbabura Quichua when *-shca* is suffixed to a subordinate verb, it can also function like a resultative nominalizer (Cleary-Kemp 2013:36; Cole 1982:148) meaning "the present result of a past situation", which differs from a perfective (an end of a past action). In (30) the past situation involved cooking food and the present result is that it is fully cooked and can now be brought somewhere. Unlike *-shpa* and *-cpi, -shca* does not encode reference and can therefore be used with same and different subject references ((28) shows a different subject reference in the subordinate clause while both clauses in (29) have the same referent). The use of *jipa* 'after' indicates sequentiality as documented in Quichua Cole (1982:61).

(28) *Comishca jipami danata sabin jaba de servesayma.*
komi-**ʃka** xipa=mi da-na-ta sabi-n xaba de seɾβesa=ima
eat-**PERF** after=VAL give-INF-ACC know-3 case of beer=ETC
'After having eaten, they usually bring out cases of beer among other things. C.Z08LG

(29) *Albertishca jipama cargochijurianga.*
alberti-**ʃka** xipa=ma kaɾgoʧi-xu-ɾia-nga
advise-**PERF** after=AFF take.charge-PROG-HAB-3
After letting them know, he wanted to take charge. C.S08Ju

(30) *Huaquinka cozinashkata llevashpa andan.*
wakin=ka kǫzina-**ʃka**-ta ʒę̣βa-ʃpa anda-n
alguno=TOP cocinar-**PERF**-ACC llevar-SS.CONV andar-3
'Some people come bringing [fully] cooked food.' (Stewart 2013:16)
'Algunos van llevando comida cocinada.'

A verb within a subordinate clause can also mark purpose while encoding subject reference. In example (31) *-ngapa* marks same-subject (e.g., 'You come to see your friend.') while (32) marks different subject (e.g., I was eating and my friend was the one who saw me.).

(31) *Vinijunguimi amigota vingapa.*
bini-xu-ngi=mi amigo-ta bi-**ngapa**
come-PROG-2=VAL friend-ACC see-**SS.PURP**
'You come to see your friend.' E.EG44

(32) *Yoca mercadopi comigrircani mio amigo viwachun.*
jo=ka meɾkado-pi komi-gɾi-ɾka-ni mio amigo bi-wa-**ʧun**
I=TOP market-LOC eat-FUT-PST-1 my friend see-OBJ.1-**DS.PURP**
'I was eating in the market when my friend saw me.' E.LG42-2.3

[14] Additionally, Cleary-Camp (2013) argues that in Imbabura Quichua *-shca* contrasts with *-rca* (past tense marker) where the former is used for non-eyewitness events and the latter for eyewitness events. However, to date I have yet to find clear evidence of this in Media Lengua, though this is a topic for future research.

3.2.6.2 Relative Clauses

One structural difference between Media Lengua and the Quichua variety described in Cole (1982) and Cole et al. (1982) involves relative clauses. Imbabura Quichua garnished some notoriety in the linguistics literature due to their analysis of "headless relative clauses" in the language. Example (33), reproduced from their paper, shows that the main clause lacks a head directly to the left or right of the embedded clause (possible positions marked with X).[15]

(33) ***X****[Wambra wagrata randishca]****X*** *ali wagrami.*

wambra	wagra-ta	ʐandi-ʃka	ali	wagra=mi
child	cow-ACC	buy-PERF	good	cow=VAL

'The cow which the child bought is a good cow.' (Cole et al. 1982:117)

Yet in both Media Lengua and Quichua spoken in Pijal all attempts to elicit such structures, receive acceptable judgements (as a relative clause) of translated examples from Cole et al. (1982), or encounter them in our natural speech corpus were unsuccessful. Instead translations of this structure in Media Lengua (e.g., (33) as *Joben vacata comprashca bueno vacami.*) were interpreted as simplex utterances. For instance, in both (33) and its Media Lengua translation, speakers interpreted 'child' as the subject and 'sold the cow' as the predicate followed by an adjunct NP that provided clarifying information about the object ('cow') 'by the way, it was a good cow'. This interpretation gives *-shca* the previously mentioned perfective reading and agreement with the subject is understood by the absence of inflectional morphology after *-shca* (i.e., null marking, e.g., *-shca-∅* = -PERF-3 vs. *shca-ni* = -PERF-1). Further analysis of relative clause structure in Media Lengua (and Pijal Quichua) revealed five primary differences that set it apart from the Quichua variety described in Cole et al. [16]

These include:

1. The verb within the embedded clause is finite, allowing for agreement with the embedded subject in person, number, and tense (see (34) to (37)).
2. Unlike in (33), the head is left adjacent and overtly marked with the accusative marker *-ta* in every example ((34) to (37)).
3. Media Lengua (and Colloquial Quichua to some extend) has the option to use Spanish-origin relativizers *que*/ *lo que* 'which/ that which', though this is not a requirement (compare (35) & (36)).[17] Structurally, the position of the relativizer, following the head, provides evidence that the head is located outside the embedded clause.
4. Relative clauses in Media Lengua (and Pijal Quichua) might be better analyzed as 'object-extracted-internally headed relative clauses' rather than as 'headless relative clauses' given that the referent is expressed outside the relative clause (prior to the relativizer (see e.g.,

[15] However, given that the head is still present within the embedded clause, this might be better understood today as an internally headed relative clause.

[16] I would like to thank Martin Kohlberger and Olga Lovick for helping me think through the descriptions presented in this section, though I take full responsibility for any misinterpretations presented herein.

[17] It is uncertain whether this alters the meaning of the utterance.

(36)), while still being embedded within the clause that forms the subject of the main clause.

5. Media Lengua frequently packages or encodes the relative clause into the apposition *ese-ca* (topic-marked demonstrative), which appears directly to the right of the embedded clause (see (38)). This is likely a mechanism to mark the end of a complex subject.

(34) *Ese ornota*$_i$ *[tenenchi]*$\emptyset_i$ *leñawanmi ocupanchi.*
ẹsẹ ọrnọ-ta tẹnẹ-nʧi lẹña-wan=mi ọkupa-nʧi
DET stove-ACC have-1P wood-INST=VAL use-1P
'The stove, that we have, uses wood.' E.MT3

(35) *Ese vasota*$_i$ *[yo comprarcani]*$\emptyset_i$ *quebrarca.*
ẹsẹ basọ-ta jọ kọmpra-ɾka-ni kẹbra-ɾka
DET glass-ACC I buy-PST-1 break-PST
'The glass I bought broke.' E.LG2.6

(36) *Ese vasota*$_i$ *[que yo comprarcani]*$\emptyset_i$ *quebrarca.*
ẹsẹ basọ-ta kẹ jọ kọmpra-ɾka-ni kẹbra-ɾka
DET glass-ACC REL I buy-PST-1 break-PST
'The glass that I bought broke.' E.LG2.6

(37) *Ese comidata*$_i$ *[lo que coznarcanguica]*$\emptyset_i$ *guapo guapomi carca.*
ẹsẹ kọmida-ta lọ kẹ kọzna-ɾka-ngi=ka wapọ wapọ=mi ka-ɾka
DET food-ACC REL cook-PST-2=TOP very delicious=VAL be-PST
'The food that you cooked was delicious.' E.LG2.6

(38) ***Ese animalcunata*** *[que vendercangui]* ***eseca*** *artu valirca.*
ẹsẹ animal-kuna-ta kẹ bẹndẹ-ɾka-ngi ẹsẹ=ka artu bali-ɾka
DET animal-PL-ACC REL sell-PST-2 DET=TOP a.lot value-PST
'That animal, which you sold, was very expensive.' E.LG2.6

In examples (34) through (37), the relative clause contains a verb that is inflected to agree with its subject in both person and number in addition to the tense of the clause. In each example, the head of the relative clause is located immediately to the left and is marked with the accusative *-ta*. Examples (36) and (37) both employ the Spanish-origin relative pronoun *que* (or *lo que*), while (34) and (35) do not. In examples (34) to (37), the right-dislocated subject of the main clause is implicit (a null-subject). However, I have marked its omission with ∅ as its function in allowing the object-marked head of the relative clause to agree with the verb of the main clause is consequential to the structure. Given that Media Lengua is a pro-drop language and, semantically, *eseca* is redundant (encoding the head of the relative clause), it is unsurprising that it does not always appear overtly.

Example (38) explicitly uses the right-dislocated subject pronoun *eseca* 'it/ they' immediately following the embedded clause.[18] In every instance in our data, the pronoun is topic

[18] This runs in parallel with Cole et al's description of the relativized NP in Quichua moving to the right of the embedded and losing object marking morphology. However in Media Lengua it manifests as a pronoun that takes the relativized NP as its antecedent as it has moved to the left of the embedded clause.

marked and its antecedent is the object-marked head of the relative clause. Given *eseca*'s standing as a subject in the main clause that encodes the head of the relative clause, agreement can take place with the main clause verb. This dismisses a possible ergative-absolutive alignment in agreement given that *eseca*, and not the object-marked head, agrees with the verb. Additionally, when the relative clause is removed from examples like (36), the head drops its object marking and takes the topicalizer indicating its role as subjects as observed comparing (35) and (39).

(39) *Ese vasoca quebrarinllamy.*
ẹsẹ basọ-ca kẹbɾa-ɾi-n=ʒa=mi
DET glass=TOP break-REFL-3-LIM=VAL
'The glass just broke.' ✓LG

3.2.6.3 Nominalized Clauses

A third type of subordination in Media Lengua (and Quichua) involves non-finite nominalized clauses.[19] Media Lengua makes use of two nominalizers, *-na* (see examples (40)-(43)) and *-y* (see examples (44) & (45)), that are used with non-finite complement of verbs. The suffix *-na* is the most common of the two and carries stronger future overtones compared to *-y*, which both Cole (1982) and Hermon (1984) reference as a present nominalizer. In general, *-na* is associated with verbs like *querena* 'want', *sabina* 'know', and *pensana* 'think' while *-y* is generally associated with *podina* 'can', though this is not always the case (see (43) & (45)). The nominalized verb is also marked with the accusative *-ta* by the main verb as seen in examples (40)-(45). It is also worth noting that word order is not restricted to OV as is usually the case with other types of subordination (see VO in (42) & (45)).

(40) *Yo dorminata quereni.*
jọ doɾmi-na-ta kẹɾẹ-ni
I sleep-NOM-ACC want-1
'I want to sleep.' E.LMG51.8

(41) *Ese wawaca no conversanata sabinchu.*
ẹsẹ wawa=ka nọ kọnβẹɾsa-na-ta sabi-n=ʧu
ese guagua=TOP no conversar-NOM-ACC saber-3=NEG
'That kid doesn't usually talk.' ELG43.2.2

(42) *Notro pensanchi juganata.*
nọtɾọ pẹnsa-nʧi xuga-na-ta
1p think-1p play-NOM-ACC
'We think about playing.' E.LMG51.8

(43) *Nostro despacio hablanata podingui.*
nọstɾọ dẹspasiọ abla-na-ta pọdi-ngi
nosotros despacio hablar-NOM-ACC poder-2
'We can speak slowly.' E.AM.2

(44) *Elca coznayta podinmi.*

[19] The description that follows is based on Hermon's (1984) description of Imbabura Quichua as both languages use same structure.

ɐl=ka kǫzna-i-ta pǫdi-n=mi
he=TOP cook-NOM-ACC can-3=VAL
'He can cook.' E.LMG51.8

(45) Ya sabingui hablayta bueno, no?
ja sabi-ngi abla-i-ta buɐnǫ nǫ
so know-2 speak-NOM-ACC good no
'You already know how to speak well, right?' C.LG.Z02

3.2.7 Coordination

Coordination in Media Lengua (and Quichua) makes use of both Spanish-origin coordinating conjunctions, *y* 'and' and *o* 'or', and the Quichua-origin conjunction suffix =pash/=pish, which roughly translates 'as well' or 'neither' depending on the context. Both set of conjunctions can also be used within the same utterance (48). Spanish-origin conjunctions are used to link independent clauses (48), phrases (46), individual words within phrases (49), and *y* is also a common transition word (47). The suffix *=pash*/*=pish* appears to be more common with lists with the suffix appearing on each listed item (50).

(46) *Contratanayman tocanga otro camionta o alguno busetata.*
kǫntrata-na-iman tǫka-nga ǫtrǫ kamiǫn-ta ǫ algunǫ busɐta-ta
hire-INF-COND must-3.FUT others truck-ACC or some minibus-ACC
'We should probably rent another truck or one of those mini buses.' C.LG.Z02

(47) *Y ellallata vevin sembrashpa y todavia yoka auno conosenichu herenciata.*
i ɐʒa-ʒata bɐβi-n sɐmbra-ʃpa i tǫdaβia jǫ=ka aunǫ
and she-TOT live-3 plant-GEN and still I=TOP not.yet

kǫnǫsɐ-ni=ʧu ɐrɐnsia-ta
know-1=NEG inheritance-ACC
'And she still only gets by on what she grows and yet I haven't seen any of the inheritance.' C.LG.Z09

(48) *Cotsinashpa danchi guertogokunapish ya habin tiempogopish antes lluvijun y plantagokunapash buenomari.*
kǫzina-ʃpa da-nʧi wɐrtǫ-gu-kuna=piʃ ja abi-n tiɐmpǫ-gu=piʃ antɐs
cook-GEN give-1P garden-DIM.1-PL=CONJ so there.is-3 time- DIM.1=CONJ before

ʒuβi-xu-n i planta-gu-kuna=paʃ buɐnǫ=mari
rain-PROG-3 and plant- DIM.1-PL=CONJ good=AFF
'We cook for them from the garden as well since the weather has been nice; it rained before and that is good for the plants.' C.AM.Z05

(49) *Invierrnota arrto nieve y lluviami abin.*
inβiɐʐnǫ-ta azɫǫ niɐβɐ i ʒuβia=mi abi-n
winter-ACC a.lot snow and rain=VAL there.is-3
'During winter there is a lot of snow and rain.' E.LG43.3.4

(50) *Puercopash borregotapash ternerotapash gentetapashmi comen detsen arribacunamanca.*
puɐrkǫ=paʃ bǫʐɐgǫ-ta=paʃ tɐrnɐrǫ-ta=paʃ xɐntɐ-ta=paʃ=mi kǫmɐ-n dɐzɐ-n azɨba-kuna-man=ka
pig=CONJ sheep-ACC- CONJ calf-ACC- CONJ people-ACC=CONJ=VAL eat-3 say-3 up-PL-DIR=TOP
'They say that people who live further up the mountain eat pig, sheet, and calves as well.' C.CC.Z11

4 Origins

There are several hypotheses with respect to the origins of Media Lengua, however conclusive evidence is still scant. Muysken (1997:368) describes the emergence of Salcedo Media Lengua as an expressive, rather than communicative, need for accultured Indigenous people who left their communities to work in the cities. Upon their return, they formed Media Lengua to establish a new ethnic self-identification for those who no longer identified with either the rural Kichwa or the urban Spanish cultures. Gómez Rendón (2005:39) suggests that Imbabura Media Lengua developed through prolonged contact between the Quichua speaking Indigenous populations and the Spanish speaking Mestizo populations. Similar to Muysken, Dikker (2008:131) also believes that Media Lengua was created by Quichua-speaking men who left their communities to work in urban Spanish-speaking areas. When the men returned, they had acquired a fluent level of Spanish and had been using Quichua infrequently. However, instead of purely expressive in origin, Dikker claims that Media Lengua served as a link between the older monolingual Quichua-speaking generations and younger monolingual Spanish-speaking generations. Contrarily, Stewart (2015b) claims that Media Lengua was likely developed by women and children, not men. He posits that women bared a greater responsibility for child rearing and would spend more time in the markets selling agricultural goods where there were constant interactions with the Spanish speaking population.[20] Children listening to their parents engaging in this new and 'novel' language (likely Spanish heavily influenced by Quichua) may have then developed a 'schoolyard Media Lengua'. He also reasons that the late and unguided acquisition of Spanish by workers, who would have transferred Media Lengua to their family members, would likely not have developed the fine acoustic details required to contrast the overlapping vowels present in modern day Media Lengua, which children interacting with Spanish would be more likely to have acquired (see Section 3.1.2). With respect to its emergence as a new ethnic self-identification, speakers of Imbabura Media Lengua clearly consider themselves as Indigenous Kichwa-Kayambi, and this is likely not a new group association (Jarrín Paredes 2014:1; Lipski 2019:5; Stewart 2015b:181). Speakers of Yacubamba Media Lengua also identify as members of their local Indigenous communities (Kichwa-Cotopaxi) and do not appear to be shifting way from this ethnic identification. However, it should be noted that, with respect to ethnic identification, that the situation in the 1970's when Muysken was first documenting the language may have been quite different.

Stewart (2015b) suggests that regardless of the origins of Media Lengua, it was likely either brought to Pijal from Cotopaxi or vice versa. His basis for these claims rests in the "striking resemblance" between the Imbabura and Cotopaxi varieties at both phonological and morphological levels (Stewart 2011:116). For example, Muysken (1997), Stewart et al (2023) and Stewart et al (Stewart et al. 2020:882) reference three examples of the same lexical reduction: *dizina* 'say' → *zina* 'say', *yuyani* 'I think' → *yani* 'I think' and *demasiado* 'too much' → *demas* 'too much'. For the former, the Quichua verb, *nina* 'to say' does not have a reduced form and verbs in Media Lengua do not undergo reduction to match syllable length in Quichua, making *zina* in all Media Lengua varieties, either a coincidental or a shared innovation. Even more striking is the latter, where the Quichua verb *yuyana* 'to think' should have given away to Spanish *pensar* as

[20] It is also mentioned in a transcribed conversation in Müller (2011:42) that women were the first to speak Media Lengua.

pensana ‘to think’. While *pensana* does exist, Media Lengua speakers in both Imbabura and Cotopaxi often use *yani* in first person (‘I think’), which is a reduced form of Quichua *yuyani* ‘I think’. This reduction, of an already rare Quichua-origin verb in Media Lengua, only appears in the first-person singular form in both dialects with the rest of the inflections mapping on to *pensana* (e.g., *pensangui* ‘you think’ **yangui*, **yuyangui*).[21] Additionally, both dialects reject the SONORANT+STOP voicing rule in non-verbal morphology (see section 3.1.1), while surrounding Quichua varieties employ it. There are also several common frozen forms; examples include *aúnu* ‘not yet’, núway ‘there’s no’, *dintrana* ‘enter’ (rather than *entrana*) from Cotopaxi (Muysken 1997:384) vs. *auno* ‘not yet’ *nohuay* ‘there’s no’, and *dentrana* ‘enter’ from Imbabura (Stewart et al. 2020:281, 593 respectively). Both regions also make frequent use of the double ablative in the transition word *daimanta* ‘from there’ with the *d* from Spanish *de* ‘from’ and the Quichua ablative *-manta* ‘from’ appearing with *ai* ‘there’ (Stewart et al. accepted for Cotpaxi; Stewart et al. 2020:940 for Imbabura). In both Imbabura and Cotopaxi there is also the relexification of the Spanish pronoun *vos* ‘you’ instead of *tú* ‘you’ and the relexification of the Spanish strong possessives *mío, tuyo, suyo* ‘mine, yours hers/his’, used to possess nouns, instead of *mi, tu, su* ‘my, your, his/her’.

One possible grammatical borrowing that might provide additional evidence for a Cotopaxi-Imbabura connection is the usage of the diminutive marker *-wa* in Imbabura Media Lengua (see example (24)) (Stewart 2013:2, 2015b:27, Stewart et al. 2020:445); a form not common in Imbabura varieties of Quichua (nor documented in Cole 1982), but identified in Cotopaxi (Catta 1994:27 this connection was made in Lipski, 2019). Notwithstanding, both Media Lengua varieties have strong influences in their morphology and phonology from the local dialects of Quichua from their respective regions. For example, the benefactive marker in Cotopaxi is *-buk* as in *kuyi-buk* ‘for the guinea pigs’ (Muysken 1997:366) and in Imbabura, one finds *-pa* as in *cuy-pa* ‘for the guinea pigs’ (Stewart et al 2020:1400). I had a conversation with Pieter Muysken before his passing where we discussed the possibility that Media Lengua may had originated in Quito by workers from Cotopaxi and Imbabura who subsequently brought the language back to their respective communities, which might explain similarities described herein.

Statements from Elders, their age, and their parents and grandparents’ age suggest that Media Lengua was likely in use in Pijal as an L1 some time in the early 1900s (Lipski 2019:7; Stewart 2011:32) and than it spread to the San Pablo communities in the 1950s and 60s through intermarriage (Gómez Rendón 2005:46; Jarrín Paredes 2014:6; Stewart 2011:34). It was also stated by community members that there was an influx of emigrants from Cotopaxi to Pijal at the beginning of the 20th century, which can be seen in surnames originating from Cotopaxi in Pijal such as Chicaiza. Muysken (1997) states that the language likely developed between 1920 and 1940 as older generations in 1975, when he first documented Media Lengua, were Quichua speaking. Media Lengua speakers that spoke to Stewart et al in 2022 in Yacubamba had similar statements where the older generation (60+) were Quichua-speaking, placing its origin in the 1950s and 60s.

[21] It is worth noting that rather than a shared innovation, that both *zin* (3rd person singular of *zina*) and *yani* may be functioning as evidentials in addition to their verbal forms. *Zin* would be akin to Quichua *nin* ‘say’, often used as a reportative, and *yani* is similar in shape to *yari*, which is a supposition marker.

5 Psycholinguistic and Sociolinguistic Studies of Media Lengua

Given that Media Lengua was formed from two typologically unrelated, fully functional languages that were essentially split apart and reformed into a new fully functional language, with clear divisions from each source language, it is unsurprising that there has been substantial interest in the cognitive and psycholinguistic aspects involving its use and formation.

5.1 Language Status

With respect to the status of Media Lengua[22] as an independent language, rather than an improvised mix or heavily hispanized version of Quichua. Lipski (2017:251) shows that the boundaries between both languages are clearly delimited for most speakers as evidenced from explicit metalinguistic judgements and indirect probes involving repetition experiments. Additionally, Lipski (2020b) provides evidence that there is a processing cost associated with lexical mixing based on eye-tracking data. He suggests that speakers enter a "single-language mode" (Media Lengua or Quichua) once one of the two languages is cued, which is evidenced by processing delays when unexpected changes in the lexicon are presented (p. 9). Lipski's results also reveal that Media Lengua appears to be a stable relexified language while still being in contact with both source languages. Specifically, the results of memory-loaded repetition tasks revealed that participants consistently "'corrected' mixed Quichua–Media Lengua utterances by maintaining a single lexical source for all roots" (p. 254). However, Lipski (2019) also points out that this stability may only last for a generation or two when spoken alongside both source languages. Through a number of interactive tasks (speeded translation, speeded acceptability judgments, language classification, and lexical decision), a calculated rate of separation between Media Lengua and Quichua was identified. The results suggest that the perceptual boundaries delimiting Media Lengua are more stable when only one of the two source languages continues to be spoken, but eventually become more permeable if both source languages are present (p. 432), which could eventually result in an intermediate Spanish-Quichua lexical variety.

Jarrín Paredes (2014) conducted a critical discourse and sociolinguistic analysis of Media Lengua in the communities of Angla, Uscha, Casco-Valenzuela, and El Topo to identify linguistic ideologies and stereotypes surrounding the use of Media Lengua and Quichua. Her results suggest that opinions of Media Lengua and Quichua are not homogenous. Overall, Casco Valenzuela and Angla are known as Media Lengua speaking communities while Ucsha and El Topo are known for speaking a 'purer' version of Quichua, with Ucsha leading the way (p. 45, 47). Unlike claims by other previously mentioned authors (e.g., Deibel, Lipski, Muysken, and Stewart), Jarrín Paredes claims that Media Lengua is more of a register than an independent language and is used when a speaker is less competent in Quichua (p. 133); a position also supported in Gómez Rendón's more recent work (Gómez Rendón 2021; Gómez Rendón and Jarrín Paredes 2017). She also claims that Media Lengua does not appear in isolation but is almost always accompanied by alternation with Spanish and Quichua (p. 134).

[22] All such studies referenced in Section 5 involve Imbabura Media Lengua. Therefore, all references to Media Lengua refer to the Imbabura varieties unless otherwise stated.

Gómez Rendón (2021:43) has also changed his stance on Media Lengua as an independent language from his earlier publications claiming that as a repertoire of linguistic strategies and mechanisms (lexical, grammatical, and phraseological), Media Lengua is closer to a register than an autonomous language. His rationale includes an alterative method for counting relexified vocabulary that results in a 59% relexification rate[23], in addition to a number of frozen forms (10%), and lexical items that were marked as code-switching (23%) (p. 38), which would not make Media Lengua vastly different from Quichua varieties with heavy lexical borrowings. It is notable that his resulting calculations for relexification differ substantially from Lipski (2016:3), Stewart (2011:37), Deibel (2019:407), and Muysken (1997:378 for Cotopaxi Media Lengua), who all claim a near 90% relexification rate. He also attributes a large number of lexical items to 'adlexification' (e.g., *libru* 'book') given that there is no equivalent in Quichua (p. 37).

With respect to code-switching, Gómez Rendón (2021) cites Stewart (2011) and Muysken (1997) as evidence for his claim that code-switching is responsible for a substantial portion of the Spanish vocabulary in Media Lengua. While Stewart (2011) claims code-switching is more prevalent in Media Lengua than in Quichua, he specifically refers to temporal expressions (p. 62), which, like frozen forms, are pervasive in Quichua as well. This suggests that their integration in Media Lengua is not outside the grammatical frame of contemporary Quichua. On the other hand, Muysken (1997:396) specifically mentions prepositions as possible instances of code-switching, which have been shown, at least in Imbabura Media Lengua, to also follow the grammatical frame of Quichua (see Deibel 2019). Additionally, the process of adlexification, which also takes place in Quichua, was first detailed as a possible lexical transfer strategy in Shappeck (2011), who never actually found Media Lengua speakers during his fieldwork in Cotopaxi. Regardless of the method of transfer of the Spanish vocabulary into Media Lengua, the number of lexical items of Spanish-origin in the descriptive Media Lengua dictionary from Pijal is 89% (2862 of the 3216 headwords) compared to 42% in Pijal Quichua (Stewart et al. 2020).

Gómez Rendón (2021:29) also makes a number of claims regarding the usage of Media Lengua in Pijal stating that it is exclusively a Spanish speaking community and Media Lengua is not used on a daily basis. Additionally, he claims that it is only used by a small group of people as part of a community tourism project to help revitalize Quichua in order to access government funding (p. 29). While it is true that there are some community members in Pijal who have not used the language in a meaningful period of time (Stewart 2011:35, 76), other speakers use it on a daily basis or intermittently in Pijal (Stewart 2015b:56). In fact, as of 2011, there were an estimated 300 to 400 speakers of Media Lengua in Pijal aged 35 and above (Stewart, 2011). Residents of Pijal between the ages of 20 to 35 typically have a passive knowledge of Media Lengua, while most speakers younger than 20 are often Spanish monolinguals. However, there is greater vitality of Media Lengua in Angla and Casco Valenzuela, where children are still acquiring the language, though it is used with less frequency compared to adult speakers (Gómez Rendón 2008:52; Jarrín Paredes 2014:48).

Another point of contention with respect to Media Lengua's status as an independent language or register deals with the number of functional Quichua morphemes. Both Müller (2011:34) and Gómez Rendón (2005:50, 2008:68) show a substantial reduction of the estimated 63 Quichua

[23] Note that this contrasts his earlier calculation of 75% in 2005 and 2008.

morphemes (as per the ILL-CIEI 1982 as cited by Gómez Rendón 2005) in Media Lengua with Gómez Rendón claiming 49 for the Imbabura variety and Müller claiming 24 and 26 for Imbabura and Cotopaxi varieties respectively. Müller claims that the reduction in morphemes forces speakers to use elements from Spanish to replace discourse functions not available to them from Quichua (p. 34). She deduces that this is due to the lack of mastery in Quichua and the continued Hispanicization the language. Gómez Rendón (2005:50) originally stated that the Quichua morphology was completely functional and inflectional/derivation processes are the same as in Ecuadorian Quichua, but later (2008:77) claimed Hispanicization as the most likely cause in morpheme reduction as speakers transition to Spanish. However, research from Stewart suggests that the reduction in Quichua morphemes in Media Lengua may simply be due to gaps in the data collected by the previously mentioned researchers. Stewart (2015b:28) shows evidence of at least 56 Quichua morphemes in Media Lengua from Pijal and contends that most of the remaining morphemes (based on ILL-CIEI 1982, which draws from data across 12 provinces (p. 19)) appear to have fallen out of use, never existed, or are exceedingly rare in Imbabura Quichua. Additionally, none of these morphemes (*-raycu* CAUSATIVE, *-mana* AUGMENTATIVE, *-lli* CLOTHING, *-rac* IMMEDIATE, *-sami* CLASS, *-nic* DIRECTIONAL, *-cancha* EXTERIOR) are attested in Cole's grammar of Imbabura Quichua, published the same year as the ILL-CIEI dictionary (1982). The one exception is the ordinal marker *-niqui* (not mentioned in the ILL-CIEI dictionary), which has been replaced by Spanish ordinal numbers. Stewart's forthcoming archive data, consisting of over 24 hours of recorded conversations, which is comprised of Quichua translations for each utterance (translated by Quichua speakers in Pijal) also shows no evidence of these morphemes. This suggests that Media Lengua in Pijal still follows a very conservative Imbabura Quichua grammatical frame and little in the way of grammatical 'Hispanicization', even as the language is losing ground to Spanish in the community.

5.2 Morphosyntax and Lexicon

With respect to the mental representation of Media Lengua's lexicon and structure, Deibel (2020b) conducted a production and comprehension task to better understand the costs associated with switching languages and whether they are influenced based on linguistic similarities. Her experiments revealed that no significant cost in production or comprehension was associated with switching between Media Lengua and Quichua (p. 11). She argues that Media Lengua speakers have no need to regenerate a new grammatical frame when switching to Quichua as both languages share identical morphosyntactic frames (p. 12). However, switching costs were significant between Media Lengua and Spanish, which she attributes to structural differences in the grammars.

Lipski (2016) suggests that while Media Lengua and Quichua share identical phrase structure, syntactic mechanisms, and morphology (p 2.), there is a set of traditionally non-lexical elements (namely, interrogatives, negators, and pronouns) that undergo relexification as well. Results from an un-timed acceptability judgement task showed that these elements may be functioning to constraint language mixing given that there was a preference against language-switching after these elements when compared to lexical content words (p. 16).

At the same time, a limited number of Spanish-origin grammatical elements, mostly adpositions, also appear in Media Lengua. According to Dikker (2008:152), such borrowings satisfy a "social need to express an in-between identity", which is "compatible with […] general accounts of contact-induced language change". She claims that since Spanish-origin prepositions

do not surface as postpositions (e.g., **Quito a* '*Quito to') this is "evidence against strict relexification" as proposed by Muysken (1981), given that transfer does not appear to be limited to phonological shapes of the lexical roots[24]. However, Deibel (2019, 2020a) tested this hypothesis experimentally with 64 Media Lengua speakers who took part in video description and translation tasks. Her results reveal that adpositions are not a homogenous category but instead show a clear lexical-functional split, which is "uniformly framed by Quichua morphosyntax" (2019:418); a finding predicted by Muysken's relexification hypothesis. This is best observed in complex multimorphemic adposition configurations (see (51)) where the lexical portion can undergo relexification from Spanish and the functional portion remains from Quichua (2019:418). In other words, transfer takes place according to how categories are compartmentalized in Quichua, not Spanish. Additionally, this Quichua category, containing lexical and functional adpositions, shows some degree of flexibility given that both relexified and non-relexified varieties are possible, with the relexified version preferred nearly 5 to 1 (2019 p. 418).

(51) ***casa-adelante****-pi* > ***casa****-naupa-pi*
house-in front of-LOC
'in front of the house' (Deibel 2019:418)

5.3 Phonology

Studies described hitherto have shown robust evidence for a clear lexical-functional split in Media Lengua, which is based on a conservative grammatical frame from Quichua and a highly relexified vocabulary from Spanish, which primarily maps onto Quichua's lexical properties. However, things are not as clear cut with respect to Media Lengua phonology.

Nearly all analyses of mixed language phonology (and language contact phonology, in general) focus on *phonemic conflict sites,* which are conflicting areas of phonological convergence stemming from differences in the source languages' phonological inventories. As seen in Section 3.1.2, native Quichua does not contain phonemic mid-vowels (/e/ or /o/) whereas Spanish does. Therefore, one might surmise that Media Lengua speakers would either adopt the new phonemes or assimilate them to their L1. However, both the phonetic and phonological realities of mixed languages, including Media Lengua, are more complex (Stewart 2015b). Cross-linguistically, mixed language phonologies show a number of arrangements including, for example: near-mergers, overlapping categories, assimilation, complete transfer, overshoot, and nearly complete mixing of the source language phonologies (Buchan 2012; Bundgaard-Nielsen and O'Shannessy 2019, 2021; Jones and Meakins 2013; Jones, Meakins, and Mauwiyath 2012; Onosson and Stewart 2021b, 2021a; Rosen 2006, 2007; Rosen et al. 2019; Rosen, Stewart, and Sammons 2020; Stewart 2011, 2014, 2015b, 2015a, 2018a, 2020; Stewart et al. 2018; Stewart, Meakins, et al. 2020; Stewart and Meakins 2021). Stewart and Meakins (2021:87) suggest that rather than an awareness of the source-language divisions (as appears to be the case in higher-level phenomena e.g., syntax & lexicon), the arrangement of a mixed language's phonology is more likely the "result of various underlying acquisition, cognitive, and structural processes". For instance, the age the introduced language was acquired by the originators of the mixed language (i.e., whether the originators were

[24] I interpret this to mean that she considers the category of adposition as a homogenous lexical category.

early or late bilinguals), and the degree of functional load required to maintain phonemic contrasts in the mixed language.

In the case of Media Lengua, Stewart (2011, 2014) showed that the acoustic differences between the mid- and high vowel categories (described in section 3.1.2) are still distant enough that contrasts may still be hypothetically possible. This was later confirmed in Stewart (2018b) with a 2-alternative forced choice (2AFC) identification task, with minimal pair stimuli modified along continua from mid- to high vowels (e.g., *piso* /p**i**so/ 'floor' to *peso* /p**e̞**so/ 'weight'). Using a multimethod approach for correlate identification, Onosson and Stewart (2021a) also showed that Media Lengua speakers are able to navigate the overlapping mid- and high vowel categories not only through differences in formant frequencies, but also due to structural and social cues such as syllable type (open, closed), stress, who is producing an utterance, and the context in which the utterance is being produced. Onosson and Stewart (2021a) considered context as an important correlate given that the variation in spelling (described in section 3.1.2) is likely due to the variation in production. Stewart and Meakins (2021:87) suggest that Media Lengua's resulting phonology reflects L2 speech patterns of mid- to late-bilinguals given that phonological conflict sites are either assimilated or acquired, but not to the same degree as would be expected by monolingual native speakers"; essentially Spanish-origin words in Media Lengua generally sound like Quichua-accented Spanish.

Like the vowel number discrepancy between Quichua and Spanish, Spanish has a stop voicing contrast (/p, t, k/ vs. /b, d, g/) whereas Quichua does not (/p, t, k/). Stewart (2015b, 2018a) measured voice onset time (VOT) in Spanish borrowings containing the voiced series and voiceless series of stops in Media Lengua and Quichua. Speakers of both languages consistently produced long negative VOT for Spanish-origin /b, d, g/ and short unaspirated stops in Spanish-origin and Quichua-origin /p, t, k/. To test whether speakers were actually using these differences for contrastive purposes, or simply assimilating Spanish-like voiced stops without considering categorical boundaries, Stewart (2015b) once again used a similar 2AFC identification task. The experiment involved paired stimuli with gradually modified VOT durations of word-initial stops in minimal pairs across 10-step continua from a prototypical voiced stop to a prototypical voiceless stop (e.g., *peso-beso* 'weight-kiss', *tos-dos* 'cough-two'). His results suggests that listeners identified significant differences in the voiced stops from the voiceless stop with a high degree of consistency. The combined results from these studies suggest that both Media Lengua and Quichua speakers have fully adapted the stop voicing contrast both productively and perceptually from Spanish lexical borrowings.

With respect to phonotactics, 62 Quichua-Media Lengua bilinguals participated in lexical-decision and false-memory tasks to test whether Quichua and Media Lengua share a single or separate lexica and to identify whether systematic phonotactic differences between the two languages exist (Lipski 2020a). Lipski's results from the false-memory experiment lean towards a single lexicon "with lexicon-internal language tagging" (p. 354). In tandem with the lexical-decision task, his results also reveal that the subtle phonotactic differences between both languages play a role in tagging. However, the phonotactic differences may not be robust enough to maintain continued separation between Quichua and Media Lengua as Spanish usage increases in the communities.

6 Writing, Literature, and Language Tools

Like Quichua, Media Lengua is essentially an oral language. However, when it is written, speakers almost always use a Spanish-based orthography, and not the Unified Quichua system developed in the early 1980s. In 2013, together with several community members from Pijal, we published a compilation, entitled *Stories and Traditions from Pijal: Told in Media Lengua*, containing 30 stories, traditions, jokes, and herbal remedies from the community (Stewart 2013). When discussing the orthography for this book, community members were interested in combining some of the graphemes used in Unified Quichua (e.g., <k>), which were included (p. xi). While speakers had little issue reading the mixed orthographies, over the years it became apparent that speakers would default to the Spanish-based system when writing. Because of this, subsequent publications have opted for the Spanish-based orthography.

As of 2020 (online) and 2021 (print), Media Lengua has its own dictionary, published online by *Dictionaria* (Stewart, Prado Ayala, and Gonza Inlago 2021; Stewart et al. 2020). This is a descriptive dictionary based primarily on conversational data. It is made up of 3216 headwords and contains translations in the local dialect of Quichua from Pijal, Spanish, and English in addition to possible spelling variations (based on archival transcriptions and consultant feedback). It also contains the part of speech, synonyms, IPA transcriptions, language origin, and example phrases. The online version also contains audio files of each headword, recorded by native speakers from Pijal.

In 2021 we also self-published a cookbook written in Media Lengua (with Spanish translations), entitled *Recetacunaca Yopa Comunidadmanta* 'Recipes from my Community'. This book contains 22 recipes from Pijal (Prado Ayala et al. 2021). We have also produced several online tools found at https://dzesis.github.io/languagetools/. These include a grammatical parser (in its beta version as of 2023), written by Jesse Stewart and Olga Kriukova and a verb conjugator written by Fatemeh Fatemi and Jesse Stewart. These tools were designed to aide learners and linguists alike who are interested in Media Lengua. Finally, Stewart's Imbabura Media Lengua archive (Stewart accepted-2024) will be available through The Archive of the Indigenous Languages of Latin America (AILLA) by then end of 2024.

7 Summary

This chapter aimed to consolidate much of the recent research on Media Lengua since Muysken's seminal work in the 1970s, 80s, and 90s. Through this, I hoped to bring together new and old insights into its origin, language status, and how its processed cognitively by its speakers. This chapter also informs on documentation efforts and provides a basic description of the structure of Media Lengua along with its similarities and differences both cross-dialectally and with respect to its source languages.

Areas for future research still abound in the Ecuadorian Andes, whether they focus on Media Lengua's uniqueness, Quichua's dialectal richness, or language contact present and past, there is still much to be explored. This is especially true given the recent documentation of Cotopaxi Media Lengua after 30 years. Given that Media Lengua is not being passed down to the

next generation in many of the communities where it is currently spoken, continued documentation efforts on this exceedingly rare case of language contact is both important and pressing.

Que quichuata querishpa, chaupi shimita querishpapish fasilmenteme aprendenga aquipi vivishpaca. 'Whether you want to learn Quichua or Media Lengua, it's easy to do if you live here.' (Stewart et al. 2020:598)

References

Adelaar, Willem, and Pieter Muysken. 2004. *The Languages of the Andes*. Cambridge UK: Cambridge University Press.

Arends, Jacques, Pieter Muysken, and Norval Smith. 1994. *Pidgins and Creoles: An Introduction*. Vol. 15. Amsterdam & Philadelphia: John Benjamins Publishing.

Bakker, Peter. 2003. 'Mixed Languages as Autonomous Systems'. Pp. 107–49 in *The Mixed Language Debate: Theoretical and Empirical Advances*, edited by Y. Matras and P. Bakker. Berlin: Walter de Gruyter.

Bruil, Martine. 2011. 'The Emergence of Future Converbs in Imbabura Quichua: Pre-Hispanic Language Contact as a Possible Explanation'. in *Language Contact in Times of Globalization*. Vol. 38, *Studies in Slavic and General Linguistics*, edited by C. Hasselblatt, P. Houtzagers, and R. van Pareren. Leiden: Brill.

Buchan, Heather. 2012. 'Phonetic Variation in Gurindji Kriol and Northern Australian English: A Longitudinal Study of Fricatives in Maternal Speech'. University of Wollongong.

Bundgaard-Nielsen, Rikke, and Carmel O'Shannessy. 2019. 'Voice Onset Time and Constriction Duration in Warlpiri Stops (Australia)'. Pp. 3612–16 in *Proceedings of the 19th International Conference of Phonetic Sciences (ICPhS)*, edited by S. Calhoun, P. Escudero, M. Tabain, and P. Warren. Canberra, Australia: Australasian Speech Science and Technology Association Inc.

Bundgaard-Nielsen, Rikke, and Carmel O'Shannessy. 2021. 'When More Is More: The Mixed Language Light Warlpiri Amalgamates Source Language Phonologies to Form a near-Maximal Inventory'. *Journal of Phonetics* 85:1–16. doi: https://doi.org/10.1016/j.wocn.2021.101037.

Catta, Javier. 1994. *Gramática Del Quichua Ecuatoriano*. 3rd ed. Quito: Abya-Yala.

Cleary-Kemp, Jessica. 2013. 'A "Perfect" Evidential: The Functions of -Shka in Imbabura Quichua'. Pp. 27–50 in *Structure and Contact in Languages of the Americas, Survey Reports, Survey of California and Other Indian Languages*, edited by J. Sylak-Glassman and J. Spence. Berkeley: eScholarship.

Cole, Peter. 1982. *Imbabura Quichua*. Amsterdam: North-Holland Publishing Company.

Cole, Peter, Wayne Harbert, and Hermon Gabriella. 1982. 'Headless Relative Clauses in Quechua'. *International Journal of American Linguistics* 48(2):113–24.

Deibel, Isabel. 2019. 'Adpositions in Media Lengua: Quichua or Spanish? – Evidence of a Lexical-Functional Split'. *Journal of Language Contact* 12(2):404–39. doi: https://doi.org/10.1163/19552629-01202006.

Deibel, Isabel. 2020a. 'Language Representations in the Presences of a Lexical-Functional Split: An Experimental Approach Targeting the Quichua-Media Lengua-Spanish Interface'. PhD Dissertation, The Pennsylvania State University, Pennsylvania.

Deibel, Isabel. 2020b. ‘The Contribution of Grammar and Lexicon to Language Switching Costs: Examining Contact-Induced Languages and Their Implications for Theories of Language Representation’. *Bilingualism: Language and Cognition* 1–16. doi: https://doi.org/10.1017/S1366728919000865.

Deibel, Isabel. 2021. ‘VO vs.OV: What Conditions Word Order Variation in Media Lengua?’ Pp. 157–88 in *New Perspectives on Mixed Languages: From Core to Fringe*. Vol. 18, *Language Contact and Bilingualism [LCB]*, edited by M. Mazzoli and E. Sippola. Bremen, Germany.

Dikker, Susan. 2008. ‘Spanish Prepositions in Media Lengua: Redefining Relexification’. Pp. 121–48 in *Hispanisation: The Impact of Spanish on the Lexicon and Grammar of the Indigenous Languages of Austronesia and the Americas*, edited by T. Stolz, D. Bakker, and R. S. Palomo. Berlin/New York: Mouton De Gruyter.

van Gijn, Rik. 2009. ‘The Phonology of Mixed Languages’. *Journal of Pidgin and Creole Languages* 24:91–117. doi: 10.1075/jpcl.24.1.04gij.

Gómez Rendón, Jorge. 2005. ‘La Media Lengua de Imbabura’. Pp. 39–58 in *Encuentros y Conflictos: Bilingüismo y Contacto de Lenguas en el Mundo Andino*, edited by H. Olbertz and P. Muysken. Madrid: Iberoamericana.

Gómez Rendón, Jorge. 2007. ‘Grammatical Borrowings in Imbabura Quichua’. Pp. 481–521 in *Grammatical borrowing in cross-linguistic perspective*. Vol. 1, edited by Y. Matras. New York: Walter de Gruyter.

Gómez Rendón, Jorge. 2008. *Mestizaje Linguístico En Los Andes: Génesis y Estructura de Una Lengua Mixta*. Quito: Abya-Yala.

Gómez Rendón, Jorge. 2021. ‘La Media Lengua: Una Revisión de Los Supuestos Teóricos’. Pp. 23–48 in *Contacto lingüístico y contexto social, Estudios de variación y cambio*, edited by M. Ángeles Soler and J. Serrrano. D.F, México.

Gómez Rendón, Jorge, and Gabriela Jarrín Paredes. 2017. ‘Una Nueva Mirada al Mestizaje Lingüístico En Los Andes Septentrionales’. *Letras* 58(94):46–77.

Guion, Susan. 2003. ‘The Vowel Systems of Quichua-Spanish Bilinguals: Age of Acquisition Effects on the Mutual Influence of the First and Second Languages’. *Phonetica* 60:98–128.

Hermon, Gabriella. 1984. *Syntactic Modularity*. Berlin: De Grutyer Mouton.

ILL-CIEI. 1982. *Caimi Ñucanchic Shimiyuc-Panca*. Quito: Ministerio de Educación y Cultura; Pontificia Universidad Católica del Ecuador.

Jarrín Paredes, Gabriela. 2014. ‘Estereotipos Lingüísticos En Relación al Kichwa y a La Media Lengua En Las Comunidades de Angla, Casco Valenzuela, El Topo y Ucsha de La Parroquia San Pablo Del Lago’. Pontificia Universidad Católica Del Ecuador, Quito.

Jones, Caroline, and Felicity Meakins. 2013. ‘Variation in Voice Onset Time in Stops in Gurindji Kriol: Picture Naming and Conversational Speech’. *Australian Journal of Linguistics* 33:196–220. doi: 10.1080/07268602.2013.814525.

Jones, Caroline, Felicity Meakins, and Shujau Mauwiyath. 2012. ‘Learning Vowel Categories from Maternal Speech in Gurindji Kriol’. *Language Learning* 64:1052–78. doi: 10.1111/j.1467-9922.2012.00725.x.

Kohlberger, Martin. 2010. ‘Cotopaxi Quichua: A Phonological Description and an Analysis of Stops and Affricates in Central Highland Ecuadorian Quichua’. MA Thesis, University of Edinburgh.

Lefebvre, Claire. 2005. ‘Relexification: A Process Available to Human Cognition’. Pp. 125–39 in Vol. 27. Proceedings of the Annual Meeting.

Lefebvre, Claire. 2006. *Creole Genesis and the Acquisition of Grammar: The Case of Haitian Creole*. Vol. 88. Cambridge: Cambridge University Press.

Lefebvre, Claire, and Isabelle Therrien. 2007. 'On Papiamentu Ku'. Pp. 169–82 in *Language description, history and development: Linguistic indulgence in memory of Terry Crowley*. Vol. 30, edited by J. Siegel, J. Lynch, and D. Eades. John Benjamins Publishing.

Lipski, John. 2015. 'Colliding Vowel Systems in Andean Spanish'. *Linguistic Approaches to Bilingualism* 5:91–121. doi: 10.105/lab.5.1.04lip.

Lipski, John. 2016. 'Language Switching Constraints: More than Syntax? Data from Media Lengua'. *Bilingualism: Language and Cognition* 25. doi: dx.doi.org/10.1017/S1366728916000468.

Lipski, John. 2017. 'Ecuadoran Media Lengua: More than a "Half"-Language?' *International Journal of American Linguistics* 83(2):233–62.

Lipski, John. 2019. 'Reconstructing the Life-Cycle of a Mixed Language: An Exploration of Ecuadoran Media Lengua'. *International Journal of Bilingualism* 1–27. doi: doi.org/10.1177/1367006919842668.

Lipski, John. 2020a. 'Can a Bilingual Lexicon Be Sustained by Phonotactics Alone? Evidence from Ecuadoran Quichua and Media Lengua'. *The Mental Lexicon* 15(2):330–65. doi: https://doi.org/10.1075/ml.19024.lip.

Lipski, John. 2020b. 'Pronouns, Interrogatives, and (Quichua-Media Lengua) Code-Switching: The Eyes Have It'. *Languages* 5(11):1–13. doi: doi:10.3390/languages5020011.

Meakins, Felicity. 2013. 'Mixed Languages'. Pp. 159–228 in *Contact Languages: A Comprehensive Guide*, edited by Y. Matras and P. Bakker. Berlin: Mouton de Gruyter.

Meakins, Felicity, and Jesse Stewart. 2022. 'Mixed Languages'. in *The Cambridge Handbook of Language Contact in Population Structure*. Vol. Volume 2: Multilingualism in Population Structure, edited by S. Mufwene and A. M. Escobar. Cambridge: Cambridge University Press.

Müller, Andrea. 2011. 'La media lengua en comunidades semi-rurales del Ecuador: uso y significado social de una lengua mixta bilingüe'. PhD Dissertation, Universität Zürich, Zürich.

Muysken, Pieter. 1979. 'La Mezcla de Quechua y Castellano: El Caso de La "Media Lengua" En El Ecuador'. *Lexis* 3(1):41–56.

Muysken, Pieter. 1980. 'Sources for the Study of Amerindian Contact Vernaculars in Ecuador'. *Amsterdam Creole Studies* 3:66–82.

Muysken, Pieter. 1981. 'Halfway between Quechua and Spanish: The Case for Relexification'. in *Historicity and variation in Creole studies*. Vols 57–78, edited by A. R. Highfield. Ann Arbor: Karoma Publishers.

Muysken, Pieter. 1997. 'Media Lengua'. Pp. 365–426 in *Contact languages: A Wider Perspective*, edited by S. Thomason. Amsterdam: J. Benjamins Pub. Co.

Muysken, Pieter. 2013. 'Two Linguistic Systems in Contact: Grammar, Phonology, and Lexicon'. Pp. 193–215 in *The handbook of bilingualism and multiculturalism*, edited by T. Bhatia and W. Ritchie. Malden, MA: Blackwell Publishing.

Muysken, Pieter. 2020. 'Corpus de Salcedo'. edited by P. Dankel, M. Haboud, H. Olbertz, and S. Pfänder. acceso libre via MOCA (por Daniel Alcón).

Onosson, Sky, and Jesse Stewart. 2021a. 'A Multi-Method Approach to Correlate Identification in Acoustic Data: The Case of Media Lengua.' *Laboratory Phonology: Journal of the*

Association for Laboratory Phonology 12(1):1–30. doi: https://doi.org/10.5334/labphon.291.

Onosson, Sky, and Jesse Stewart. 2021b. 'The Effects of Language Contact on Non-Native Vowel Sequences in Lexical Borrowings: The Case of Media Lengua'. *Language and Speech PaPE 2019 Special Issue* 1–30. doi: doi.org/10.1177/00238309211014911.

Onosson, Sky, and Jesse Stewart. 2023. 'Cotopaxi Media Lengua Vowels: A Preliminary Analysis'. Pp. 3360–65 in *Proceedings of the 20th International Congress of Phonetic Sciences*. Prague: Guarant International.

Prado Ayala, Gabriela, Lucia Gonza Inlago, and Jesse Stewart. 2021. *Recetacunaca Yopa Comunidadmanta*. 1st ed. Lexington, KT, USA: Lulu.

Rosen, Nicole. 2006. 'Language Contact and Michif Stress Assignment'. *Sprachtypol. Univ. Forsch (STUF)* 59:170–90.

Rosen, Nicole. 2007. 'Domains in Michif Phonology'. PhD Dissertation, University of Toronto, TSpace.

Rosen, Nicole, Jesse Stewart, Michele Pesch-Johnson, and Olivia Sammons. 2019. 'Michif VOT'. Pp. 3593–97 in *Proceedings of the 19th International Conference of Phonetic Sciences (ICPhS)*, edited by S. Calhoun, P. Escudero, M. Tabain, and P. Warren. Canberra, Australia: Australasian Speech Science and Technology Association Inc.

Rosen, Nicole, Jesse Stewart, and Olivia Sammons. 2020. 'How "Mixed" Is Mixed Language Phonology- An Acoustic Analysis of the Michif Vowel System'. *Journal of the Acoustical Society of America* 147(4):2989–99. doi: https://doi.org/10.1121/10.0001009.

Shappeck, Marco. 2011. 'Quichua-Spanish Language Contact in Salcedo, Ecuador: Revisiting Media Lengua Syncretic Language Practices'. University of Illinois at Urbana-Champaign.

Stewart, Jesse. 2011. 'A Brief Descriptive Grammar of Pijal Media Lengua and an Acoustic Vowel Space Analysis of Pijal Media Lengua and Imbabura Quichua'. MA Thesis, University of Manitoba, MSpace.

Stewart, Jesse. 2013. *Stories and Traditions from Pijal: Told in Media Lengua*. 1st ed. Charleston: CreateSpace.

Stewart, Jesse. 2014. 'A Comparative Analysis of Media Lengua and Quichua Vowel Production'. *Phonetica* 7:159–82. doi: 10.1159/000369629.

Stewart, Jesse. 2015a. 'Intonation Patterns in Pijal Media Lengua'. *Journal of Language Contact* 8(2):223–62. doi: https://doi.org/10.1163/19552629-00802003.

Stewart, Jesse. 2015b. 'Production and Perception of Stop Consonants in Spanish, Quichua, and Media Lengua'. PhD Dissertation, University of Manitoba, DSpace.

Stewart, Jesse. 2018a. 'Voice Onset Time Production in Spanish, Quichua, and Media Lengua'. *Journal of the International Phonetic Association* 48(2):173–97. doi: doi.org/10.1017/S002510031700024X.

Stewart, Jesse. 2018b. 'Vowel Perception by Native Media Lengua, Quichua, and Spanish Speakers'. *Journal of Phonetics* 71:177–93. doi: https://doi.org/10.1016/j.wocn.2018.08.005.

Stewart, Jesse. 2020. 'A Preliminary, Descriptive Survey of Rhotic and Approximant Fricativization in Northern Ecuadorian Andean Spanish Varieties, Quichua, and Media Lengua'. in *Spanish Phonetics and Phonology in Contact: Studies from Africa, the Americas, and Spain, Issues in Hispanic and Lusophone Linguistics series*, edited by R. Rao. Amsterdam & Philadelphia: John Benjamins.

Stewart, Jesse. accepted-. ‘Media Lengua’. *The Archive of Indigenous Languages of Latin America (AILLA)*.

Stewart, Jesse, Lucia Gonza Inlago, and Gabriela Prado Ayala. 2023. ‘Cotopaxi Media Lengua Is Still Very Much Alive’. *Language Documentation and Conservation* 17:49–63. doi: http://hdl.handle.net/10125/74690.

Stewart, Jesse, and Felicity Meakins. 2021. ‘Advances in Mixed Language Phonology: An Overview of Three Case Studies’. in *New Perspectives on Mixed Languages: From Core to Fringe. Language Contact and Bilingualism*, edited by M. Mazzoli and E. Sippola. Berlin: De Gruyter Mouton.

Stewart, Jesse, Felicity Meakins, Cassandra Algy, Thomas Ennever, and Angelina Joshua. 2020. ‘Fickle Fricatives: Obstruent Perception in Gurindji Kriol and Roper Kriol’. *Journal of the Acoustical Society of America* 147(4):2766–78. doi: https://doi.org/10.1121/10.0000991.

Stewart, Jesse, Felicity Meakins, Cassandra Algy, and Angelina Joshua. 2018. ‘The Development of Phonological Stratification: Evidence from Stop Voicing Perception in Gurindji Kriol and Roper Kriol’. *Journal of Language Contact* 11(1):71–112.

Stewart, Jesse, and Sky Onosson. 2023. ‘Vowel Raising in Cotopaxi Quichuan Languages’. Pp. 3311–15 in *Proceedings of the 20th International Congress of Phonetic Sciences*, edited by R. Skarnitzl and J. Volín. Prague: Guarant International.

Stewart, Jesse, Gabriela Prado Ayala, and Lucia Gonza Inlago. 2020. ‘Media Lengua Dictionary’. *Dictionaria* 12:1–3216. doi: 10.5281/zenodo.4147099.

Stewart, Jesse, Gabriela Prado Ayala, and Lucia Gonza Inlago. 2021. *Chaupishimipa Dictionarioca*. 1st ed. Lexington, KT, USA: Lulu.