Mixed Languages

Jesse Stewart
University of Saskatchewan, Canada

1 Introduction

Mixed languages, as a linguistic phenomenon, arise from the amalgamation of two or more languages in bilingual/multilingual societies that fill an expressive, rather than communicative, need during periods of notable social change (Meakins and Stewart 2022, 310). From a diachronic perspective, mixed languages offer a unique window into the dynamic processes of language contact and evolution, as they appear to exhibit intact systematic divisions of linguistic components originating from their source languages. Traditionally, this meant that classifying mixed languages using binary tree models (see "Family Tree Model") was challenging owing to their inherent "genetic ambiguity" (Thomason and Kaufman 1988). As a result of this dual-linguistic heritage, phylolinguists have traditionally created a miscellaneous 'mixed language' category to account for this language type (see, e.g., categorizations in Glottolog (Nordhoff et al. 2023) and Ethnologue (Eberhard, Simons, and Fennig 2020)).

Classifying mixed languages based solely on sociohistorical or typological criteria has also been an imperfect metric. Their emergence can be traced diachronically to a variety of sociohistorical contexts, whether they involve descendants of migrants (Jarva 2008 for Old Helsinki Slang; Pecht 2021 for Cité Duits), progeny of mixed unions (Bakker 1997 for Michif), or communal language shift (Meakins 2013a for Gurindji

The Wiley Blackwell Companion to Diachronic and Historical Linguistics. Edited by Adam Ledgeway, Edith Aldridge, Anne Breitbarth, Katalin É. Kiss, Joseph Salmons, and Alexandra Simonenko.
 Published 2026 by John Wiley & Sons, Inc.
DOI: 10.1002/9781119898023.wbcdl043

Kriol; Muysken 1997 for Media Lengua; also see "Language Shift, Obsolescence, and Death"). Typologically, mixed languages are typically heterogenous, both from the perspective of synchronically autonomous languages and diachronically through the evolution with their source languages. As autonomous systems, mixed languages are as diverse as any language type with examples spanning the globe and each showcasing unique characteristics and adaptations. Diachronically, mixed language source material arranges into three primary typologies through their formation. These include (i) lexicon-grammar (LG) configurations, like Media Lengua, (ii) structural mixes (SM), as seen in Gurindji Kriol and Michif, and even those like Sri Lanka Malay, which exhibit (iii) structural convergence (SC) (see "Convergence and Linguistic Areas"). These three taxonomies are based on Meakins and Stewart (2022), who simplify Bakker's (2017) three categories of 'noun phrase, verb phrase (N-V)', 'verb-phrase, noun-phrase, lexical mix (V-NN)', and 'lexicon-inflection (L-INFL)' into 'structural mixes/ combinations'. Mazzoli and Sippola (2021, 9) take this a step further and call into question converted languages as their criteria for defining mixed language-hood are unclear. Example (1) provides a Media Lengua utterance with bolded elements from Spanish. For comparative purposes, the sentence is translated into both Quichua (with glosses) and Spanish (with elements used in Media Lengua underlined). Example (2) provides a Gurindji Kriol utterance with bolded elements of Kriol origin and contains translations in Gurindji and Kriol.

(1)

	Ese cuchillo*huan* ***mano****ta* ***lastima****rcani*.			
	ẹsẹ	*kuʧiʒọ-wan*	*mano-ta*	*lastima-ɾka-ni*
	that	knife-INST	hand-ACC	hurt-PST-1
Quichua	*Kay* ***cuchillu****wan maquida chugrircani*.			
	kai	***kuchiʧʒu****-wan*	*maki-da*	*ʧugri-ɾka-ni*
	this	knife-wan	hand-ACC	hurt-PST-1
Spanish	***Me lastimé la mano con ese cuchillo.***			
	'I cut my hand with that knife.' (Stewart accepted-a)			

(2)

	Dat *warlakungku* ***bin baitim dat*** *marluka* ***fut****ta*.						
	dat	*waɽlaku-ŋgku*	*bin*	*bait-im*	*dat*	*maɽluka*	*fut-ta*
	the	dog-ERG	PST	bite-TR	the	old.man	foot-LOC
Gurindji	*Warlaku-lu katurl payarni marluka jamana-la*.						
Kriol	***Dat*** *dog* ***bin baitim dat*** *olman la* ***fut***.						
	'The dog bit the old man on the foot.' (Stewart and Meakins 2021, 74)						

Before Thomason and Kaufman's (1988) foundational publication, mixed languages were not recognized as autonomous systems but rather as instances of previously documented contact phenomena (e.g., code-switching or creolization, also see "Code-Switching"). Subsequently, a series of seminal works has consolidated our understanding of mixed languages; notable among them are edited collections by Thomason (1997), Bakker and Mous (1994), and Matras and Bakker (2003). Recent investigations, such as those led by Michaelis et al. (2013), have offered preliminary insights into a variety of mixed languages. More exhaustive studies have also emerged, spotlighting languages like Michif (Bakker 1997), Ma'á (Mous 2003), Gurindji Kriol (Meakins 2013a), Media Lengua (Gómez Rendón 2008; Stewart accepted-b; Stewart, Prado Ayala, and Gonza Inlago 2020), Light Warlpiri (O'Shannessy 2005), and

Sri Lanka Malay (Nordhoff 2009, 2012). Additionally, theoretical dimensions of mixed languages have been discussed in a range of books, review articles, bibliographies, and educational chapters (e.g., Bakker 2003, 2017; Mazzoli and Sippola 2021; Meakins 2013b, 2016; Meakins and Stewart 2022; Mous 2003; Muysken 2007, 2013; Stewart and Meakins 2021; Thomason 1995; van Gijn 2009; Velupillai 2015; Winford 2003). The number of publications on individual mixed language topics is now far too extensive to list here, though, many will be mentioned throughout this chapter.

Through this body of research, mixed languages are now predominantly recognized as independent languages and several commonalities (both structural and social) have been identified that tentatively set them apart from other contact phenomena (see "Contact and Borrowing"). For instance, from a usage-based perspective, mixed languages are formed by bilinguals for expressive purposes (mentioned in Bakker 1997; Golovko 1994; Mazzoli and Sippola 2022; Meakins 2011b; Muysken 1997), while creole, pidgin, and trade languages form out of communicative necessity to facilitate interactions between speakers of different languages (Lefebvre 1998, 395; Meakins 2013b, 36). Moreover, unlike other contact phenomena, mixed languages develop as either secret (Boretzky and Igla 1994 for mixed Romani dialects; Grant 1994 for Shelta; Muysken 1994 for Kallawaya) or internal (Bakker 1994 for Michif; Meakins 2013b for Gurindji Kriol; Mous 2003 for Ma'á; O'Shannessy 2005 for Light Warlpiri; Pecht 2021 for Cité Duits; Stewart 2011 for Media Lengua; Gonzales 2022 for Lánnang-uè) languages used solely among the speech community where they are spoken. By contrast, pidgins and trade languages are typically created to permit group-external communication among speakers of both the substratum and superstratum languages (Foley 1988; Hymes 1971; Lefebvre 1998). Structurally, pidgins and trade languages often show simplified grammatical structures, greater regularization, leveling, or omission of morphology, and a reduced lexicon (see, e.g., Kusters 2003; McWhorter 2001; Trudgill 2009; also see "Loss and Leveling"). Mixed languages generally do not exhibit such restructuring ("Reanalysis and Restructuring"), given that the originators of the language are fluent bilinguals in the source languages (Bakker 1997 for Michif; Meakins 2013a for Gurindji Kriol; Stewart accepted-b for Media Lengua). It should be noted that both these views are challenged (see, e.g., Brousseau, Filipovich, and Lefebvre (1989) for Haitian Creole and Gillon and Rosen 2018 for Michif).

Pidgin and trade language formation also rely on a superstratum lexifier language, spoken by an economically powerful minority, that interacts with other substratum languages, spoken by a majority, that provide varying degrees of structure (see, e.g., Foley 1988; Hymes 1971; Noonan 2010). Contrarily, mixed languages typically have two clear source languages that arrange linguistic components within one of the three typologies described previously. The mixed language literature is also generally void of other creole-related phenomena such as gradient registers between less prestigious and more prestigious forms (e.g., basilect-acrolect continua), and processes of decreolization are not documented (exceptions to this are observed in the Australian mixed languages surveyed herein (see Section 2.7)). Yet mixed languages, like other autonomous languages, clearly have registers. For instance, a formal introduction and discussion in Media Lengua will have approximately the same number of Spanish origin words as a joke told in the language, though there are obvious differences in speech rate, clarity, and syntactic and lexical choices (see the same speaker in Stewart 2013, 21, telling an off-color joke, and then seriously discussing a community tourism project in Stewart accepted-a; the former with a 95% relexification rate and the latter with 98%).

The same can be said about Michif in formal language classes instructed by elders at the University of Saskatchewan versus when elders informally converse amongst themselves. Code-switching is another contact phenomenon often tied to bilingual societies that is used internally for expressive purposes (see, e.g., De Fina 2007). Yet, unlike code-switching, mixed languages show greater predictability as to where components from a given source language will appear structurally (Meakins and Stewart 2022, 312). Mixed languages that are still in contact with their source languages may also exhibit code-switching of their own but that is still identifiably different from the source language structural splits (see Stewart accepted-a for Media Lengua).

While the details described hereto may appear to make mixed languages objectively different than other contact phenomena (see "Contact and Borrowing"), it is worth recalling the title of Thomason's (1995) paper "Language Mixture: Ordinary Processes, Extraordinary Results." Here, she claims that "close analogues of all [processes] can be found in common types of language change" and that every so often, unclear as to why, these processes culminate in extraordinary linguistic mixtures that become established in a speech community" (1995, 15). Thomason also suggests that mixed language creation is socially – not linguistically – motivated. This latter point has led to detractors of mixed languages as a useful linguistic category. For instance, Versteegh (2017, 233), in his chapter "The Myth of the Mixed Languages," goes as far as to state in his conclusions that "languages do not mix, people do."

Others are more comfortable discussing the asymmetrical roles of the source languages while still valuing the 'extraordinary' results of these languages. For example, Gillon and Rosen (2018, 169–170) state that "mixed languages are all likely to behave mainly like one unified language, with some extra features from the other language, once the spotlight is put on their structure," resulting "in a system with more features than the original," but that "mixed languages are regular languages, just with their history on their sleeves." Similarly, Stewart and Meakins (2021, 331) conclude that mixed language phonology is not particularly special and can be described through well-documented L2 learning/acquisition processes. Specifically, the introduced language, originally acquired as an L2, essentially conforms to the ancestral L1 phonological system in much the same way a mid- to late bilingual might acquire the phonology of their L2 with accented speech. For example, the underlying phonology of Media Lengua is Quichua, Cree for Michif, and Gurindji for Gurindji Kriol. The fact that some introduced material is adopted may suggest that cognitive factors are at play that could lead to greater phonological optimization (e.g., distributing functional load or increasing the number of possible lexical contrasts in the introduced vocabulary).

Much of Stewart and Meakin's (2021) analysis is based on empirical work on phonological conflict sites (areas of phonological convergence where two or more sounds compete for a position in the phoneme inventory of a contact language) that reveal the asymmetrical roles of the source languages in a mixed language's phonology (Buchan 2012; Bundgaard-Nielsen and O'Shannessy 2021; Jones, Meakins, and Buchan 2011; Jones, Meakins, and Mauwiyath 2012; Jones and Meakins 2013a, 2013b; Onosson and Stewart 2021a, 2021b, 2023; Rosen 2006, 2007; Rosen et al. 2019; Rosen, Stewart, and Sammons 2020; Stewart 2014, 2015b, 2015a, 2018a, 2018b, 2020; Stewart et al. 2018, 2020; Stewart and Meakins 2021; Stewart and Onosson 2023; also see "Acoustic-Perceptual Factors in the Actuation of Sound Change"). This body of work suggests that theoretical accounts of mixed language phonology formation (Muysken 2013; van Gijn 2009) do not accurately predict their outcome. For instance, Bakker (1997, 83) and van Gijn

(2009, 102–105) claim that Michif has a stratified phonological system where French phonology is used with French origin components while Cree phonology is used with Cree origin components. Van Gijn claims that this is predictable based on the unmixed phonological domains and where they appear on the prosodic hierarchy (see "Typology of Prosodic Organization"). For instance, he suggests that Michif, with separate NP and VP domains, would apply the phonology of the language that dominates each domain, whereas Media Lengua, an agglutinating language that combines lexicon and morphology from each source language in all domains, would maintain the phonology of the ancestral source language (Quichua in this case) (2009, 107). However, an acoustic analysis of oral vowels by Rosen, Stewart, and Sammons (2020) reveals that the system is inherently Cree with the added addition of only two French vowels (/ɛ/ and /ɔ/). Similar results were also found for voice onset time (VOT) where Michif has more in common with Cree's stop system, with non-contrastive voicing, compared to French's stop system, with contrastive voicing (Rosen et al. 2019). These results suggest that Michif's phonology is essentially Cree with some additions from French supporting Rosen's (2006, 2007) stance that there is little evidence of a split phonology.

Contrarily, Media Lengua has adopted Spanish origin vowels, but in a Quichua-like frame[1] (Stewart 2014). Speakers have also fully adopted the Spanish stop voicing contrast, which is non-contrastive in native Quichua words (Stewart 2018a). Yet other sounds have assimilated to Quichua phonemes (Stewart 2020) while Media Lengua's intonational phonology is essentially Quichua (Stewart 2015a). Beyond the additions of several phonemes and onset clusters, Media Lengua's phonology resembles that of the ancestral language (Quichua) rather than that of the introduced language (Spanish). Similar findings are seen in Gurindji Kriol (Stewart and Meakins 2021) and likely in Light Warlpiri as well, though this warrants further discussion (see Section 2.7). These empirical findings suggest an asymmetrical source language influence where the ancestral language provides the basis of the phonological system.

Structurally, in Media Lengua, Quichua provides the entire morphosyntactic frame, including word order (see "(Basic) Word Order") and most of the semantics of Media Lengua's relexified vocabulary (Lipski 2017; Muysken 1981, 1997; Stewart accepted-b). Additionally, most active Spanish morphology, which could be transferred to Media Lengua, defaults structurally to Quichua (see the gender system described in Stewart accepted-b). This suggests that Media Lengua is essentially a Quechuan language with an 'extraordinary' degree of lexical borrowing. Similarly, Gillon and Rosen's (2018) book on the Michif determiner phrase (DP) argues that, structurally, Michif is essentially an Algonquian language, with a few extra French elements (e.g., adjectives) (Gillon and Rosen 2018, 169) and "considerable" French borrowings (7). This evidence suggests that the arbitrary category of 'mixed language' may not be a necessary phylogenetic classification. Instead, mixed languages might be better classified synchronically as part of their dominant source language family, if one is clearly dominant.

2 Determining mixed language-hood

Based on this literature, opinions on mixed languages as a linguistic category are 'mixed'. Yet it also reveals several commonalities based on social and structural factors (see Table 1), that together might be used to set mixed languages apart from

Table 1 Distinguishing factors for mixed language-hood.

Sociolinguistic Factors	
Source language bilingualism/multilingualism	Bakker 1997; Meakins 2011b, 2013b; Mous 2003; Muysken 1997; O'Shannessy 2005; Thomason 1997
In-group/secret usage	Bakker 1994; Boretzky and Igla 1994; Grant 1994; Meakins 2013a; Mous 2003; Muysken 1994; O'Shannessy 2005; Pecht 2021; Stewart 2011; Gonzales 2022
Expressive purpose/new identity	Bakker 1997; Golovko 1994; Mazzoli and Sippola 2022; Meakins 2011b; Muysken 1997
Conscious/deliberate creation	Boretzky and Igla 1994; Kossmann 1994; Mous 1994; Thomason 1995, 17; 2003, 32
Structural Factors	
Stratified typology	Bakker 2017; Mazzoli and Sippola 2022; Meakins 2013b; Meakins and Stewart 2022
Preserved systemic complexities	Bakker 1997; Stewart accepted-b
Single language primacy	Gillon and Rosen 2018; Stewart and Meakins 2021
Autonomy/conventionalization	Bakker 2003; Meakins 2012; Meakins and Stewart 2022
Typologically/genetically distinct	Bakker 2017; Bakker and Mous 1994, 6

other contact phenomena. Each factor discussed is inherently diachronic, being linked to the process or result of language change. However, it should be noted that possible factors for identifying mixed languages such as *social change* or *social upheaval* (Meakins and Stewart 2022, 310; Thomason 1995, 16), *rapid formation* (Bakker and Mous 1994, 2; Meakins and Stewart 2022, 331; Mous 1994, 83; Thomason 1995, 17), and *formative processes* (e.g., relexification (see "Lexicalization") or *code-switching* (see "Code-Switching")) are not included in this list as these factors are also well documented in the pidgin, creole, and code-switching literature excluding them as unique criteria for mixed language formation.

This chapter provides a synthesis of the literature on the diachronic processes and their results used to classify mixed languages, through thematic analyses based on the factors listed in Table 1. By focusing on each factor, the aim is to determine whether the 'mixed language' category is sufficiently different from other linguistic categories of language contact (see "Borrowing of Linguistic Rules") (e.g., creoles, pidgins, trade languages, code-switching, etc.). This chapter distinguishes itself from prior studies in several ways. Firstly, its emphasis is not on the establishment of criteria for mixed languages, but rather on evaluating the uniqueness of established criteria by comparing them with other contact languages and languages with debatable 'mixed' classifications. Secondly, equal weight is given to both social and structural aspects of mixed languages, avoiding the emphasis on one over the other that characterizes some prior analyses. This highlights both the diachronic processes involved in language change and their results. Lastly, 'source language primacy' is also included as a criterion to make the claim that most mixed languages are phylogenetically classifiable.

This chapter draws on data from 13 languages including six well-known mixed languages: Media Lengua (Ecuador), Michif (Canada), Gurindji Kriol (Australia), Light Walpiri (Australia), Ma'á (Tanzania), and Mednyj Aleut (Russia), as well as two arguably mixed languages that have received more recent documentation, Lánnang-uè (Philippines) and Amish Shwitzer (United States). This chapter also includes three languages with debatable classifications, Barranquenho (Portugal), Papiamentu

(Curaçao), and Jopará (Paraguay), along with other types of contact languages for comparison, including Haitian Creole (Haiti), and English–Spanish code-switching[2] (United States) (see "Code-Switching"). By drawing on a select number of languages, this chapter can provide greater detail from more well-documented cases, directly from investigators with first-hand knowledge of each language under analysis. Unfortunately, due to length restrictions, this has also meant excluding well documented, yet restricted-use mixed languages, like Kallawaya and Angloromani (see Hannß 2022; Matras et al. 2007 respectively).

2.1 Source language bilingualism/multilingualism

The role of bilingualism or multilingualism in the diachronic development of mixed languages and other contact varieties is evident in nearly all the languages surveyed (where mutual intelligibility is not present in the source languages, see Section 3). For Media Lengua, Muysken (1997, 377) states that, "the creators … must have been bilingual to some extent" and present-day speakers are still bilingual (Stewart accepted-b). For Michif, Bakker (1997, 11) states that, "[t]he Cree and French components are so close to the source languages that this mixed language cannot have been imperfect second-language acquisition. … Its first speakers must have been fluent bilinguals." In Australia, Gurindji Kriol's emergence is described by Meakins (2011b, 55) as stemming from a "highly bilingual setting," making it a "symbiotic mixed language," and Light Warlpiri, "arose from codeswitching practices among bilinguals" (O'Shannessy 2016, 68).

Golovko (1994, 117) describes Mednyj Aleut as being "invented" by bilingual speakers of Aleut and Russian, for whom Aleut was the mother tongue. Mous (2003, 74) points to a preexisting bilingual environment as the impetus for the creation of Ma'á, stating that, "prior to parallel lexicon building, a long process of gradual bantuisation in a situation of language maintenance under bilingualism, is most likely to have taken place." However, most of the literature specifically discussing Ma'á (Mous 1994, 2002, 2003, 2005; Thomason 1983) does not explicitly state that it was formed by bilingual speakers.

Source language bilingualism/multilingualism is also present in the more recently documented mixed languages surveyed. In the case of Lánnang-uè, Gonzales (2022, 7) states that, "[t]he Lannangs ... pride themselves on their ability to communicate in various languages." However, Gonzales (2023b, 94) also notes that present-day speakers are most proficient in Lánnang-uè and English, likely due to the prominent ecologies in which the languages are used. His study also noted variability in self-reported proficiency levels, especially in Hokkien and Lánnang-uè. These findings may suggest that Lánnang-uè is/is becoming independent from its source languages since its inception over 100 years ago. Amish Shwitzer tells a different story with Hasse and Seiler (2023, 112) noting that Pennsylvania-Dutch-speaking women incompletely acquired Bernese Swiss German as an L2. Seiler (2017, 211) adds that, "in Amish Shwitzer, the typical structure of a grammar-lexicon mixed language emerged without widespread active bilingualism or great assimilation pressure." In this case, bilingualism was likely not needed to create Amish Shwitzer as there was already a high degree of mutual intelligibility between the source languages.

For Barranquenho, Clements, Amaral, and Garrett (2021, 231) state that it is "a reasonable assumption that Barranquenhos have been bilingual in Portuguese and Spanish

since at least the 17th century," and that the language only "go[es] back at least 150 years" (Clements, Amaral, and Luís 2008, 13). For Papiamentu, Jacobs (2012, 74) states that, "the existence of ... a bilingual setting on 17th-century Curaçao cannot be proven historically, [so] we must alternatively consider the possibility that Upper Guinea PC [Portuguese Creole] was relexified in the absence of full bilingualism." However, like Amish Shwitzer, bilingualism may not have been necessary to create Papiamento given that the lexicon of Upper Guinea Portuguese Creole and Spanish had "some degree of mutual intelligibility" (2012, 69). For Jopará, Estigarribia (2015, 199) states that it "emerged from a situation of extended and extensive (if not actually full) bilingualism."

Turning to English–Spanish code-switching (see "Code-Switching"), Velasquez (2010, 89) "affirm[s] that [speakers] are conscious of their bilingualism" and Becker (1997, 5) affirms that speakers who code-switch between English and Spanish "maintain the integrity of two separate language systems." Only Haitian Creole appears to have formed without source language bilingualism, multilingualism, or mutual intelligibility. Lefebvre (2004, 30, 65) states that Haitian Creole developed in a "multilingual community, in need of a lingua franca ... [with] very limited direct access to the superstratum language [French]."

2.2 In-group/secret usage

The concept of an in-group or secret language is often referenced as a defining aspect of mixed languages. For instance, Muysken (1997, 410) states that Media Lengua is "very much an in-group language," a characteristic that led to initial reluctance among speakers to use it openly (Stewart 2011, 35). Similarly, Michif's status as an in-group language likely contributed to its obscurity among outsiders, as noted by Bakker (1997, 10:410). Gillon and Rosen (2018, 1) also describe Michif's use as an in-group language spoken at home, distinguishing it from other languages spoken in more public settings. Meakins (2023, 8) points out that Gurindji Kriol seems to have developed features to maintain its in-group identity, with linguistic choices intended "to sound more Gurindji-like," which "reflects a desire not to be understood by outsiders (English speakers)." Similarly, O'Shannessy (2005, 32) states that Light Warlpiri "developed as an in-group language, through Warlpiri speakers speaking to each other and code-mixing between Warlpiri and Kriol or English." For Ma'á, the use of lexical manipulation as a means of expressing identity or secrecy is highlighted by Mous (2003, 91). Additionally, Golovko (1994, 118) describes Mednyj Aleut as initially serving as a secret code, later becoming a native language of the next generation.

Gonzales (2022, 330) explains that Lánnang-uè's role as an in-group code is apparent in how it is selectively used among individuals with mixed Southern Chinese-Filipino (i.e., Lannang) cultural heritage, and its use is avoided with others, including Hokkien and Filipino individuals who are not Lannang heritage. Hasse and Seiler (2023, 95) state that, "Amish Shwitzer is explicitly an in-group language. It is used only within the community … [and] with outsiders, speakers of Amish Shwitzer use English, which they acquire as L2 at school."

Carvalho and Lucchesi (2016, 52) state that Barranquenho is "reserved for in-group interactions" and, as per Garrett (2021, 127), reflects a semi-shift where it functions as a social identity marker. Estigarribia (2015, 199) states that Jopará can be considered an in-group language relative to monolingual Spanish speakers in Paraguay or beyond Paraguay's borders. However, the use of Jopará has expanded beyond the household and can be found in other facets of daily life in urban settings. For English–Spanish

code-switching (see "Code-Switching"), Hill Zirker (2007, 15), reveals its use as an in-group variety among bilinguals, which can be 'switched off' if speakers want to include monolinguals in their conversations.

The languages described hereto contrast with Papiamentu's development. Jacobs (2012, 69) suggests that its creation was influenced by a desire to signify acculturation in a Spanish-dominant cultural setting, rather than as a strictly in-group language. Similarly, Haitian Creole emerged as a lingua franca in a multilingual community, which affirms that its role originally went beyond in-group communication (Lefebvre 2004, 30).

2.3 Expressive purpose/new identity

While in-group or secret languages primarily serve community-internal purposes, most mixed languages are also described as being created for expressive purposes or to signal a new identity. For instance, Muysken (1997, 376) notes that the emergence of Media Lengua was driven by "expressive needs" related to "ethnic self-identification" rather than communicative necessity. Most researchers agree with the former, however, "Imbabura Media Lengua [speakers] clearly consider themselves as Indigenous Kichwa, and this is likely not a new group association" (Jarrín Paredes 2014, 1; Lipski 2019, 5; Stewart 2015b, 181). Speakers of Cotopaxi Media Lengua also identify as members of their local indigenous communities and do not appear to be shifting away from this ethnic identification (Stewart, Gonza Inlago, and Prado Ayala 2023). However, it should be noted that the situation in the 1970s when Muysken was first documenting the language may have been different.

Michif's connection to Métis identity is highlighted by Bakker (1997, 52) and is further explained by Gillon and Rosen (2018, 1), who describe it as having emerged from the unique cultural and ethnic amalgamation of French fur traders and Cree women. Meakins (2011b, 39) describes Gurindji Kriol as serving as an identity marker for younger Gurindji people, blending their traditional heritage with a more modern Aboriginal identity, despite its speakers not forming a separate ethnic group. O'Shannessy (2005, 32) notes that Light Warlpiri did not arise from an interlanguage to communicate with non-Warlpiri speakers, suggesting its emergence for expressive purposes. Mous (2003, 91) touches on Ma'á's use of lexical manipulation for identity expression. Golovko (1994, 118) also states that Mednyj Aleut's emergence was motivated by "the aspiration of a group of people for a separate identity."

For Lánnang-uè, Gonzales (2022, 330) states that, "the Lannangs have been observed to use their mixed code Lánnang-uè to index their mixed identity." Additionally, Hasse and Seiler (2023, 96) state that Amish Shwitzer is "a strong feature of the Swiss Amish identity." For Barranquenho, Clements, Amaral, and Garrett (2021, 231) state that speakers "came to see themselves as distinct from the Portuguese and Spanish" and that the language is largely maintained due to "its use as a marker of local identity" (Clements, Amaral, and Luís 2011, 397). For Papiamentu, Jacobs (2012, 69) suggests that it developed partly as a means for speakers of Upper Guinea Portuguese Creole to mark a new group identity or to signify acculturation to the dominant Spanish culture. Additionally, through Lustig's (1996, 2) analysis of Ramona Quebranto (the first text written entirely in Jopará), he describes Jopará as an "effective and expressive vehicle for communication among socially and culturally marginalized people" (2). Several authors (Martínez 2010; Toribio 2002, 115; Velasquez 2010) also describe

English–Spanish code-switching (see "Code-Switching") as an expression of Latino identity in diverse contexts, though Toribio (2002, 115) also notes that some individuals may reject code-switching due to associated stigma. Haitian Creole is the only language in this survey that is not described as having emerged for expressive purposes or as an ethnic identity. Instead St. Fort (2000), describes Haitian Creole as serving as a communicative bridge between slaves and masters under French colonial rule.

2.4 Conscious/deliberate creation

Researchers who have worked with mixed languages often remark that they are created quickly and consciously. In other words, the originators are typically aware that they are creating a new way of communicating based on the languages they already speak. Muysken (2007, 328–329) states that, "conscious processes of language creation will predominantly involve the lexicon (both borrowing and lexical creation) and certain aspects of pronunciation of which speakers are sufficiently aware to manipulate." He then references 'relexification' (see "Lexicalization") "as the result of conscious creation, but not the adoption of underlying grammatical patterns." With respect to their rapid formation, Jacobs (2012, 68) states that, "[i]f language mixing were an unconscious and unintended by-product of (intensive) language contact, one would expect this to occur, if at all, at a much slower rate."

While 'conscious creation' is not directly stated for Media Lengua, the language's formation seems to have involved conscious elements. Firstly, it was likely formed rapidly within a single generation (Muysken 1997, 374), and underwent relexification (see Muysken 1981). Secondly, in describing its possible origin, Stewart (2015b, 186) states that it might have developed through a "schoolyard" language, suggesting deliberate manipulation of the source languages. Additionally, Thomason (2003, 29) states that, "in Media Lengua, as in Michif, deliberate decision is likely to have been important in shaping the final form of the mixed language." Finally, there is the fact that present-day speakers are well aware of the language they use (Lipski 2017, 251), which is likely not a recent discovery for them.

With reference to Michif, Bakker (1997, 213) states that, "people of bilingual communities who consider themselves separate groups or who need a form of communication unintelligible to outsiders may develop such a mixed language, more or less consciously." Light Warlpiri presents a two-stage genesis, with O'Shannessy (2012, 306) indicating some degree of conscious creation, particularly in the initial stage. Mous (1994, 199) describes Ma'á as a consciously created lexical register by Normal Mbugu speakers, aiming to differentiate themselves. Similarly, Golovko (1994, 118) suggests that Mednyj Aleut may have started as a game or secret code, indicating a degree of intentionality in its formation. For Lánnang-uè, Gonzales (2023a, 17, 19) states that speakers "seem to be innovating Lánnang-uè by consciously attempting to suppress their knowledge of Lánnang-uè derivational morphology to preserve the integrity of their Hokkien." His findings suggest that, "the conscious and deliberate acceptance of mixing practices within the community is an important factor (perhaps a necessary condition) for the crystallization of stable multilingual practices" (2023a, 19). Jacobs (2012, 68–69) states that the development of Papiamentu appears to have been partly a conscious act, driven by a desire for a new group identity or acculturation to the dominant Spanish culture. English–Spanish code-switching (see "Code-Switching"), as discussed by Velasquez (2010, 89), involves speakers consciously navigating their bilingualism, indicating deliberate use of both languages.

According to Clements, Amaral, and Luís (2011, 402), Barranquenho's development seemed to be more of a gradual integration of Spanish traits into Portuguese, suggesting a less deliberate process. Similarly, Hasse and Seiler (2023, 113) describe Amish Shwitzer's emergence as not intentional but rather resulting from incomplete acquisition of Bernese Swiss German by Pennsylvania Dutch speakers, which was eventually adopted by the wider community. For Gurindji Kriol, McConvell and Meakins (2005, 32) state that, "much more controversial is the hypothesis of Thomason (2003, 32) that mixed languages are the products of conscious invention or deliberate decision-making on the part of the bilingual community. There is no evidence for this in the case of Gurindji Kriol."

It is difficult to find explicit statements on Haitian Creole's development as a conscious or unconscious process. However, it likely combined some conscious lexical and phonological choices, especially given arguments in favor of its formation through relexification (see Lefebvre 1998), while other elements may have come together more organically. For instance, Lefebvre (1998, 58), citing the *Atlas sociolinguistique du Bénin* (Commission nationale de linguistique du Benin 1983, 55), highlights the fact that there was some degree of mutual intelligibility in Haitian Creole's substrate languages. This might have resulted in the subconscious rearrangement of underlying grammatical patterns.

Similarly, there is no explicit reference to the conscious creation of Jopará found in the literature review. However, the first mention of Guaraní and Spanish mixing dates back to 1871 (Dudek and Clements 2021, 286). Now more than 150 years later, its status as a language is still called into question by linguists. Estigarribia (2015, 216–217) points out that Jopará is still described as an "unstable language mix" (see Lustig 1996, 1), and "a non-normalized linguistic complex" (see Palacios Alcaine 2005, 38). Only more recently has it been described as a possible third language (Bakker, Gómez Rendón, and Hekking 2008). Whichever the case, the gradual diachronic development of Jopará and its inconsistent descriptions with respect to conventionalization, suggest its development has been more organic than deliberate as observed with other mixed languages.

2.5 Stratified typology

Most documented mixed languages fall diachronically into two of the three classifications described in Section 1. Due to the rarity of the structurally converged type, this survey only includes lexicon-grammar and structural mixes. Media Lengua, as described by Muysken (1997, 365), Stewart (accepted-b), Gómez Rendón (2005, 39), and Lipski (2019, 411) is a classic example of a lexicon-grammar mixed language, combining Quichua morphosyntax with Spanish lexical forms created through relexification (see "Lexicalization"). Ma'á and Amish Shwitzer are also classified as lexicon-grammar mixes. Mous (1994, 92; 2003, 2) notes that Ma'á and Normal Mbugu share one grammar but contain parallel (distinct) vocabulary, and Hasse and Seiler (2023, 86, 105) describe Amish Shwitzer with Pennsylvania Dutch grammar and a Bernese Swiss German lexicon. Jacobs (2012, 74) also shows that Papiamentu aligns with lexicon-grammar mixed languages, characterized by a Spanish content lexicon and Upper Guinea Portuguese Creole morphosyntax.

Haitian Creole, while not classified as a mixed language (see Section 1 for characteristics that distinguish mixed languages from creoles), also demonstrates a lexicon-grammar split akin to Media Lengua. Vladman (1988, ix) states that Haitian

Creole's vocabulary is about 90 percent French-based, an observation that dates back to the 1930s when Comhaire-Sylvain (1936, 178) notes that, "we are in the presence of a French cast in the mold of African syntax, or ... an Ewe language with French vocabulary." For Barranquenho, Clements, Amaral, and Garrett (2021, 231–232) and Garrett (2021, 127) show that the language is predominantly formed with a Portuguese lexicon and Spanish grammatical structures, though it also shows significant mixing. Because of this, rather than categorizing it as a lexicon-grammar mixed language, they classify it as a "semi-shift mixed language" (Clements, Amaral, and Garrett 2021, 232).

Turning to structural mixes, Bakker (1994, 13), describing Michif, states that, "[a]t first sight, the language combines Cree verbs with French noun phrases, and in both components virtually all the complexities of both source languages are preserved." Mednyj Aleut, also classified as a structural mix, shows a noun–verb split, with Russian contributing to the finite verb phrase and Aleut to the noun phrase, as detailed by Golovko (1994, 118). Similarly, Gurindji Kriol and Light Warlpiri are both classified as structural mixes, exhibiting a split between noun and verb phrase systems (Meakins 2011b, 12; O'Shannessy 2005, 31). This split is detailed in a comparative analysis by Meakins and O'Shannessy (2012, 225) showing that for both languages, "Kriol/Aboriginal English contributes much of the verb phrase structure including the TMA systems, and the traditional languages, Warlpiri and Gurindji, supply the nominal structure, including case and derivational morphology."

Languages in this survey that do not fit into one of these typologies include Jopará, English–Spanish code-switching (see "Code-Switching"), and Lánnang-uè. For the latter, Gonzales (2022, 331) states that, "[t]here appears to be no wholesale incorporation of entire paradigms or systems from different source languages (e.g., VP morphemes from Tagalog, NP morphemes from Hokkien [etc.]...)." Instead, he observes "a finer-grained fusion of lexicon and grammatical systems." For English–Spanish code-switching (see "Code-Switching"), Toribio (2002, 97) and Hill Zirker (2007, 63) observe notable linguistic constraints that govern switching patterns. However, their patterns do not fit within the established mixed language typologies. Finally, Estigarribia (2015, 188) states that Jopará exhibits both Spanish and Guaraní matrices along with composite matrix clauses and concludes that Jopará is more of a mixed-lect (see Myers-Scotton 2002, §6.1 for a discussion on the Matrix Language framework).

2.6 Preserved/conserved systemic complexities

Because the originators of mixed languages are competent bilinguals, complexities from at least one source language are often preserved. This contrasts with the common but not always accurate perception of pidgins and creoles as languages characterized by simplification (see Kusters 2003; Trudgill 2009; see also "Sociolinguistic Typology: Complexification and Simplification"). For instance, Media Lengua's grammatical structure is comparable to monolingual Quichua and maintains complex clause structures (see also "Complex Predicate Formation"), verbal inflections, and Quichua's extensive agglutinating morphology, et cetera (Stewart accepted-b; Stewart, Prado Ayala, and Gonza Inlago 2021, v). For Michif, Bakker (1997, 10) states that, "Michif is very much unlike a pidgin in that it has neither a reduced lexicon nor a simplified grammatical system." Gillon and Rosen (2018, 104) also state that the Algonquian verb stem remains complex and there is no erosion of the Algonquian animacy system. Meakins (2011b, 99) states that Gurindji Kriol contrasts with pidgin and creole

languages through the retention of inflectional morphology from its source languages and that "the formation of [Gurindji Kriol] was not driven by a preference for simple linguistic variants" (Meakins et al. 2019, 327). Light Warlpiri retains a near-maximal phonological inventory from both source languages (Bundgaard-Nielsen and O'Shannessy 2021) and "mostly shows processes commonly seen in mixed languages – wholesale retention of structures from its sources" (O'Shannessy 2005, 329). Such preserved complexities are also complemented by innovative aspects in its auxiliary and verb systems (O'Shannessy 2012, 305–306). For Ma'á, Thomason (1983, 221) states that African pidgins, which have arisen among speakers of exclusively Bantu languages, show far more sweeping morphological reduction than the minor sorts of simplification observed in Ma'á.

In the development of Amish Shwitzer, the more complex inflectional class of contracted verbs from Bernese German, characterized by extensive suppletion, is preserved over the simpler Pennsylvania German system. Additionally, Amish Shwitzer retains the more intricate grammaticalized morphosyntactic features of Pennsylvania Dutch, like the future tense and progressive aspect, that are less developed or optional in Bernese German (Hasse, pers. comm. 2023). Jacobs (2012) does not explicitly mention preserved complexities or simplification of the morphosyntactic structure of Papiamentu. However, in his argument of Papiamentu as a mixed language, he states, "[t]he very nature of mixed languages (e.g., the absence of simplification processes in their genesis) clearly suggests that they arise in communities where fluent bilingualism is the norm" (2012, 62–63), suggesting that he is of the opinion that Papiamentu conserves complex structures from at least one of its source languages (likely Upper Guinea Portuguese Creole). In English–Spanish code-switching (see "Code-Switching"), Becker (1997, 11) highlights the maintenance of grammatical integrity in both languages to such a degree that they are akin to monolingual English and Spanish utterances. For Jopará, Estigarribia (2015, 216), referencing Boidin (2016), states that it "is not a pidgin, since it does not show the grammatical simplification that classically accompanies pidgins." For Barranquenho, Clements, Amaral, and Luís (2021, 234) state that there is no reduction in the Portuguese phonology, which could have given way to the simpler Spanish system. The language also shows mixtures in the determiner and pronominal system rather than a simplification or wholesale adoption from one source language.

Two mixed languages that have been described as containing simplified forms from both source languages are Mednyj Aleut and Lánnang-uè. For the former, Golovko, (1994, 117–118) states that, "[t]here is a certain reduction of both Aleut and Russian parts [lexical elements, derivational suffixes, verbal inflections] which were absorbed by [Mednyj] Aleut. The lexicon has shrunk compared to Bering Island Aleut, [though] the Aleut component (however reduced) is functionally the same as in 'pure' Aleut dialects. The Russian component is simplified considerably." Lánnang-uè presents a more nuanced picture, exhibiting some degree of phonological simplification (Gonzales and Starr 2020), reduction in the nominal marking from Hokkien, reduced gender marking, and the triplication of adjectives (Gonzales 2022, 333). Yet, it also conserves complex elements from Hokkien and shows increased complexity in other cases (e.g., the pronominal system, large phonemic inventory) (Gonzales 2022, 332).

Lastly, Haitian Creole's complexity is a matter of perspective. While often viewed as simplified compared to its superstratum language, French, this view changes when

compared with its substratum West African languages (Lefebvre 1998, 5). Brousseau, Filipovich, and Lefebvre (1989) investigated this and found that morphologically, affixes follow the model of the West African languages and not that of French and that "the presumed morphological simplicity of creoles reduces to the selection of the unmarked option with respect to the position of morphological heads" (1).

2.7 Single language primacy

The aspect of single language primacy in mixed languages is often overlooked due to their novel mixtures. However, identifying a dominant source language could be an important factor for understanding their formation and classification. Single language primacy is not a new concept in the mixed language debate, yet it is seldom addressed in the collective discourse on mixed languages. One exception comes by way of Grant (2002, 88) who highlights that the grammatical system of a mixed language often derives from the language best known to its creators, influencing its phonological and morphosyntactic characteristics.

Media Lengua, as described by Muysken (1997, 365), is essentially Quichua with the bulk of its stems replaced by Spanish phonological shells. This predominance of Quichua is seen not just in its grammatical structure but also in its prosody (Stewart 2015a), phonology (Stewart 2014, 2020), and semantics (Muysken 1997, 402), demonstrating a Quichua-based framework. Initial analyses of Michif suggested clear divisions between NP and VPs and maintenance of structural integrity from both source languages (Bakker 1997, 80, 116). However, recent studies have shown that the phonology of Michif is actually set in an Algonquian frame and only borrows a limited number of elements from French (Rosen et al. 2019; Rosen, Stewart, and Sammons 2020). Gillon and Rosen (2018, 141) also argue that syntactically the noun phrase acts "like an Algonquian language, and it uses French morphosyntax to create structures that the Algonquian grammar can interpret." They conclude that Michif "is an Algonquian language that has heavily borrowed from French."

From birth, Light Warlpiri speakers receive input overwhelmingly in Light Warlpiri and Warlpiri and little input from English and Kriol beyond code-switching (O'Shannessy 2012, 322). There are also indications of Warlpiri functioning as the base-language in the phonological system. O'Shannessy (2005, 35) states that, "[Light Warlpiri] words with Warlpiri as their source language follow the same phonotactic rules as Lajamanu Warlpiri." Yet, Kriol and Australian English words show variable pronunciation along a basilect-acrolect type continuum. A recent phonetic study also shows that while Light Warlpiri has a near-maximum phonology from its source languages, the ways in which the stop inventory is produced and perceived differ from that of Australian English and Kriol (Bundgaard-Nielsen and O'Shannessy 2021). However, there are some indications of a Kriol dominant influence as most verbs and verbal morphology are from Kriol (O'Shannessy 2005, 31).

For Gurindji Kriol, Meakins (2011b, 2) states that during the inception of the language, "Kriol provided most of the verb structure, inflectional morphology such as case morphology is derived from Gurindji. The result is a composite grammatical frame where neither language dominates, and both contribute to the structural character of this mixed language." However, nowadays the language seems to have an increasing influence from Kriol (Meakins, pers. comm. 2023). Yet, at the same time, there may be hints that Gurindji has a greater influence on the phonology of Gurindji Kriol as

there is more variability in stop voicing and stop-fricative production and perception compared to Kriol (McPherson et al. Submitted; Stewart et al. 2018, 2020).

For Ma'á, Mous (2003, 8) affirms that "Ma'á is structurally dependent on Normal Mbugu." Additionally, "[t]he lexicon of Ma'á is parallel to that of Mbugu; in the sense that Ma'á forms are on a par with Mbugu forms sharing semantics and formal morphological properties" (10). Therefore, Ma'á is structurally, morphologically, and semantically Mbugu (Bantu) and typically only borrows Cushitic phonological shells; very similar to Media Lengua's structure. In Mednyj Aleut, a language formed by Aleut L1 speakers, the Aleut component remains functionally intact (albeit reduced, see Section 2.6), while the Russian element is considerably simplified, particularly in verb inflection and tense usage (Golovko 1994, 118). Russian morphemes are adapted to Aleut's structural framework, leading to simplifications like the exclusion of Russian gender markers. Mednyj Aleut also preserves key Aleut syntactic features, such as causatives and transitivizers, and certain clause-linking mechanisms. The language's phonological system is also more Aleut-like, despite some Russian influence (Golovko 1994, 115–116).

For Lánnang-uè, Gonzales (pers. comm. 2023) mentions that Lánnang-uè has a stronger Hokkien influence, and the frame is clearly Hokkien, but there are some cases where this frame is not obvious. He also states that, "Lánnang-uè is situated somewhere on a continuum between 'Hokkien' and a 'mixed language', heavily leaning towards 'mixed language'" (Gonzales 2022, 337). Speaker perception also suggests Lánnang-uè is more akin to Hokkien than the other source languages. Gonzales also references Ang See's (1990, 14) statement that "many [speakers] perceive it as a dialect of Hokkien 'adulterated' by words or phrases of non-Hokkien origin" (1).

Clements, Amaral, and Garrett (2021, 231) suggest that "Barranquenho is the result of Spanish-language traits being introduced into the Portuguese spoken by the Barranquenhos." Additionally, the lexicon is "Portuguese with some use of Spanish pragmatically" (233) while "Spanish-language vocabulary is rarely used in Barranquenho and the occasions where Spanish is used are instances of codeswitching" (249). The development of Papiamentu (as per Jacobs 2012, 62–63) shows that Spanish lexicon has replaced the basic vocabulary of the Upper Guinea Portuguese Creole through relexification (see "Lexicalization"). This lexicon is embedded within a grammatical framework that is fundamentally Upper Guinea Portuguese Creole.

English–Spanish code-switching does not conform to a clear pattern of single language primacy. Instead, it is influenced by the social context and language preference of the speakers, with switches often occurring based on the dominant language of the interlocutor. Lustig (1996, 22) describes Jopará as a variation of Guaraní that incorporates Spanish lexical material into its structure, essentially forming a code that is rooted in Guaraní morphosyntax. This formation means that understanding Guaraní is crucial as it remains predominantly based on Guaraní rather than Spanish structures. According to Lefebvre (2004, 110), Haitian Creole aligns more with its substratum languages, reflecting the grammatical parameters of its creators' native languages rather than those of the superstratum, French. She states that from "a typological point of view, Haitian Creole should be classified with its substratum languages" (122). Lastly, while Amish Shwitzer likely does not have a perfect split, based on current research, it is difficult to classify as being more Bernese German or more Pennsylvania Dutch given the close genetic relationship between its source languages (Hasse, pers. comm. 2023).

2.8 Autonomy/conventionalization

Language autonomy and/or conventionalization has been referenced as an important aspect in differentiating mixed languages from other forms of language contact. These characteristics underscore the transition of a linguistic system from a state of flux to a stable, independent, often nativized language (see also "Lexical Change and Stability").

Media Lengua, while still spoken alongside its source languages, is a nativized language that maintains conservative characteristics from the Quichua and Spanish spoken during its inception in the early 1900s (Muysken 1997, 372, 374; Stewart accepted-b). Bakker (1994, 13) states that all current Michif "speakers in general know neither Cree nor French" and that it was passed down as a first language (14), both aspects of an autonomous language. For Gurindji Kriol, Meakins (2011b, 43) states that, "language autonomy may also be demonstrated by the independent developments of Gurindji Kriol ..., which are not reflected in the source languages." O'Shannessy (2005, 32) states that Light Warlpiri arose through code-switching that "conventionalized into a new language, which is now learned by children as one of their two first languages." Gonzales (2018, 111; 2022, 328) affirms that Lánnang-uè has partially separated from its source languages and is spoken natively by a distinct ethnic group, meeting the criterion for autonomy, with independent patterns and features from its source languages. Amish Shwitzer is also described by Hasse and Seiler (2023, 113) as a "stabilized mixed language," which was "nativized by [Pennsylvania Dutch] children." Clements, Amaral, and Garrett (2021, 231) suggest that "Barranquenho is the result of Spanish-language traits being introduced into the Portuguese spoken by the Barranquenhos and that over time these traits came to form part of an emerging linguistic variety that conventionalized as Barranquenho." Both Haitian Creole and Papiamentu enjoy official status in their respective countries and have a substantial native speaker base (see Grant 2008, 73, for Papiamentu; Vladman 1991, 108–110 for Haitian Creole).

Conversely, English–Spanish code-switching does not exhibit language autonomy due to its reliance on both source languages (Poplack 1980, 601). Likewise, Estigarribia (2015, 217) describes Jopará as lacking conventionalization and having an unstable linguistic mix. Lastly, little has been said about the autonomy of Ma'á, however, Mous (2003, 86) affirms that "[t]he two systems [Ma'á and Normal Mbugu] are linguistically not independent but in the speakers' views they are separate. While speaking Inner Mbugu [Ma'á] they do so as fully as possible [yet] the expected permanent and gradual switch between languages does not occur," suggesting that Ma'á is not autonomous from Normal Mbugu.

2.9 Typologically distinct

Most studies of mixed languages have traditionally focused on those with typologically/genetically unrelated source languages, which lead to clearly distinct compartmentalized structures. On the other hand, when the source languages are typologically/genetically related, the resulting mixed language often features more integrated and less distinctly separated characteristics. The differences between these types have led some researchers to categorize the latter as blended languages (see Bakker 2017, 227).

"Media Lengua is the result of mixed linguistic elements from two typologically [and genetically] unrelated languages," Spanish (Indo-European) and Quichua (Quechuan)

(Stewart 2018b, 178). Bakker (1994, 17) states that, "the typological distance between French and Cree is almost as great as can be"; Cree is a polysynthetic language and spoken French is a relatively isolating language. Gurindji Kriol and Light Warlpiri's structural and lexical foundation is drawn from distinct sources: Gurindji and Warlpiri are members of the Ngumpin-Yapa subgroup, and Kriol, an English-lexifier creole (see Meakins 2011a, 59, for Gurindji Kriol; O'Shannessy 2005, 35–36, for Light Warlpiri). Ma'á's development under prolonged bilingualism of genetically and typologically distant Bantu and Cushitic languages also exemplifies this distinctness (Mous 2003, 75). Golovko (1994, 116) states that Mednyj Aleut, blending Aleut (Inuit–Yupik–Unangan) with Russian (Indo-European), overcame typological distance, mainly in the direction from Russian to Aleut. For Lánnang-uè, Gonzales (2018, 114) states that, "its sources are typologically diverse: Hokkien is isolating, while Tagalog and English are more morphologically rich." Haitian Creole combines French (Indo-European) and Fongbe (among other Kwa (Niger-Congo) languages), which are typologically unrelated. For instance, Kwa languages do not have "derivational verbal morphology, and ... lack inflectional morphology" (Lefebvre 2004, 113; for a more extensive list of typological differences, see Lefebvre 1998, 61). Papiamento's creation involved contact between Spanish and Upper Guinea Portuguese Creole. While the lexica exhibit some degree of mutual intelligibility, the structure of both languages is quite different (Indo-European vs. Niger-Congo) (Jacobs 2012, 69). English–Spanish code-switching operates between two Indo-European languages, but they differ significantly in verbal morphology, syntactic, and prosodic structures (Morales 2014, 56). For Jopará, Estigarribia (2015, 188) states that, "Guaraní is a member of the Tupí-Guaraní branch of the Tupí linguistic family, genetically unrelated and typologically rather different from Spanish."

In this survey, only Amish Shwitzer and Barranquenho emerged from closely related languages. Amish Shwitzer emerged from Bernese German and Pennsylvania Dutch, which both form part of the West Germanic branch (Hasse and Seiler 2023, 92). For Barranquenho, Clements, Amaral, and Garrett (2021, 232) argue that it "possess[es] traits that allow it to be classified, at least in part, both as a hybridized variety ... due to typological and genetic proximity of Spanish and Portuguese [both West Iberian Romance languages]."

3 Discussion

This chapter has adopted a thematic approach synthesizing criteria used in mixed language classification. It includes a survey of 13 languages, ranging from prototypical mixed languages to code-switching. The details provided show a complex panorama that challenges the uniqueness of the criteria used in mixed language categorization. This synthesis likely leaves the reader wondering, "What exactly is a mixed language?" Throughout the literature, numerous aspects have been used to identify mixed languages, yet no single aspect, whether it be 'bilingualism', 'conscious creation', 'stratified typology', 'in-group usage', 'new identity', 'preserved complexities', 'typological/genetic source language distance', or 'autonomy', definitively classifies a language as 'mixed' (see Table 2). Instead, we see that some languages identified as mixed do not fulfill certain criteria, while others not classified as mixed meet certain criteria.

Table 2 Survey results from Section 2.

	Media Lengua	Michif	Gurindji Kriol	Light Warlpiri	Ma'á	Mednyj Aleut	Lánnang-uè	Amish Shwitzer	Barranquenho	Papiamento	Jopará	En-Sp CS	Haitian Creole
Source language bilingualism	✓	✓	✓	✓	✓	✓	✓	X	✓	?	X	✓	X
In-group/ secret usage	✓	✓	✓	✓	✓	✓	✓	✓	✓	X	✓	✓	X
Expressive purpose/ New identity	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	X
Conscious creation	✓	✓	X	✓	✓	✓	✓	X	X	✓	X	✓	?
Stratified typology	✓	✓	✓	✓	✓	✓	X	✓	X	✓	X	X	✓
Preserved complexities	✓	✓	✓	✓	✓	X	?	✓	✓	✓	✓	✓	✓
Single language primacy	✓	✓	X	✓	✓	✓	✓	?	✓	✓	✓	X	✓
Autonomy/ Conventionalized	✓	✓	✓	✓	X	✓	✓	✓	✓	✓	X	X	✓
Typologically distinct	✓	✓	✓	✓	✓	✓	✓	X	X	X	✓	✓	✓

For instance, Amish Shwitzer, (a mixed language, as per Hasse and Seiler 2023), challenges the notion that mixed languages only arise from competent bilinguals, while Barranquenho (argued to be a case of semi-shift in Clements, Amaral, and Garrett 2021), shows that non-mixed languages also emerge from bilingual ecologies. Similarly, the emergence of languages like Gurindji Kriol and Haitian Creole contradicts the idea that conscious creation is a necessary element, with descriptions of Gurindji Kriol (mixed language) suggesting that it emerged organically, while Haitian Creole (creole language) emerged partially through the conscious process of relexification (see "Lexicalization"). These differences not only underscore the sociohistorical contexts within which these languages evolve, but also highlight the diachrony that captures how the diverse typologies of the source languages influence their structural aspects over time. This survey shows that languages not classified as mixed, or with debatable classifications, can show the same types of stratified typologies (e.g., structural mixing vs. lexicon-grammar splits) as mixed languages (e.g., Haitian Creole, Papiamentu), while Lánnang-uè, a language that checks nearly all the boxes for mixed language-hood, shows finer grade fusion rather than clear compartmentalization. Even language autonomy as a criterion is not adequate on its own to classify a language as mixed. For instance, Ma'á (mixed language) remains dependent on one of its source languages, while Barranquenho, Papiamentu, and Haitian Creole are all considered as conventionalized languages. Given the bilingual ecologies in which mixed languages emerge, it might be expected that source language complexities are retained from at least one source language. While this is mostly the case, Mednyj Aleut (mixed language) calls this into question, while source language complexities are found in all other non-mixed languages surveyed. Finally, this survey calls into question typological/genetic distance among the source languages, with languages like Papiamentu (specifically its lexicon) and Amish Shwitzer (both arguably mixed languages) having emerged from typologically and genetically related languages.

Refinement to some of these criteria may be warranted to improve their accuracy and applicability in identifying/classifying mixed languages diachronically. For instance, 'source language bilingualism' needs to be expanded to multilingualism (to include languages like Light Warlpiri and Lánnang-uè), though neither are necessary if the source languages have a relatively high degree of mutual intelligibility (e.g., Amish Shwitzer and Papiamentu). 'Conscious creation' seems to hinge on whether mixed language formation was rapid vs. gradual, yet neither appear to affect the overall outcome. For instance, both Media Lengua and Gurindji Kriol have a substantial literature classifying them both as mixed languages, yet they check the 'conscious creation' box differently. Similarly, it is questionable as to whether a mixed language must align with one of the three mixed-language typologies described in Section 1, as two varieties surveyed challenge this notion. The typologies of both Lánnang-uè and English–Spanish code-switching do not align with lexicon-grammar and structural mix typologies, yet this likely is not enough to exclude the former given all other indicators suggest that it is a mixed language. A less rigid criterion like 'conventionalization of extensive mixed elements' might be more applicable, thus allowing for the inclusion of languages like Lánnang-uè, while still excluding actual code-switching of the English–Spanish type described in this chapter. Additionally, typologically relatedness only seems to be akin to the level of difficulty in identifying conventionalization or compartmentalization of different source elements, rather than being a decisive factor in determining a language's classification as 'mixed'.

The concept of single language primacy implies that contact languages have a dominant or more influential source language from which they emerge. In a lexicon-grammar mixed language, the dominant source language typically provides the structural base of the mixed language (e.g., Quichua morphosyntax, word order, phonology, and semantics in Media Lengua), while in structural mixed languages the dominant source language typically has a greater influence on the material provided by the non-dominant language (e.g., changes in grammatical gender in the French origin noun phrase in Michif). Identifying this language could be used to classify a mixed language within that language's broader family (see "Family Tree Model"). This is likely more accurate than the continued use of generic 'mixed language' categories comprised of unrelated languages. This approach has already been applied to Michif in Glottolog (Nordhoff et al. 2023), but not in Ethnologue (Eberhard, Simons, and Fennig 2020), as of the writing of this chapter. Similar considerations should be made for Media Lengua and might be beneficial for other mixed languages as well.

Finally, are mixed languages unique? In short yes, and no. The survey of languages in this chapter reveals that there is no single defining characteristic that sets mixed languages apart from other forms of language contact. Yet, mixed languages seem to enjoy a position on the extreme end of a contact language continuum, a result clearly in line with Thomason (1995). This suggests that mixed language-hood is more about accumulative criteria, rather than meeting a single criterion. Therefore, the more criteria a contact language meets, the higher on the contact language continuum it could be placed, with 'mixed languages' at one end and occasional lexical borrowings on the other. This extreme position is unique in that few languages are found here. Therefore, they warrant some recognition as they represent the most radical result of social, cultural, and linguistic contact. However, within the broad category of 'contact languages', there is little evidence that mixed languages, or other contact languages for that matter,

warrant separate linguistic classifications outside of their sociohistorical genesis or as markers along the contact language continuum.

SEE ALSO: Acoustic-Perceptual Factors in the Actuation of Sound Change; (Basic) Word Order; Borrowing of Linguistic Rules; Code-Switching; Complex Predicate Formation; Contact and Borrowing; Convergence and Linguistic Areas; Family Tree Model; Language Shift, Obsolescence, and Death; Lexical Change and Stability; Lexicalization; Reanalysis and Restructuring; Sociolinguistic Typology: Complexification and Simplification; Typology of Prosodic Organization.

Abbreviations

INST = instrumental; ACC = accusative; PST = past; ERG = ergative; TR=transitive; LOC=locative

Acknowledgments

I would like to thank Wilkinson Gonzales, Anja Hasse, and Felicity Meakins for taking the time to discuss with me aspects of the languages that they work with.

Notes

1. I use *frame* to refer to the structural skeleton or template of a language that provides its (morpho)syntactic structure, which can be filled with lexical items from (an)other language(s). This contrasts with *matrix language*, typically used in code-switching research to refer to the dominant language in code-switching production.
2. Here I refer to intra- and intersectional code-switching by fluent bilinguals, not the emergence of a possible 'mixed language' spoken in Puerto Rico, which "retains phonological, morphological, and syntactic, structure of Puerto Rican Spanish [but where] much of its vocabulary is English-derived" (Nash 1970).

References and Suggested Readings

Ang See, Teresita. 1990. *The Chinese in the Philippines: Problems and Perspectives*, vol. 1. Manila: Kaisa para Sa Kaunlaran.

Bakker, Dik, Jorge Gómez Rendón, and Ewald Hekking. 2008. "Spanish Meets Guaraní, Otomí, and Quechua: A Multilingual Confrontation." In *Aspects of Language Contact: New Theoretical, Methodological and Empirical Findings with Special Focus on Romancisation Processes*, 165–238. Berlin: Mouton De Gruyter.

Bakker, Peter. 1994. "Michif, the Cree-French Mixed Language of the Métis Buffalo Hunters in Canada." In *Mixed Languages: 15 Case Studies in Language Intertwining*, edited by Peter Bakker and Maarten Mous, 13–33. Amsterdam: Institute for Functional Research into Language and Language Use (IFOTT).

Bakker, Peter. 1997. *A Language of Our Own: The Genesis of Michif, the Mixed Cree-French Language of the Canadian Metis*. New York: Oxford University Press.

Bakker, Peter. 2003. "Mixed Languages as Autonomous Systems." In *The Mixed Language Debate: Theoretical and Empirical Advances*, edited by Yaron Matras and Peter Bakker, 107–149. Berlin: Walter de Gruyter.

Bakker, Peter. 2017. "Typology of Mixed Languages." In *The Cambridge Handbook of Linguistic Typology*, edited by Alexandra Aikhenvald and R.M.W. Dixon, 217–253. Cambridge: Cambridge University Press.

Bakker, Peter, and Maarten Mous, eds. 1994. *Mixed Languages: Fifteen Case Studies in Language Intertwining*. Amsterdam: Institute for Functional Research into Language and Language Use.

Becker, Kristin R. 1997. "Spanish/English Bilingual Codeswitching: A Syncretic Model." *Bilingual Review/La Revista Bilingüe* 22 (1): 3–30. https://www.jstor.org/stable/25745367.

Boidin, Capucine. 2016. "Jopara: Una Vertiente Sol y Sombra del Mestizaje." In *Tupí y Guaraní: Estructuras, Contactos y Desarrollos*, edited by Wolf Dietrich and Haralambos Symeonidis, vol. 11: 303–331. Münster: Lateinamerika – Zentrum/Centro Latinoamericano de l'Université de Münster: LIT http://halshs.archives-ouvertes.fr/halshs-00257767.

Boretzky, Norbert, and Birgit Igla. 1994. "Romani Mixed Dialects." In *Mixed Languages: 15 Case Studies in Language Intertwining*, edited by Peter Bakker and Maarten Mous, 35–68. Amsterdam: Institute for Functional Research into Language and Language Use (IFOTT).

Brousseau, Anne-Marie, Sandra Filipovich, and Claire Lefebvre. 1989. "Morphological Processes in Haitian Creole: The Question of Substratum and Simplification." *Journal of Pidgin and Creole Languages* 4 (1): 1–36. DOI: 10.1075/jpcl.4.1.02bro.

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

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: 10.1016/j.wocn.2021.101037.

Carvalho, Ana Maria, and Dante Lucchesi. 2016. "Portuguese in Contact." In *The Handbook of Portuguese Linguistics*, edited by Leo Wetzels, Sergio Menuzzi, and João Costa, 41–55. Chichester: Wiley.

Clements, J. Clancy, Patrícia Amaral, and Jordan Garrett. 2021. "Social Identity and the Formation and Development of Barranquenho." In *New Perspectives on Mixed Languages: From Core to Fringe*, edited by Maria Mazzoli and Eeva Sippola, 225–252. Berlin: De Gruyter Mouton.

Clements, J.C., P. Amaral, and A. Luís. 2008. "Cultural Identity and the Structure of a Mixed Language: The Case of Barranquenho." In *Proceedings of the Thirty-Fourth Annual Meeting of the Berkeley Linguistics Society*, February 8–10, edited by Sarah Berson, Alex Bratkievich, Daniel Bruhn, Amy Campbell, Ramon Escamilla et al., 13–22.

Clements, J. Clancy, Patrícia Amaral, and Ana Luís. 2011. "Spanish in Contact with Portuguese: The Case of Barranquenho." In *The Handbook of Hispanic Sociolinguistics*, edited by Manuel Díaz-Campos, 395–417. Oxford: Wiley Blackwell.

Comhaire-Sylvain, S. 1936. *Le Créole Haïtien: Morphologie et Syntaxe*. Wetteren: De Meester.

Commission nationale de linguistique du Benin. 1983. "Créole Haïtien." In *Atlas sociolinguistique du Bénin*, 55. Abidjan: Commission nationale linguistique du Bénin.

De Fina, Anna. 2007. "Code-Switching and the Construction of Ethnic Identity in a Community of Practice." *Language in Society* 36 (3): 371–92. DOI: 10.1017/S0047404507070182.

Dudek, Elizabeth Herring, and J. Clancy Clements. 2021. "Jopara as a Case of a Variable Mixed Language." In *New Perspectives on Mixed Languages: From Core to Fringe*, edited by Maria Mazzoli and Eeva Sippola, 277–297. Berlin: De Gruyter.

Eberhard, David M., Gary Simons, and Charles Fennig. 2020. *Ethnologue: Languages of the World*, 23rd ed. Dallas: SIL International. http://ethnologue.com.

Estigarribia, Bruno. 2015. "Guaraní-Spanish Jopara Mixing in a Paraguayan Novel: Does It Reflect a Third Language, a Language Variety, or True Codeswitching?" *Journal of Language Contact* 8: 183–222.

Foley, William A. 1988. "Language Birth: The Processes of Pidginisation and Creolisation." In *Linguistics: The Cambridge Survey*, edited by Frederick J. Newmeyer, 162–183. London: Cambridge University Press.

Garrett, Jordan. 2021. "Me Gohtaba Ehta Linguaji Arranquenha: Variable Object Clitics in Barrancos, Portugal." In *East and West of the Pentacrest: Linguistic Studies in Honor of Paula Kempchinsky*, edited by Timothy Gupton and Elizabeth Gielau, 109–134. Amsterdam: John Benjamins.

Gillon, Carrie, and Nicole Rosen. 2018. *Nominal Contact in Michif*. Oxford: Oxford University Press.

Golovko, Eugeniv V. 1994. "Mednyj Aleut or Copper Island Aleut: An Aleut-Russian Mixed Language." In *Mixed Languages: 15 Case Studies in Language Intertwining*, edited by Peter Bakker and Maarten Mous, 113–121. Amsterdam: Uitgave IFOTT.

Gómez Rendón, Jorge. 2005. "La Media Lengua de Imbabura." In *Encuentros y Conflictos: Bilingüismo y Contacto de Lenguas en el Mundo Andino*, edited by Hella Olbertz and Pieter Muysken, 39–58. Madrid: Iberoamericana.

Gómez Rendón, Jorge. 2008. *Mestizaje Linguístico en los Andes: Génesis y Estructura de una Lengua Mixta*. Quito: Abya-Yala.

Gonzales, W.D.W. 2018. "Philippine Hybrid Hokkien as a Postcolonial Mixed Language: Evidence from Nominal Derivational Affixation Mixing." MA thesis, National University of Singapore.

Gonzales, W.D.W. 2022. "'Truly a Language of Our Own': A Corpus-Based, Experimental, and Variationist Account of Lánnang-Uè in Manila." PhD diss., University of Michigan. DOI: 10.7302/4693.

Gonzales, W.D.W. 2023a. "Spread, Stability, and Sociolinguistic Variation in Multilingual Practices: The Case of Lánnang-Uè and Its Derivational Morphology." *International Journal of Multilingualism* 20: 1–23. DOI: 10.1080/14790718.2023.2199998.

Gonzales, W.D.W. 2023b. "Variability in Clusters and Continuums: The Sociolinguistic Situation of the Manila Lannangs in the 2010s." *Asia-Pacific Language Variation* 9 (1): 83–124. DOI: 10.1075/aplv.22009.gon.

Gonzales, W.D.W., and Rebecca Lurie Starr. 2020. "Vowel System or Vowel Systems? Variation in the Monophthongs of Philippine Hybrid Hokkien in Manila." *Journal of Pidgin and Creole Languages* 35 (2): 253–292. DOI: 10.1075/jpcl.00061.won.

Grant, Anthony P. 1994. "Shelta: The Secret Language of Irish Travellers Viewed as a Mixed Language." In *Mixed Languages: 15 Case Studies in Language Intertwining*, edited by Peter Bakker and Maarten Mous, 123–50. Amsterdam: Institute for Functional Research into Language and Language Use (IFOTT).

Grant, Anthony P. 2002. "Language Intertwining." In *Creolization and Contact*, edited by Smith Norval and Tonjes Veenstra, 81–112. Amsterdam: John Benjamins.

Grant, Anthony P. 2008. "A Constructionist Approach to the Early History of Papiamentu." In *Linguistic Studies in Papiamentu*, edited by N. Faraclas, R. Severing, and C. Weijer, 73–116. Willemstad: Fundashon pa Planifikashon di Idioma.

Hannß, Katja. 2022. "Linguistic Manipulations in Kallawaya." In *New Perspectives on Mixed Languages: From Core to Fringe*, 189–223. Berlin: De Gruyter Mouton.

Hasse, Anja, and Guido Seiler. 2023. "Social Factors in Mixed Language Emergence: Solving the Puzzle of Amish Shwitzer." In *Sociolinguistic and Typological Perspectives on Language Variation*, edited by Ballarè Silvia and Inglese Guglielmo, 85–120. Berlin: De Gruyter Mouton.

Hill Zirker, Kelly Ann. 2007. "Intrasentential vs. Intersentential Code Switching in Early and Late Bilinguals." Master's thesis, Brigham Young University. https://scholarsarchive.byu.edu/cgi/viewcontent.cgi?article=1926&context=etd.

Hymes, Dell. 1971. "Introduction." In *Pidginization and Creolization of Languages: Proceedings of a Conference Held at the University of West Indies, Mona, Jamaica, April 1968*, edited by Dell Hymes, 65–91. London: Cambridge University Press.

Jacobs, Bart. 2012. "Embedding Papiamentu in the Mixed Language Debate." *Journal of Historical Linguistics* 2 (1): 52–82. DOI: doi.org/10.1075/jhl.2.1.05jac.

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." MA thesis, Pontificia Universidad Católica Del Ecuador.

Jarva, V. 2008. "Old Helsinki Slang and Language Mixing." *Journal of Language Contact* 1: 52–80.

Jones, Caroline, and Felicity Meakins. 2013a. "The Phonological Forms and Perceived Functions of Janyarrp, the Gurindji 'Baby Talk' Register." *Lingua* 134: 170–193.

Jones, Caroline, and Felicity Meakins. 2013b. "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 Heather Buchan. 2011. "Comparing Vowels in Gurindji Kriol and Katherine English: Citation Speech Data." *Australian Journal of Linguistics* 31: 305–326.

Jones, Caroline, Felicity Meakins, and Shujau Mauwiyath. 2012. "Learning Vowel Categories from Maternal Speech in Gurindji Kriol." *Language Learning* 64: 1052–1078. DOI: 10.1111/j.1467-9922.2012.00725.x.

Kossmann, Maarten. 1994. "Amarna-Akkadian as a Mixed Language." In *Mixed Languages: 15 Case Studies in Language Intertwining*, edited by Peter Bakker and Maarten Mous, 169–173. Amsterdam: Institute for Functional Research into Language and Language Use (IFOTT).

Kusters, Wouter. 2003. *Linguistic Complexity: The Influence of Social Change on Verbal Inflection*. Utrecht: LOT Dissertations.

Lefebvre, Claire. 1998. *Creole Genesis and the Acquisition of Grammar: The Case of Haitian Creole*. Cambridge: Cambridge University Press.

Lefebvre, Claire. 2004. "The Relexification Account of Creole Genesis: The Case of Haitian Creole." In *Issues in the Study of Pidgin and Creole Languages*, edited by Claire Lefebvre, 59–180. Amsterdam: John Benjamins.

Lipski, John. 2017. "Ecuadoran Media Lengua: More Than a 'Half'-Language?" *International Journal of American Linguistics* 83 (2): 233–262.

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

Lustig, Wolf. 1996. "Mba'éichapa Oiko La Guarani? Guarani y Jopara En El Paraguay." *Papia* 4 (2): 19–43.

Martínez, Ramón Antonio. 2010. "'Spanglish' as Literacy Tool: Toward an Understanding of the Potential Role of Spanish–English Code-Switching in the Development of Academic Literacy." *Research in the Teaching of English* 45 (2): 124–149.

Matras, Yaron, and Peter Bakker. 2003. "The Study of Mixed Languages." In *The Mixed Language Debate: Theoretical and Empirical Advances*, edited by Yaron Matras and Peter Bakker, 1–20. Berlin: Walter de Gruyter.

Matras, Yaron, H. Gardner, C. Jones, and V. Schulman. 2007. "Angloromani: A Different Kind of Language?" *Anthropological Linguistics* 49 (2): 142–184.

Mazzoli, Maria, and Eeva Sippola, eds. 2021. *New Perspectives on Mixed Languages: From Core to Fringe*. Berlin: De Gruyter Mouton.

Mazzoli, Maria, and Eeva Sippola. 2022. "Mixed Languages from Core to Fringe: Introduction to the Volume." In *New Perspective on Mixed Languages: From Core to Fringe*, edited by Maria Mazzoli and Eeva Sippola, 1–27. Berlin: De Gruyter Mouton. DOI: 10.1515/9781501511257-001.

McConvell, Patrick, and Felicity Meakins. 2005. "Gurindji Kriol: A Mixed Language Emerges from Code-Switching." *Australian Journal of Linguistics* 25: 9–30.

McPherson, Leah, Felicity Meakins, Erich Round, and Jesse Stewart. Submitted. "What Drives the Presence of English-like Frication in Kriol-Derived Words in Gurindji Kriol? (An Instrumental Production Study.)"

McWhorter, John. 2001. "The World's Simplest Grammars Are Creole Grammars." *Linguistic Typology* 5 (2–3): 125–166.

Meakins, Felicity. 2011a. "Borrowing Contextual Inflection: Evidence from Northern Australia." *Morphology* 21: 57–87. DOI: 10.1007/s11525-010-9163-4.

Meakins, Felicity. 2011b. *Case Marking in Contact: The Development and Function of Case Morphology in Gurindji Kriol*. Amsterdam: John Benjamins.

Meakins, Felicity. 2012. "Which Mix? – Code-Switching or a Mixed Language – Gurindji Kriol." *Journal of Pidgin and Creole Language* 27 (1): 105–140.

Meakins, Felicity. 2013a. "Gurindji Kriol." In *The Survey of Pidgin and Creole Languages*, edited by Susanne Michaelis, Philippe Maurer, Martin Haspelmath, and Magnus Huber, 3: 131–139. Oxford: Oxford University Press.

Meakins, Felicity. 2013b. "Mixed Languages." In *Contact Languages: A Comprehensive Guide*, edited by Yaron Matras and Peter Bakker, 159–228. Berlin: Mouton de Gruyter.

Meakins, Felicity. 2016. "Mixed Languages." In *Oxford Research Encyclopedia of Linguistics*. Oxford: Oxford University Press. DOI: 10.1093/acrefore/9780199384655.013.151.

Meakins, Felicity. 2023. "The Third Space in the Fourth Column: Revisiting the Role of Agency in the Formation of Creoles." *Journal of Pidgin and Creole Languages* 38 (2): 431–445. DOI: 10.1075/jpcl.00117.mea.

Meakins, Felicity, Xia Hua, Cassandra Algy, and Lindell Bromham. 2019. "Birth of a Contact Language Did Not Favor Simplification." *Language* 92 (2): 294–332. DOI: 10.1353/lan.2019.0032.

Meakins, Felicity, and Carmel O'Shannessy. 2012. "Typological Constraints on Verb Integration in Two Australian Mixed Languages." *Journal of Language Contact* 5 (2): 216–246. DOI: 10.1163/19552629-006001001.

Meakins, Felicity, and Jesse Stewart. 2022. "Mixed Languages." In *The Cambridge Handbook of Language Contact in Population Structure*, edited by Salikoko Mufwene and Anna Maria Escobar. Cambridge: Cambridge University Press.

Michaelis, Susanne, Philippe Maurer, Martin Haspelmath, and Magnus Huber, eds. 2013. *The Survey of Pidgin and Creole Languages*, vol. 3. Oxford: Oxford University Press.

Morales, Alexandra. 2014. "Production and Comprehension of Verb Agreement Morphology in Spanish and English Children L2 Learners: Evidence for the Effects of Morphological Structure." PhD diss., University of Illinois at Urbana-Champaign. https://www.proquest.com/docview/1639029567 .

Mous, Maarten. 1994. "Ma'á or Mbugu." In *Mixed Languages: 15 Case Studies in Language Intertwining*, edited by Peter Bakker and Maarten Mous, 175–200. Amsterdam: Institute for Functional Research into Language and Language Use (IFOTT).

Mous, Maarten. 2002. "Paralexification in Language Intertwining." In *Creolization and Contact*, edited by Smith Norval and Tonjes Veenstra, 113–124. Amsterdam: John Benjamins.

Mous, Maarten. 2003. *The Making of a Mixed Language: The Case of Ma'á/Mbugu*. Amsterdam: John Benjamins.

Mous, Maarten. 2005. "Yaaku and Ma'á: An Endangered Language and the Way Out." In *Creating Outsiders: Endangered Languages, Migration and Marginalisation. Proceedings of the Ninth FEL Conference, Stellenbosch, South Africa, 18–20 November 2005*, edited by Nigel Crawhall and Nicholas Ostler, 55–58.

Muysken, Pieter. 1981. "Halfway between Quechua and Spanish: The Case for Relexification." In *Historicity and Variation in Creole Studies*, edited by Arnold R. Highfield and Albert Valdman, 52–78. Ann Arbor: Karoma Publishers.

Muysken, Pieter. 1994. "Callahuaya." In *Mixed Languages: 15 Case Studies in Language Intertwining*, edited by Peter Bakker and Maarten Mous, 207–211. Amsterdam: Institute for Functional Research into Language and Language Use (IFOTT).

Muysken, Pieter. 1997. "Media Lengua." In *Contact Languages: A Wider Perspective*, edited by Sarah Thomason, 365–426. Amsterdam: John Benjamins.

Muysken, Pieter. 2007. "Mixed Codes." In *Handbook of Multilingualism and Multilingual Communication*, edited by Peter Auer and Li Wei, 315–339. Berlin: Mouton de Gruyter.

Muysken, Pieter. 2013. "Two Linguistic Systems in Contact: Grammar, Phonology, and Lexicon." In *The Handbook of Bilingualism and Multiculturalism*, edited by Tej K. Bhatia and William C. Ritchie, 2nd ed., 193–215. Malden, MA: Blackwell.

Myers-Scotton, Carol. 2002. *Contact Linguistics: Bilingual Encounters and Grammatical Outcomes*. Oxford: Oxford University Press.

Nash, Rose. 1970. "Spanglish: Language Contact in Puerto Rico." *American Speech* 45 (3–4): 223–233. https://www.jstor.org/stable/454837 .

Noonan, Michael. 2010. "Genetic Classification and Language Contact." In *The Handbook of Language Contact*, edited by Raymond Hickey, 48–65. Oxford: Wiley Blackwell.

Nordhoff, S. 2009. *A Grammar of Upcountry Sri Lanka Malay*. Utrecht: LOT.

Nordhoff, Sebastian, ed. 2012. *The Genesis of Sri Lanka Malay: A Case of Extreme Language Contact*. Leiden: Brill.

Nordhoff, Sebastian, Harald Hammarström, Robert Forkel, and Martin Haspelmath. 2023. Glottolog Database 4.8. Leipzig: Max Planck Institute for Evolutionary Anthropology. DOI: 10.5281/zenodo.8131084.

Onosson, Sky, and Jesse Stewart. 2021a. "The Effects of Language Contact on Non-Native Vowel Sequences in Lexical Borrowings: The Case of Media Lengua." *Language and Speech* 0 (0): 1–30. DOI: 10.1177/00238309211014911.

Onosson, Sky, and Jesse Stewart. 2021b. "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: 10.5334/labphon.291.

Onosson, Sky, and Jesse Stewart. 2023. "Cotopaxi Media Lengua Vowels: A Preliminary Analysis." In *Proceedings of the 20th International Congress of Phonetic Sciences*, 3360–3365.

O'Shannessy, Carmel. 2005. "Light Warlpiri – A New Language." *Australian Journal of Linguistics* 25 (1): 31–57.

O'Shannessy, Carmel. 2012. "The Role of Codeswitched Input to Children in the Origin of a New Mixed Language." *Linguistics* 50 (2): 305–340.

O'Shannessy, Carmel. 2016. "Distributions of Case Allomorphy by Multilingual Children." *Linguistic Variation* 16 (1): 68–102. DOI: 10.1075/lv.16.1.04osh.

Palacios Alcaine, Azucena. 2005. "Lenguas en Contacto en Paraguay: Español y Guaraní." In *Variedades Lingüísticas y Lenguas en Contacto en el Mundo de Habla Hispana*, edited by Carmen Ferrero and Nilsa Lasso-von Lang, 35–43. Bloomington: Books Library.

Palacios Alcaine, Azucena. 2008. "Paraguay." In *El Español en América: Contactos Lingüísticos en Hispanoamérica*, edited by Azucena Palacios Alcaine, 279–300. Barcelona: Ariel.

Pecht, Nantke. 2021. "Pronominal Usage in Cité Duits, a Dutch-German-Limburgish Contact Variety." In *New Perspectives on Mixed Languages: From Core to Fringe*, edited by Maria Mazzoli and Eeva Sippola, 299–323. Berlin: De Gruyter Mouton.

Poplack, Shana. 1980. "Sometimes I'll Start a Sentence in Spanish y TERMINO EN ESPAÑOL: Toward a Typology of Code-Switching," *Linguistics* 18 (7–8): 581–618. DOI: 10.1515/ling.1980.18.7-8.581.

Rosen, Nicole. 2006. "Language Contact and Michif Stress Assignment." *Sprachtypol. Univ. Forsch (STUF)* 59: 170–190.

Rosen, Nicole. 2007. "Domains in Michif Phonology." PhD diss., University of Toronto.

Rosen, Nicole, Jesse Stewart, Michele Pesch-Johnson, and Olivia Sammons. 2019. "Michif VOT." In *Proceedings of the 19th International Conference of Phonetic Sciences (ICPhS)*, edited by Sasha Calhoun, Paola Escudero, Marija Tabain, and Paul Warren, 3593–3597.

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): 2989–2999. DOI: 10.1121/10.0001009.

Seiler, Guido. 2017. "On the Emergence of Grammar-Lexicon Mixed Languages: The Case of Amish Shwitzer." In *SLE 2017 Book of Abstracts*, 211. Zurich: Societas Linguistica Europaea 50.

https://societaslinguistica.eu/wp-content/uploads/2020/03/SLE-2017-Book-of-abstracts.pdf.

St. Fort, Hugues. 2000. "What Is Haitian Creole?" *Créole Connection* 11 (20). http://faculty.webster.edu/corbetre/haiti-archive/msg02164.html.

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.

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

Stewart, Jesse. 2014. "A Comparative Analysis of Media Lengua and Quichua Vowel Production." *Phonetica* 7: 159–182. DOI: 10.1159/000369629.

Stewart, Jesse. 2015a. "Intonation Patterns in Pijal Media Lengua." *Journal of Language Contact* 8 (2): 223–262. DOI: 10.1163/19552629-00802003.

Stewart, Jesse. 2015b. "Production and Perception of Stop Consonants in Spanish, Quichua, and Media Lengua." PhD diss., University of Manitoba. DOI: 10.1159/000369629.

Stewart, Jesse. 2018a. "Voice Onset Time Production in Spanish, Quichua, and Media Lengua." *Journal of the International Phonetic Association* 48 (2): 173–197. DOI: 10.1017/S002510031700024X.

Stewart, Jesse. 2018b. "Vowel Perception by Native Media Lengua, Quichua, and Spanish Speakers." *Journal of Phonetics* 71: 177–193. DOI: 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*, edited by Rajiv Rao. Amsterdam and Philadelphia: John Benjamins. DOI: 10.1121/10.0000991.

Stewart, Jesse. accepted-a. "Media Lengua." *The Archive of Indigenous Languages of Latin America (AILLA).* https://ailla.utexas.org.

Stewart, Jesse. accepted-b. "Media Lengua in the Ecuadorian Andes." In *Contact Varieties of Spanish and Spanish-Lexified Contact Varieties*, edited by Leonardo Cerno, Hans-Jörg Döhla, Miguel Gutiérrez Maté, Robert Hesselbach, and Joachim Steffen. Berlin: Mouton de Gruyter.

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. 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 Maria Mazzoli and Eeva Sippola, 57–92. 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): 2766–2778. DOI: 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." In *Proceedings of the 20th International Congress of Phonetic Sciences*, edited by Radek Skarnitzl and Jan Volín, 3311–3315.

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*. Lexington: Lulu. https://www.lulu.com/en/gb/shop/lucia-gonza-inlago-and-gabriela-prado-ayala-and-jesse-stewart/chaupishimipa-diccionarioca/hardcover/product-r4n6dr.html?page=1&pageSize=4 .

Thomason, Sarah. 1983. "Genetic Relationship and the Case of Ma'á." *Studies in African Linguistics* 14 (2): 195–232. DOI: 10.32473/sal.v14i2.

Thomason, Sarah. 1995. "Ordinary Processes, Extraordinary Results." In *Spanish in Four Continents*, edited by C. Silva-Corvalan, 15–34. Washington, DC: Georgetown University Press.

Thomason, Sarah, ed. 1997. *Contact Languages: A Wider Perspective*. Amsterdam: John Benjamins.

Thomason, Sarah. 2003. "Social Factors and Linguistic Processes in the Emergence of Stable Mixed Languages." In *The Mixed Language Debate: Theoretical and Empirical Advances*, edited by Yaron Matras and Peter Bakker, 21–40. Berlin: Mouton de Gruyter.

Thomason, Sarah, and Terrence Kaufman. 1988. *Language Contact, Creolization, and Genetic Linguistics*. Berkeley: University of California Press.

Toribio, Almeida J. 2002. "Spanish–English Code-Switching among US Latinos." *International Journal of the Sociology of Language* 158: 89–119. DOI: 10.1515/ijsl.2002.053.

Trudgill, Peter. 2009. "Sociolinguistic Typology and Complexification." In *Language Complexity as an Evolving Variable*, edited by Geoffrey Sampson, David Gil, and Peter Trudgill, 97–108. Oxford: Oxford University Press.

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.

Velasquez, Maria Cecilia. 2010. "Language and Identity: Bilingual Code-Switching in Spanish–English Interviews." Master's thesis, University of Toronto. https://tspace.library.utoronto.ca/bitstream/1807/25679/1/Velasquez_Maria_C_201011_MA_Thesis.pdf.

Velupillai, Viveka. 2015. *Pidgins, Creoles and Mixed Languages: An Introduction*. Amsterdam and Philadelphia: John Benjamins.

Versteegh, Kees. 2017. "The Myth of the Mixed Languages." In *Advances in Maltese Linguistics*, edited by Benjamin Saade and Mauro Tosco. Berlin: De Gruyter Mouton. DOI: 10.1515/9783110565744-011.

Vladman, Albert. 1988. "Ann Pale Kreyol: An Introductory Course in Haitian Creole." Guides – Classroom Use – Teaching Guides (For Teacher) 52. Indiana University, Bloomington. https://files.eric.ed.gov/fulltext/ED356617.pdf.

Vladman, Albert. 1991. "The Deminorization of Haitian Creole." *Beroamericana* 42 (1): 108–126. https://www.jstor.org/stable/41671245 .

Winford, Donald. 2003. *An Introduction to Contact Linguistics*. Malden, MA: Blackwell.