

Jenneke van der Wal* and Tonjes Veenstra

The long and short of verb alternations in Mauritian Creole and Bantu languages

Abstract: Mauritian Creole displays an alternation between a short and a long form of the verb, which is reminiscent of the conjoint–disjoint alternation found in some eastern Bantu languages. Based on comparison with other French-based creoles and socio-historical evidence, we conclude that the Bantu substrate must have had an impact on the grammatical system of Mauritian Creole. We compare the synchronic properties of the alternations in Mauritian Creole and the most likely substrate Bantu languages of northern Mozambique and examine two possible scenarios for the influence of Bantu on the Mauritian verbal alternation, concluding that probably only the (syntactic) basics of the Bantu alternation motivated the persistence of the alternation in Mauritian Creole.

Keywords: Bantu, creole, conjoint/disjoint alternation, language contact, focus

DOI 10.1515/flin-2015-0003

Submitted August 8, 2013; Revision invited May 23, 2014; Revision received July 25, 2014;

Accepted August 18, 2014

1 Introduction

Mauritian Creole is a French-related creole spoken on the island of Mauritius, which developed out of the contact between French, the superstrate language, and several typologically diverse substrate languages of Austronesian, Eastern Bantu, Niger-Congo, Dravidian, and Indo-Aryan origin. As in some other French-related creoles, a distinction is made between long and short forms of verbs, as illustrated in (1) for *ferme* vs. *ferm*:

*Corresponding author: **Jenneke van der Wal**, Faculty of Modern & Medieval Languages, University of Cambridge, Sidgwick Avenue, Cambridge CB3 9DA, UK, E-mail: jennekevanderwal@gmail.com

Tonjes Veenstra, Zentrum für Allgemeine Sprachwissenschaft, Schützenstrasse 18, 10117 Berlin, Germany, E-mail: veenstra@zas.gwz-berlin.de

Mauritian Creole

- (1) a. *Kifer to lizie gayar pe ferme?*
 why 2SG eye lively ASP close
 ‘Why are your lively eyes closing?’
 (Dev Virasawmy, Montagn Morn; Henri 2010: 1)
- b. *Ki ferm mo nam dan enn prizon.*
 that close 1SG soul LOC DET prison
 ‘That closes my soul in a prison.’
 (Dev Virasawmy, Balad San Patri; Henri 2010: 1)

Note that not all French-related creoles exhibit this alternation. Corne (1999: 132) observes that verb forms in the Lesser Antillean Creoles, i.e. the different varieties as spoken in Guadeloupe, Martinique, St. Lucia, and Dominica, are invariable, and what little variation there is has no semantic or syntactic correlates. In Mauritian Creole, on the other hand, the long/short opposition did survive. Becker and Veenstra (2003) have argued that the alternation can best be analysed as the reflex of French inflectional morphology that survived the creolization process. One of the questions, therefore, is why the long/short alternation was kept in Mauritian Creole (and not in other creoles).

In those creoles where the alternation is present, it correlates with syntactic properties. Interestingly, the syntactic correlate differs in (almost) each French creole. Veenstra (2003) shows that the alternation basically comes in two guises. It either marks a Tense distinction (present/past), leading to concomitant movement of the verb into the INFL-domain, as is the case in Louisiana Creole (Rottet 1992), or there is a context-sensitive rule that deletes the *-e*, depending on the element that follows the verb (Syea 1992). The latter pattern is found in Mauritian Creole. A further important difference is that the short form can occur sentence-finally in Louisiana Creole, but not in Mauritian Creole. Although we only provide a fine-grained discussion of the pattern in Section 3, a second important question to pose in this introduction is why the alternation in Mauritian Creole has the function it does.

As mentioned in Veenstra (2009), the long/short alternation in Mauritian Creole is reminiscent of the conjoint/disjoint (CJ/DJ) distinction in Bantu languages (Meeussen 1959), where pairs of verb forms exist with the same Tense–Mood–Aspect (TMA) semantics, but different sentence-final restrictions (see Van der Wal and Hyman, in preparation). Although Veenstra is sceptical about the role played by Bantu languages in the remoulding of French into Mauritian Creole and even claims that “the grammatical underpinnings of the alternation in Mauritian Creole and the Bantu languages, Makhuwa in particular, [are] just not similar enough to enable us to come up with a realistic scenario on the emergence of the long/short

opposition in Mauritian Creole in terms of substrate influence” (Veenstra 2009: 109), we nevertheless believe that part of the answer to the questions above lies in the contribution of the substrate languages that were present at the relevant period on the Mascarene Islands. An important reason for being less sceptical comes from the fact that the pattern we find in Mauritian Creole is only found in those creoles that have a strong (eastern or southern) Bantu substrate. Moreover, as we will show below in more detail, the absence of the short form in sentence-final position is a property that sets Mauritian Creole apart from other French-related creoles and is shared with the relevant Bantu substrate(s). Thus, we want to maintain that these Bantu languages played some decisive role in the linguistic shaping of the newly emerging contact varieties on the Mascarene Islands, although its precise nature is still far from clear.

Both in Mauritian Creole and in several southern and eastern Bantu languages we find two alternating verb forms expressing the same TMA semantics but differing in the relation with what follows. As we already mentioned above, what these verb forms have in common is that the short form in Mauritian Creole and the conjoint form in Bantu languages may not appear sentence-finally. Examples from Mauritian Creole and a variety of Bantu languages are presented below, where the conjoint forms in (b) would be ungrammatical were they sentence-final like the disjoint forms in (a):

Mauritian Creole¹

- (2) a. LF *Mo pe māze.*
 1SG ASP eat
 ‘I’m eating.’
- b. SF *Mo pe mǎz dipen.*
 1SG ASP eat bread
 ‘I am eating bread.’

Makhuwa (P31)²

- (3) a. DJ *Ni-náá-thípá.*
 1PL-PRS.DJ-dig
 ‘We are digging.’

¹ All unreferenced data in this paper stem from our own fieldwork. The data from Mauritian Creole stem from fieldwork done by Veenstra in 2009 and 2012. Data from Makhuwa were gathered by Van der Wal during fieldwork in 2005, 2006, and 2008.

² The Bantu languages are conventionally classified by a letter and a number, the letters referring to geographical zones according to Maho’s (2009) updated classification of Guthrie (1967 [1948]).

- b. CJ *Ni-n-thípá nłittí.*
 1_{PL}-PRS.CJ-dig 5.hole
 ‘We dig a hole.’
 (van der Wal 2008: 218)

Makwe (P20)

- (4) a. DJ *A-ní-yúuma|.*
 1_{SM}-PFV.DJ-buy
 ‘She has bought.’
- b. CJ *A-yum-ite vítáabu|.*
 1_{SM}-buy-PFV.CJ 8.books
 ‘She has bought books.’
 (Devos 2008: 217)

Makonde (P22)

- (5) a. DJ *Va-na-yangaáta.*
 2_{SM}-PRS.DJ-help
 ‘They are helping.’
- b. CJ *Va-yangata váyéeni.*
 2_{SM}-help guests
 ‘They help guests.’
 (Kraal 2005: 235, 265)

One of the major issues here is how similar (and/or different) the syntactic and interpretational properties of these alternations are in the different languages under consideration. A detailed cross-linguistic comparison of the alternation will enable us to provide an answer to the leading question of this paper: which knowledge of/in the substrate was transferred to the creole?

To that end, we will compare Mauritian Creole with two groups of Bantu languages, from Guthrie’s (1967 [1948]) zones P and S, roughly corresponding to northern Mozambique and South-Africa. From a socio-historic perspective, Bantu P languages constitute the relevant substrate group, as the slave population was mostly from that area. We will show that the similarity between the alternation in Mauritian Creole and that in the Bantu P languages is only superficial, and that the underlying mechanisms responsible for the surface patterns are in fact different (focus in Bantu P versus constituency in Mauritian Creole). On the basis of this comparison, we will discuss two possible scenarios for substrate continuities from Bantu into Mauritian

Creole: (i) there was a complete transfer of the grammatical system from Bantu P, but Bantu P was at that point in time constituency-based, i.e. more similar to Mauritian Creole than it is nowadays; (ii) there was no wholesale transfer of the grammatical machinery underpinning the alternation, but only the very basic property of the conjoint/disjoint system was transferred, i.e. the absence of the conjoint form in sentence-final position. The conclusion we will draw is that the conditioning features of the alternation in Mauritian Creole represent the lowest common denominator between the creole and Bantu P-zone languages as well as that found in other Bantu languages.

The paper is organized as follows. In Section 2 we look at the socio-historic and demographic context of the formative period of Mauritian Creole. We show that it is most likely that speakers of Bantu P languages constituted the majority of the slave population during the relevant period. Therefore, if there are grammatical continuities from the substrate language(s), we expect them to come from this group of languages. In Section 3, we provide detailed information on the grammatical underpinnings of the alternation in Mauritian Creole as well as the Bantu P languages. We show that the languages from zone P pattern differently from Mauritian Creole. In addition, we discuss the conjoint/disjoint system of the Bantu languages from zone S, which we claim have a system more similar to Mauritian Creole than those languages from zone P. However, there is no socio-historic and demographic evidence that links up Mauritius with populations from Bantu zone S. Section 4 first introduces Becker and Veenstra's (2003) analysis of the emergence of the alternation in Mauritian Creole, and presents two possible scenarios for substrate influence from Bantu languages on the grammar of Mauritian Creole. Section 5 concludes this paper and summarizes its main results.

2 Historical background

The group of southern and eastern Bantu languages is very large indeed (Guthrie 1967; Nurse and Philippson 2003), and not every language in this group has been present in the colonial period in Mauritius. In order to find out which of these (groups of) languages are relevant to our present concerns, it is important to have a closer look at the socio-historic and demographic context of the formative period of Mauritian Creole.

Although there were several attempts by the Portuguese (1507) and the Dutch (1638–1710) to establish visiting posts and/or permanent settlements on the island, it was only when the French took over control of Mauritius in the 1710s that it was permanently settled. Therefore, continuous habitation can be said to date from 1721 onwards. Information on the beginning years of the colony between 1735 and 1767 can be found in Baker and Corne (1982), although historical overviews like Haudrère (1989) seem to be unaware of this source. Baker (2008) presents the following timeline of (majority) groups of slaves during this early period:

1721 – 1726	Malagasies
1729 – 1733	West Africans (mainly Wolof-speakers)
1733 – 1765	Malagasies
1765 – onwards	Bantu (the main bulk from northern Mozambique)

Although there are opposing views and different theories on the speed of creolization (cf. Arends 2008; Smith 2006; Veenstra 2008; and many others), we assume the period during which Mauritian Creole stabilized to be between 1760 and 1790, basically following the insights of Baker (e.g. 2008 and earlier work). Fifty years after the start of the colonization in 1721, the population had risen to 29,761, of which 85% were slaves.

According to Allen (2008: 47), as many as 388,000 slaves may have been exported in total to Mauritius (and Réunion). As noted above, most of them came from Madagascar, Mozambique, and the Swahili Coast but they also came from India and Southeast Asia, between 1670 and 1848 (see Larson 2007). The majority (approximately 85%) reached the islands between 1770 and the early 1830s. Table 1 summarizes the slave trade to the Mascarene Islands for the relevant period:

Table 1: Slaving voyages involving the Mascarenes, 1768–1809 (adapted from Allen 2008: 50).

	Period				
Slaving voyages to the Mascarenes from:	1768–79	1780–89	1790–99	1800–09	Total
Madagascar	32	18	32	147	229
Mozambique	37	27	51	81	196
Swahili Coast	11	16	24	33	84
India	11	1	8	1	21
Muscat	2	–	–	–	2
Anjouan	–	1	1	–	2
Multiple	1	3	5	–	9
Not reported	4	1	–	1	6
Total	98	67	121	263	549

Thus, at the time of emergence (and stabilization) of Mauritian Creole, the majority of the slaves imported came from the east coast of East and South Africa, in particular from Mozambique. In fact, the initial and major source was northern Mozambique and the slaves were presumably traded on Ilha de Mozambique. As demand increased, the trade slowly spread along the coast (down to southern Mozambique and right up to the southernmost bit of Somalia (where Swahili-related languages are spoken). Table 2 lists the different ports in Mozambique from which these earlier slave voyages left.

Table 2: Ports in Mozambique.

Ports	Geography	Language	Language group(s)
Ilha de Mozambique	North Mozambique	Makhuwa-Enahara	P31
Ibo	islands close to Pemba	Mwani	G40
Inhambane	South Mozambique	Tonga	S62
Querimba	islands close to Pemba	Mwani	G40
Quelimane	Mid Mozambique	Chuwabo/Lomwe	P32/34

Later slave voyages left from the following ports on the Swahili Coast: Côte d’Afrique, Kilwa, Lindi, Mafia, Mombasa, Mongale, Mouttage, and Zanzibar. These are not central to our present concerns, however. Table 2 further provides information on the main languages that were spoken in the areas around the ports, as well as to which groups of Bantu languages they geographically belong (using the notation based on Guthrie’s 1967 classification). This suggests that the relevant languages for comparison with Mauritian Creole are those from the Bantu P group, of which Makhuwa can be considered the most prominent one.³

This conclusion is further corroborated by the list of “tribes” whose presence in Mauritius is mentioned in the local literature from the eighteenth century (partially based on Allen 2008; Baker p.c.) (Table 3).

Converging evidence for the claim that the speakers of Bantu P languages in general, and Makhuwa in particular, were the clear majority in the slave population, and, as a consequence, played a decisive role in the linguistic shaping of the new emerging contact variety on the Mascarene islands comes from Alpers (1975). Alpers (1975: 151) notes that contemporary slave traders concluded that

³ It should be borne in mind that “Bantu P” in the sense of Guthrie (1967) is essentially a geographical definition; Tore Janson (p.c.) points out that zone P is internally heterogeneous (see also footnote 4). Another point to bear in mind is that slaves were gathered from further inland to these ports, so there is no one-to-one correspondence between ports and linguistic background. The linguistic background is established in Table 3, though.

Table 3: Tribes present in Mauritius.

Tribal name	Modern equivalent	Bantu classification
Macouas	Makhuwa	P31
Moudjavoas	the Makhuwa name for the Yao (including the class prefix)	P21
Sénas and Moursénas	Sena	N44
Yambanes		S60
Mouquindos	perhaps Ngindo (in Tanzania)	P14
Mavairs	Mwera?, just possibly Mabiha	P22 (Mwera) P25 (Mabiha)
Macondés	Makonde	P23
Niamoésés	Nyamwezi	F22

slaves from Mozambique were preferred and sold for a higher price in Ile de France (as Mauritius was called at the time) despite the lower costs of slaves at other ports, such as Kilwa (situated in present-day Tanzania), and that the Makhuwa slaves were the most esteemed of all the Mozambique people. At Ibo, the second most important slave port after Ilha de Mozambique, the large majority of slaves exported were Makhuwa, the remainder being Makonde. For Ilha de Mozambique, it is more difficult to find out about the ethnic origin of the slaves shipped to the Mascarene Islands, because there the slave traders drew on resources of the entire colony. Despite this cautionary remark, we can safely assume that here as well most enslaved persons were presumably speakers of Bantu P languages. Alpers (1975: 151) further quotes one contemporary authority, saying “of every 1,000 slaves exported from Mozambique by the French, 150 came from Yao and 370 from Makua, with the remainder coming from Sofala (80), Inhambane (150), and Sena (250)”.

What should be clear from the foregoing discussion is that if we want to establish a link between Mauritian Creole and Bantu languages, we have to compare it with Bantu P languages, because speakers of this group of languages were present during the relevant period of time in the colonial context of the emergence of Mauritian Creole. It is most likely that in the emergence of this creole, the Makhuwa were the most influential because they made up the majority, and they were the most esteemed in the colony. We will thus concentrate on a comparison between Mauritian Creole and a set of Bantu P languages with the most detailed data coming from Makhuwa.⁴ The next section will compare the different systems of verb form alternations in these languages.

⁴ We do not consider Yao (P22), as it seems to be quite different from the other P languages and does not have the verbal alternation.

3 Synchronic comparison of Mauritian Creole and (Mozambican) Bantu languages

In order to address the question what the precise influence was of the Bantu languages on Mauritian Creole, that is, what knowledge of the substrate was transferred to Mauritian Creole, we need to compare the synchronic properties of Mauritian Creole with those of the Bantu languages in northern Mozambique. In this section we discuss the formal, structural, and interpretational properties.

3.1 Form

In all languages under consideration, the alternation between long and short verb forms, and correspondingly, between conjoint and disjoint forms, is distinguished by segmental morphology on the verb.⁵ In Mauritian Creole the long form differs from the short form in the presence of a final vowel, as illustrated in (6). Baker (1972) observed that 70% of the verbal lexicon is subject to this alternation and that those verbs are all vowel-final, ending in *e* or *i*. Almost all verbs that undergo the alternation are *e*-final. Henri (2010) notes that only four *i*-final verbs in the lexicon display the alternation and other vowels do not participate in the alternation (see Henri 2010 for a detailed description). The alternating vowel is not connected to Tense–Aspect morphology and is constant across conjugations. We will return to the morphological origin of the alternation in Mauritian Creole in Section 4.1.

Mauritian Creole

- (6) a. LF *Sunil pu manze.*
 Sunil M eat
 ‘Sunil will eat.’
- b. SF *Sunil pu manz min.*
 Sunil M eat Chinese.noodles
 ‘Sunil will eat Chinese noodles.’

Although the conjoint and disjoint verb form in Bantu languages also differ morphologically, the situation is slightly more complex. As a generalization we

⁵ In every conjoint–disjoint language, at least one tense is marked morphologically, although in some languages not all tenses that display the alternation mark it by segmental morphology; see also the point about phonological phrases.

can state that the disjoint form usually has more pre-stem morphological material than the conjoint form, but the precise form of the prefixes and suffixes varies per conjugation. This is illustrated in (7) for Makonde and (8) for Makhuwa.

Makonde (P22)

- (7) a. DJ *Va-na-yangaáta*.
 2SM-PRS.DJ-help
 ‘They are helping.’
- b. CJ *Va-yangata váyééni*.
 2SM-help guests
 ‘They help guests.’
 (Kraal 2005: 235, 265)

Makhuwa (P31)

- (8) CJ *ki-n-lépá epapheló* DJ *ki-náá-lépa* ‘I write (a letter)’
ki-lep-álé epapheló *k-oo-lépa* ‘I have written (a letter)’
k-aa-lépá epapheló *k-aánáa-lépa* ‘I wrote (a letter)’
k-aa-lep-álé epapheló *k-aahí-lépa* ‘I had written (a letter)’

The morphological marking in the alternation in Bantu languages differs from that in Mauritian Creole in two other respects: first, the morphological differences between the conjoint and the disjoint verb form are linked to the Tense–Aspect morphology, and second, the alternation is restricted to the “basic” tenses, excluding for example the relative tenses and often also subjunctive and negative forms.

Prosodic marking is also present in the languages under discussion and it has a function in the alternation. It remains to be seen, however, how big a role it plays and whether it is a determining factor in the alternation in Mauritian Creole and/or the Bantu languages.

For Mauritian Creole, Corne (1982) argues that syntactic-semantic constraints on the alternation are conditioned by five simultaneously applicable phonological rules, which apply to the subclass of Mauritian verbs subject to the alternation. Henri (2010), however, shows that there are (at least) two counterarguments to this phonological analysis: (i) the proposed rules do not predict which verbs do not alternate; (ii) some of the rules do not predict the correct short form. Although stress is obviously related to the form of the verb, we side with Henri and find the analysis not convincing. A first argument against the prosodic account is in the use of unstressed pronouns. If the appearance of the long form were triggered by receiving stress, as Corne

(1982) argues, we would expect the verb to take a long form when the only element following it is an unstressed pronoun, as well. This is not the case, as illustrated in (9): the verb still takes a short form when followed by an unstressed pronoun.

Mauritian Creole

- (9) *Sunil inn konn li.*
 Sunil A know 3SG
 ‘Sunil has known it.’

A second argument against a prosodic analysis is the fact that it cannot account for the use of different verb forms and different phrasing of sentential complements, which clearly relates to their syntactic status of CP or IP, as discussed in the next subsection. Furthermore, there are not sufficient data on the prosody of Mauritian Creole (a mere total of three pages in Baker 1972, see Henri 2010; for some additional information), nor is there a proper analysis of its stress and phrasing, which makes us reluctant to propose an analysis on the basis of prosody. We have to leave a detailed description and account of Mauritian Creole prosody for further research.

For the Bantu languages, a prosodic analysis for focus has been proposed by Costa and Kula (2008). The *CJ/DJ* distinction has been related to focus in the Immediate After the Verb position (IAV; Buell 2007, cf. Watters 1979). This focus reading, Costa and Kula (2008) argue, can be accounted for by reference to phonological phrasing, which obviates the need for a designated syntactic focus position. The focus interpretation of the element in IAV position is in turn directly related to the choice of verb form as *CJ* or *DJ* (Van der Wal 2011). This raises the question whether prosody/phonological phrasing can also account for the choice of a *CJ* or *DJ* verb form. If that is the case, there should be a linking algorithm between prosody, discourse, and syntax, or, as Costa and Kula say, the phonological component should “read the syntactic information and map it onto phonological categories”. This entails that there should be some marking in syntax. Furthermore, if prosody were the main or only factor, it would be difficult (if not impossible) to account for the segmental marking of the verb forms in the TMA affixes.

From the foregoing, we conclude that prosody (phonological phrasing and stress) may indeed be a factor in the alternation in the languages under discussion, but that it can certainly not be the only one. Although we do not want to exclude the influence of prosody on the development process of the alternation, a purely prosodic account is not the most promising hypothesis to account for the synchronic situation. Therefore, this paper focuses on the distributional and syntactic properties.

3.2 Structure

With respect to structure, the only property shared by Mauritian Creole and Bantu is the sentence-final restriction: a conjoint or short form must be followed by some overt element, as illustrated in (10) and (11).

Mauritian Creole

- (10) a. LF *Pyer pu manze.*
 Peter M eat
 ‘Peter will eat.’
- b. SF *Pyer pu manz min.*
 Peter M eat Chinese.noodles
 ‘Peter will eat Chinese noodles.’
- c. SF **Pyer pu manz.*
 Peter M eat
 intended reading: ‘Peter will eat.’

Makonde (P22)

- (11) a. DJ *Va-na-yangaáta.*
 2SM-PRS.DJ-help
 ‘They are helping.’
- b. CJ *Va-yangata váyééni.*
 2SM-help guests
 ‘They help guests.’
- c. CJ **Va-yangaata.*
 2SM-help
 int ‘They are helping.’
 (adapted from Kraal 2005: 235, 265)

Two other structural factors are dissimilar for Mauritian Creole and Bantu. First, the use of the short or long form in Mauritian Creole is sensitive to the argument–adjunct distinction (Baker 1972; Zribi-Hertz and Li Pook Tan 1987; Seuren 1990 and Seuren 1995; Syea 1992; Veenstra 2009; Henri 2010). The short form is used before an argument (12a), while the long form is used before an adjunct, such as the locative in (12b). Schematically, the distribution is as in (13); however, see Section 3.3 for effects on the interpretation.

Mauritian Creole

- (12) a. SF *Pyer ti manz/#manze min.* [Theme]
 Peter T eat Chinese.noodles
 ‘Peter ate Chinese noodles.’
- b. LF *Pyer ti manze/#manz Rozil.* [Locative]
 Peter T eat Rose-Hill
 ‘Peter ate in Rose-Hill.’
- (13) a. SF [IP DP [VP V XP_{ARG}]]
- b. LF [IP DP [VP V-e (XP_{ADJ})]]

By contrast, in the Bantu languages both verb forms can be followed by arguments, as in (14), and adjuncts, as shown in (15).⁶

Makhuwa (P31)

- (14) a. CJ *O-n-rúw’ eshímá.*
 1SM-PRS.CJ-stir 9.shima
 ‘She is preparing shima.’
- b. DJ *O-náá-rúwá eshíma.*
 1SM-PRS.DJ-stir 9.shima
 ‘She is preparing shima.’
- (15) a. CJ *Eshímá e-ruw-iy-é tsiítsáale / naññáanová.*
 9.shima 9SM-stir-PASS-PFV.CJ like.that / right.now
- b. DJ *Eshímá yoo-rúw-íya tsiítsáale / naññáanová.*
 9.shima 9SM.PFV.DJ-stir-PASS like.that / right.now
 ‘(The) shima was cooked like that/right now.’

Second, Mauritian Creole and Bantu differ with respect to the choice of verb form before an embedded CP or IP sentence. Mauritian Creole employs the short form before an IP complement (16a), but the long form preceding a CP complement (16b).

⁶ The illustrative data are from Makhuwa, because we can display the full variation, but from the data available a similar picture arises for Makonde and Makwe.

Mauritian Creole

(16) a. direct perception

SF *Li inn truv [IP mwa pe kit kot mwa.]*
 3SG A see 1SG A leave LOC 1SG
 ‘He saw me leaving my place.’

b. indirect perception

LF *Mo inn truve [CP ki li inn kit so lakaz.]*
 1SG A see that 3SG A leave 3SG house
 ‘I saw that he had left his house.’

Mauritian Creole also shows a sensitivity to extraction. If the construction as in (16a) was a kind of subject-to-object raising construction, we would expect it to behave like object extraction as in (17a) and take a long form. The short form in the subject extraction construction in (17b) shows that the (complete) embedded clause is the trigger for the alternation.

Mauritian Creole

(17) a. extraction of object

LF *Ki_i li inn truve t_i?*
 what 3SG A see
 ‘What did he see?’

b. extraction of embedded subject

SF *Kisanla_i li inn truv [IP t_i pe kit kot mwa.]*
 who 3SG A see A leave LOC 1SG
 ‘Who did he see leaving my place?’

For the Bantu languages, sufficient data are lacking with respect to the behavior of the conjoint–disjoint alternation before sentential complements (see Halpert 2012; Van der Wal 2014). In preliminary data, we found that both verb forms can be used before IP and CP complements, as illustrated in (18) and (19).⁴

Makhuwa (P31)

(18) a. CJ *N-himy-alé [CP wiirá Zainábú o-n-thotonl-é pani?]*
 2PL.SM-tell-PFV.CJ COMP Zainab 1SM-1OM-visit-PFV.CJ 1.who
 ‘Who did you say that Zainab visited?’

b. DJ *Moo-himyá [CP wiirá Zainábú o-n-thotonl-é pani?]*
 2PL.SM.PFV.DJ-tell COMP Zainab 1SM-1OM-visit-PFV.CJ 1.who
 ‘Who did you say that Zainab visited?’

- (19) a. CJ *Othíló o-ni-phwany-alé* [_{IP} *ni-ca-áka ohíyu.*]
 1.Thilo 1SM-1PL.OM-meet-PFV.CJ 1PL.SM-eat-DUR 14.evening
 ‘Thilo found us (while we were) eating in the evening.’
- b. DJ *koh-aá-wéhá* [_{IP} (*ápiipi*) *a-katth-áka.*]
 1SG.SM.PFV.DJ-2OM-watch 2.grandma 2SM-wash-DUR
 ‘I saw her (the old woman) washing.’

The distributional facts show that structural factors have a stronger impact on the verbal alternation in Mauritian Creole than in the Bantu languages of northern Mozambique.

3.3 Meaning

The interpretation of the element immediately following the verb is dependent on the form of the verb. In this section, we discuss the four possible combinations of verb form and following element (short/conjunct or long/disjunct combined with argument or adjunct).

In Mauritian Creole, a short form canonically combines with an argument and a long form with an adjunct. This does not induce any (special) semantic effect. In the two other combinations, however, such effects in terms of focus do arise. If the long form is followed by an argument, as in (20), the truth of the proposition is focused. Henri and Abeillé (2008) described this interpretational effect in terms of Verum Focus, defined as “Polarity Kontrast” in the sense of Vallduvi and Vilkuuna (1998).

Mauritian Creole

(20) LF [_{IP} DP [_{VP} V-e XP_{ARG}]]

Speaker A: *Mo pe al kwi kari poul parski Zan kontan manz kari poul.*
 ‘I’m going to cook chicken curry because John likes to eat chicken curry.’

Speaker B: *Be non. Zan pa manze kari poul.*
 but no John neg eat curry chicken.
 ‘No, John doesn’t EAT chicken curry.’
 (Henri and Abeillé 2008: 387)

If the short form is followed by an adjunct instead of an argument, it is the adjunct that receives the focus interpretation. In (21), the focus is on *dan stad* ‘in the stadium’, as it is a natural answer to a question like ‘Where did you run?’. It

is our impression that an adjunct becomes more object-like when preceded by a short verb form, thus giving rise to an incorporation-like interpretation of the adjunct, as for example in (22).

(21) [IP DP [VP V XP_{ADJ}]]

SF *Mo ti pe galup dan stad.*
 1SG T A run LOC stadium
 ‘I was running in the stadium.’

(22) SF *Mo inn manz dan restoran.*
 1sg a eat loc restaurant
 ‘I’ve been eating in restaurants.’

In summary, the short form in Mauritian Creole is typically used preceding arguments and IPs and marks term focus when used with adjuncts, whereas the long form is typically used phrase-finally, preceding adjuncts and CPs, and induces truth or verb focus when preceding an argument.

In the Bantu languages in northern Mozambique, focus has a more direct relation with the form of the verb. That is, what immediately follows a conjoint verb form is interpreted as the focus of the sentence. Hence, the conjoint form must be used in *wh*-questions, as the postverbal *wh*-word is inherently focused (23). For Makhuwa, focus can be defined as exclusive: the predicate of the sentence holds exclusively for the referent of the focused element and not for possible alternatives (Van der Wal 2011). The element following the *cj* verb form, whether argument or adjunct, is implicitly or explicitly contrasted with alternatives, as in (24) and (25).

Makwe (P20)

- (23) a. *cj Uyumité cáani?*
 2SG.SM.buy.PFV 7.what
 ‘What did you buy?’
- b. *DJ * Uníyúuma cáani*
 intended reading: ‘What did you buy?’
 (Devos 2008: 387)

Matuumbi (P13)

- (24) *cj Ní-kata kaámba.*
 1SG.SM-cut rope
 ‘I am cutting *rope* (not something else).’
 (Odden 1996: 60)

Makhuwa (P31)

- (25) CJ *Nki-c-aálé* *ni* *kuyéí,* *ki-c-aalé* *ni*
 NEG.1SG.SM-eat-PFV with 1.spoon 1SG.SM-eat-PFV.CJ with
matáta.
 6.hands
 ‘I didn’t eat with a spoon, I ate with my hands.’

For Matuumbi, Odden suggests that the disjoint verb form induces a contrastive focus reading on the verb, as in (26). In Makonde (Kraal 2005: 235), Makhuwa (Van der Wal 2009), and Makwe (Devos 2008), the interpretation of the disjoint form is generally unmarked, although when the verb is focused, the disjoint form must be used. As mentioned, the argument–adjunct distinction has no influence on the use of the verb form and/or the interpretation of the following element.

Matuumbi (P13)

- (26) a. DJ *Eendá-kaatá.*
 1SG.SM.PROG.DJ-Cut
 ‘He is cutting.’
- b. DJ *Eendá-kaatá* *kaámba.*
 1SG.SM.PROG.DJ-cut rope
 ‘He is *cutting* rope (not doing something else to it).’
 (Odden 1996: 61)

The exclusive interpretation of the element following a conjoint verb form in Makhuwa also seems to apply to adverbial clauses, as indicated in the translations and comments of (27)–(29). The adverbial subordinate clause following the main clause verb contains a verb in the present or perfective situative tense. When the main clause verb takes a conjoint form, the situation in the adverbial clause is a precondition for the predicate in the main clause to be true (Van der Wal 2014).

Makhuwa (P31)

- (27) CJ *Ákwáatú* *a-n-réerá* *ya-khal’* *oóriipa.*
 2.cats 2SM-PRS.CJ-be.good 2SM.SIT-stay 2.black
 ‘Cats are beautiful (only) if they’re black.’ (other cats are not pretty)
- (28) CJ *Ehópá* *tsi-n-khwá* *ya-rup’* *epúla.*
 10.fish 10SM-PRS.CJ-die 9 SM.SIT-fall 9.rain
 ‘A lot of fish is caught when it rains.’ (lit. ‘many fish die when it rains’) ‘Only in the rainy season is much fish caught; if it doesn’t rain, no fish is caught.’

- (29) a. DJ *Ki-náá-cá* *wé* *o-c-áale*.
 1SG.SM-PRS,DJ-eat 2SG. PRO 2SG.SM-eat-PFV.SIT
 ‘I’ll eat when you’ve eaten’
 Situation: host says “Serve yourself, dig in!”, but out of respect
 you let him eat first
- b. CJ *Ki-n-cá* *wé* *o-c-áale*.
 2SG.SM-PRS,CJ-eat 2SG.PRO 2SG.SM-eat-PFV.SIT
 Situation: you distrust the food; mafia situation where the plates
 may have been switched or the food may be poisoned.

The interpretational facts tell us that focus is a much more influential factor in the alternation in the Bantu languages studied than it is in Mauritian Creole.

In conclusion, the synchronic properties of the verbal alternation are quite different for Mauritian Creole than for the Bantu languages. Whereas the alternation is primarily determined by structural restrictions in Mauritian Creole, with interpretational effects in the non-canonical cases, the alternation is more dependent on the resulting (focus) interpretation in Bantu languages like Makhuwa. The current systems of the verbal alternation in Mauritian Creole and in northern Mozambican Bantu languages are obviously related and at the same time they are obviously fundamentally distinct as well.

Interestingly, the alternation in Mauritian Creole shows points of similarity with the alternation as described for some Bantu languages spoken in South Africa. The conjoint–disjoint alternation is analysed as “focus-based” for Makhuwa, but as “constituency-based” in Zulu (see references below) and Sotho (Zerbian 2006), spoken in South Africa.⁷ As Buell (2006) shows, the conjoint–disjoint alternation in Zulu can more insightfully be analysed by reference to constituency than to focus. Although focus does play a role, it seems to be related only indirectly to the alternation (Buell 2009; Cheng and Downing 2012). Instead, the form of the verb is determined by the position of the verb in the (IP or vP) constituent: if the verb occurs constituent-final it takes a disjoint verb form; if the verb is not final in its constituent, it is in a conjoint form (Van der Spuy 1993; Buell 2006).

The constituency analysis is informed by a number of arguments, the clearest of which are illustrated in (30): object marking and phonological phrasing. The disjoint verb form is constituency-final when, obviously, it occurs in sentence-final position, but also when a following object is in a dislocated position, as in (30a). The object *isalukazi* ‘old woman’ is in a dislocated position,

⁷ This observation could probably be generalized to hold for all the conjoint–disjoint languages in zone P (focus-based) and zone S (constituency-based), but more research is needed to confirm this hypothesis.

i.e. outside of the vP, which is evident from the obligatory presence of an object marker (incorporated pronoun) *-si-* on the verb, and in the separate phonological phrasing of verb and object. The right boundary of a phonological phrase in Zulu is marked by lengthening of the penultimate syllable, and these right boundaries were shown to be aligned with the right boundary of a syntactic phrase by Cheng and Downing (2009). The disjoint verb form in (30a) is final in its phonological – and hence syntactic – phrase (*-hlu:pha*), whereas the conjoint verb form is phrased together with the object (*-hlupha*). This constituency-based alternation is schematically represented in (31).

Zulu

- (30) a. DJ Abafana [ba-ya-si-hlu:pha] isaluka:zi.
 2.boys 2_{SM-PRS}.DJ-7_{OM}-annoy 7.old.woman
- b. CJ Abafana [ba-hlupha isaluka:zi.]
 2.boys 2_{SM}-annoy 7.old.woman
 ‘The boys are annoying the old woman.’
 (Buell 2005: 64, 66)

- (31) a. [V_{CONJOINT} X]_{IP} (Y)
 b. [V_{DISJOINT}]_{IP} (X) (Y)

The relation with focus is proposed to be indirect: whatever is inside the constituent at the end of the derivation receives a focus interpretation, be that an argument or adjunct, a subject or an object. Focus on the verb or the truth-value is always expressed by a (constituent-final) disjoint verb form.

Thus, in Zulu, there is an adjacency requirement between the verb and an object in a certain domain, which is reminiscent of the pattern in Mauritian Creole. This similarity to the Mauritian Creole alternation begs the question of whether there is a link between Mauritian Creole and the Bantu languages of zone S. However, these languages are an improbable substrate of Mauritian Creole, as there is no socio-historical evidence that links up Mauritius with substantial populations from Bantu zone S. The next section discusses the link between the Bantu languages of zone P, while also addressing the parallels with the alternation as currently found in Bantu zone S.

4 Diachronic link between Mauritian Creole and Bantu

Before presenting two possible scenarios for the influence of the Bantu substrate on the grammar of Mauritian Creole, we first introduce Becker and

Veenstra's (2003) analysis of the emergence of the verbal alternation in Mauritian Creole.

4.1 Reinterpreting verb forms in a Basic Variety

The vowel involved in the alternating verb forms in Mauritian Creole is best analysed as the reflex of French inflectional morphology that survived the creolization process. Becker and Veenstra (2003) show the development and survival of the morphology by analysing processes of incipient second language acquisition and showing how they can shed a light on creolization. Their point of departure is the untutored language learner, and the input he/she gets. The input that the slaves received who arrived in the French colony on Mauritius was the different regional and social varieties of French spoken by the colonists. Importantly, these learners only had access to the spoken language, a factor which substantially affects verb inflection. Compared to the written forms, oral input is quite reduced in its distinctive inflectional forms (Harris 1989). If one takes into account that the 1PL form is rarely used in casual speech, being replaced by the impersonal form *on*, the paradigm in (32) basically comes down to two forms: [parl] and [parle],

(32)	1SG	<i>je parle</i>	/parl/
	2SG	<i>tu parles</i>	/parl/
	3SG	<i>il/elle parle</i>	/parl/
	1PL	<i>on parle</i>	/parl/
		<i>(nous parlons)</i>	/parlõ/
	2PL	<i>vous parlez</i>	/parle/
	3PL	<i>ils/elles parlent</i>	/parl/

The picture is blurred by the fact that the form [parle] is not just used to indicate person (2PL vs. 1/3), but also figures as the past participle and infinitive (33). Furthermore, this form is also used in much of the imparfait (34), where the opposition /-e/ versus /-ε/ is neutralized in many (regional) varieties of French.

(33)	/parle/	<i>vous parlez</i>	2PL present indicative
	/parle/	<i>parlé</i>	past participle
	/parle/	<i>parler</i>	infinitive

(34)	1SG	<i>je parlais</i>	/parle/
	2SG	<i>tu parlais</i>	/parle/
	3SG	<i>il/elle parlait</i>	/parle/

1PL	<i>on parlait</i>	/parɛ/
	(<i>nous parlions</i>)	/parljõ/))
2PL	<i>vous parliez</i>	/parlje/
3 PL	<i>ils/elles parlaient</i>	/parɛ/

This situation, as sketched by Becker and Veenstra (2003), makes the learner realize that there is a short form [*parl*] and a long one [*parle*], but “as both forms carry different values, they might find the form–function assignment problematic” (Becker and Veenstra 2003: 287). This results in a relatively arbitrary use of both forms, being in free variation (without any restriction such as the long/short finality restriction, as found in Mauritian Creole and (some) Bantu languages). In data from second language acquisition of French, it was observed that learners who speak a Basic Variety (Klein and Perdue 1997) indeed use both the long and the short form, but without functionally distinguishing them. The idea is then that the slaves on Mauritius who were learning French reached a level similar to the Basic Variety level of French, with two verb forms in free variation, and they continued creolization from there. In such a situation of functionless morphology, the morphology either gets lost (as happened in many French-based creoles) or is refunctionalized. Which function the morphological alternation is used for, then, depends on a number of factors, an important one being the substrate languages. In Mauritian Creole, the distinction between the two forms in French was reanalysed as a syntactic constraint with pragmatic implications.

At this point it may be relevant to discuss Trudgill’s (2011) hypothesis that complexification in language contact is only possible in long-term stable bilingual situations, whereas superficial contact with L2 speakers results in simplification. It would follow from this hypothesis that there is no complexification in creole formation, which is the ultimate L2 contact situation. Nevertheless, the rise of the short/long alternation is surely more complex compared to French. However, Trudgill argues that “being complex” can only be assessed relative to the L2 learners and their respective L1. Continuing this logic, for L2 speakers of French with a Bantu language as their L1, the long/short finality restriction would already be familiar and therefore not complex to learn. If Trudgill is right and L2 learners do not complexify their language, the only way to explain the apparent “complexification” in the reanalysis of the French endings as a short/long finality restriction is to assume that this is a Bantu feature that the L2 speakers already knew.

We will now consider the role of the Bantu substrate(s) in this reanalysis.

4.2 Scenario 1: the substrate was less focus-based

The Bantu substrate of Mauritian Creole exerted influence on the newly emerging language roughly between 1760 and 1790. In view of this time-depth, one way to account for the differences between the constraints on the verb forms in Present-day Bantu and Mauritian Creole is that the predecessor of Makhuwa, and other languages of zone P, was syntactically more like Zulu (zone S), where the alternation is constituency-based. In other words, the slaves who were taken to Mauritius in the eighteenth century spoke one or more Bantu languages in which the verbal alternation was more determined by the syntactic restrictions (like current-day Zulu) than by focus considerations (like current-day Makhuwa). Theoretically, there are three ways to account for the hypothetical “S-like” status of the Bantu substrate in the eighteenth century, each of which, however, is highly improbable or downright impossible. First, any direct influence of the languages of zone S is unlikely, because there is no evidence that “zone-S speakers” were ever in direct contact with Mauritius for a sufficiently long period or with a numerically relevant impact (see Veenstra 2009). Second, this substrate language could not have been a predecessor of the languages that are now in both zone P and S, because by the relevant period, these were different languages in different geographical areas (Janson 1991–92). This is also why the third possibility is unlikely, which is that zone S influenced zone P when the two were separate zones and languages. If zone S had exerted influence on the languages of zone P, some contact should have existed between the languages of the two zones. However, Janson (1991–92) and Batibo, Moilwa, and Mosaka (1997) argue that Makhuwa (in the south of zone P) and Sotho (in the north of zone S) were separated around 1100 AD by other peoples coming from the north or north-west.

One remaining option is that the languages of zone P had simply not yet developed the strong pragmatically restricted alternation we find nowadays. This option deserves further consideration. It presupposes that in the Bantu languages, the conjoint–disjoint alternation came into being as a distinction based on constituency or phrase-finality, which only later developed its semantic-pragmatic interpretation. In this hypothetical scenario, some ancestor of the Eastern Bantu languages would thus have had two verb forms that were reanalysed as an opposition between non-final and final.⁸ Of course, there must have

⁸ Güldemann (2003) and Nurse (2008) state that the conjoint–disjoint alternation must have been a trait of an earlier stage of Bantu languages, because it is very unlikely that so many languages so widespread developed such a similar system independently. The restriction of the conjoint–disjoint alternation to Eastern Bantu may indicate a development after the first spread of Bantu from Cameroon to the east.

been pragmatic implications of these forms, simply because the focus cannot be on a postverbal element if the verb is sentence-final, that is, if there is no element to follow the verb. This alternation based on finality developed to become determined by constituency once the “final” form was used in non-final position as well. The pragmatic implications were presumably still present, but they were not an inherent part of the distinction between the two verb forms, whose use was determined by the syntax.

At that stage, a split would have occurred,⁹ with the Bantu languages of zone S retaining the constituency-based system, and the languages of zone P initiating a process of pragmatic strengthening. Pragmatic strengthening is a process whereby inferences associated with a linguistic element are strengthened eventually to become conventionalized as (part of) the meaning. In our case, the inferences were that the element following the conjoint/non-final form is more salient than the verb, and that the verb itself is more salient when the disjoint/final verb is used. When these interpretations were strengthened, the saliency of the element following the conjoint/non-final form was semanticized to become an inherent part of the meaning. The focus on the element after the conjoint/non-final form became standard with the use of this conjoint. This meant that the form of the verb came to be directly connected to the position of the focus in a sentence, a change that can be seen as functional reanalysis (see Brinton and Stein 1995 on functional renewal): at first, the linguistic form – the verbal alternation – indicated finality, but it was reanalysed as expressing a difference in focus.

This scenario is visualized in Figure 1, where underlining indicates (pragmatic) saliency and boldface indicates (semanticized) focus.

There are many debatable aspects of the proposed scenario, and no fewer questions that can be posed. One of these is why functional reanalysis would have taken place in the languages of zone P. Although we will never find the full motivation for such a change, one of the facilitating factors may have been the difference in the system of object marking. Synchronic data from zone S (Venda, Sotho-Tswana, Nguni languages) show that the object marker (OM) functions as an incorporated pronoun in these languages (see, among others, Demuth and Johnson 1989; Van der Spuy 1993).¹⁰ It takes up an argument role of the verb, as demonstrated in (35), and a coreferent noun phrase following the verb is in a dislocated position and interpreted as an afterthought.

⁹ This separate development of zones S and P may or may not coincide with the actual geographical split mentioned in the previous paragraph.

¹⁰ The situation in Changana/Tsonga is not clear, though (see Zerbian 2007: 66, 67).

finality	constituency	current alternations
		'zone P' (focus strengthened)
[V X]	[V X] ↗	V X V (X)
	→	
V #	<u>Y</u>] (X)] ↘	(constituency)
		'zone S' [V <u>X</u>] <u>Y</u>] (X)]
		conjoint disjoint
		conjoint disjoint

Figure 1: Diachronic development of two types of alternation.

Setawana (S31)

- (35) a. CJ *Thabo ó-bidítse ntsá.*
 Thabo 1_{SM}-lashed 9.dog
 'Thabo lashed the dog.'
- b. DJ *Thabo ó-e-bídítse ntsá.*
 Thabo 1_{SM}-9_{OM}-lashed 9.dog
 'Thabo lashed it, the dog.'
- (Demuth and Johnson 1989: 25)

As such, the syntactic status of the element following the verb is always clear: if the verb does not have an OM, the following DP is the syntactic object of the verb. But if a coreferent OM is present, the following DP can only be a dislocated phrase (following binding condition C). The status of the postverbal DP, based on the presence or absence of the OM, hence also indicates the position of the verb within its constituent: if an OM is present, the verb is final in its constituent. Logically, only the disjoint form can contain an OM, not the conjoint, as shown in (36) and (37). As a consequence, constituency can quite easily be detected in these languages, which may be a factor in the persistence of the constituency-based alternation.

Zulu

- (36) a. CJ *Abafana [ba-hlupha isaluka:zi.]*
 2.boys 2_{SM}-annoy 7.old.woman
 'The boys are annoying the old woman.'
- b. CJ * *Abafana [ba-si-hlupha isaluka:zi.]*
 2.boys 2_{SM}-7_{OM}-annoy 7.old.woman
- c. DJ *Abafana [ba-ya-yi-cu:la] ingo:ma.*
 2.boys 2_{SM}-PRS.DJ-9_{OM}-sing 9.song
 'The boys are singing a song.'

- d. DJ * *Abafana* [ba-ya-cu:la] *ingo:ma.*
 2.boys 2_{SM-PRS}.DJ-sing 9.song
 (Buell 2005 and Buell 2006)

Tswana (S31)

- (37) a. CJ *Re-thusa* *Kitso.*
 1_{PL.SM}.help Kitso
 ‘We help Kitso.’
- b. CJ * *Re-mo-thusa* *Kitso*
- c. DJ *Re-a-mo-thusa* *Kitso.*
 1_{PL.SM-PRS}.DJ-1_{OM}.help Kitso
 ‘We help him, Kitso.’
- d. DJ * *Re-a-thusa* *Kitso*
 (Creissels 1996: 112, 113)

In contrast to this system of object marking as incorporated pronouns, object prefixes in the languages of zone P (Matuumbi, Makwe, Makonde, Makhuwa) cannot be analysed as pronominal. Instead, they are agreement markers, which in some languages have definiteness effects. In Matuumbi, the presence of an object marker indicates the definiteness of the object, as in (38). Here, OMs are agreement markers, which thus appear on conjoint as well as disjoint verb forms.

Matuumbi (P13)

- (38) a. CJ *Ni-nolya* *baandu yiimbe.*
 1_{SG.SM}.sharpen 2.people knives
 ‘I’m sharpening knives for people.’
- b. CJ *Ni-ba-nólya* *baandu yiimbe.*
 1_{SG.SM}-2_{OM}.sharpen 2.people knives
 ‘I’m sharpening knives for the people.’
 (Odden 2003: 544; glosses added)

In Makhuwa, only objects of noun class 1 and 2 can be object-marked on the verb, and they are obligatorily object-marked when present. Because the OMs are agreement markers, the syntactic status of the object is of no importance, and hence object markers can appear on both conjoint and disjoint verb forms, as in (39). Without the OM’s unambiguous marking of the relation between verb and object (as in zone S), the distribution of the verb forms in terms of constituency is less clear. This could be a facilitating factor for the functional reanalysis of the conjoint and disjoint verb forms as indicators of focus.

Makhuwa (P31)

- (39) a. CJ *Ki-ni-ń-wéha* *Hamísi* *nancoólo.*
 1SG.SM-PRS.CJ-1OM-look 1.Hamisi / 1.fish.hook
 ‘I see Hamisi / a/the fish hook.’
- b. DJ *Ki-ná-ń-wéha* *Hamísi* / *nańcóólo.*
 1SG.SM-PRS.DJ-1OM-look 1.Hamisi / 1.fish.hook
 ‘I see Hamisi / a/the fish hook.’

The scenario sketched here has an evident historical implication. If the substrate languages from zone P used to have a more constituency-based system, and if this is the system that is supposed to have had an influence on Mauritian Creole, this implies that a language like Makhuwa must have developed the “focus-based” alternation over the last two-hundred years. That is, the language as it was brought to Mauritius had not yet reanalysed the conjoint–disjoint distinction in terms of focusing (which would explain the syntax-based system of current Mauritian Creole) and must have undergone pragmatic strengthening only afterwards, and only on the African continent (northern Mozambique), not in Mauritian Creole.

As no documentation exists on the languages spoken in northern Mozambique at the time, or at least not on the specifics of the grammatical verbal system, we cannot validate the hypothesis or substantiate the proposals sketched above. Nevertheless, one indication might be found in the Makhuwa as spoken by a small society in Durban, South Africa. The descendants of the slaves who were brought there between 1873 and 1880 still keep the Makhuwa culture and language alive (Seedat 1983; Mesthrie 2006). We may hypothesize that their language was more similar to that of the slaves transported to Mauritius than present-day Makhuwa, and we know that it developed separately from the Makhuwa of northern Mozambique. If the earlier Makhuwa (and other substrate languages) indeed had a conjoint–disjoint alternation with different restrictions than the current language(s), one could imagine that the Makhuwa as spoken in Durban has developed a different alternation than that of northern Mozambique. However, from preliminary data we have the impression that this is not the case: the Makhuwa as spoken in Durban is overall the same as that spoken on the northern Mozambican coast (Sarifa Moola, p.c.; Charles Kisseberth, p.c.).

In conclusion, although pragmatic strengthening of the alternation in the languages of zone P (after ±1780) is a possible scenario, it is not the most obvious or probable scenario. A more likely scenario is that the development of a focus-based alternation in Makhuwa started earlier on as a gradual and slow

process, possibly from the split between Makhuwa and Sotho in the beginning of the twelfth century, as suggested by Janson (1991–92).

4.3 Scenario 2: only the basics survive

The second scenario we propose to account for the role of the Bantu substrate in forming the syntactically based verbal alternation in Mauritian Creole is that the developing creole only took the very basic system of the conjoint–disjoint alternation in the substrate. That is, the alternation in the substrate languages belonging to Bantu zone P did have a stronger link with focus, but only the sentence-finality was used in establishing the creole language on Mauritius. After all, grammatical structures tend to simplify in creolization processes.

In Becker and Veenstra’s (2003) account this would mean (i) that the second language learners were confronted with two forms in French, reanalysed these forms, and put them to use shaped by their substrate knowledge, and (ii) that the only property of the substrate that was taken as relevant or applicable in this reanalysis was sentence-finality. The limited influence of the substrate conjoint–disjoint alternation in the reanalysis could be due to the occurrence of the two French forms in contexts that would not allow other generalizations. Then again, this is not to be expected, because the first use is in free variation in Becker and Veenstra’s (2003) approach.

A further question this scenario needs to answer is why only finality would “survive” in the creolization process. There are two main reasons, which are also arguments in favor of the second scenario. The first is that the restriction in sentence-final distribution is the only property present in all the conjoint–disjoint languages, from Kinyarwanda in the north to Xhosa in the south; it can thus be seen as a basic and defining property. The second reason is that sentence-finality is the clearest restriction on the distribution of the conjoint and disjoint verb form. This is clearly visible in various descriptive grammars of Bantu languages that have the conjoint–disjoint alternation: if any information is given on the alternation, the first thing mentioned is the difference in sentence-final distribution. Furthermore, whatever interpretational properties the alternation may have, the difference in use between the conjoint and the disjoint verb form often comes down to being “appropriate” or “inappropriate”, whereas the sentence-final restriction is a clearer and stronger case of being grammatical or ungrammatical.¹¹

¹¹ A reviewer adds that an argument in favor of this view may come from first language acquisition. How children learn these alternations is a worthwhile path for further research.

5 Conclusion

The paper started out by drawing attention to the similarities between the long–short alternation in verb forms in Mauritian Creole and the conjoint–disjoint alternation in Bantu languages. It was then observed that a comparison with other French-based creoles suggests an influence from the Bantu substrate on the emergence of the verbal alternation in Mauritian Creole in its current form. Although there is socio-historical evidence for the relation between the Bantu languages in northern Mozambique and Mauritian Creole, it turns out, upon closer inspection, that there are few similarities between their synchronic verb forms, as shown in Section 3 and noted in Veenstra (2009). We sketched two possible scenarios in which (a) Bantu substrate(s) could have exerted influence on the alternation in Mauritian Creole. The first scenario was deemed implausible: it proposes that the substrate showed an alternation that was based more on syntax and constituency, like present-day Mauritian Creole. The second was considered much more likely: it proposes that only the basics of the conjoint–disjoint alternation were retained in the formation of Mauritian Creole.

At the outset of this paper, we posed three related research questions: (i) Why was the alternation in the Basic Variety retained in Mauritian Creole? (ii) Why did it get this function? (iii) Which knowledge of/in the substrate was transferred to the creole? After the careful comparison of Mauritian Creole and the substrate Bantu languages, and after taking into account the various historical scenarios, we can answer the questions as follows. We believe that the alternation between the short and the long form as present in the Basic Variety was kept in the development of Mauritian Creole because it could be utilized for a function that was present in the substrate languages, which was the conjugational category of conjoint–disjoint. This is why it “survived” in Mauritian Creole and disappeared in other French Creoles. However, the function was not preserved in its elaborate form as found in the Bantu languages forming the substrate. It is very likely that it is only the very basics of the substrate system that had an influence on the persistence and development of the alternation in Mauritian Creole: there is just one constraint, namely, finality, that plays a role in the use of the two forms, and the semantic-pragmatic effects of focus are only indirectly involved with the alternation, only surfacing in the deviations from the canonical use.

Acknowledgements: We would like to thank Tore Janson, Ian Roberts, Philip Baker, Fabiola Henri, Muhsina Alleesaib and two anonymous reviewers for their comments, as well as the audiences at 40th Colloquium of African Languages

and Linguistics (CALL 40) in Leiden (2010), the 6th International Contrastive Linguistics Conference in Berlin (2010), and Bantu 4 in Berlin (2011), where we presented this work. The points of view expressed here and any errors or misrepresentations are our own. The research for this paper was carried out when Jenneke was employed at the Royal Museum for Central Africa in Tervuren, Belgium, within the GRAMIS project. Tonjes' participation in this project was made possible through the support by the Federal Ministry of Education and Research (BMBF) of Germany (grant number 01UG0711). We hereby gratefully acknowledge the financial support of these institutions.

Abbreviations

1/2/3 = 1st/2nd/3rd person; A = aspect, ASP = aspect; CJ = conjoint; CP = complementizer phrase; DET = determiner; DJ = disjoint; DUR = durative; IP = inflectional phrase; LF = long form; LOC = locative; M = mood; OM = object marker; PASS = passive; PFV = perfective; PL = plural; PRO = (independent) pronoun; PROG = progressive; PRS = present; SF = short form; SG = singular; SIT = situative tense; SM = subject marker; T = tense;

References

- Allen, Richard B. 2008. The constant demand of the French: The Mascarene slave trade and the worlds of the Indian Ocean and Atlantic during the eighteenth and nineteenth centuries. *Journal of African History* 49. 43–72.
- Alpers, Edward A. 1975. *Ivory and slaves in East Africa*. London: Heinemann.
- Arends, Jacques 2008. A demographic perspective on creole formation. In Silvia Kouwenberg & John V. Singler (eds.), *The handbook of Pidgin and Creole studies*, 309–331. Oxford: Wiley-Blackwell.
- Baker, Philip. 1972. *Kreol: A description of Mauritian Creole*. London: C. Hurst & Company.
- Baker, Philip. 2008. Elements for a sociolinguistic history of Mauritius and its Creole (to 1968). In Philip Baker & Guillaume Fon Sing (eds.), *The making of Mauritian Creole*, 307–334. London: Battlebridge Press.
- Baker, Philip & Chris Corne. 1982. *Isle de France Creole: Affinities and origins*. Ann Arbor, MI: Karoma.
- Batibo, Herman M., James Moilwa & Naledi M. Mosaka. 1997. The historical implications of the linguistics relationship between Makua and Sotho languages. *PULA Journal of African Studies* 11(1). 23–29.
- Becker, Angelika & Tonjes Veenstra. 2003. The survival of inflectional morphology in French-related creoles: The role of SLA processes. *Studies in Second Language Acquisition* 25(2). 283–306.

- Brinton, Laurel & Dieter Stein. 1995. Functional renewal. In Henning Andersen (ed.), *Historical linguistics 1993: Selected papers from the 11th International Conference on Historical Linguistics*, 33–47. Amsterdam: John Benjamins.
- Buell, Leston. 2005. *Issues in Zulu verbal morphosyntax*. Los Angeles, CA: UCLA PhD dissertation.
- Buell, Leston. 2006. The Zulu conjoint/disjoint verb alternation: Focus or constituency? *ZAS Working Papers in Linguistics* 43. 9–30.
- Buell, Leston. 2009. Evaluating the immediate postverbal position as a focus position in Zulu. In Masangu Matondo, Fiona McLaughlin & Eric Potsdam (eds.), *Selected proceedings of the 38th Annual Conference on African Linguistics: Linguistic theory and African language documentation*, 166–172. Somerville, MA: Cascadilla Proceedings Project.
- Cheng, Lisa L.-S. & Laura J. Downing. 2009. Where's the topic in Zulu? *The Linguistic Review* 26. 207–238.
- Cheng, Lisa L.-S. & Laura J. Downing. 2012. Against FocusP: Arguments from Zulu. In Ivona Kucerova & Ad Neeleman (eds.), *Information structure: Contrasts and positions*, 247–267. Cambridge: Cambridge University Press.
- Corne, Chris 1982. Final vowel truncation in Indian Ocean Creole French. In Philip Baker & Chris Corne (eds.), *Isle de France creole: Affinities and origins*, 49–63. Ann Arbor, MI: Karoma.
- Corne, Chris. 1999. *From French to Creole*. London: University of Westminster Press.
- Costa, João & Nancy C. Kula. 2008. Focus at the interface: Evidence from Romance and Bantu. In Cecile De Cat & Katherine Demuth (eds.), *The Bantu–Romance connection*, 293–322. Amsterdam: John Benjamins.
- Creissels, Denis. 1996. Conjunctive and disjunctive verb forms in Setswana. *South African Journal of African Languages* 16. 109–115.
- Demuth, Katherine & Mark Johnson. 1989. Interactions between discourse functions and agreement in Setswana. *Journal of African Languages and Linguistics* 11. 22–35.
- Devos, Maud. 2008. *A grammar of Makwe* (Studies in African linguistics 71). Munich: LINCOM Europa.
- Güldemann, Tom. 2003. Present progressive vis-à-vis predication focus in Bantu: A verbal category between semantics and pragmatics. *Studies in Language* 27. 323–360.
- Guthrie, Malcolm. 1967 [1948]. *The classification of the Bantu languages*. London: Oxford University Press.
- Halpert, Claire. 2012. Argument licensing and agreement in Zulu. Cambridge, MA: MIT PhD dissertation.
- Harris, Martin. 1989. French. In Bernard Comrie (ed.), *The world's major languages*, 210–235. London: Routledge.
- Haudrère, Philippe. 1989. *La compagnie française des Indes au XVIIIe siècle (1719–1795)*. Paris: Librairie de l'Inde.
- Henri, Fabiola. 2010. *A constraint-based approach to verbal constructions in Mauritian: Morphological, syntactic and discourse-based aspects*. Paris: PhD Dissertation (University of Mauritius & Ecole Doctorale des Sciences du Langage, ED 132, Université Paris Diderot, Paris 7).
- Henri, Fabiola & Anne Abeillé. 2008. Verb forms alternation in Mauritian. *On-line Proceedings of the HPSG-2008 Conference*, Keihanna, Kyoto. Stanford, CA: CSLI Publications.
- Janson, Tore. 1991–1992. Southern Bantu and Makua. *Sprache und Geschichte in Afrika* 12–13. 63–106.

- Klein, Wolfgang & Clive Perdue. 1997. The basic variety. *Second Language Research* 13. 301–347.
- Kraal, Peter. 2005. *A grammar of Makonde*. Leiden: University of Leiden PhD dissertation.
- Larson, Pier M. 2007. Enslaved Malagasy and 'Le Travail De La Parole' in the pre-revolutionary Mascarenes. *Journal of African History* 48. 457–79.
- Maho, Juni. 2009. NUGL online: The online version of the New Updated Guthrie List, a referential classification of the Bantu languages (<http://goto.glocalnet.net/mahopapers/nuglonline.pdf>).
- Meeussen, A. E. 1959. *Essai de Grammaire Rundi* (Annales du Musée Royal du Congo Belge, Série Sciences Humaines 24). Tervuren: Musée Royal du Congo Belge.
- Mesthrie, Rajend. 2006. Subordinate immigrant languages and language endangerment : Two community studies from KwaZulu-Natal. *Language Matters: Studies in the Languages of Africa* 37(1). 3–15.
- Nurse, Derek. 2008. *Tense and aspect in Bantu*. Oxford: Oxford University Press.
- Nurse, Derek & Gerard Philippson. 2003. *The Bantu languages*. London: Routledge.
- Odden, David. 1996. *The phonology and morphology of Kimatuumbi*. Oxford: Clarendon Press.
- Odden, David. 2003. Rifiji-Ruvuma (N10, P10–20). In Derek Nurse & Gérard Philipson (eds.), *The Bantu languages*, 529–545. London: Routledge.
- Rottet, Kevin. 1992. Functional categories and verb raising in Louisiana Creole. *Probus* 4. 261–289.
- Seedat, Zubeda Kassim. 1983. The Zanzibaris in Durban. Durban: University of Natal MA thesis.
- Seuren, Pieter 1990. Verb syncopation and predicate raising in Mauritian Creole. *Linguistics* 28(4). 809–844.
- Seuren, Pieter 1995. Notes on the history and the syntax of Mauritian Creole. *Linguistics* 33. 531–577.
- Smith, Norval S.H. 2006. Very rapid creolization in the framework of the Restricted Motivation Hypothesis. In Claire Lefebvre, Lydia White & Christine Jourdan (eds.), *L2 acquisition and creole genesis: Dialogues* (Language Acquisition and Language Disorders 42), 49–65. Amsterdam: John Benjamins.
- Syea, Anand 1992. The short and long form of verbs in Mauritian Creole: Functionalism versus formalism. *Theoretical Linguistics* 1(18). 61–97.
- Trudgill, Peter. 2011 *Sociolinguistic typology: Social determinants of linguistic complexity*. Oxford: Oxford University Press.
- Vallduvi, Enric & Maria Vilkuna. 1998. On rheme and kontrast. In Peter Culicover & Louise McNally (eds.), *The limits of syntax*, 79–108. New York: Academic Press.
- Van der Spuy, Andrew. 1993. Dislocated noun phrases in Nguni. *Lingua* 90. 335–355.
- Van der Wal, Jenneke. 2008. Agreement inthetic sentences in Bantu and Romance. In Cecile De Cat & Katherine Demuth (eds.), *The Bantu–Romance connection*, 323–350. Amsterdam: John Benjamins.
- Van der Wal, Jenneke. 2009. *Word order and information structure in Makhuwa-Enahara*. Utrecht: LOT.
- Van der Wal, Jenneke. 2011. Focus excluding alternatives: Conjoint/disjoint marking in Makhuwa. *Lingua* 121(11). 1734–1750.
- Van der Wal, Jenneke. 2014. Subordinate clauses and exclusive focus in Makhuwa. In Rik van Gijn, Jeremy Hammond, Dejan Matić, Saskia van Putten & Ana Vilacy Galucio (eds.), *Information structure and reference tracking in complex sentences*, 45–70. Amsterdam: John Benjamins.

- Van der Wal, Jenneke & Larry M. Hyman (eds.). In preparation. *The conjoint/disjoint alternation in Bantu* (Trends in Linguistics). Berlin: De Gruyter Mouton.
- Veenstra, Tonjes. 2003. What verbal morphology can tell us about creole genesis: The case of French-related creoles. In Ingo Plag (ed.), *Phonology and morphology of creole languages*, 293–314. Tübingen: Niemeyer.
- Veenstra, Tonjes. 2007. Verb allomorphy in French-related creoles and the syntax-phonology interface. In Emily Elfner & Martin Walkow (eds.), *Proceedings of Thirty-Seventh Annual Meeting of the North East Linguistic Society (NELS 37)*, 17–30. Amherst, MA: GLSA Publications.
- Veenstra, Tonjes. 2008. Creole genesis: The impact of the language bioprogram hypothesis. In Silvia Kouwenberg & John V. Singler (eds.), *The handbook of Pidgin and Creole studies*, 219–241. Oxford: Wiley-Blackwell.
- Veenstra, Tonjes. 2009. Verb allomorphy and the syntax of phases. In Enoch Aboh & Norval Smith (eds.), *Complex processes in new languages*, 99–113. Amsterdam: John Benjamins.
- Watters, John. 1979. Focus in Aghem: A study of its formal correlates and typology. In Larry M. Hyman (ed.), *Aghem grammatical structure (SCOPI 7)*, 137–197. Los Angeles, CA: USC Department of Linguistics Publications.
- Zerbian, Sabine. 2006. *Expression of information structure in Northern Sotho*. Berlin: Humboldt University PhD Dissertation.
- Zerbian, Sabine. 2007. A first approach to information structuring in Xitsonga/Xichangana. In Lutz Marten & Nancy Kula (eds.), *SOAS Working Papers in Linguistics 15* (Bantu in Bloomsbury: Special issue on Bantu Linguistics), 65–78. London: SOAS, University of London, Department of Linguistics.
- Zribi-Hertz, Anne & L. J. Li Pook Tan 1987. Gouvernement et syntagme verbal: A propos de la truncation verbale en Creole Mauricien. *Documents de travail—Université Paris 8*(1). 57–86.