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Early creole syllable structure: A cross-linguistic survey of the earliest attested varieties of Saramaccan, Sranan, St. Kitts and Jamaican

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1. Introduction

It is a standard textbook claim that the syllable structure of creole languages tends toward the unmarked, very simple, consonant-vowel structure, which is present in all languages of the world (cf. Blevins 1995). For example, Romaine (1988: 63) puts forward that "[c]reoles have no initial or final consonant clusters. They have a simple syllable structure which consists of alternating consonants and vowels, e.g. CVCV." And indeed, we often find historic processes of epenthesis and deletion to make the syllables of the words of donor languages conform to this alleged simple pattern:

(1) Epenthesis in Creoles (data taken from Holm 1988: 108-113)

a.	álima	<	Pt. alma	*Principe CP*
b.	galufu	<	Pt. garfo	*São Tomé CP*
c.	lávulu	<	Pt. libro	*Annobón CP*
d.	kini	<	Dt. knie	*Negerhollands CDt*
e.	carabe	<	Fr. crabe	*Mauritian CF*
f.	siton	<	E. stone	*Cameroon Pidgin E.*
g.	miti	<	E. meet	*Vern. Liberian E.*
h.	taki	<	E. talk	*Sranan CE*
i.	dioso	<	Sp. dios	*Palenquero CSp*
j.	hopi	<	Dt. hoop	*Papiamentu CSp/P*

(2) Deletion in Creoles

a.	tomp	<	Dt. stomp	*Negerhollands CDt*
b.	merican	<	E. american	*Bahamian CE*
c.	kupa	<	P. ocupar	*Principe CP*
d.	ris	<	Fr. risque	*Haitian CF*
e.	tan	<	Dt. tand	*Negerhollands CDt*
f.	tan	<	E. stand	*Sranan CE*

However appealing the simplicity claim is, it is probably false. There are few systematic studies of creole syllable structure available, but those studies that exist all show that the picture is much more complex. For example, Alber/Plag (2001) present evidence that even in the earliest variety of the radical creole Sranan, certain complex syllable structures are observable. Similar findings with regard to other creole languages can be found in Stolz

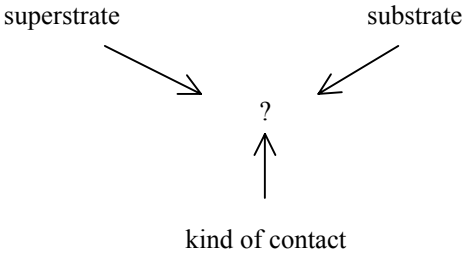
(1986), Aceto (1996), Tinelli (1979), Lipski (2000), Meade (1995), Sabino (1990, 1993), Singler (1996a, 1996b), or Klein (2003).

In this paper we will investigate the syllable structure of four early varieties of Caribbean English Creole, Early Sranan (ESR), Early Saramaccan (ESA), Early St. Kitts (ESK), and Early Jamaican (EJAM). Apart from Early Sranan, these varieties have not yet been investigated systematically with regard to their syllable structure. The present study is part of a larger project which aims at a broad cross-linguistic analysis of the syllable structures found in Caribbean creoles.

The first aim of this paper is to provide a systematic comparative descriptions of the phonotactic patterns and syllable structures of the earliest attested varieties of these languages. The second aim is to solve the problem of apparent variability of epenthesis and deletion as repair strategies in the emergence of creole syllable structure. When and where does epenthesis occur? When does deletion occur? Why does epenthesis apply in one case, deletion in the other? Finally, we try to find a historical explanation for the observed patterns. More specifically, what is the role of the superstrate, the substrate, or the nature of the contact?

In order to answer the last question our project aims at teasing apart these factors by (as far as possible) systematically controlling two of the three factors and varying the third. The three factors are schematized in (3):

(3)



In this study, we keep the superstrate and substrate languages more or less constant and vary the third variable, the kind of contact. Both Sranan and Saramaccan are characterized by the early removal of the superstrate, which is not the case for Jamaican and St. Kitts. Thus we expect to find differences in syllable structure, if the nature of the contact plays as decisive role.

It has been shown that early varieties of creole languages can differ structurally quite substantially from later varieties of the same language.[1] Hence, it is crucial for the study of the emergence of creole language structure in general to use the earliest reliable data available for the languages under discussion. This is what we have done for the present investigation.

We will argue that the observed effects of deletion and epenthesis are triggered by structural restrictions imposed by the grammar of the respective creole language along the lines of Alber/Plag (2001). In all varieties, phonotactic restructuring takes places, because the constraints on syllable structure are tighter in the creoles than in their lexifier languages.

[1] See, for example, the papers in Baker and Bruyn (1998) for discussion. This general point is further substantiated by the results of this study.

We will see that the structures we find in the creole are the result of a compromise between the superstrate and the substrate grammars and that the nature of the compromise is determined, on the one hand, by the grammars and lexicons of the languages involved and, on the other hand, by the nature of the contact. Continuing superstrate presence or more intensive contact is likely to result in a greater assimilation to superstrate structures.

2. The data

The decision to use the earliest sources has the advantage that the data deviate from the *status nascendi* as little as possible, so that some later developments which might blur the picture are eliminated from the analysis. For the present study we have used the following data.

For Sranan, we employed the earliest available documents of Sranan dating from the early 18th century to the mid 19th century: Herlein (1718; 110 types, 194 tokens), the recently discovered Saramacca Peace Treaty (1762, written in Sranan, published in Hoogbergen and Polimé 2000, 281 types, 1777 tokens)**,** van Dyk (1765; part 1: 849 types, 4374 tokens, part 2: 733 types, 7028 tokens), Nepveu (1770; 262 types, 615 tokens), Stedman (1790, containing data from 1773-1777; 108 types, 172 tokens), court records (van den Berg 2001, data from 1702 through 1827, 475 types, 1151 tokens) and Schumann's dictionary (1783, 2391 types, 17731 tokens).[2] The sources have been used in a number of large-scale syntactic and phonological studies before (Arends, 1989; Bruyn, 1995; Plag, 1993; Smith, 1987) and can, if treated with the usual caution that is necessary for historical linguistic research, be regarded as linguistically reliable (see Arends, 1995a; Bruyn, 1995; Plag, 1993 for more detailed discussion).

For Saramaccan, we employed Schumann's Saramaccan dictionary of 1778 (926 types), which has also been used by, for example, Smith (1987) and Aceto (1996). Given the generally high quality of Schumann's linguistic work, this dictionary can also be considered very reliable.

The data for Early St. Kitts come from the 18th century texts by Mathews, published in Baker and Bruyn (1998, 602 types). For a detailed assessment of the reliability of that source see the papers in that volume. Especially the two papers concerned with phonological aspects, Plag (1998) and Smith (1998), show that Mathew's texts are useful data bases for research into the sound structure of that language.

The first substantial source texts for Jamaican date back to the late 18th and early 19th century. Before this period, records are mostly patchy, often consisting of no more than single utterances or mere phrases. The data base for our Early Jamaican study is a subset of the texts in D'Costa and Lalla (1989) and Lalla and D'Costa (1990), covering a range of about 40 years from around 1790 for the earliest to 1828 for the latest source. The selection of texts was based on a systematic ranking of the texts with regard to their supposedly faithful rendering of the phonological patterns of the language of the time (e.g. by using non-standard orthography or other devices to indicate non-standard sound structure). Only

[2] The forms cited below are usually given in their modern Sranan form if, with respect to epenthesis and deletion, the early Sranan forms do not differ from their modern descendents. Where there are such differences it has been noted.

the texts that had sufficient length and were rated highest made it into our corpus, which finally consisted of 1036 word types. A list of the selected texts can be found in the appendix.

All sources show a certain amount of variation, with the Early Jamaican text being most striking in this respect. Of course, one could argue that this variation is due to inconsistencies in the notation of the source texts. However, as we selected only those Early Jamaican texts which appeared most reliable, we should not expect this factor to influence the quality of the corpus to great measures. Another explanation for the variability could be that it was actually a prevalent feature of Early Jamaican. This does not seem unlikely, considering what we find in the modern variety of the creole. In 1961, DeCamp referred to the linguistic situation in Jamaica as one of a continuum, "ranging from the speech of the most backward peasant labourer all the way to that of the well-educated urban professional" (1961: 82). Likewise, in a more recent study, Patrick (1999) finds that speakers of Jamaican Creole differ considerably in their linguistic performance. The high degree of variation thus appears to be a general characteristic of Jamaican from early on.

All source texts were first digitalized, then word lists were created and each word type was coded in an electronic database for the relevant phonological properties. For our analysis we concentrated on the clear majority patterns found in the creole data, mostly excluding isolated variants from the discussion.[3] However, in those cases where the variability is substantial in a particular context, it was included in the analysis. Where the variation is intriguing for some other reason, we comment on it in the relevant sections.

The results of our investigation are described in the next section.[4]

3. Results

In this section we will first take a look at complex onsets, then turn to word-final codas and finally to word-internal consonant clusters. It will become clear that there is a substantial overlap in the patterns of all four varieties, but there are also considerable differences, with the Surinamese creoles patterning differently from the island creoles.

3.1. Complex Onsets

With regard to onset structures we observe a striking similarity between the four creole languages. All of them allow complex onsets consisting of two consonants, provided that these onsets obey the sonority principle (e.g. Clements 1990). Thus, different kinds of word-initial obstruent-sonorant clusters are possible and attested:

[3] But see, for example, Plag and Uffmann (2000) for a detailed quantitative analysis of deletion and epenthesis in Early Sranan sources.

[4] Initial exploratory studies of Early Saramaccan, Early St. Kitts and Early Jamaican were carried out by Rotter (2002), Schüttenhelm (2002) and Schramm (2003). The analysis of Early Sranan is taken from Alber/Plag (2001).

(4)		*English*		*creole*	
	a.	snake	>	sneki	*ESR*
		Suriname	>	Sranan	
		brake	>	breki	
	b.	afraid	>	frede	*ESA*
		self	>	srepi	
		smoke	>	smoko	
	c.	broke	>	bruk	*ESK*
		sleep	>	sleep	
		sweet	>	sweet	
	d.	truth	>	trut	*EJAM*[5]
		swim	>	swim	
		small	>	small	

If, however, the initial cluster violates sonority, as the /s-plosive/ clusters do in English, these clusters are uniformly repaired in all four creole varieties by deletion of the first consonant, i.e. /s/. Consider the data in (5) through (8):

(5)		*English*		*ESR*
	a.	speak	>	piki
		stand	>	tan
		strong	>	tranga
		scrape	>	krebi
		square	>	kweri
	b.	speak	>	*sipiki, *siki
		strong	>	*sitaranga, *sranga
	c.	smoke	>	smoko (*somoko, *moko, *soko)
		snake	>	sneki (*sineki, *neki, *seki)
	d.	sleep	>	slibi/sribi (*silibi, *sibi, *libi)
		drink	>	dringi (*diringi, *ringi, *dingi)

(6)		*English*		*ESA*
	a.	speak	>	pikki
		steer	>	tîri
		strong	>	tranga
		scratch	>	krassi
	b.	speak	>	*sipikki, *sikki
		strong	>	*sitaranga, *sranga
	c.	smoke	>	smoko (*somoko, *moko, *soko)
		snake	>	sneki (*sineki, *neki, *seki)
	d.	bless	>	blessi (*bilessi, *lessi, *bessi)
		drink	>	dringi (*diringi, *ringi, *dingi)

[5] Note that in EJAM there are some isolated forms in which the second consonant, usually an /r/ or an /l/, is deleted (e.g. *blaspheme* > *b'apheme*).

(7)		*English*		*ESK*
	a.	spit	>	pit
		stand	>	tan
		skin	>	kin
	b.	skin	>	*sikin, *sin
	c.	smoke	>	no evidence; probably retention
		snake	>	no evidence; probably retention
	d.	sleep	>	sleep (*leep, *seep)
		play	>	play (*lay, *pay)
		quarter	>	quatter (*watter, *katter)

(8)		*English*		*EJAM*
	a.	speak	>	peak
		stand	>	tan
		skin	>	kin
	b.	skin	>	*sikin, *sin
	c.	small	>	small (*mall, *sall)
	d.	sleep	>	sleep (*leep, *seep)
		crab	>	crab (*rab, *cab)
		twenty	>	twenty (*wenty, *tenty)

The asterisked forms in the (a) and (b) cases of (5) through (8) show that alternative options to repair an offending cluster, such as deletion of the second consonant or epenthesis of a vowel, are systematically ruled out. The forms in (c) and (d), illustrate that for sonority-obeying clusters no reduced forms are attested, they are never repaired.

2.2. Word-final codas

With regard to word-final codas, we can see a split between the two Surinames varieties and the two varieties spoken on the island. While both ESR and ESA - with one notable exception - only allow simplex nasal codas, ESK and EJAM tolerate also other coda consonants. Let us consider ESR and ESA first. The data in (9) and (10) show that word-final codas in these languages are being repaired by vowel epenthesis, unless the coda consonant is a nasal (see (9a) and (10a)).[6] Deletion of a final singleton consonant is not an option, as illustrated by the asterisked forms in (9b) and (10b). In the case of a final consonant cluster, it can be additionally observed that the stem-final consonant is deleted, unless it is preceded by a nasal. In such cases, we get a an output structure that again conforms to the overall coda restriction (cf. (9c), (9d), (10c) and (10d)).

(9)		*English*		*ESA*
	a.	one	>	wan (*wa, *wani)
		begin	>	begin (*begi, *begini)

[6] We do not discuss here the problem of which vowel is inserted in each particular case. See Plag/Uffmann (2001), Lappe/Plag (2003) or (Uffmann) 2004 for recent treatments.

b. back > bakka (*bak, *ba)
afraid > fredde
face > fêsi
c. first > fossu
haste > hessi
d. think > tinga
bend > bendi

(10)

	English		*ESR*
a.	anyone	>	iniwan (*iniwa, *iniwani)
	begin	>	begin (*bigi, *bigini)
b.	afraid	>	frede (*fre, *fred)
	nose	>	noso
	top	>	tapu
c.	field	>	firi
	first	>	fosi
	soft	>	safu
d.	want	>	wanti
	paint	>	pendi

The only exceptions to this pattern are illustrated in (11). Word-final /rk/ clusters are systematically preserved, and a word-internal /r/ coda is licensed in this, and only this, environment:

(11)

a.	*English*		*ESA*
	hark	>	harka
	mark	>	marka
b.	*English*		*ESR*
	hark	>	harki
	mark	>	marki

Turning to ESK and EJAM, we find that not only nasals are allowed in word-final coda position, but also other consonants:

(12)

a.	*English*		*ESK*
	open	>	opin
	meet	>	mit
	liv	>	lib
b.	*English*		*EJAM*
	woman	>	ooman
	eat	>	eat
	make	>	make

There are only marginal cases of epenthesis in the data, which, however, may point towards a historical stage in which word-final vowel epenthesis was more wide-spread. The ESK text has 13 words that quite unambiguously show word-final epenthesis, as against 303 that

feature a consonant at the right word edge. The EJAM text has 10 epenthesized forms as against 698 which tolerate a final consonant.

The two varieties also pattern in the same way with regard to the treatment of word-final clusters. These are generally repaired by the deletion of the final consonant. If the pre-final consonant is a nasal, final /t/ or /d/ are variably deleted whereas other final obstruents are systematically preserved. This is shown in (13) and (14):

(13)		*English*		*ESK*
	a.	past	>	pass
		soft	>	soff
	b.	send	>	sen
		but also: and	>	and, an
	c.	think	>	tink
		dance	>	dance

(14)		*English*		*EJAM*
	a.	must	>	muss
		left	>	lef
	b.	stand	>	tan
		but also: want	>	want, wan
	c.	think	>	tink
		stump	>	tump
		dance	>	dance

2.3. Word-internal clusters

Let us turn now to word-internal clusters. Again ESA and ESR pattern differently from ESK and EJAM.

The Surinamese creoles leave clusters in donor language words intact if these can be syllabified according to the coda and onset constraints already mentioned in section 2.1. Thus nasal-obstruent(-sonorant) clusters survive being syllabified as /n.C(C)/. Consider (15) and (16):

(15)	*Engl./Port.*		*ESA*
	domingo	>	do.min.go
	country	>	kon.dre
	dumpling	>	dum.bru

(16)	*English*		*ESR*
	something	>	san.ti
	country	>	kon.dre

Other internal clusters undergo restructuring in both languages, with deletion as the only possible repair strategy. It is either the first or the second consonant of the cluster that is deleted, with a tendency towards the latter case. Consider (17) and (18):

(17)

Engl./Port.		*ESA*
nasty	>	nâsi
bastard	>	bassra
softly	>	safri, sapri

(18)

English		*ESR*
doctor	>	datra
nasty	>	nasi
softly	>	safri
sister	>	sisa

It is not quite clear what determines the choice of the deleted consonant. According to Wilson (2001:148), phonological processes of cluster reduction by deletion canonically target the first consonant. This means that the data in (17) and (18) above (with the exception of *datra* < *doctor*) would call for a refinement (or even abandonment) of this putative typological generalization. Taking into account data such as those in (19) rather suggests an analysis on the basis of sonority. It is the least sonorous consonant that is deleted:

(19)

a.

English		*ESA*
goodmorrow	>	gumarra
goodnight	>	gunêti

b.

English	>	*ESR*
goodmorrow	>	kumara
goodnight	>	kuneti

Only in those cases where sonority cannot decide (such as *doctor* > *datra*), it is the first consonant that has to be deleted, in accordance with Wilson's generalization. The sonority-based argumentation is, however, only convincing if we accept the idea that plosives are less sonorant than fricatives (cf. *nasty* > *nasi*), and that the /d/ in expressions such as *good morrow* and *good night* was still present in the input to the restructuring process.

ESK and EJAM show partly an identical, and partly a different pattern. They both allow internal nasal-obstruent(-sonorant) clusters under the appropriate syllabification, as evidenced in (20):

(20)

English		*ESK*
somebody	>	somebody
something	>	sunting
hungry	>	(h)ungry

(21)

English		EJAM
mpempem (Twi)	>	pempeny 'plenty'
something	>	sunting
master-thank you	>	massa-tenky

With other internal clusters, we find two patterns, deletion and preservation. In the cases such as those in (22a) and (23a), we find deletion of the first consonant, in the cases in (22b) and (23b) deletion of the second consonant.

(22)		*English*		*ESK*
	a.	business	>	binness
	b.	mister	>	missy
		nasty	>	nasy

(23)		English		EJAM
	a.	blaspheme	>	bapheme
	b.	master	>	massa

So far, everything looks parallel to the Surinamese creoles, to the effect that word-internal, codas are not allowed in EJAM and ESK, although word-finally, codas are legal.

However, ESK and EJAM also variably show the preservation of internal clusters, which leads to the existence of word-internal codas. Consider (24):

(24)	a.	*English*		*ESK*
		sister	>	sissy, sister
	b.	*English*		*EJAM*
		minister	>	minister

In ESK this is the minority pattern, in EJAM this is the majority pattern. The variation itself and the comparison with the other two varieties suggests that we are dealing with two different stages of development. We propose that in an earlier stage of the language, there were no internal codas. Due to new words entering the language which were adopted with a more faithful rendering of the original segmental sequence, internal coda consonants became possible. This process is more advanced for EJAM than for ESK at the time of the respective documentary evidence. An additional fact speaking in favor of our proposal is that the variation at least in Jamaican appears to operate on a item-by-item basis, such that there is no lexical item that shows both variants. This is exactly what you would expect in this type of change. Furthermore, it is the presumably older, and more frequent, every-day words (such as *master* or *sister*) that show consistent deletion.

To wrap up the story of internal clusters, we can say that complex onsets which are allowed in initial position can occur word-internally as well (e.g. Saramaccan: *kondre* < *country*; cf. *dringi* < *drink*), but at least in Sranan and Saramaccan, obstruents are not possible codas in word-internal position. Obstruent clusters are simplified by deletion of either the first or the second consonant, with sonority playing a role in this decision. For St Kitts and Early Jamaican both retention and simplification of internal obstruent clusters are attested. The variation was argued to reflect two different stages in the development of the creole with reduction being the earlier one. Word-internal NC(C) sequences remain unchanged in all four varieties, since a syllabification under observation of pertinent coda constraints is possible.

2.4. Summary

In (25) we have summarized the main results of our analysis, giving both the possible structures (indicated by 'yes'), and the pertinent repair strategies ('T' stands for /d/ and /t/):

(25) **Summary of syllable structures and repair strategies**

	ESR/ESA	*ESK/EJAM*
complex onsets:		
[obstr] [son]	yes	yes
/sP/	deletion of /s/	deletion of /s/
word-final codas:		
nasal coda	yes	yes
non-nasal coda	epenthesis ⇒ .CV#	yes
NC coda	epenthesis ⇒ N.CV#	- yes, if C ≠ T - deletion of C, if C = T ⇒ N#
C_1C_2 coda	deletion of C_2 and epenthesis ⇒ .C_1V#	deletion of C_2 ⇒ C_1#
internal clusters:		
NC(C)	yes ⇒ N.C(C)	yes ⇒ N.C(C)
C_1C_2	deletion of C_1 or C_2	variable deletion of C_1 or C_2

The table shows nicely the similarities and differences between the different varieties, with the island creoles allowing a wider range of syllable structures, and showing a general dispreference for epenthesis as a repair strategy.

The question that naturally arises is how these patterns may have come about. This is the topic of the next section.

3. Restructuring the syllable: a case of substrate influence

One central question concerning the emergence of creole language structure is the influence of the different languages involved in the contact versus the influence of language universals, be it in the form of universals of first or second language acquisition or in the form of universal markedness conditions on grammatical structure. Furthermore, the socio-linguistic dimension cannot be ignored in situations of contact in general, nor in creolization settings in particular. We will discuss each of these factors with regard to syllabic structure.

There is a general tendency observable in all four creoles under discussion to restructure marked lexifier syllables. However, none of the creoles permits only unmarked CV syllables, but all of them allow also other structures such as certain types of complex onsets and coda consonants. We will argue that these structures are essentially substrate-induced. The reason for this view is that, in general, syllabic restructuring takes place if speakers of a

language with tighter syllable structure constraints, allowing only less marked syllables, acquire a language that allows more marked syllable structures. Such effects are widely documented in the loan word and second language acquisition literature (e.g. Silverman, 1992; Yip, 1993; Itô & Mester, 1995a, 1995b; Paradis, 1996; Paradis & Lacharité, 1997; Uffmann, 2001, 2004 on loan words; Eckman, 1981; Hancin-Bhatt & Bhatt, 1997; Broselow et. al., 1998 on second language acquisition). In order to substantiate the claim that phonotactic restructuring in the creoles results from essentially the same mechanisms, we need to take a closer look at syllable structure in the relevant substrate languages.

For Sranan and Saramaccan, Arends (1995) concludes that Gbe, Kikongo and (less importantly) Twi must have dominated among the slaves native languages during the formative period, and the situation is similar for the other Surinamese creole (see also Smith 1987, Plag 1993, Migge 1998). The literature on St Kitts shows a slightly different picture. Parkvall (1999) suggests that five African language families need to be taken into account, Atlantic, Mande, Kru, Kwa and Bantu. However, he also states that between 1640 and 1690, when the proportion of slaves passed 50% of the islands population, Kwa speakers made up the largest group of slaves. Cooper (1999) mentions speakers of Gbe and Akan languages (Twi and Fante) in particular. In comparison, Yoruba, also a Kwa language, was apparently spoken only by a relatively small minority (<10%) prior to 1740 (cf. Parkvall 1999). Finally, for Jamaica, we again find reports on a predominance of Kwa languages. Reflecting on the issue of substrate languages, Cassidy/Le Page (1967: xli) state that:

> "in the first fifty years of the islands settlement the largest number from any one language-community were those from the Gold Coast […] and its hinterland, speaking therefore one of the Akan-Ashanti languages; and the next largest number were from Dahomey, many of whom probably spoke Ewe."

Comparing the accounts for the four creoles, we can thus say that they share a common core of the most important substrate languages:

(26) Main substrate languages
- ESR/ESA:
  - Gbe
  - Kikongo
  - Twi
- ESK:
  - Gbe
  - Akan languages (Fante/Twi)
  - some minor influence from Yoruba
- EJAM:
  - Gbe
  - Akan languages (Fante/Twi)

If we look at the phonotactic constraints these languages impose on their lexical items, we can make the following observations. Gbe and Kikongo allow only open syllables, while in Twi, nasals can occur in coda position. Onset clusters are allowed in all of the major substrates only if sonority increases towards the syllable peak. [obstr]-[son] clusters are therefore possible onsets in Twi and Gbe, whereas Kikongo is slightly more restrictive permitting only complex onsets of the type [obstruent]-[glide]. Obstruent clusters are not allowed in any of the substrate languages, regardless of position. These facts are illustrated

in (27) with data from the 19th century to get as closely as possible to the time of the contact situation:

(27) a. *Kikongo* (Seidel and Struyf, 1910, their notation)
kwiza ‘come’
twika ‘send’
engyuvu ‘question’
b. *Gbe* (Schlegel, 1856, his notation)
dro ‘put down’
bla ‘bind’
tšro ‘spoil’
c. *Twi* (Christaller, 1875, his notation)
osram ‘moon’
mutwam ‘you pass’
trabére ‘a place to sit’

Thus, the substrate languages show a pattern that is highly similar to that of the more conservative creoles ESR and ESA. ESK and EJAM, which have been under continuous superstrate influence, allow for a greater variety of syllable types, which can be explained as the effect of more successful preservation of the input due to better access to the lexifier items and their sound structure. What does mean for a more general theory of the emergence of syllable structure?

The cross-linguistic investigation of creole syllables presented in this paper supports the theory put forward in Alber/Plag 2001 in optimality-theoretic terms, according to which high-ranking structural constraints are responsible for the emergence of simplified syllable structures. The universal flavor of the phenomenon results from the fact that the operating markedness constraints themselves are universal. It is their high ranking in the grammar that is transferred from the substrate languages, to the effect that aspects of African grammar are imposed on the English base words, causing restructuring of non-conforming lexifier syllables. However, when the substrate syllable structure constraints allow it, the English output is faithfully preserved. The superstrate thus provides the segmental material on which structural constraints and faithfulness constraints operate.

In the foregoing paper, we have described the processes of deletion and epenthesis that lead to the emergence of new syllable structures in the creole languages under discussion. There is, however, at least one problem that we have not addressed, namely the choice between the different possible repair strategies, epenthesis vs. deletion, according to the different contexts in which they occur. For Sranan, it has been shown in Alber/Plag (2001) that the variable strategies emerge in a unitary fashion from an optimality-theoretic grammar which ranks different markedness and faithfulness constraints in a hierarchical manner. For reasons of space, such a model cannot be provided here for the remaining three creoles under discussion. We trust, however, that the differences in behavior between these languages can be modeled through a reranking of the pertinent constraints.

4. Conclusion

In conclusion, we can say that the early varieties of English-based creoles investigated in this paper show remarkable similarity in their phonotactic restructuring of the superstrate lexical items. Certain types of marked structures are repaired by epenthesis or deletion to arrive at less marked syllable types. However, contra to claims found in the literature, even the earliest attested varieties have not only CV syllables. Complex onsets observing sonority and certain types of coda are allowed. Creole languages may therefore be regarded not as especially simple, but as rather average languages, as regards their sound structure (cf. Klein (this volume) for the same point).

Differences between varieties could also be found, and these differences in structure correlate with differences in the availability of the superstrate. Those varieties that had more intensive and prolonged contact with their European lexifiers show a more faithful preservation of the syllabic structure of the words taken from them.

Our findings concerning the emergence of syllable structure in Caribbean English Creoles supports a second language acquisition scenario of creolization. Less marked structures in the creole emerge due to transfer from the less marked grammars of the substrate speakers.

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Appendix

List of Early Jamaican source texts

L = Lalla and D'Costa (1990)
V = D'Costa and Lalla (1989)

Short title	**Reference**	**Author**	**Date**
Short journey in the West Indies: Old man	L 130-131	?	1790
Annancy & Death	L 137-140	Jekyll, Walter	18?? Early 19th century (ascribed)
Song: "Quaco Sam"	L 143-145	reconstructed	1814-1823; rough est.
Tour through Jamaica: Sermon at a funeral	L 146-147	Williams, Cynric	1823
Song: "Woodpecka"	L 152	?	1828
The history of the Maroons: One wife too many	V 18	Dallas, Robert Charles	1796-1800
Memoirs: Middle passage	V 26-27	Crow, Captain	1815-1829
Memoirs: African traders	V 27-28	Crow, Captain	1815-1829
Tour through Jamaica: Sermon at a slave's funeral	V 37	Williams, Cynric	1823
Tour through Jamaica: Ebenezer & Bilboes	V 39	Williams, Cynric	1823
Tour through Jamaica: Ebenezer & Mules	V 39-40	Williams, Cynric	1823
Tour through Jamaica: Buckra parson	V 41	Williams, Cynric	1823
Jamaica as it was: rebel's appeal	V 59-60	Senior, Bernard Martin	1815-35
Jamaica: between two masters	V 64-66	Phillippo, James Mursell	1823 onwards
Manners&Customs: Mudfish and Watchman	V 88-111	Murrey, Henry G.	1844; but reflects more archaic usage of creole ⇒ Nancy story!

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