Dutch creoles compared with their lexifier

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In this chapter, we compare lexical and grammatical data from three Dutch-based creoles: Virgin Islands Creole Dutch, Berbice Creole and Skepi Dutch of Guyana. We consider the lexicons, as well as phonological and typological patterns, and both synchronic and diachronic comparisons are made. Typologically, Berbice Creole appears closer to Dutch than the other two creoles, but lexically it is the farthest from Dutch. For some of the analyses, phylogenetic software was used to visualize connections and distances between each of the creoles and the lexifier Dutch. The conclusion is that the three creoles came into being independently. From a diachronic perspective, the documented forms of Virgin Islands Creole Dutch show mostly a gradual move away from Dutch and toward a more creole-like profile in the 20th century.

10.1   Introduction

In this chapter, we compare three creole languages that have a Dutch lexical base. The creoles are Skepi Dutch (Skepi) of Guyana, Berbice Dutch (Berbice) of Guyana, and Virgin Islands Creole Dutch, the latter based on data from the 18th through to the 20th century. The approximate locations of the three creoles can be found on Map 10.1. This study goes beyond Stolz (1986), Bruyn & Veenstra (1993), and Robertson (1989) in that both lexical and grammatical features are discussed from synchronic and diachronic perspectives.

We first introduce the three creoles in Sections 10.2 to 10.4. In Sections 10.5 and 10.6, we compare the three creoles, both from a lexical and a structural-typological point of view. As in the other chapters, we use computational tools developed in evolutionary biology to make automatized comparisons between the different languages, including network analysis and measures of distances.

Map 10.1 The three creole languages that have a Dutch lexical base.

10.2 18th-Century Virgin Islands Creole Dutch and 20th-Century Virgin Islands Creole Dutch

Virgin Islands Creole Dutch (VICD) has been documented for a period of 250 years, which is quite exceptional for a creole language. There are written documents for VICD covering a period of 250 years, as well as later tape recordings (Van Rossem & van der Voort 1996). The language was formerly spoken in the Danish West Indies, from 1917 the U.S. Virgin Islands. The first documents available in the language are letters written in VICD by slaves in the 1730s. The last speaker, Alice

Stevens, died in 1987. She had learned the language from her grandparents, and had worked with linguists who made tape recordings of her speech. Van Rossem and van der Voort (1996) produced a valuable anthology of texts covering two and a half centuries of VICD documents. That book has since been supplemented by publications of new text materials and analyses by Stein (2010a, b), Sprauve (2010), van Sluijs (2011) and Sabino (2012), among others.

It has long been known that there are considerable differences between 18th-century VICD and 20th-century VICD. Linguists have dealt with this discrepancy between older and newer periods of documentation in very different ways. Bickerton (1981: 74–75) did not include VICD in his studies of creole languages because he did not want to rely on written sources alone. Sabino (2012) does not consider the older missionary sources as completely authentic because they would be affected by grammatical prescriptivism, and therefore the older sources differ from the 20th-century sources. The latter are the only ones that Sabino considers reliable. Kouwenberg (2013: 884) does not consider some of the early texts "true" creole either. Unfortunately, a number of studies on VICD blend early sources with newer sources, as if the structure of the language had remained unchanged over a period of 250 years (e.g. Van Diggelen 1978; Bakker et al. 1994; De Kleine 2007). This gives a potentially distorted picture of the structural features of the language. In this chapter, earlier and newer sources are kept separate. Some creolists have attempted to map the diachronic developments (Stolz 1987; Muysken 1995, 2003; Hinskens 1998; van Sluijs 2014; see also Van Rossem & van der Voort 1996) and they observed considerable differences between older sources and 20th century sources.

Diachronic data in VICD suggest a gain through time of features commonly associated with creoles (see below), but also a development away from Dutch in the direction of a more typical creole profile. There are exceptions. Bimorphemic question words of the type *what-reason* for *why* or *what-place* for *where* have long been seen as typical for creoles (see Bickerton 1981; Muysken & Smith 1990; Holm & Patrick 2007). VICD, however, had more bimorphemic question words in the 1700s than were encountered in 20th-century texts, as can be seen in Table 10.1. Bimorphemic forms not directly derived from Dutch are shown in bold.

On the other hand, the absence of productive reduplication in earlier sources and its presence in later sources, indicates a gradual creolization (cf. Sørensen & Bakker 2003 for VICD). In this paper, we will distinguish two or three different time periods and treat Virgin Islands Creole Dutch spoken during each of these periods as a distinct variety or language.

Table 10.1 Question words in two different varieties of Virgin Islands Creole Dutch. Innovated bimorphemic forms are shown in bold.

Modern Dutch Question words	Meaning equivalents English Question words	Older VICD Question words in Oldendorp 1767/8 (five or six bimorphemic, bold)	Modern VICD Question words in De Jong 1926 (two bimorphemic, bold)
wat	what	**wagoed**, wat	wat, wa, awa
wie	who	wie	awi, widi (older: danawie)
waar	where	waar, **na wat plek, wat plek**	wâ, **wâ api, wâ apisi**, api, apê
wanneer	when	wanneer, **wattied,** wol as	[not attested]
hoe	how	hoeso	huso (< Dutch hoezo)
hoeveel	how much/how many	hoeveel, **hoe moeschi**	hovel, huwêl, huwê
waarom	why	**voor wagoed**, wat maak	**wama, awama**

10.3   Berbice Creole

Dutch settlers and plantation owners had established themselves on the Wild Coast of South America from the early 1600s, following several decades of Dutch trade in the region (Hulsman 2009). The different colonies led to the emergence of several creoles, of which two have been documented, one of them being Berbice Creole, also called Berbice Dutch. Until recently Berbice has been spoken by people settled at Wiruni Creek, and formerly also along the Berbice River in Guyana, and perhaps elsewhere. Robertson (1983) mapped the known locations of Dutch creole speakers in Guyana in the 1800s, based on historical documentation.

There are several aspects of Berbice Creole in which it deviates from all other known creoles of the world in a unique way. An overview of the major deviant structural aspects of Berbice compared to other creoles can be found in Kouwenberg (1992). Most importantly, the basic lexicon of Berbice is derived from two different main sources, which is rather unusual among creoles. In most other creoles, African items are almost exclusively found in more peripheral areas of the vocabulary, such as religion, flora and fauna. Studies on African vocabulary in creoles can be found in articles in Bartens and Baker (2012) for a range of creoles. For other creoles the African elements fit the metaphor of "substrate", in that only more in-depth studies dig up African features, whereas they are quite a basic part of Berbice Creole. With 38% of the Swadesh list from Eastern Ijo (Kouwenberg 1992: 264) rather than the main lexifier Dutch, only Saramaccan (English and

Portuguese) and Angolar (Portuguese and KiMbundu) have comparable numbers of words from a second lexifier in the Swadesh list.

All languages are lexically blended to some extent, creoles probably less so than non-creoles, but the nature of the lexical mixture in Berbice creole is also unique in that it is mixed in basic lexical domains such as persons, kinship, and body parts (Kouwenberg 1994, 2012). No other creoles, and probably no non-creoles either, display etymologies from two different sources in these very basic semantic categories. The only exceptions are mixed languages of the Michif type (Bakker 1997), which came about in exceptional, but quite different, circumstances as well.

Berbice Dutch is also unique in its sources of bound morphemes. Creoles have often been characterized as languages with little morphology. Seuren (1998: 292–293), for instance, claimed: "If a language has a Creole origin it is SVO, has TMA [tense-mood-aspect] particles, has virtually no morphology." Similarly, McWhorter (1998, 2005) claimed that creoles are languages with little or no inflection. Here, Berbice differs from most creoles in that it has at least three affixes of clearly inflectional nature: an imperfective suffix *(a(rε))*, a perfective suffix *-tε*, and in nominal morphology a plural affix – *apu*. In addition, there are some derivational suffixes and several processes of reduplication in Berbice Creole.

Furthermore, Berbice Creole has a few cliticized personal pronouns of Ijo origin that occur quite frequently (Kouwenberg 1993, 1994), and object clitic pronouns are quite unusual among creoles. Asian Portuguese creoles (especially Indo-Portuguese of Korlai and Diu) also have inflectional morphemes, and Palenquero Spanish creole uses a Bantu plural prefix, but Berbice is unique in the number of inflectional morphemes and the fact that the morphemes are found in both nominal and verbal domains. All of the inflectional and derivational suffixes are from Ijo, not from Dutch. Of course, the functions of these elements in Ijo and Berbice are not completely identical. For instance, the plural marker is generalized from a marker limited to human nouns in Ijo to one also marking nonhuman animates and inanimate nouns in Berbice (Kouwenberg 2012: 141). There are no Dutch affixes. The Ijo suffixes are used with both Ijo and Dutch nouns. The number and nature of African-derived affixes has no parallel in any other creole.

A third point in which Berbice differs from all creoles is the fact that the African component is from Ijo, and only from Ijo. Ijo is a group of languages spoken in southern Nigeria, formerly considered part of the Niger-Congo stock, but Dimmendaal (2011) considers the Ijoid languages as a separate family (see also Bøegh et al. 2016, for the deviant typological properties of Ijo within West Africa). In other Caribbean or South American creole languages, we encounter no words that are unambiguously derived from this language group. The overview in Bartens and Baker (2012: 281–282) lists percentages of African words in 22 creoles. Berbice has 100% from Ijo, most creoles have 0% from Ijo, and three languages have 1% or

2% of the African component from Ijo. However, scrutiny of the book chapters in Bartens & Baker searching for Ijo words reveals that many of the possible Ijo words have identical forms and meanings in other non-Ijoid African language groupings as well. In short, there may not be a single word that is unambiguously from Ijo in the other Atlantic creoles, and this contrasts greatly with Berbice.

Finally, even though the Berbice language has components of a European language (Dutch), an African language (Ijo) and an Amerindian language (Lokono, of the Arawakan family), the last generation of speakers were almost all Amerindians or of mixed Amerindian descent. How have these Amerindians adopted, or developed, a language with African and European elements? We provide no solution to these mysteries here. For discussion about the latter, see Kouwenberg (2009, 2012, 2013, 2015; Bakker forthcoming).

10.4   Skepi Dutch Creole

Skepi Dutch Creole developed along the Essequibo River in what is now Guyana, in a section formerly colonized by the Dutch and later by the British. The published materials are limited to a handful of sentences (Robertson 1983) and a list of 200 words (Robertson 1989). Therefore, we are only able to make a more detailed lexical comparison between Skepi and the other creoles. As for the grammar, the few sentences available for scrutiny (see the appendix in Bakker 2014, based on Robertson 1983) suggest that it is a creole language, structurally similar to other creoles, with a preverbal TMA system, SVO word order, no gender distinction, no inflectional morphology in verbs or nouns, and no inversion – all of which are features that Skepi shares with most other Atlantic creoles but not with Dutch. Lexically, it does not have the African component that is so prevalent in Berbice. We will give one historical example sentence here, which was found in a letter written in Skepi in 1780. The interpretation is mine, but we are much obliged to Margot van den Berg (2013) and Cefas van Rossem for the groundwork. See also Kouwenberg (2013) and <http://stemmenvanafrika. nl/skepi-nederlands-is-dit-geen-moye-taal/> and <http://www.hum.leidenuniv.nl/ onderzoek/brieven-als-buit/over/brief-van-de-maand-december-2013.html>. The Skepi sentence is given in italics, and the word glosses in modern Dutch.

(11) *en sok   kum   kloeke dagka van Noom di sitte   bi Warme lantta*
      en zoek komen mooi   dag   van Oom die woont in warm   land

      en als um kom Weeran bi Bikkelante
      en als hem kom terug   in wittenland

      ham sel brangk van die 4 blabba moye Goeto
      hem zal breng van die 4 kind   mooie goed.

'en probeer op een mooie dag naar oom te komen die in een warm land woont en als hij terugkomt in Nederland zal hij voor de vier kinderen mooie goederen(dingen) meebrengen' (modern Dutch)
'…and try to come one beautiful day to Uncle who lives in a warm country, and when he comes back to the country of the White people, he will bring nice things for the four children.'

All words but two are from Dutch. *Blaba* could be an Akan word for child. *Bikke* is a widespread African word for European, found in French and English creoles, originating in Benuic (e.g. Igbo) and Ijoid languages, cf. Ijo *bɛkɛ* (see Bartens & Baker 2012: 128). Kouwenberg (2013) suggests an Eastern Ijo etymon and thus a possible indication of contact between Berbice Creole and Skepi.

10.5 The Dutch creoles: Lexical comparison

In this section, we compare the Dutch creoles, using computational tools developed for tracking evolution, where appropriate (SplitsTree; Huson & Bryant 2006). The results are visualized in trees or networks.

Creoles can be characterized as languages restructured and expanded after a stage of rather severe simplification. Under such a characterization, there are exactly three Dutch-based creoles: Skepi, Berbice, and Virgin Islands Creole Dutch. Afrikaans is, in our view, not a result of expansion after severe reduction, and therefore not taken into account here. VICD differs so greatly at the various stages of its documented history that we take two (sometimes three) different varieties of it into account: late 18th-century and 20th-century VICD. When the earliest documents, that is, the slave letters from the 1730s, provide sufficient information, we also consider early 18th-century VICD as a distinct variety from later and much richer 18th century material.

We compare the three creoles on the basis of etymological source, both on the basis of all words from a 200-word selection, and the Dutch etymons only. Also, we consider lexical phonology, concretely phonotactics. Finally, a comparison is made on the basis of typological properties in the realm of morphology and syntax, where one can abstract away from the forms themselves. This has been done earlier by Daval-Markussen and Bakker (2011) for tracking the connections among the Atlantic English creoles, and in this volume by Sippola for Iberian creoles (Chapter 11) and by Daval-Markussen for French creoles (Chapter 8).

10.5.1   Origin of the roots

For the lexical comparison, we used Robertson's (1989) word list of ca. 200 English meanings collected for Skepi, as the point of departure. Robertson added the meaning equivalents of the same (English) meanings in Berbice and VICD. We have supplemented Robertson's list with additional Berbice and VICD words from other sources, notably Kouwenberg (1994) for Berbice, and De Josselin De Jong (1926) for VICD, in which more than a few additional words were located and added to the lexical database. Some English meanings have several translation equivalents, therefore the total number of words for each language is slightly more than 200.

Note that these are not Swadesh lists but rather a selection that covers some basic terms, some more specialized vocabulary, and some local lexicon. The criteria for compilation may be the words remembered by the final generation of semi-speakers of Skepi. The Berbice data were obtained from fieldwork and VICD equivalents (from De Josselin De Jong 1926) have been added by Robertson, supplemented by me. Note also that the numbers differ from those given in Robertson (1989), mostly due to the fact that words were added and more information on the etymology of Berbice items have become available.

Table 10.2 shows a quantification of the etymological origins of the retrieved words for the three languages. Table 10.2 makes it immediately clear that, as far as the origin of the lexicon is concerned, Skepi and VICD are much more similar to one another than they are to Berbice. In Berbice, only 63% of the 211 words of the 200-meaning list are from Dutch, compared to 91% and 90% in Skepi and VICD, respectively. The Berbice list has 30% West African words (Smith et al. 1987), compared to only 2% to 4% in the other creoles. (see Mufwene 1993 and Bartens & Baker 2012 for assessments of African components of creoles).

Table 10.2 Etymological sources for a 200-word lexicon from each of the three Dutch creoles. Percentages and absolute numbers.

	Dutch origin	West African origin	Amerindian origin	English origin	Portuguese origin	Unknown origin
Berbice (211 words)	63% (132)	30% (63)	3% (6)	2% (4)	0% (1)	2% (5)
Skepi (211 words)	91% (192)	2% (4)	4% (8)	2% (5)	1% (2)	0% (0)
20th century VICD, (211 words)	90% (189)	3% (6)	2% (4)	2% (5)	0% (1)	3% (6)

Graphically, the lexical distances on the basis of the etymologies of roots between the three creoles can be presented as in Figure 10.1.

Figure 10.1 Comparison of lexicon of Skepi, Berbice Creole, and Virgin Islands Creole Dutch, based on etymologies of a word list with 211 items.

Figure 10.1 does not represent an evolutionary pattern; the computational technique is only used as a means to make a graphic representation of lexical distances. The length of the branches (or edges) in Figure 10.1 represents the lexical distance between the three Dutch creoles in this respect. VICD and Skepi are much closer to one another because they have a similar number of roots from Dutch and other languages. Berbice creole appears quite distinct from the other two, obviously because of the presence of many West African roots.

10.5.2   Comparison of the Dutch roots

The next step in our lexical comparison is to compare the etymological sources of the Dutch words in the three creoles, based on shared etymologies. If a Skepi word, a VICD word and a Berbice word all have the same Dutch word as their source, the three words are counted as the same, even if their form may be somewhat different. If the languages use different Dutch words for the same meaning, then the creole words are counted as two or three distinct ones. Where no Dutch word was available for a particular meaning in Robertson's list in one of the languages (this would most often happen in Berbice creole, when an Ijo word was used), that word was not included in the count.

132 of the meanings in the revised list yield words with Dutch etymologies in all three languages, and in 39 of the cases (30%), a different Dutch word is the etymological source in at least one of the languages, against 92 words (70%) with the same etymology. Examples include the word for "back": in Skepi it is *lɛnt*, from Dutch *lende* "side (of body)", in Berbice *atri* from Dutch *achter* "behind" and in VICD *rigi* from Dutch *rug* "back" (body part). Here all three forms have a different etymological source. Where Berbice Creole and VICD have a form for "beneath, under" from Dutch *onder* (*ondro* and *ondə* respectively), Skepi has a form derived from *beneden* "down", dialectal *benere*: *bɛnɛr*. And VICD is the deviant one in "cup": Skepi and Berbice have *mok* resp. *mok(u)* (Dutch *mok* "mug"), VICD has *kopi* (Dutch *kop* "cup" or diminutive *koppie, kopje*).

Taking all the 144 available words with a Dutch etymology from the word lists of the three creoles (i.e., including those words where more than one translation equivalent of the English meanings is available), it appears that VICD is the most deviant one of the three. Table 10.3 shows that VICD has 62% (107) common Dutch roots with Berbice and 67% (97) with Skepi, and Berbice is the language with most common roots with Skepi (78%, or 113). For five words, all three languages have different etymologies. This result is not surprising considering the different histories of the three colonies. The Berbice and Skepi speaking regions were geographically close. Contacts of both settlers and colonized people may be expected between settlements.

Table 10.3 Shared Dutch etymologies (common roots) between the three Dutch creoles

	Berbice	**Skepi**	**Virgin Islands Creole Dutch**
Berbice			
Skepi	78% (113)		
Virgin Islands Creole Dutch	62% (107)	67% (97)	

10.5.3   Phonotactics of Dutch and Ijo words in Dutch creoles

The phonotactic patterns compared in this section are based only on the list of words generated from the 200 meanings found in Robertson (1989). For this study, presented in more detail in Bakker (2014), we surveyed only clusters found in this restricted data set, thus avoiding a bias toward the better-documented Berbice Creole and VICD, for both of which at least five times as many words are attested as for Skepi. As in the previous sections, Robertson's (1989) list is supplemented with Berbice forms from Kouwenberg (1994) and VICD forms from De Josselin De Jong (1926).

The phonotactic patterns can be taken into account by looking at initial, medial and final clusters and combinations of vowels. We treat the Ijo and Dutch components from Berbice Creole separately; they appear to obey quite different phonotactic rules.

The Ijo words in Berbice Creole only allow one final consonant, the nasal -*n*, whereas the Dutch words in Ijo allow 11 final consonants or clusters. These clearly go back to Ijo and Dutch sources (cf. Harry 2003 for Ijo). The Skepi words show 21 final consonants and clusters, and VICD 16 different ones. There is only limited overlap between the two, as is visualized in Figure 10.2, where the length of the branches indicates the quantity of clusters not found in the other creoles.
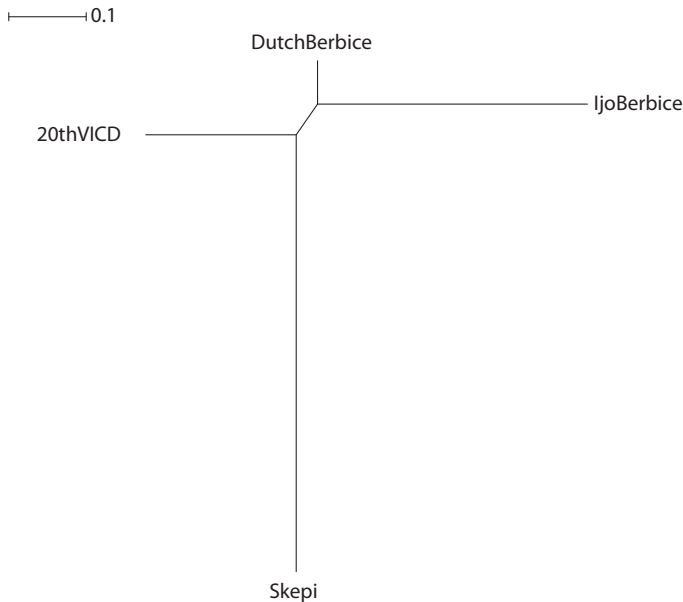
Figure 10.2 Phonotactic distances between final consonant clusters in Skepi, VICD and the two components of Berbice Creole

There are in total 22 initial clusters in the three creoles. Berbice allows 15 clusters, six are found in Ijo words, 11 in Dutch words, four of them only in the Ijo words, nine only in Dutch words, and three shared. Skepi has 15 initial clusters, and VICD 17 clusters. The Dutch lexical elements in the three creoles show much overlap, but again the Ijo elements deviate mostly from the others, suggesting that Ijo elements preserve Ijo phonotactic constraints.

Medial clusters are most numerous, but several of them also cross syllable boundaries. There are 45 medial clusters in the dataset, and each of the four creoles has a similar number not found in the other creoles. Berbice has 22 medial clusters, and both Ijo and Dutch elements have 13, of which only four are shared. Skepi and VICD have 24 and 29 medial clusters respectively. There is remarkably little overlap between the three creoles: only the clusters *-mp-* and *-nd-* are found in all three creoles.

Vowel sequences are a bit trickier, as it is not clear whether they represent diphthongs or separate syllables. There are only nine in all, four in VICD, six in Skepi, seven in Berbice, two of them shared between Ijo and Dutch elements. Again, we observe little overlap.
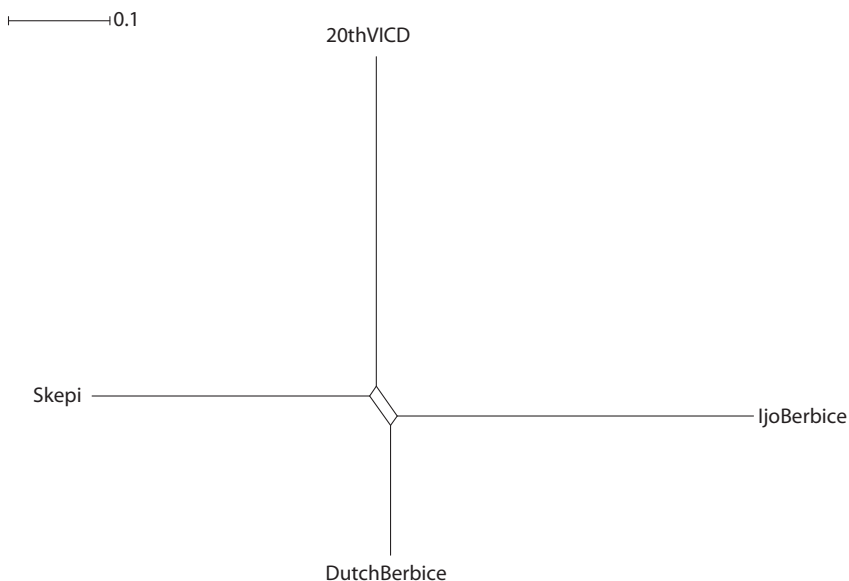
Figure 10.3 General phonotactic distances between Skepi, VICD and the two components of Berbice Creole.

We can conclude that there is surprisingly little overlap between the phonotactic structures of the three Dutch creoles. This is also visible in the graph in Figure 10.3, which visualizes the relations between all of the 103 phonotactic features. The Dutch elements in Berbice appear to be the least deviant of the others. This lack of overlap can again be interpreted as pointing to a separate genesis for the three Dutch creoles, and different sets of dominant substrate languages for each of them. The fact that the Ijo and Dutch elements in Berbice Creole behave in very different ways, suggests that these elements follow their own norms according to source languages. These Ijo patterns are fairly close but by no means identical to modern Kalabari Ijo patterns (cf. Harry 2003), but we do not discuss possible changes and adaptations here. Perhaps this suggests a certain level of bilingualism among preceding generations at some point in time.

It has to be kept in mind, that this analysis is not based on a full database of the languages, but only on the final consonants and consonant clusters and vowel combinations found in a 200-word list with 211 words for each of the three creoles. As the sample is restricted to 200 words, some forms will certainly be missing. For example, Berbice also has initial *spr-* (*springhan*, but compare *pringi* from Dutch *springen*) and *str-* (*strafu*), medial *-gr-* (*swagri*) and *-sl-* (*stisli*) and the vowel sequence *-uei* in *duei*, none of which happen to be present in the 211 item word list, and therefore not taken into account.

For more detail, more analysis, and the datasets, see Bakker (2014). We have not dealt with epenthetic vowels inserted in etymological consonant clusters, paragogic vowels at the end of words, and consonants inserted before words that etymologically start with vowels.

In general, Berbice has the lowest number of phonotactic possibilities (the lowest number of final consonants, final consonant clusters, medial clusters, and vowel combinations, especially in the Ijo component). In some areas, VICD has more possibilities than Skepi (a wider range of final consonants, word-initial consonant clusters, vowel combinations), but sometimes Skepi has a wider range, e.g. word-medial and word-final consonant clusters. An explanation on the basis of different substrates would be one to explore, along the lines of Smith (1987) for the Surinamese creoles. It is clear that the Ijo influence on the Dutch component in Berbice was limited, because the phonotactic patterns for Ijo- versus Dutch-related words differ in Berbice Creole.

10.6 Typological comparison

10.6.1 Three varieties of Virgin Islands Creole Dutch and Berbice Creole

In this section, we compare morphosyntactic typological data for the Dutch creoles, where we also add Dutch and for VICD we include data from different time periods. Due to lack of information, Skepi is not taken into consideration here.

If one wants to study the similarities between languages that go beyond particular word forms, one must take typological features into consideration, such as the order of nouns and modifiers, the presence of prepositions versus postpositions, the presence or absence of gender, and the like. Examination of creoles (as defined independently by creolists) in terms of features – identified by typologists as either being typical for creoles, or as characteristic of some of the languages of the world – invariably points to the structural distinctness of creoles vis-a-vis noncreoles (see Bakker et al. 2011 for creoles worldwide; Szmrecsanyi & Kortmann 2009 for English creoles, and many of the studies in this book).

Phylogenetic models can help to show links between different creoles. We have selected a number of features in which the Dutch creoles are known to differ from one another. We limit our analysis in this section to morphosyntactic features.

For the typological comparison, we selected a number of features where previous research had shown that different values were used in different time periods for VICD. Hence, the selected features can shed light not only on typological connections with other Dutch creoles and Dutch, but also on temporal developments of VICD.

The features selected should not be taken to be representative of a typological profile of any sort. Note also that any numerical value of a typological feature summarizes a complex reality in a single value, but that does not exclude the possibility that some structural features also have alternative constructions with lower frequency. For Dutch, one could argue, for instance, that there is also reduplication, though not productive (*tiktak*, imitation of sound of a clock), or a possibility for double negatives (*nooit niet* litt. "never not"), but such minor patterns are not taken into consideration. Here we focus on the most general values of the selected features.

For VICD, we used four different types of sources from three time periods. For the first (the earliest) period, we used slave letters written between 1732 and 1760. For the second period, we used two types of sources from the 1760s: Oldendorp's (1767–1768) dictionary, including the example sentences therein, and Oldendorp's

Table 10.4 Structural features for four sources of Virgin Islands Creole Dutch, for Dutch, and for Berbice.

	VICD Slave letters, 1730s–1760s	VICD Oldendorp Dialogues, 1760s	VICD Oldendorp Dictionary, 1760s	VICD De Jong 1926	Berbice Creole	Dutch
1 with = and	0	1	0	1	1	0
2 plurals – s/ en	1	1	1	0	0	1
3 zero plural	1	1	1	1	0	0
4 Dutch verbal morphology	1	0	0	0	0	1
5 adjectives variable Ø/-e	1	1	0	0	0	1
6 inherited verb-particle	1	1	1	0	0	1
7 bimorphemic question words dominant	?	0	1	0	0	0
8 bimorphemic question words present	?	1	1	1	1	0
9 reduplication	0	0	0	1	1	0
10 infinitive *om*	1	0	0	0	0	1
11 infinitive *voor*	1	1	1	1	1	0
12 focusmarker	?	1	0	1	1	0
13 copula with adjectives	1	1	1	1	0	1
14 preverbal Negation	1	1	1	1	0	0
15 preverbal TMA	1	1	1	1	0	0
16 prepositions	1	1	1	1	1	1
17 postpositions	0	0	0	0	1	0
18 double negative	?	1	1	1	1	1
19 possession N *van/fan* N	1	1	1	1	1	1
20 possession N "his" N	1	1	1	1	1	1
21 possession N N	?	0	0	1	1	0
22 serial verbs	0	0	0	1	1	0

dialogues between masters and slaves (Stein 2010b). The reason for taking these two sources from the same decade separately is the impression that these sources were grammatically different. One of them may be closer to the vernacular of the slaves, which could thus be verified. For the third period (the 20th century), De Jong's (1926) primary materials were investigated.

We selected features based on suggestions adopted from Stolz (1986) and Sabino (2012), among others, not all of which are logically independent of one another. They are listed in Table 10.4. For example, features (2) and (3) both relate to plural marking, one relating to the presence of some plural suffixes, the other to the absence or presence of zero marking of plurality. For a more detailed description of the features, we refer to Bakker (2014). Here we just present a Table with 22 features.

Table 10.4 shows the scores given for the different features found in the sources from the three different varieties of VICD, as well as in Dutch and Berbice. Here, *yes* scores 1, *no* scores 0, and a question mark indicates that no answer could be provided based on the available data.

The data was analyzed using the computational tools devised for phylogenetic research (Huson & Bryant 2006). The results are shown in Figure 10.4. A network
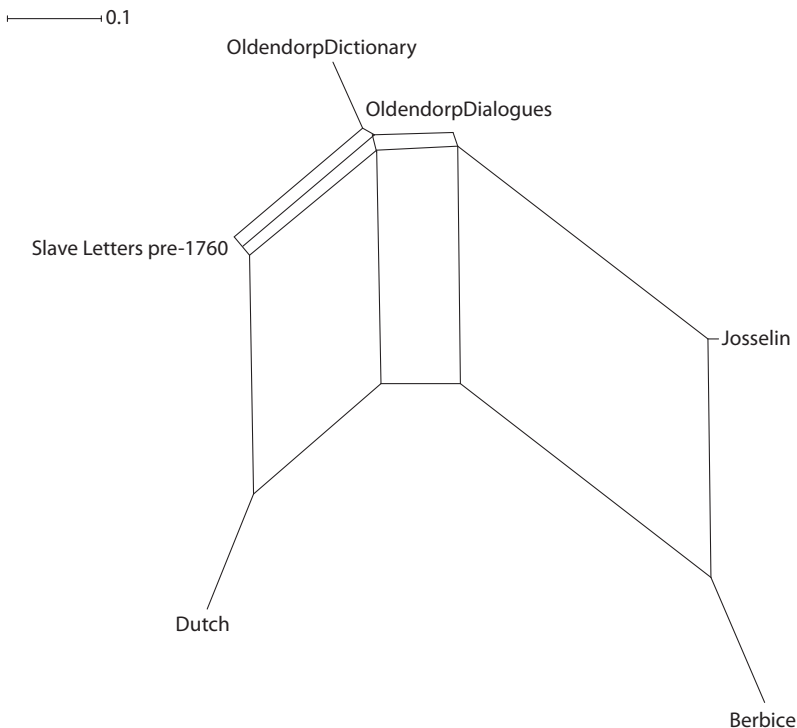

Figure 10.4 A network of Dutch, Berbice Creole, and three varieties of Virgin Islands Creole Dutch, based on typological data.

approach was chosen as it allows one to show not only the inherited features but also, potentially, borrowing and contact.

Figure 10.4 shows that the language of the slave letters is the closest to Dutch, followed by the language of Oldendorp's materials (two different kinds; 1767–1768; 2010), and followed by the variety of 20th-century language documented by Josselin De Jong. This study shows that the differences between the two types of texts from Oldendorp from the 1760s are very small. These results again support the observation that the three varieties of VICD are quite distinct languages. Note that Berbice and 20th-century VICD, appear to be at roughly equal distances from Dutch.

A rooted tree, based on the same data, with Dutch as the first taxon, is shown in Figure 10.5. Figure 10.5 could be interpreted as a diachronic development away from a form of Dutch and toward 20th-century VICD, in an evolutionary framework, where Berbice develops parallel to VICD.
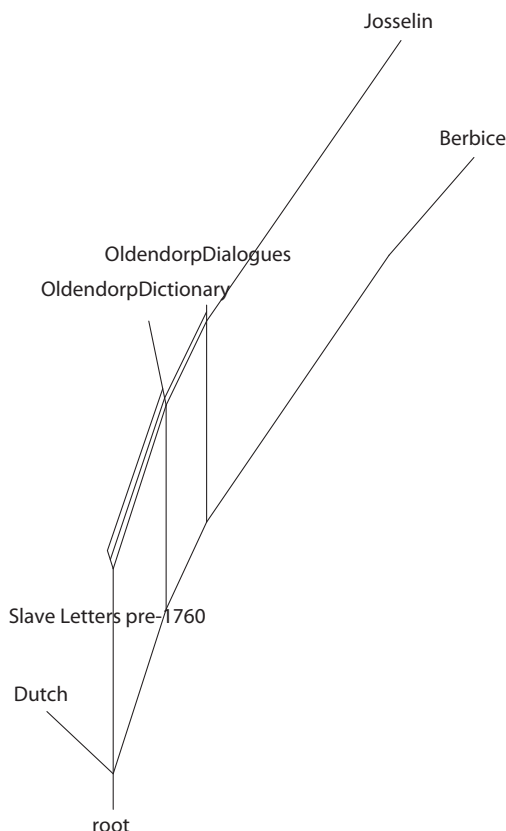

Figure 10.5 Rooted tree with Dutch, three varieties of Virgin Islands Creole Dutch, and Berbice Creole, based on typological data.

Figure 10.5 attests that Berbice and 20th century VICD are the furthest re-moved from Dutch, VICD of the slave letters is the closest to Dutch, and the VICD varieties documented by Oldendorp fall in between.

10.6.2 Skepi, Berbice, and 20th-Century Virgin Islands Creole Dutch: Grammatical traits

As previously mentioned, very little is known about the structural features of Skepi. Not even a dozen sentences have been published. Still, even when it is difficult to generalize, a few properties can be extracted from this limited material. For example, one can draw generalizations with regard to the question word system based on one question word only. With these cautionary remarks, we present the known structural properties of Skepi in Table 10.5, and their equivalents in Berbice, in VICD and in a category "most creoles", roughly based on the data in Holm & Patrick (2007). Here too, binary scores are applied, for presence (1) or absence (0).

Table 10.5 Structural features of Skepi compared with structural features of other creoles and Dutch.

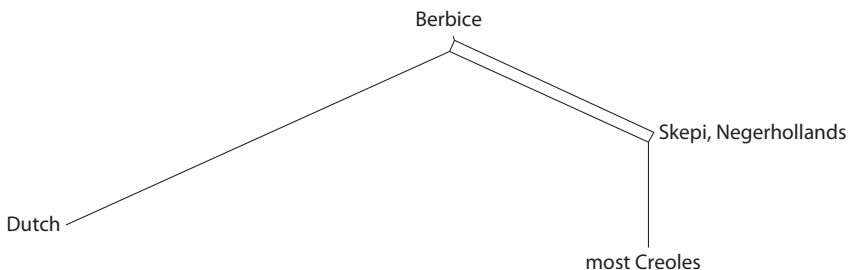|	Berbice	Skepi	VICD	Most creoles	Dutch
Gender	0	0	0	0	1
Verbal inflection	1	0	0	0	1
Nominal inflection	1	0	0	0	1
Case in pronouns	0	0	0	0	1
Bimorphemic question words	0	0	0	1	0
Preverbal tense, mood, aspect	1	1	1	1	0
Preverbal negation	0	1	1	1	0
SVO	1	1	1	1	0
Inversion	0	0	0	0	1
Serial verbs	1	1	1	?	0

Figure 10.6 A network of structural properties of the Dutch creoles.

By feeding these data into the Splits Tree software, the results shown in Figure 10.6 were obtained. Figure 10.6 shows that Skepi and VICD are structurally similar to one another, in fact identical. Longer branches represent more distance between languages. Both Skepi and VICD are close to other creoles, whereas Berbice is closer to Dutch than the other creoles, no doubt because of the presence of inflection in both Dutch and Berbice and the absence of preverbal negation in both. The closeness of Berbice and Dutch, however, is also somewhat misleading, because the concrete inflectional morphemes in the two languages are from different source languages, Ijo and Dutch respectively. The forms of the morphemes have not been transmitted from Dutch to Berbice Creole.

10.7   Conclusions

We have compared the Dutch creoles along a number of lexical and grammatical parameters: etymological composition of the lexicon, words inherited from Dutch, phonotactic differences and similarities, and typological features. Even if one disregards the African component of Berbice, the creoles are quite distinct from Dutch, and from one another.

Taking into account only the Dutch cognates shared by Virgin Islands Creole Dutch, Berbice, and Skepi, there is no reason to assume that any one of these creoles is derived from any of the others. The phonotactic patterns of the three creoles are quite different, and a significant minority of meanings across the three languages (between 22% and 38%) have different Dutch etymons. It is most likely, perhaps even obvious, that all of them emerged independently from one another. None of the three go back to the same creolized or pidginized ancestor. This conclusion is in line with findings of Silvia Kouwenberg (2009, 2013) with regard to Skepi and Berbice Creole, and it also appears likely for VICD as well.

From a typological point of view, Skepi and Virgin Islands Creole Dutch are quite close to one another and to other (Atlantic) creoles, but they are distant from Dutch, whereas Berbice is placed in between them. However, on the basis of a different, more elaborate set of typological features, Berbice is most distant from Dutch. These differences are exposed through the selection of particular features. The data from the three varieties of Virgin Islands Creole Dutch suggest a development over time away from Dutch and toward a more creole-like profile. This could also be due to variation, where earlier sources were based on less basilectal features.

This all indicates that an independent genesis of the three creoles is the most likely scenario, with only very moderate and superficial contact between Berbice and Skepi.

The results corroborate what has been suggested before about the possible connections and the differences among the Dutch creoles, and the development of Virgin Islands Creole Dutch. This is the first structural comparison of Dutch creoles that includes the limited Skepi data and suggests a more typical creole profile for this language.

Note

The datasets for this chapter can be found here: https://phylogenetic-creole-studies.blogspot.com

Acknowledgments

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