

Change or variation in historical data: A case study of the Virgin Islands Dutch Creole imperfective and prospective aspect marker*

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“A written record of a speech event stands like a filter between the words as spoken and the analyst” (Schneider 2002: 67). The filter covering missionary sources typically consists of multiple layers, since they are produced by second language learners. Such missionary sources are generally consulted when they constitute the main source of data from that period. This is the case for Virgin Islands Dutch Creole (DC) and its 18th century documentation. I discuss four documented alternations, either in form or function, of the imperfective (and prospective) aspect markers (preverbal ‘le’ and ‘lo’), where it is not clear whether we are dealing with either the outcome of a linguistic change or a change in progress, or a case of (stable) inherent variation. By discussing the background of the author of the relevant sources, the audience design, and the speech community that the source is meant to reflect, an attempt is made for each alternation to resolve the issue of whether we are dealing with change or variation and to overcome the challenges posed by the ‘filter’ over the data.

1 Introduction

Linguists studying historical data are mostly interested in the spoken language of historical time periods. As speech recordings are a relatively recent phenomenon, historical data are typically written sources. Since ‘a written record of a speech event stands like a filter between the words as spoken and the analyst’, it is the ‘primary task’ of the analyst to ‘remove the filter’ (Schneider 2002: 67). This means that an assessment needs to be made of how far the written record is removed from the actual spoken language and by what layers the speech variant is obscured. This is particularly vital in the study of

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missionary sources, where the filter separating the written from the spoken language consists of multiple layers.

Historical missionary sources are generally consulted in those cases where they constitute the main source of data from that period. This is the case for Virgin Islands Dutch Creole (DC)¹, the extinct Dutch-lexified creole language of the current US Virgin Islands, where the missionary data are the main source of 18th century data. A reconstruction is made even more complex by the existence of various language varieties, representing different speech communities.

In this paper I investigate the use of imperfective and prospective aspect markers in all DC sources available, ranging from the 18th to the 20th century. DC expresses tense, mood, and aspect (TMA) through preverbal particles. In the 18th century data, imperfective aspect may be expressed through preverbal *le*:

- (1) Wa goed jender le soek?
 what 2P IPFV seek
 ‘What are you looking for?’ (Böhner ms. [3.2.1.]: 25)

By contrast, the 19th and 20th century sources only contain preverbal *lo*:

- (2) Sen a lo skrew
 3P PST IPFV shout
 ‘They were shouting.’ (Magens 1883: 131)

I will discuss four documented alternations, either in form or function, involving these two items, where it is not clear whether we are dealing with either the outcome of a linguistic change or a change in progress, or a case of (stable) inherent variation. The documentation of these items can only be significant for our understanding of the evolution of the language, if they can be correctly interpreted in this respect. By discussing the background of the authors of the relevant sources, the audience design, and the speech community that the source is meant to reflect, I will evaluate for each alternation the extent to which we can ascertain whether we are dealing with change or not.

The paper is built up as follows. First, I will discuss the framework within which I will try to determine whether we are dealing with language change or inherent variation in section 2. In section 3, the socio-historical background of DC, its varieties, and the available sources are discussed. In section 4, I define my use of the term ‘imperfective aspect’. Sections 5 and 6 concern the use of *le* and *lo* respectively in the 18th century data. In sub-sections 5.3 and 6.3, I will

¹ Also often referred to as Negerhollands, but see footnote 5, where the term Negerhollands is used in a more restricted sense.

evaluate whether we are dealing with language change or not. Section 7 addresses imperfective and prospective *lo* in the 19th and 20th century data and section 8 the prospective construction *lo lo* documented in 19th/20th century data. The paper ends with the conclusion in section 9.

2 Framework: language change versus sociolinguistic variation

The main issue of this paper is whether variation in the data represents true variation or language change. The framework for doing so will be Weinreich et al.'s (1968) discussion of the relationship between language change and sociolinguistic variation. It was part of their goal to demonstrate that language change should be studied '*in vivo*' and that 'the past [...] – no matter how richly recorded and ingeniously studied – can never replace the present as a laboratory for the linguist' (Weinreich et al. 1968: 164). However, historical data may provide indispensable clues for the evolution of language when combined with the insights about the mechanisms of language change studied in the present. Accordingly, this paper will not attempt to contribute to the study of the mechanisms of language change, but instead attempt to distinguish it from sociolinguistic variation.

Essential to Weinreich et al.'s model is the 'multilayer conception of language' (1968: 164): language is a system consisting of multiple styles, which (1) 'offer alternative means of saying 'the same thing''; and (2) 'are jointly available to all (adult) members of the speech community' (1968: 159). Weinreich et al. point out how '[a]ny pair of dialects can be brought under the heading of a single 'diasystem' [but that] it is only when a pair of dialects are jointly available to a group that switches back and forth between them – even if some members of the group only *hear* one of the styles and never speak it – that the multilayer formulation is relevant to an understanding of language change' (1968: 163). The 'concept of style switching [is] in principle a durative and recurrent phenomenon' (1968: 164).

There are four problems central to language change:

(i) *the transition problem*: 'the transfer of features from one speaker to another appears to take place through the medium of bidialectal speakers, or more generally, speakers with heterogeneous systems characterized by orderly differentiation' (1968: 184);

(ii) *the embedding problem*:

(a) embedding in the linguistic structure: 'The linguistic change itself is rarely a movement of one entire system into another, [but instead] a limited set of

variables in one system shift their modal values gradually from one pole to another' (1968: 185).

(b) embedding in the social structure: 'In the development of language change, we find linguistic structures embedded unevenly in the social structure; and in the earliest and latest stages of a change, there may be very little correlation with social factors. Thus it is not so much the task of the linguist to demonstrate the social motivation of a change as to determine the degree of social correlation which exists, and show how it bears upon the abstract linguistic system' (1968: 185).

(iii) *the evaluation problem*: 'The theory of language change must establish empirically the subjective correlates of the several layers and variables in a heterogeneous structure. Such subjective correlates of evaluations cannot be deduced from the place of the variables within the linguistic structure' (1968: 186).

(iv) *the actuation problem*: 'It is suggested that a linguistic change begins when one of the many features characteristic of speech variation spreads throughout a specific subgroup of the speech community. This linguistic feature then assumes a certain social significance - symbolizing the social values associated with that group (cf. Sturtevant 1947: 81ff.). Because the linguistic change is embedded in the linguistic structure, it is gradually generalized to other elements of the system. Such generalization is far from instantaneous, and change in the social structure of the community normally intervenes before the process is completed. New groups enter the speech community and reinterpret the on-going linguistic change in such a way that one of the secondary changes becomes primary' (1986: 186–187).

3 Dutch Creole, its sources and varieties

3.1 A short history of the Danish West Indies

Permanent settlement of the Danish West Indies began in 1672/1673 on the island of St. Thomas. By 1691, there were 389 European inhabitants, of whom only 30% had actually been born in Europe (van Rossem 2013: 719). Less than 20 years after the founding of the colony, 24% of the total European population consisted of locally-born children, while another 26% were children born on other Caribbean islands (van Rossem 2013: 719). Although it was a Danish colony, 42% of the colonists in 1691 who were born in Europe were Dutch or Flemish (van Rossem 2013: 720). Additionally, a considerable number of people born on other islands in the West-Indies were native speakers of Dutch (van

Rossem 2013: 725). The Dutch were also culturally dominant among the European population (Hall 1992: 13).

The Dutch language also exerted influence on the enslaved population: it is the main lexifier of the creole that arose in the Danish colony. There was a majority of Dutch speakers in five out of seventeen neighbourhoods on St. Thomas in 1691. These five neighbourhoods contained 71.1% of all of the enslaved people on the island (van Rossem 2013: 725), which means that the majority of the enslaved people lived in areas dominated by speakers of Dutch. To be more specific, the origin of many DC words can be traced back to south western varieties of Dutch, i.e., West-Flemish and Zeelandic, spoken in the area between the towns of Bruges, Oostende, and Vlissingen (van Rossem 2000).

The neighbouring island of St. John was captured by the Danish in the spring of 1718. The planters who settled there had all come from St. Thomas, taking their slaves with them. The majority of them were Dutch as well (Westergaard 1917: 75).

In 1733, St. Croix was bought from the French. Here, the English were culturally dominant, constituting the large majority of the planters. An English creole was reported to have been spoken on St. Croix in 1767, but DC was spoken there as well (Oldendorp 2000: 682).

St. Thomas's economy was initially based on plantations, but after becoming a free port in 1724, the island acquired enormous wealth through trade, with a resulting decrease in the number of plantations (Sabino 2012: 67). By 1780, there were more enslaved workers in the towns than on plantations on St. Thomas (Sabino 2012: 69 and the citations therein). On St. John, however, the main focus remained on plantations until the early 19th century (Sabino 2012: 69 and the citations therein). As DC was the language of the plantation workers and English was dominant in the towns as the language of trade, this development initiated a slow shift on St. Thomas (and ultimately on St. John as well) from DC to English and English creole in the course of the 18th and the 19th centuries (Sabino 2012: 71–72; van Rossem and van der Voort 1996: 32). As a result, from the 19th century onwards, the remaining DC speakers were bilingual in English and/or English creole.

3.2 Two missions on the Danish West Indies

The German speaking Moravian Brethren started their mission in 1736 to proselytize the colony's slaves (see Stein 1986a for a detailed description). Their strategy to achieve this was to use the slaves' own language. It took about three decennia before the Moravians were confident to publish in this language. Apart from some letters, their first publication in creole dates from 1761 (Stein 1986b: 26). Despite their efforts to get well acquainted with DC and the value they attributed to a good command of it, the Moravian missionaries felt compelled to

‘elevate’ the language with Biblical terms and created the high register that they deemed fit for the Bible. In 1767 and 1768, Christian Oldendorp was sent from Herrnhut in Germany, the Moravians’ home base, to the Danish Antilles to compile material for a history of the mission and report its success. In his final manuscript published in 2000, he had done much more than that and had produced a thorough description of the three islands in many aspects. His observations on the Dutch creole language are a vital source for the evaluations and discussions in this paper.

A second mission was started in 1756 by the Danish Lutheran church. Like the Moravian missionaries, it meant to convert the slaves through their own language. The main differences in the creole of the Danes compared to that of the Moravians lies in the spelling. The Moravians had a command of Dutch and in principle used Dutch orthography, while the Danes did not. As an illustration, to indicate the sound /u/, the Moravians used the Dutch spelling <oe>, while the Danes spelled <u>, like in Danish.

3.3 *Varieties of (Virgin Islands) Dutch Creole*

DC was not only spoken by people of African descent, but also by people of European descent born in the colony (Oldendorp 2000 [1768]: 357; Magens 2009).² Oldendorp reports in his manuscript that most white people in the colony can speak creole, although English is indispensable in the towns (2000: 357–358). The locally born people of European descent learnt it in their youth, as explained by Oldendorp:

Partly, the white children are taken care of by slave women, partly they grow up among slave children and thus first learn the creole or slave language. There are people who do not speak any other language properly. However, the white creoles speak this language more finely than the slaves and have their own elegant expressions and way of speaking. The English mostly keep their language and do not learn [Dutch] creole. And on their plantations, the slaves have to address them in that language. That is why in many parts of St. Croix the slaves speak English.³ (Oldendorp 2000: 358, translation mine)

² A similar situation existed in Suriname in the 18th century, see van den Berg (2007: 11).

³ ‘Die blanken Kinder werden teils von Negerinnen gewartet, teils wachsen sie unter Negerkindern auf und lernen also zuerst die criolische oder Negersprache. Man trifft welche an, die keine andere recht können. Überhaupt reden aber die blanken Criolen diese Sprache feiner als die Neger und haben ihre eigene zierlichere Ausdrücke und Redensarten. Die Engländer behalten mehrentsils bloß ihre Sprache und lernen kein Criolisch. Und auf ihren Plantagen müssen sich die Slaven darin nach ihnen richten. Daher reden in großen Gegenden von St. Crux die Neger englisch.’

Now while Oldendorp praises the ‘white creoles’ more refined and elegant way of expressing themselves (2000: 710), they are also less pure speakers of DC:

They often use Dutch words instead of creole ones among each other, to make their language a bit more different from that of the black creoles. Therefore, one learns creole more purely from the blacks than from the whites, since many of them use unnecessary foreign words, out of habit or on purpose.⁴ (Oldendorp 2000: 710, translation mine)

Thus, in the years 1767 and 1768, Oldendorp reports a difference between the language of the ‘blacks’, the population of African descent, and the ‘white creoles’, the locally born colonists of European descent. I will introduce the terms ADC, the variety of Virgin Islands Dutch Creole as spoken by the population of African descent, and EDC, the variety of Virgin Islands Dutch Creole as spoken by the population of European descent.⁵ These two language varieties must be seen as inherently variable, as are all languages. Although the language use of the missionaries has probably been characterized by immense individual variation (or different levels of having acquired an acceptable form of DC), I use the term MDC to refer to DC as it was used by the missionaries (both Moravian and Danish).

The above fragments from Oldendorp show that EDC speakers often insert Dutch words and constructions. Another major difference between EDC and ADC is the pronunciation, as reported by both Magens (2009[1770]: 16) and Oldendorp (2000: 711–712). The blacks ‘cannot properly pronounce guttural sounds, but mostly leave them out. Similarly, when two consonants come together, they do not always pronounce both of them’ (Magens 2009: 16). Oldendorp tells us that the blacks’ pronunciation of their ‘pure creole’⁶ makes it hard for them to be understood by Europeans, even when they have a good command of the creole language:

Some [blacks] speak pure creole, but very fast and according to their heavy Guinean pronunciation. They pronounce most words only half

⁴ ‘Sie [die blanken Criolen] brauchen auch oft untereinander holländische Wörter anstatt criolischer, um ihre von der Negersprache in etwas zu entfernen. Man lernet daher das Criolische eher recht rein von den Schwarzen als von den Blanken, weil viele von diesen aus Gewohnheit oder mit Fleiß unnötige fremde Wörter hineinmengen.’

⁵ The terms ADC and EDC correspond to the distinction made between Negerhollands and Hoch Kreol respectively in Sabino (1990, 2012).

⁶ ‘rein criolisch’.

and so indistinctly that one does not know what they want to say. This is the reason that a [white] person who knows creole well does not understand each black [creole speaker]: one needs a long training and even then sometimes an interpreter is required to explain the creole that is mixed with Guinean⁷ (Oldendorp 2000: 711–712, translation Stein 1995: 45).

Thus, we find that the speaker that we would want to typify as the most representative speaker of 18th century ADC is said to mix in African elements. At the same time, we find that the speakers that we want to characterize as speakers of EDC are said to speak a less pure creole and mix in Dutch elements. Thus, we are forced to conclude that the pure creole that Oldendorp refers to is neither entirely ADC nor EDC. ADC is supposedly primarily different from this variety in its pronunciation, EDC in the addition of Dutch or other foreign words and constructions. Obviously, if the average ADC speaker's pronunciation is so difficult to decipher as Oldendorp sketches, then Oldendorp cannot have been able to truly verify the extent to which ADC was identical to or different from the 'pure creole'.

This leads us to another conclusion: there must have been ADC speakers that Oldendorp was able to understand, speaking a variety that was not obscured by a strong African pronunciation. Oldendorp was one of the Moravian brethren and was assigned the task to document the history of the Moravian mission in the Danish West Indies. Therefore, he was much involved with the black community of converts to the Moravian mission. Sensbach (2005: 236) writes: 'he interviewed dozens of African and Creole workers, many of whom were original converts from the 1730s'. Among these original converts were slaves who had learnt 'to read and write in Dutch' (Stein 1995: 47). As Sabino (2012: 85) concludes: 'Afro-Caribbean spiritual workers were positively oriented to Western culture, they used their most Germanic variants to display that orientation, to continue their own learning, and to improve the missionaries' comprehension'. We may conclude that these spiritual workers had created a style with a pronunciation that was easy to understand for the missionaries, that was limited in if not deprived of words or constructions incomprehensible to the missionaries, and that may have adopted some European structures and vocabulary introduced by the missionaries. Like Stein (1995: 46), who interprets

⁷ 'Manche reden rein criolisch, aber ungemein geschwind und nach ihrer schweren guineischen Aussprache. Die meisten Wörter behalten sie halb im Munde oder bringen sie so undeutlich heraus, daß man nicht weiß, was es ein soll. Es ist hieraus begreiflich, daß jemand der gut criolisch kann, deswegen nicht einen jeden Schwarzen recht verstehe, daß dazu eine lange Übung gehöre und dennoch bisweilen ein Dolmetscher zu Hülfe gerufen werden müsse, der das mit Guineischem vermischte Criolische erkläre'.

Oldendorp's pure creole as referring to 'a creole without any evident African influence, which therefore was easy to understand for the Europeans', I assume that Oldendorp's pure creole refers to the language of this community of converted blacks. Thus, I assume that Oldendorp's grammar and language samples are a description of this adjusted variety of ADC and of a variety of EDC that does not deviate too much from this.

J.M. Magens was born on St. Thomas in 1715 'into a relatively wealthy family' (Dyhr 2001, cited in Magens 2009: 15). He was the son of the Danish Jacob Magens, who married the locally born daughter of a plantation owner, Anna Maria van Beverhout (Dyhr 2001, cited in Magens 2009: 15). Magens wrote a grammar of DC in 1765, which was published in Copenhagen in 1770 (Williams 1984: 55). He also published a bible translation in 1781. The grammar, which contains some proverbs and dialogues, was written for missionaries of the Danish mission studying DC (Hesseling 1905: 36). The dialogues 'were not intended as literal conversations', but 'were keyed specifically as pedagogical idealizations to be framed as 'practice'' (Williams 1984: 58). 'Magens was concerned with his presentation of the Dutch Creole language in use in the Virgin Islands. He therefore selected situations in which the social as well as the participation status of the individuals would differ' (Williams 1984: 56–57). Thus, despite some idealization, the dialogues must have reflected the language of the EDC speakers and of ADC speakers in contact with EDC speakers, in order to have been of use. Having studied law in Copenhagen from the early 1730s until 1737, and having lived in New York from around 1749 until 1760 (Dyhr 2001, as cited in Sabino 2012: 89 and Magens 2009: 15), he had not spent much of his lifetime in the Danish West Indies. Thus, Magens is likely not to have been that aware of the language use of slaves and freedmen among each other. From a grammatical point of view, the language of the slaves in the dialogues does not differ from that of any other participant.⁸

3.4 *The (Virgin Islands) Dutch Creole sources*

Most of the primary DC sources consulted have been digitalized and collected in the online accessible Negerhollands Database (NEHOL)⁹. This section will discuss these and other sources available for the current study. For a more

⁸ The terms of address used are different, as shown in Williams 1984.

⁹ The database can be accessed via <http://corpus1.mpi.nl>. This data curation project, a joint effort of the CLS, Radboud University Nijmegen and The Language Archive, Max Planck Institute for Psycholinguistics Nijmegen has been financed by CLARIN-NL, which is gratefully acknowledged.

complete overview of all 18th century texts, see Stein (1986b) and van Rossem & van der Voort (1996).

Some of the available sources can be categorized as representing ADC or EDC. However, most of the 18th century sources have been written by the missionaries for religious purposes. These need to be considered separately. The earliest sources, i.e., the slaves' letters (re-discovered by Peter Stein in the early 1980s), are also best treated as a separate category: some of them are written in Dutch with Dutch Creole influence, others in a very stylized and Europeanized form of Dutch Creole, that initially lacked even its most characteristic features: the preverbal tense-mood-aspect (TMA) markers (see e.g. Stein 1985 and 1995 for more details). The first attestation of *le* is in a letter from 1752 (table 1). The late appearance of TMA markers has been suggested to be the result of experimenting with the language variety (Dutch or DC) to be used, audience design (Stein 1985), and getting acquainted with the non-European elements (Stein 1995: 47–49). We prefer this interpretation over the assumption that the TMA markers had become grammaticalized only halfway into the 18th century, because other creole features, such as bare plurals and lack of inflectional plural marking, also increase significantly in frequency in the slave letters post 1750 (Stein 1995: 50).

Table 1: The slaves' letters

Letters by year of writing	
Preverbal <i>le</i> absent	1738; 1739a,b,c; 1740; 1753 (Catarina)
Preverbal <i>le</i> present	1752; 1753 (Cornelius); 1760; 1762

The missionaries' first written records of DC date from roughly the same period as the period when the TMA markers start appearing in the slave letters (table 2). Although *le* is quite frequently used throughout the various sources, it is remarkable that some late sources lack *le* and use Ø instead. The absence of *le* in the 1795 Old Testament translation could be due to sample size (around 4,500 words). However, in the case of the undated and anonymous New Testament translation with code 3.2.3.2 (see table 2), this cannot be the reason. The parallel translation 3.2.3.1 contains 155 occurrences of *le* out of about 25,000 words, while 3.2.3.2 contains no occurrences of *le* in about 20,000 words. Unfortunately, neither the translator nor the exact date of these sources are known.

Table 2: Moravian missionary data available in NEHOL

Year	Code	Genre	Author	<i>le/lo</i>
1754	3.3.3	Christmas song	Isles	<i>le</i>
1755	3.3.4	hymns	unknown	<i>le</i>
1765	HERRN65	hymn book	unknown	<i>le</i>
1767	3.3.1.7	church retrospective	unknown	<i>le</i>
1768	OLDGESPR	dialogues	Oldendorp	<i>le</i>
1772	3.3.6	religious essay	Schmidt (Loretz) ¹⁰	-
1774	AUER74	letter	Auerbach	-
[<1785]	3.2.1	Gospel Harmony (Lieberkühn 1769) translation	Böhner	<i>le</i>
[<1785]	3.2.2	GH translation	Böhner	<i>le</i>
1780	3.2.6	Idea Fidei Fratrum (Spangenberg 1779) translation	Böhner	<i>le</i>
[<1785]	3.2.4	NT Epistles translation + Revelation of John	Böhner	<i>le</i>
[<1785]	3.2.5	OT translation	Böhner	<i>le</i>
1784	AUER84	2 catechisms	Auerbach	-
n.d.	3.3.1.3	OT Genesis translation	unknown	-
[< 1792]	3.2.3.1	GH translation	Auerbach ¹¹	<i>le</i>
n.d.	3.2.3.2	GH translation	unknown	-
1796	3.3.1.5A	Creole sermon	unknown	-
1797	3.3.1.5B	Creole sermon	unknown	-
1797	3.3.1.5C	Creole sermon	Reichels	<i>le</i>
1802	Grammatik	Grammar with dialogues conversation	unknown	<i>lo</i>

While all earlier sources use either *le* or do not use an imperfective marker at all, the Moravian grammar from 1802 uses *lo*. The grammar itself comments that it

¹⁰ The essay has been written by Moravian Brother Johann Loretz. Stein assumes the date of editing to be 1783/1784, the time when Loretz visited St. Thomas to inspect the Moravian mission on St. Thomas (1986b). In the text itself, the translation (into Creole) is attributed to Melchior Schmidt and dated ‘ca. 1772’. This suggests that the text had been written by Loretz and then translated more than a decade before Loretz’s visit to St. Thomas. The translation may of course have been modified on the occasion of Loretz’s visit in 1783/1784.

¹¹ On the basis of the similarity between his handwriting and that used in ms 3.2.3.1, Cefas van Rossem (p.c.) suggests that Johann Christoph Auerbach may be the author of the manuscript (see <http://diecreoltaal.wordpress.com/> for a picture comparison of mss 3.2.3.1 and 3.2.3.2 and a letter by Auerbach). Auerbach served on the Danish West Indies from 1766 until his death in 1792 (Het Utrechts Archief), so that ms 3.2.3.1 cannot have been written any later than 1792. Nevertheless, it is probable that the author of ms 3.2.3.1 has consulted Böhner’s manuscripts for his translation.

used to be ‘common in speech to use *le* in the present’, but that ‘nowadays *lo* is more common in speech’ (Hesseling 1905: 104–105)¹². The 1802 grammar takes some dialogues from Oldendorp (2000) [1768] and replaces every occurrence of *le* in the original by *lo*.¹³

The Danish Lutheran missionaries’ sources (see table 3) all contain *le*, with only one exception. Magens’s (1770) grammar with dialogues, our only specific source of colonists’ DC, contains both *le* and *lo*, although not in functional variation (see sections 4.1 and 4.2).

Table 3: Danish Lutheran missionary data in NEHOL

Year	Code	Source	Author	<i>le/lo</i>
1770	Wold ABB	primer	Wold	<i>le</i>
1770	PSBUK70	hymn book	unknown	<i>le</i>
1770	Kingo.ABB	primer	Kingo	<i>le</i>
1781	PONTOPPI Evangelium	NT translation	Magens	<i>le</i>
1798	LUND98	religious educational writing	Lund	<i>le</i>
1800	Barby.ABB	primer	unknown	-
1823	PRAET32	hymn book	unknown	<i>le</i>

Table 4: Sources of African Dutch Creole

Year	Code	Source	Author	<i>le/lo</i>
1788	-	rebel slave song	Schmidt	<i>lo</i>
1871	-	language sample	Van Name	<i>lo</i>
1881	PONTOPPI	proverbs, dialogues	Pontoppidan	<i>lo</i>
1883	AMAGENS	letter written to demonstrate the creole	Magens	<i>lo</i>
1904	Greider	Four sentences as a creole sample	Greider	-
1926	dJdJ texts + wordlist	103 narratives, mostly folktales, plus a wordlist collected in 1922/1923	de Josselin de Jong	<i>lo</i>
1936	Nelson	words, sentences, and short narratives	Nelson	<i>lo</i>
1977	-	dissertation containing some newly recorded example sentences	Adams Graves	<i>lo</i>
1980s	-	recordings of the last speaker made in 1980s	Sprauve	<i>lo</i>
1990;	-	dissertation; monograph resp. containing language samples of recordings of the last speaker made in 1980s	Sabino	<i>lo</i>
2012				

¹² ‘es war vor mehreren Jahren sehr gewöhnlich dass man, wenn man im Präsens redete, *le* vorsetzte [...]. Heut zu Tage aber findet man dieses *le* in Schriften äusserst selten (ausser in den alten) und im Reden ist nun das *lo* mehr gebräuchlich als *le*.’

¹³ I am grateful to Cefas van Rossem (p.c.) for sharing this observation with me.

Table 4 lists all sources containing ADC. They are practically all of considerably later date than the colonists' and missionary data. This complicates a direct comparison between ADC and EDC. All sources in table 4 contain *lo* without a trace of *le* whatsoever.

Some additional specification of the informants of the sources in table 4 is in order. Pontoppidan's (1881) informants are unknown, except that they were from St. Thomas. Magens (1883) has written his letter with the help of a Dutch Creole speaking girl. De Josselin de Jong (1926) has consulted nine informants (de Josselin de Jong 1924: 69, see table 5). All informants produced preverbal *lo*, with the exception of informant 5, but this may be due to his small contribution.

Table 5: de Josselin de Jong's (1926) informants

Informant	Text	Contribution size in words	Born	From
1	I - XIII, CI ¹⁴	10,387	1858	St. Thomas
2	XIV - XVI	416	?	St. Thomas
3	XVII	113	1854	St. Thomas
4	XVIII - XXII, CI	1,542	1859	St. John
x ¹⁵	XXIII - XXVII	2,230	?	-
5	XXVIII - XXIX	140	1845	St. John
6	XXX - XXXI	180	1841	St. John
7	XXXII - XXXVII	1,341	1858	St. John
8	XXXVIII - XXXXIV ¹⁶	1,551	1850	St. John
9	XXXXV - LXXXII	18,495	1863	St. John

¹⁴ Text CI is a compilation of contributions by informant 1, 4, and 9. What individual parts have been contributed by whom is not indicated.

¹⁵ DJdJ has caused some confusion by not having mentioned who contributed stories XXIII-XXVII. I think the most obvious solution is that these have been provided by informant 4, and that DJdJ by accident left out the V in the Roman numeral XXVII (resulting in XXII). However, based on the phonological features investigated in Sabino (1990: 96–155), it turns out that informant 4 (referred to as informant D) is more conservative (i.e., deletes, inserts, and simplifies more) than informant x (informant E) on all features: insertion of word final vowels, deletion of single consonants, cluster simplification, epenthesis in word final clusters, and deletion in word final clusters. In order to avoid forcing an interpretation on the data, I have treated informant x as a separate informant.

¹⁶ De Josselin de Jong (1926: 7) has attributed story LXXXVIII (88) to both informants 7 and 9.

Nelson has collected some words and phrases from 7 informants from St. Thomas, St. John, and St. Croix (see van Rossem 2013 for more information) during a holiday in 1936. Preverbal *lo* occurs in the contributions of four of these, all women (see table 6).

Table 6: Nelson's (1936) informants who produced preverbal *lo*

Informant	From	preverbal <i>lo</i>
VM	Christiansted, St. Croix	2
HF	St. Croix	5
IS	St. John	4
RF	St. Thomas	1

4 Imperfective aspect

Most functions of the DC aspect markers *le* and *lo* can be characterized as expressing 'imperfective aspect', which has been defined as 'viewing a situation from within' (Comrie 1976: 24). Thus, no reference is made to the onset or the termination of the situation. In (3), the progressive form of the verb *walk* does not make any assertion about the start and the end of the situation:

(3) He was walking on the beach.

More specific types of imperfective aspect can be distinguished depending on the situation type and its genericity. With respect to genericity, we can distinguish between episodic sentences which refer to a specific, individual occurrence of a situation (Krifka et al. 1995: 3), and characteristic or generic sentences, which 'report a kind of *general property*' and do not refer to 'specific episodes or isolated facts' (Krifka et al. 1995: 2). When the imperfective situation is an episodic non-stative situation, we are dealing with a progressive situation, as in (3). In the case of a non-stative characteristic imperfective situation, we speak of a habitual situation (Krifka et al. 1995: 17):

(4) On Wednesdays he walks to the office.

Stative situations may also be episodic, i.e., of limited duration as in (5), or characteristic, as in (6).

(5) The street was wet after the shower.

(6) New streets are paved with asphalt.

5 *Le* in the 18th century data

5.1 *Le* as used in the data

Throughout all sources, *le* predominantly occurs with present imperfective situations (see table 7). Both in Magens's 1770 dialogues and in the missionary sources, *le* occurs in progressive and habitual sentences, and with stative situations:

(7) *progressive*

Wat Ju Vrou bin? Hem **le** due an sie Kleer.
 where 2s woman be 3s IPFV put on 3s.POSS clothes
 'Where is your wife? She is putting on her clothes.' (Magens 1770: 75)

(8) *habitual*

Fordiemak die Heer hem sa straf sender die **le** gebryk sie
 because DET lord 3s FUT punish 3p REL IPFV use 3s.POSS
 Naem voor soso.
 name for nothing
 'Because the Lord will punish those who use His name in vain.'
 (Wold 1770: 8)

(9) *episodic stative*

a. Hem ka hoppo?
 3s PRF get.up
 b. Neen, hem **le** lej na bobo die Bedde.
 no 3s IPFV lie on.top.of DET bed
 'Is he up already? No, he is lying in his bed.' (Magens 1770: 52)

(10) *characterizing stative*

Mi **le** gloof na Jesus Christus sie eenigst soon, ons Heer.
 1s IPFV believe LOC J. Ch. 3s.POSS only son 1p lord
 'I believe in Jesus Christ, His only Son, our Lord.' (Wold 1770: 6)

(11) En die alles a geskied, dat die a kom voldaan wat
 and DET all PST happen that it PST become fulfilled what

a ka see door die Prophet, die **le** a see [...]
 PST PRF say through DET prophet REL IPFV PST say
 'And that all happened, so that it was fulfilled what had been said by the prophet who said [...]' (Böhner ms. [3.2.1]: 189)

Given the predominance of the present imperfective meaning, it is remarkable that *le* seems to be used here in a past perfective situation. In (11), Böhner gives the reader the choice between *le* and past marker *a*. If one interprets (11) as such that *le* would be a present interpretation and *a* a past interpretation, then *le* occurs exclusively in present contexts in the missionary data. A present interpretation is possible, because a quote is following with the prophecy.

The past example of *le* in Magens (1770), given below as (12c), seems to refer to a perfective situation. The focus is on the fact that the situation happened as a whole, rather than that there is reference to a point in the past when the situation was ongoing. This is underlined by the use of the past time reference marker *ha* in (12a) and (12d) without *le*.

- (12) a. Jender ha speel?
 2P PST play
 ‘Did you play?’
- b. Ju, mie ookal.
 yes 1S too
 ‘Yes, me too.’
- c. Dat wat Speel Jender ha le speel?
 FOC what game 2P PST IPFV play
 ‘What game did you play?’
- d. Ons ha speel drie Kaert.
 1P PST play three.card
 ‘We played three card.’
- (Magens 1770: 55)

Le is attested once with an inchoative situation in one of Oldendorp’s (2000) dialogues (see 13). However, the ‘inchoative’ or ‘change-of-state’ interpretation in (13) may be derived from the context.

- (13) Wanneer mi vraag die Man, em sal gie mi een stuver: em le
 when 1S ask DET man 3S FUT give 1S a penny 3S IPFV
 quaat, em le see, mi no ha.
 be.angry 3S IPFV say 1S NEG have
 ‘When I ask this man, whether he will give me some money, he gets
 angry, he says: ‘I don’t have any.’’
- (Stein 2010: 249)

- (14) Mi le weet dat Messias le kom welk ben genamd Christus.
 1S IPFV know that Messiah IPFV come REL be named Ch.
 ‘I know that Messiah is coming, who is named Christ.’
 (Böhner ms. [3.2.1]: 33)

Table 7: The functions of *le* in a representative selection of 18th century sources

	Slave letters (1752–1762)		Magens (1770)		Oldendorp (2000) [1768]		Danish primer (Wold 1770)		Gospel Harmony (3.2.1 & 3.2.2)	
	N	%	N	%	N	%	N	%	N	%
imperfective (present)	7	100	31	76	7	87.5	22	100	666	97
perfective (past)	-	-	-	-	-	-	-	-	9	1
past (indeterminate aspect)	-	-	1	2	-	-	-	-	-	-
prediction	-	-	9	22	-	-	-	-	7	1
inchoative	-	-	-	-	1	12.5	-	-	-	-
irrealis	-	-	-	-	-	-	-	-	1	0
ambiguous	-	-	-	-	-	-	-	-	8	1
Total	7	100	41	100	8	100	22	100	691	100

5.2 *Le as described in 18th century sources*

In his 1770 grammar, Magens mentions that ‘in Creole it is often common to put the word *le* in front of *verbs* in the *present tense*’ (italics in original) (Magens 2009: 33). Oldendorp is more specific and mentions that ‘[*le*] is mostly used because of its euphony, because it makes the speech more fluent. It is supposed to indicate that something already occurs and is in development, like *mi le kom*, *mi le skriev*, I am coming, I am writing’¹⁷ (Oldendorp 2000: 697). Based on the actual attestations just discussed, we may interpret this as saying that *le* was an imperfective present. This is corroborated by Oldendorp’s follow-up remark: ‘But people are not so particular about it. Many people introduce’¹⁸ *le* into the

¹⁷ ‘Um des Wohlklangs willen bedient man sich seiner am meisten, weil es die Rede fließender macht. Eigentlich soll es anzeigen, daß etwas schon geschieht und im Werden ist, als *mi le kom*, *mi le skriev*, ich komme schon, ich bin im Schreiben.’

¹⁸ I have chosen the word ‘introduce’ to translate the original German word *flicken* ‘patch’ (see footnote 19). Peter Stein (p.c.) points out that ‘introduce’ is too neutral compared to *flicken*, which rather means ‘restore’ or ‘improve’. However, it is hard to formulate a grammatical sentence with these words that is close to the original German sentence.

simple past, when they ask, in the following manner: *joe a le bring die?* did you bring it? *em a le slaa joe?* did he hit you? *jender a le skoon die?* did you clean it? And when one replies, he sometimes talks in the same way and says for example: *mi a le bring die* I (have) brought it; *mi a le see* I (have) said; *mi a le loop*; I went'¹⁹ (Oldendorp 2000[1768]: 697). Magens (2009: 33) also reports how *le* is used in the past with second and third person in a question, and with first person when an answer is given. The main point is the fact that Oldendorp's examples refer to resultative situations:

- (15) a. Joe a le bring die?
 2S PST IPFV bring 3S
 'Did you bring it/Have you brought it?'²⁰, (Oldendorp 2000: 697)
- b. Mi a le bring die.
 1S PST IPFV bring 3S
 'I (have) brought it.'²¹, (Oldendorp 2000: 697)

With the above formulation, Oldendorp explicitly portrays the past discourse occurrences of *le* as an innovation.

5.3 Change or variation?

As discussed in 3.3, Oldendorp's grammar is a description of ADC adjusted to the missionaries and a conservative variety of EDC. This means that it may refer to a style of at least two speech communities. Magens (1770) is in the first place most likely a description of a variety of EDC and possibly of ADC speakers frequently in contact with EDC speakers.

Oldendorp's discussion suggests a change, not in form, but in the use of *le*: he implies that the item *le* had been extended from a present imperfective to being used in the past in question and answer contexts, at the latest in the 1760s. Thus we may tentatively label the non-use of *le* in questions and answers with past time reference as archaic and the use of *le* as innovative. Oldendorp's use of 'some people' (*manche*) with respect to the use of *le* in questions implies that there were individuals who did not use *le* there. With respect to the use of *le* in answers, Oldendorp's use of 'sometimes' (*bisweilen*) implies at the least that people alternated between the use or non-use of *le*.

¹⁹ 'aber das wird nicht immer so genau beobachtet. Manche flicken auch das *le* ins **Imperfectum**, wenn sie fragen, auf diese Weise: *joe a le bring die?* hast du es gebracht? *em a le slaa joe?* hat er dich geschlagen? *jender a le skoon die?* habt ihr es rein gemacht? Und wenn einer antwortet, redet er bisweilen ebenso und sagt zum Exempel: *mi a le bring die* ich habs gebracht; *mi a le see* ich sagte; *mi a le loop* ich ging.'

²⁰ 'hast du es gebracht?'

²¹ 'ich habs gebracht.'

The distribution of the various uses of *le* over the two groups of assumed users will be forever beyond our reach. However, if our assumption of the target of Oldendorp's language description is correct, then it is obvious that speakers of any ADC style that has been adjusted to European communication partners will tend to conform to EDC or even MDC speakers. The opposite is hardly likely to have been the case. It is true that, as second-language learners, the missionaries must have learnt the language from others. However, as discussed in Stein (1995) and Sabino (2012: 85), MDC seems to have been shaped by the de-Africanized input of their spiritual workers and possibly some EDC speakers.

Let us first look at the basic scenarios for the origin of the item *le*:

- 1) *le* is originally an ADC form transferred into EDC;
- 2) *le* derives from a contact variety of Dutch (suggested in Holm 1986: 248), or from Dutch *leggen* 'lie' directly.

The corpora *Brieven als Buit/Letters as Loot* (van der Wal 2013) and *Gekaapte Brieven* ('Privateered Letters', van der Sijs 2012) contain many 17th century letters sent to and from the Caribbean, but no Caribbean contact variety of Dutch seems to be used. *Brieven als Buit* contains three letters with imperfective *leggen* 'lie' plus bare infinitive (i.e., without infinitive marker *te*, cf. English *to*), as in (16) from 1644. Two other letters contain the construction *leggen/liggen* 'lie' with *te*-infinitive. Interestingly, (16) contains a (hypothetical) characteristic sentence indicating that Dutch *leggen* was not restricted to progressive situations. Thus, the Dutch imperfective construction *leggen* 'lie' plus bare infinitive was available in the 17th century as a possible source for imperfective *le* in DC or a hypothesized contact variety of Dutch.

- (16) Want ick dencke dat wij daer met malcanderen soudē legg-en
because I think that we there with each.other would lie-INF
vergae-n.
perish-INF

'Because I think that we would be starving there.'

(brievenalsbuit.inl.nl, HCA 30-644, To Andries Verbrugge)

Whether or not *le* derives from a contact variety of Dutch or from Dutch directly, more important is the question whether it may have ended up in ADC when it was created. Sabino (2012: 193) dismisses Dutch *leggen* 'lie' as a possible source for an imperfective marker in ADC, because 'those enslaved in the colony are far more likely to have been commanded to 'go' than 'lay' or 'lie''. However, when lexical items grammaticalize, they lose their literal

meaning. Thus, there is no reason to assume that colonists would avoid using *leggen* or DC *lee* as a marker of imperfective aspect to their slaves. Moreover, I wonder to what extent slave directed speech should be expected to have consisted solely of imperatives. A related issue is whether the form *le* was ever a TMA marker in ADC. Stolz (1986: 243) and Sabino (2012: 193) assume that ADC used only *lo* as its imperfective marker from the beginning. I want to sidestep this discussion now (it will be discussed in 6.3), since the data will not give us a definite answer. Instead, I want to focus on the function of the marker used, whatever its phonological form.

All languages involved in the creation of DC or its documentation have constructions to express progressive and/or habitual aspect irrespective of time reference (Dutch, (Low) German, Danish, Akan (Osam 2008), Ewe/Gbe (Ameka 2008), Ga (Kropp Dakubu 2008)). Thus, based on predictions of transfer from any DC creator's native language (i.e., 'imposition' or 'source language agentivity' in van Coetsem's (1988: 3) framework), we do not expect the development of a present imperfective in any variety of DC. Since the late 19th and 20th century ADC data attest a well-developed tense-independent aspect marking system, we assume that the basic categories of this system have been present in ADC from the beginning. Therefore, whether ADC used the form *le* or *lo*, it must have been a tense-independent imperfective marker.

Yet, in the missionary data we encounter *le* as an obvious present imperfective. Thus, the locus of the innovation of *le* must be primarily EDC. If *le* was not a present imperfective in EDC, but a true imperfective, then the non-imperfective past uses of *le* reported in Magens and Oldendorp are remarkable: we would be witnessing not an extension from present to past, but an aspectual generalization from past imperfective to past. One possible scenario is that imperfective situations marked by *le* in EDC were so much more frequent in the present that the association of *(h)a le* with past imperfective was weak, and over time completely eroded, so that *(h)a le* was reinterpreted as a general past.

The alternative scenario assumes an extension from present to past: Since ADC speakers used their aspectual marker *le/lo* in both past and present, the group of ADC speakers in frequent direct contact with EDC speakers was likely to do this also (perhaps only occasionally) when communicating with the latter. Following the schema of the mechanism of change proposed in Weinreich et al. (1968: 156–157), some EDC speakers may have copied the use of *(h)a le*, but assigned to it a different interpretation than was intended by the ADC speakers.

What both scenarios have in common is that bare *le* is associated with present imperfective. Since according to Bybee et al. (1994: 126) there is no distinction between a present imperfective and a present, I assume that *le* did not have any aspectual value in 18th century EDC (although this may have initially been the case). From this, it logically follows that those speakers would not

make an aspectual distinction when using *le* in the past, irrespective of whether the use of *(h)a le* was introduced by contact with ADC speakers or whether it was present as inherent variation in EDC.

To conclude, I assume that the use of *(h)a le* most probably represents a change in EDC (although we do not know whether this was a change from present to past, or a generalization or a bleaching of its aspectual value). The alternative scenario to this proposes that *le* would have been used in EDC in both present and past, perfective, resultative, and imperfective contexts from the beginning. That is either by a specific subgroup or by random individuals from the EDC community. However, it is hard to imagine how this situation would have emerged.

6 *Lo and loop in the 18th century Dutch Creole data*

6.1 *Preverbal lo and loop as used in the 18th century data*

The first attestation of *lo* dates from 1788 from a protest song from St. Croix (van Rossem and van der Voort 1996: 224). In this example (17), *lo* expresses intention before the movement verb *lob* ‘go’. The verb repetition is a focus construction with West African roots.

- (17) Da lob mi **lo** lob.
 FOC go 1S LO go
 ‘I am going.’ (van Rossem and van der Voort 1996: 224)

The above example is a unique record of 18th century ADC, showing that *lo* had already developed as a preverbal marker in the late 18th century.

There is a manuscript version, presumably from around 1802 (Hesseling 1905: 45), of an unpublished grammar written by a Moravian missionary. It contains some dialogues from Oldendorp (2000 [1768]) in which every occurrence of *le* in the original has been replaced by *lo*.²² Also here, all examples are restricted to the (imperfective) present:

- (18) Noe, die Klock **lo** ling.
 now DET clock IPFV ring
 ‘Now, the bell is ringing.’ (Hesseling 1905: 183)

Lo is also attested in Magens’s (1770) grammar and dialogues. In the 1760s, the lexical verb *loop* ‘go’, as in (19), was commonly pronounced as /lo/ (Oldendorp 2000: 687).

²² I am grateful to Cefas van Rossem (p.c.) for sharing this observation with me.

- (19) Ons sa **loop** na die Herberg. for speel Billiar.
 1P FUT go NADET tavern COMP play billiards
 ‘We will go to the tavern, to play billiards.’ (Magens 1770: 58)

In (20), *lo* occurs in preverbal position after the complementizer *for* ‘to’. It is virtually without doubt that preverbal *lo* in (20) is identical to preverbal *loop* in (20). The obvious difference between the two is that *loop* in *loop lej neer* can be associated with actual motion, while this is not possible for *lo* in *lo slaep*. The lack of association with actual motion may be a good explanation for why *lo* is differentiated from the lexical motion verb *loop* in the construction *for lo*.

- (20) Mie ha **loop** lej neer for **lo** slaep gue laet gester Donker.
 1S PST go lie down COMP go sleep very late yesterday night
 ‘I have gone to sleep very late yesterday evening.’ (Magens 1770: 55)

In Magens’s (1770) dialogues, preverbal *loop* ‘go’ is not infrequent. In fact, almost all cases of preverbal *loop* correspond to preverbal *gaan* ‘go’ in Dutch²³, as in (21).

- (21) a. Loop due an Ju klee.
 go put on 2S clothes
 ‘Go put on your clothes.’
 b. Ga je kleren aan-doen.
 go your clothes on-put
 ‘Go put on your clothes.’ (Magens 1770: 72)

Rather than aspect, it seems that *loop* in (20) and (21a) is a motional verb, a directional. This use of *loop* ‘go’ is very frequent in the 20th century data. Motional verbs have grammaticalized in the West African substrate languages, such as Akan (Osam 2002), Ga (Kropp Dakubu 2008), and Ewe (Ameka 2008; Ameka and Kropp Dakubu 2008). In Akan, the motion verbs indicate ‘a movement towards or away from the speaker, that is required before the action indicated by the verb’ (Dolphyne 1988: 95, cited in Osam 2002: 114). In Dutch, basically the same concept is expressed with the motion verbs *gaan* ‘go’, as in (21b), and *komen* ‘come’. Thus, preverbal *loop* is frequent as a motion verb in Magens’s (1770) dialogues, but absent as an aspectual marker.

²³ Contrary to Sabino (2012: 194), who, misled by wrong data, erroneously states that DC *lo(op) slaep* ‘go to sleep’ does not have an equivalent construction in Dutch. In fact, its literal Dutch translation *gaan slapen* ‘go to sleep’ is very frequent.

6.2 *Preverbal lo and loop as described in 18th century sources*

The Moravian grammar reports a switch in form (*le* to *lo*) in the documentation. It states that ‘many years ago it was very common to use *le* before the verb, when talking in the present tense [...]. Nowadays, this *le* is rare in writing (with the exception of old works) and now *lo* is more common in speech than *le*’²⁴ (anonymous [ms]: 36, cit. in Hesseling 1905: 104–105).

In his 1770 grammar, Magens mentions *for lo* to be a gerund construction, giving the following example *for lo vervolg* ‘pursuing’ (Magens 2009: 29). However, this gerund use, which seems to infer simultaneity as gathered from the translation, cannot refer to the purposive use of *for lo slaep* ‘to go and sleep’ in (20). No other 18th century occurrences of *for lo* nor of *for loop* have been documented.

6.3 *Change or variation?*

There is consensus that the documented switch from *le* to *lo* is not a phonological change (e.g. Hesseling 1905: 105–106; Stolz 1986: 179), but a change in form (i.e., *lo* is another item than *le*). Thus, *le* is the archaic and *lo* the innovative form at the end of the 18th century. We are obviously dealing with language change here, but the question is: among which speakers?

Some relevant issues for this discussion have already been dealt with in 5.3. The possible scenarios for each variety are as follows:

- (22) a. ADC *le* > *lo*
b. ADC *lo*

- (23) a. EDC *le* > *lo*
b. EDC *le*

- (24) a. MDC *le* > *lo*

We can be certain from the Moravians’ grammar that the missionaries switched to *lo* around the turn of the eighteenth century or slightly earlier. Since they were only second-language users, we can also be certain that they will not have initiated this change: it must have been modeled on the language use of others.

The question remains: which speakers? There are two likely possibilities: 1) the language of the spiritual workers; 2) EDC speakers with which they were in contact. The spiritual workers must have ultimately been those most

²⁴ ‘es war vor mehreren Jahren sehr gewöhnlich dass man, wenn man im Präsens redete, *le* vorsetzte [...]. Heut zu Tage aber findet man dieses *le* in Schriften äusserst selten (ausser in den alten) und im Reden ist nun das *lo* mehr gebräuchlich als *le*.’

important to the missionaries, as they were the ones that the missionaries were trying to accommodate by using DC at all.²⁵ Since the Moravian grammar reports that ‘now *lo* is more common in speech than *le*’, we may assume that the spiritual workers were the ones switching to *lo* in their adjusted missionary directed style. As will be discussed in 7.1, *lo* marks imperfective aspect in the 19th and 20th century ADC sources, much like *le* does in the 18th century missionary and EDC sources. Thus, regardless of whether we assume scenario (22a) or (22b), by the end of the 18th century, *lo* can be assumed to have been used in ADC. If the spiritual workers started using *lo* in their missionary directed style, this form originates from ADC.

Now the question becomes as follows: why did the missionaries accept *lo* in their speech towards the end of the 18th century, while they did not before? From the viewpoint of scenario (22a), one possibility is that *lo* was not used before, or not as much. I assume the spiritual workers to have been, as the missionaries are likely to have been, conservative in their speech and adoption of new forms. If *lo* was an innovation somewhere in the course of the 18th century, then the spiritual workers of that time have likely been reluctant in using this form. If however we assume scenario (22b), then only the following part applies.

The factor that I assume to be crucial in the missionaries’ acceptance of *lo* (at least in speech) is a change in the people involved. By the end of the 18th century, the most prolific and linguistically involved missionary writers were dead: Johann Böhner died in 1785 (Stein 1986a: 11) and Johann Christoph Auerbach²⁶ in 1792 (Het Utrechts Archief). Someone like Böhner was personally involved in the creation of the missionary variant as we know it. Born in 1710 (Het Utrechts Archief), Böhner was 70 years old in 1780, and Auerbach, born in 1726, was 54. It is very unlikely that they would be welcoming a change in the preverbal TMA markers, when they had devoted so much time to acquiring the language in the way they had. Since the grammar is undated and unspecific about when exactly the change began, it is of course possible that the change only became relevant for the missionaries around or sometime after Böhner’s death in 1785.

But perhaps more importantly, the change was not only with the missionaries. Oldendorp interviewed many of the ‘original converts from the

²⁵ Notwithstanding the fact that, as follows from some of Oldendorp’s remarks in 2.3 and e.g. Stein 1995, the spiritual workers have had to accommodate their language to that of the missionaries.

²⁶ Visiting Brother Johannes Loretz mentions in his mission report of 1784 (found by Peter Stein) that all Moravian brothers agree that Brother Auerbach had the best command of the creole language and that the bible translations made by Auerbach are the only ones that can be understood by the slave population, without having to be reworked.

1730s' (Sensbach 2005: 236) during his stay in 1767 and 1768. These original converts, some of whom had learnt to write, must have been equally involved in the creation of the missionary standard, albeit perhaps more indirectly. In any case, they must have been the creators of the standard for the missionary directed speech. Thus, if scenario (22b) is what actually occurred, then these original converts have accepted the use of *le* in their missionary directed speech. They are therefore unlikely to change to *lo* later in their lives. If scenario (22a) is what happened in the course of the 18th century, then these original converts are likely to have resisted the change in ADC and certainly not have introduced it into their missionary directed speech. The introduction of *lo* into the missionary directed speech is thus likely to have occurred on a significant scale only once most of the original converts had died or their influence in the relevant speech community had faded. This must roughly have been in the last decade or two of the 18th century. By that time, there must have been an entirely new generation of spiritual workers for whom I assume the insistence on using *le* (instead of *lo*) was not a matter of identity, unlike for many of the original converts (in as far as *lo* was used as an aspect marker in the 1730s).

7 *Lo* in 19th and 20th century Dutch Creole

Occurrences of *loop* 'go' with a final consonant are virtually absent in the 19th and 20th century. Pontoppidan (1881) still differentiates in spelling between lexical <*loop*> 'go' and aspectual <*lo*>, but Magens (1883) writes only <*lo*>. The spelling of the narratives of de Josselin de Jong (1926) is purely based on pronunciation. Thus, the single case of *loop* 'go' in these narratives indicates a pronunciation with final /p/. The lexical verb practically always occurs without /p/, as in (25). There is variation between <*loo*> with a tense mid-closed rounded back vowel, and <*lo*> with a lax mid-closed rounded back vowel.

- (25) Hama **loo** a hus weráá.
 3S PST go NA house again
 'She went home again.'
(dJdJ 1926: 11)

The current discussion will first treat *lo* preceding the main predicate of a finite clause, i.e., a clause where a tense marker, (*h*)*a* or *sa(l)* may occur. In this position, *lo* may function similarly to *le*, which we encountered in the 18th century data, with the difference that *lo* is a true aspect marker that may have present or past time reference.

Table 12 makes a distinction between *lo* as an aspectual marker and *lo* as a lexical verb. There are only eight unambiguous cases where lexical *lo* 'go' occurs preverbally in an at least superficially similar syntactic context to where

aspectual *lo* occurs (for comparison: 36 out of all ambiguous cases (64%) have a possible reading of *lo* as a main verb). In this construction, as in (26), *lo* expresses actual motion and either a purposive or a consecutive reading of the situation expressed by the following VP, parallel to *go* ‘go’ in Caribbean English Creoles (Winford 1993: 195). This also corresponds to how *loop* was used in Magens (1770).

- (26) Bru Pushi a **loo** koop mee kaas.
 brother cat PST go buy more cheese
 ‘Brother Cat went and bought/to buy more cheese.’ (dJdJ 1926: 29)

Table 8: The aspectual interpretation of situations with preverbal *lo* in ADC

	Pontoppidan (1881)		Magens (1883)		de Josselin de Jong (1926)		Nelson (1936)	
<i>Imperfective</i>								
progressive	1	25%	4	67%	114	40%	3	25%
habitual	1	25%	1	17%	25	9%	-	-
stative	-	-	-	-	7	2%	-	-
(episodic)								
stative (generic)	-	-	-	-	3	1%	-	-
prediction	-	-	-	-	5	2%	-	-
<i>Other</i>								
inchoative	-	-	-	-	10	4%	-	-
prospective	2	50%	-	-	54	19%	7	58%
perfective	-	-	-	-	-	-	1	8%
<i>Lexical</i>								
perfective	-	-	-	-	7	2%	-	-
perfect	-	-	-	-	1	0%	-	-
<i>Ambiguous</i>	-	-	1	17%	56	20%	1	8%
Total²⁷	4	100%	6	101%	282	99%	12	99%

7.1 Imperfective aspect

Lo occurs with states and non-states alike, both in episodic and characteristic sentences:

²⁷ The cumulative percentage in table 8 is not always 100%, because the percentages have been rounded off.

(27) *progressive*

Wa ju **loo** du?

what2S IPFV do

‘What are you doing?’

(dJdJ 1926: 22)

(28) *habitual*

Di ha en boom, sen **lo** rupp di piin-na-koop- blá- boom.

it have a tree 3P IPFV call it pain NA head leave tree

‘There is a tree, they call it ‘headache leaves tree’.’ (Magens 1883: 130)

(29) *episodic stative*²⁸

Ham a see, wamaa shi bik **loo** pin am.

3S PST say why 3S.POSS belly IPFV hurt 3S

‘She_i said, why is her_i belly hurting her_i?’

(dJdJ 1926: 16)

(30) *characteristic stative* (see footnote 4)

Foma skilpat mi hunduhan a **loo** woon fawe fa api

because turtle with cock PST IPFV live far-away from where

di gobnéé a woon.

DET governor PST live

‘because Turtle and Cock lived far away from where the governor lived.’

(dJdJ 1926: 26)

Also counted as imperfective is *lo* before a motion verb indicating ongoing motion.

(31) Am a see di wuluwuluk: mi **loo** loo a mi grani.

3S PST say DET wolf 1S IPFV go NA 1S grandmother

‘She said to the wolf: ‘I am going to my grandmother.’ (dJdJ 1926: 19)

There are also contexts of progressive *lo* with the connotation of prediction. All five cases involve the verb *ko* ‘come’ with a third person subject:

²⁸ Analyzing the verb *pin* ‘hurt’ as a stative is done on the basis of a definition of a stative as in Comrie (1976: 49). I am not sure whether this classification stative – nonstative on the basis of this definition is valid for the use of *lo* in the 20th century data. Perhaps the only true distinction is that between a class of high frequency of stative verbs that do not occur with imperfective *lo*: *ha* ‘have’, *ha fo* ‘have to’, *kan* ‘can’, *mangkée* ‘want’, *wel* ‘like/want’, and *weet* ‘know’ on the one hand, and other verbs on the other.

- (32) Fekán **lo** ko!
hurricane IPFV come
‘A hurricane is coming!’ (dJdJ 1926: 55)

7.2 Prospective aspect

The second most frequent function of 19th and 20th century *lo* is to express prospective aspect (see table 12). This function has been referred to in the literature as a proximate/immediate future (Van Diggelen 1978: 75; Sabino 2012: 175), immediate future/intention (Graves 1977: 152) and a certain/immediate future (Stolz 1986: 166–167). The notion of immediate future is present in all of these descriptions. A future in general can be defined as being ‘equivalent to a prediction on the part of the speaker that the situation in the proposition, which refers to an event taking place after the moment of speech, will hold’ (Bybee & Pagliuca 1987, cited in Bybee et al. 1994: 244). Bybee et al.’s (1994: 273) discussion of immediate futures reveals that they can be typically paraphrased as ‘be[ing] about to do something’ and ‘be[ing] on the point of doing something’, which is ‘in a sense [...] not at all like a prediction’. Immediate futures are ‘not strictly speaking futures at all,’ but involve ‘assertions announcing the imminence of an event rather than a prediction that it will take place’ (Bybee et al. 1994: 273). This latter description is remarkably reminiscent of the notion of ‘prospective aspect’, which makes no direct assertion about the future situation, but only refers to a state showing signs that the future situation may come about: ‘prospective aspect’ refers to a pre-state, which is related to a future situation (Comrie 1976: 64–65; Klein 1994; Bohnemeyer 2002: 38), as in (33). This is a fundamental difference from a future tense, which does assert that the future situation will come about (Comrie 1976: 54). Another important difference is that the pre-state may lie in the past (= ‘past prospective’) (Jendraschek, to appear: 24).

- (33) Mi **loo** krew!
1S PROSP yell
'I am going to scream!'
- (dJdJ 1926: 28)

I have also counted intentional occurrences of *lo* preceding the motion verb *lo* ‘go’ as ‘prospective’:

- (34) Een dag am a see, am **loo** loo a shi grani.
 one day 3S PST say 3S PROSP go NA 3S.POSS grandmother
 ‘One day, he said, he was going (to go) to his grandmother.’
 (dJdJ 1926: 20)

7.3 *Progressive construction*

7.3.1 *Attestations in the data*

Imperfective *lo* is also involved in an imperfective construction to which not much attention has been paid so far. I will refer to this construction, where *lo* is preceded by a locative copula, as in (35), or another locative verb, as discussed below the ‘progressive construction’. In this construction, *lo* only expresses progressive aspect, since it only occurs in episodic sentences referring to particular situations. It is in variation with *lo* as an imperfective marker, as (36) shows. It is attested in the late 19th (Magens 1883) and the 20th century data:

- (35) Fo sini bin **lo** wak.
 because 3P be PROG wait
 ‘Because they were waiting.’
 (dJdJ 1926: 30)

- (36) Am **loo** wak fo di meenshi.
 3S IPFV wait for DET girl
 ‘He was waiting for the girl.’
 (dJdJ 1926: 19)

Bybee et al. (1994: 131) predict that ‘a progressive involving a stative auxiliary always derives from a construction which originally included an element with locative meaning’. Table 9 lists the auxiliaries occurring in the ‘complex progressive construction’. The four copulas *wees*, *bin*, *bi*, and *mi* together account for two-third of all occurrences. DC has seven copulas in total, all of which have a different functional distribution, as can be seen in table 16. A comparison between tables 9 and 10 shows that only copulas with locative function occur in the ‘progressive construction’. Other auxiliaries are locative verbs as well: *bli* ‘stay’, *set* ‘sit’, and *stan* ‘stand’, as in (37).

- (37) So am a stan **loo** ki boo di man.
 so 3S PST stand PROG look on DET man
 ‘So he was (standing and) looking at the man.’
 (dJdJ 1926: 21)

Table 9: The auxiliary verbs used in the ‘progressive construction’ (in dJdJ 1926 and Magens 1883)

Auxiliary	Frequency	%
<i>wees</i> ‘be’	9	29
<i>bin</i> ‘be’	5	16
<i>bi</i> ‘be’	5	16
<i>mi</i> ‘be’	1	3
<i>bli</i> ‘stay’	5	16
<i>set</i> ‘sit’	2	6
<i>stan</i> ‘stand’	3	10
<i>lei</i> ‘lie’	1	3
Total	31	100

Table 10: The functions of the Negerhollands copulas, based on Stolz (1986: 152) and Sabino (1988: 204)

	Identity NP	Adjective	Location	Focus
<i>a</i>	++	+	-	+
<i>wees</i>	+	+	+	-
<i>bi</i>	-	+	++	-
<i>bee</i>	+	-	+	-
<i>bin</i>	-	-	++	-
<i>mi</i>	±	++	+	-
Ø	+	+	+/ $\pm$	-

++ = the function of the majority of occurrences of this item

+ = a possible function of this item

± = a marginal function of this item

- = function not attested for this item

The locative character of the ‘progressive construction’ is underlined even more by its highly frequent co-occurrence with adverbial locations (see table 11):

- (38) Hunduhaan mi na gron **lo** rutl da.
 cock be NA ground PROG wrestle there
 ‘Cock was wrestling on the ground.’ (dJdJ 1926: 54)

- (39) Am bin da **lo** kreew it.
 3S be there PROG shout out
 ‘He was yelling out loud.’ (dJdJ 1926: 52)

Table 11: The expression of location with the complex progressive construction containing a copula (in dJdJ 1926)

	Inf1	Inf4	InfX	Inf9	Total	%
prepositional phrase	3	3	2	4	12	60
<i>da</i> ‘there’	1	-	1	3	5	25
none	1	-	1	1	3	15
Total	5	3	4	8	20	100

The location-less occurrences, as in (40), must be purely aspectual:

- (40) Een man a wees **loo** faŋ sprat.
 a man PST be PROG catch sprat
 ‘A man was catching sprat.’ (dJdJ 1926: 12)

7.3.2 *Change or variation?*

The progressive construction is not attested for all of dJdJ’s nine informants (table 12), but lack of occurrence may not imply that these informants did not use the construction at all. In any case, as we saw as well in table 11, there is variation in the co-occurrence of the construction with specification of location in dJdJ’s informants. I think it is here that we find a strong clue to this being a language change in progress. First, *lo* may combine with a verb to form a non-finite predicate that may be adjuncted to other constituents than syntactic subjects, such as a direct object, as in (41), or a complement of a preposition, as in (42)

- (41) Ju goodfornothing, ju kaa listáá mi **lo** wak nabono ju.
 2S good.for.nothing 2S PRF leave/let 1S PROG wait on 2S
 ‘You good-for-nothing, you have kept me waiting for you.’ (dJdJ 1926: 25)

- (42) Sin maa a doot mi shi hogo wit hopo
 3P mother PST dead with 3S.POSS eye wide open
 mi shi tan lo grin.
 with 3S.POSS tooth PROG grin

‘Their mother died with her eyes wide open and her teeth grinning.’

(dJdJ 1926: 45)

Thus, the non-finite use of *lo* + verb is not specific to the progressive construction. Therefore, it is likely that this construction originates from its use that is still most frequent (table 11): the linking of a referent to a location and the situation it performs/undergoes at the same time. In cases like (39), where the adverb *da* ‘there’ is used, the location is only minimally specified and as a consequence, the situation becomes more prominent. When the location is entirely absent, as in (35) and (40), the neutral locative verbs *bin* and *wees* do not contribute any meaning²⁹: only the progressive aspect of *lo* remains.

This scenario is typical for how progressive constructions evolve from a typological point of view (Bybee et al. 1994: 131–132).

Table 12: The expression of location with the ‘progressive construction’

Speaker	Location	Frequency	%
<i>Magens (1883)</i>	PP	1	3
<i>dJdJ (1926)</i>			
<i>inf1</i>	PP	6	19
	<i>da</i> ‘there’	2	6
	no	3	10
<i>inf4</i>	PP	3	10
<i>infX</i>	PP	2	6
	<i>da</i>	1	3
	no	1	3
<i>inf9</i>	PP	4	13
	<i>da</i> ‘there’	7	23
	no	1	3
		31	99

We are not dealing with language change here if the variation in table 12 has always been inherent in the ADC speech community and has not seen a rise in

²⁹ In (40), *wees* may be an existential introducing a new referent, *een man* ‘a man’. Possibly the two constructions overlap here.

frequency of any of the variants at the expense of other ones. Again, we are not able to verify this through corpus study, as we lack the relevant data for this.

I think that it is likely that *lo* has since long been in use to form a non-finite predicate that allows for the construction of the various types illustrated here. My assumption is that the following points are to be seen as innovations: 1) an increase in the frequency of *da* with progressive predicates formed with a locative auxiliary; 2) the introduction of progressive predicates formed with a neutral locative auxiliary (such as *bin* or *wees*) without a specification of location. Based on the structural similarity with the English progressive construction (a neutral locative auxiliary *be* plus a non-finite progressive predicate *v-ing* without the specification of a location between these two constituents of the construction) and the fact that starting from the late 18th century ADC speakers became increasingly more bi- or even trilingual in DC and English and/or English Creole, the last step in the proposed change may have been modelled on the English progressive construction. In the 20th century and probably the whole 19th century too, English and/or English Creole was the dominant language for all ADC speakers.

8 Prospective *lo lo*

8.1 *Attestations in the data*

Besides prospective *lo*, there is also a prospective construction *lo lo*. Its first attestation, (43), dates from the 1860s (Van Name 1871: 127).

- (43) Mi **lo lo** val.
 1s prosp fall
 ‘I am going to fall.’ (Van Name 1871: 162)

Just like *lo*, *lo lo* has generally been considered an immediate future. Bruyn and Veenstra (1993: 37) rightly point out that an immediate future interpretation is problematic in cases such as (44) where the situation *jit am* ‘eat her’ can no longer be fulfilled, because the alleged actor has already been killed at topic time. This is perfectly in line with how a prospective marker is predicted to function: it only involves an extrapolation of signs predicting the potential realization of a situation, but does not make any assertion about the realization of the situation. Therefore, *lo lo* in (44) makes perfect sense as a marker of prospective aspect, because it refers to the expectation of the people in the bushes, who were not aware of the fact that the monster had already been killed.

- (44) Alga də fulək sini a wees bini də bus lo ki
 all DET people 3P PST be inside DET forest PROG see
 wini də got **loo loo** jit am.
 when DET god PROSP eat 3S
 ‘All the people were inside the forest to see when the god was going to
 eat her.’ (dJdJ 1926: 14)

Stolz (1986: 242) rightly observes that almost all attestations of *lo lo* are from only one of de Josselin de Jong’s (1926) informants. However, prospective *lo lo* is also used by Van Name’s young informant from the 1860s and DC’s last speaker when recorded in the 1980s by Gilbert Sprauve (see van Rossem and van der Voort 1996: 271). It also occurs once in Pontoppidan’s (1881: 138) conversation sample. A comparison between de Josselin de Jong’s (1926) only two informants who alternate between *lo* and *lo lo* (see table 13) reveals that each one has a preference for one construction over the other. Thus all in all, *lo lo* is clearly a recurrent feature, although its frequency or acceptability seems to vary across speakers.

Table 13: The use of the two prospective constructions by two informants of de Josselin de Jong (1926)

	Informant 1		Informant 9	
prospective <i>lo</i>	8	22%	23	96%
prospective <i>lo lo</i>	22	78%	1	4%
Total	36	100%	24	100%

8.2 Change or variation?

When we include Van Name’s informant from the 1860s and DC’s last speaker recorded in the 1980s by Gilbert Sprauve (see van Rossem and van der Voort 1996: 271), there are five independent speakers documented from 1860, 1923, 1936, and the 1980s that use *lo lo* as a prospective marker. There is potentially a sixth speaker, as there are two ambiguous examples in Pontoppidan (1881) where *lo lo* is probably a prospective, but where there is too little context to be reliable³⁰:

³⁰ In the alternative interpretation, both *los* are motion verbs. The second *lo* would express purposive motion and combine with *suk*: Thus *mi lo lo suk* would be lit. ‘I go to go and look for’.

- (45) Die farki bin na cot, mi **lolo** suk bateta- tow, fo jeet fo die.
 DET pig be LOC sty ls go.go seek potatostalk COMP eat for it
 ‘The pigs are in the sty, I am going to look for potato stalks to eat for
 them.’ (Pontoppidan 1881: 138)

Prospective *lo* is much more generally attested, i.e. in thirteen speakers³¹ in a time span from 1788, 1881, 1923, 1936 (table 14, the numbers in italics represent the percentages), and the 1980s (e.g. Sabino 2012, online sound files).

Table 14: The aspectual interpretation of situations with preverbal *lo* in ADC

	Island	Prospective <i>lo</i>		Ambiguous		Prospective <i>lo lo</i>		Ambiguous		Total	
		N	%	N	%	N	%	N	%	N	%
<i>Schmidt</i> (1788)	St. Croix	2	100	-	-	-	-	-	-	2	100
<i>Pontoppidan</i> (1881)	St. Thomas	1	25	1	25	-	-	2	50	4	100
<i>Magens</i> (1883)		-	-	-	-	-	-	-	-	-	-
<i>dJdJ</i> (1926)											
inf1	St. Thomas	8	21	7	18	22	58	1	3	38	100
inf2	St. Thomas	1	100	-	-	-	-	-	-	1	100
inf4	St. John	6	100	-	-	-	-	-	-	6	100
infX	St. John	6	86	-	-	-	-	1	14	7	100
inf7	St. John	3	100	-	-	-	-	-	-	3	100
inf8	St. John	2	50	2	50	-	-	-	-	4	100
inf9	St. John	26	65	12	30	1	2.5	1	2.5	40	100
<i>Nelson</i>											
HF	St. Croix	1	20	3	60	1	20	-	-	5	100
VM	St. Croix	2	100	-	-	-	-	-	-	2	100
IS	St. John	3	75	1	25	-	-	-	-	4	100
RF	St. Thomas	1	100	-	-	-	-	-	-	1	100

Let us bypass the origin of prospective *lo* and *lo lo*, but focus instead on the speakers that alternate between the two. With the exception of Van Name's (1871) informant,³² all those who use *lo lo* (i.e., four or five speakers) also use *lo*. These speakers do not seem to form a group in terms of region (in so far we

³¹ Or fourteen, if we count infX as a separate speaker.

³² Van Name does not mention prospective *lo*, so we simply do not know for this speaker.

are able to gather from the information we have), as we have users of *lo lo* from all three islands.

The complexity of the situation is that we are dealing with two items of which we do not know exactly how and when they developed, discussing data spanning two full centuries. With respect to *lo*, we can only guess when it came in common use as a prospective marker. Therefore, let us simply assume that *lo* was on the rise as a prospective marker at least from its earliest documentation in 1788. Under this assumption, we may tentatively analyze *lo lo* as the innovative form and *lo* as the commonly used conservative form at the end of the 19th century.

There are two speakers who contributed sufficient data so that at least we may have some idea of whether they are progressive, in-between, or conservative language users (as loosely defined in Nevalainen et al. 2011: 6): dJdJ's 1926 informants 1 and 9. When we compare these two speakers to each other, we can conclude that informant 1 is a progressive speaker. We cannot be conclusive on whether informant 9 is conservative or in-between, because we do not know what the distribution would be of other informants, had they contributed more (other informants may not have used *lo lo* simply because their contributions were too small).

As we assume that prospective *lo* is older than prospective *lo lo*, we might expect that *lo lo* is less advanced in its development into a prospective marker. Coghill (2010: 386–387) formulates three stages in the development of a prospective marker: a) extension to contexts where a movement interpretation is not available, such as with the verb 'go'; b) extension of use from first person subjects to third person subjects, where intention is less transparent; and c) extension to an inanimate subject, which cannot have any intention. A comparison between *lo* and *lo lo* in de Josselin de Jong's (1926) informant 1 shows that both forms have evolved through these phases to the same extent. Examples (46) and (47) show that both have extended to contexts where a movement interpretation is not available, even though *lo lo* does not co-occur with *lo* 'go' itself.

- (46) Husoo mi **loo** loo?
 how 1S PROSP go
 'How am I going to go?'

(dJdJ 1926: 13, informant 1)

- (47) Nu di queen **loo loo** kri kwaan.
 now DET queen PROSP get angry
 ‘Now the queen is going to get angry.’ (dJdJ 1926: 14, informant 1)

Table 15 shows that both *lo* and *lo lo* have extended their use to third person subjects, but neither *lo* nor *lo lo* occurs with inanimate subjects when having prospective meaning. This shows that *lo lo* has completed its development into a prospective marker, at least for dJdJ’s (1926) informant 1.

Table 15: The person of the subjects of the two prospective constructions *lo* and *lo lo* in de Josselin de Jong (1926)³³

	<i>lo</i>		<i>lo lo</i>	
1 st person	14	26%	10	42%
2 nd person	2	4%	-	-
3 rd person	38	70%	14	58%
Total	54	100%	24	100%

9 Conclusion

The four case studies of Virgin Islands Dutch Creole preverbal aspect markers *le* and *lo* are an illustration of how to address the issue of whether we are dealing with language change or stable variation. The discussions, embedded in Weinreich et al.’s (1968) take on language change and its relationship to sociolinguistic variation, confirm that both may be the case at the same time. Thus, it is imperative to distinguish first what relevant language varieties can be discerned and how the values of the feature in question relate to these varieties.

In two of the four case studies, the data explicitly mention that there is a change. In the other two cases, it remains difficult to be conclusive. In the case of the progressive construction, the fact that there is variation within speakers that conforms to the cross-linguistically typical grammaticalization path of a progressive marker with a stative auxiliary (as discussed in Bybee et al. 1994: 131) – there are various degrees of indication of location in the progressive construction – is a strong indication that there is an ongoing change. At the same time, these observations alone are not sufficient to actually prove that there is change. Very general sociolinguistic background information may however provide an additional cue. In the course of the 18th and the 19th century, an increasing number of ADC speakers became bilingual in English and/or English

³³ Differences in the distribution in table 15 are not significant according to a *Fisher’s Exact Test*, with $p = 0.3076$.

Creole. In the final stage of the proposed grammaticalization chain, the DC progressive construction is structurally identical to the English progressive. Thus, there is reason to suspect that the use of the progressive construction without specification of location is an innovation. This is particularly convincing given that the progressive construction is a complex marker of progressive aspect, while DC already has a simpler way of marking progressive aspect: imperfective *lo*, which is itself part of the progressive construction.

In the case study of the prospective markers *lo* and *lo lo*, it is hardest to come to conclusions. There are many indications of variation, but a limited quantity of data and almost complete lack of sociolinguistic background data make it impossible to link the variation to sociolinguistic variables (the social embedding). As to the linguistic embedding, there is not much to say other than that prospective *lo* and *lo lo* are functionally equivalent. The only exception to this is that *lo lo* does not co-occur with the lexical verb *lo* 'go'. The fact that all those who use *lo lo*, also use *lo*, while the opposite is not the case, that the use of prospective *lo* is much more widely attested across different speakers than prospective *lo lo*, and that *lo* is a formally simpler means of expressing the same - prospective *lo lo* consists most likely of imperfective *lo* plus lexical *lo* 'go' - suggest all three combined that *lo lo* is a younger form and thus most likely an innovation. The fact that two informants of roughly the same age - informants 1 and 9, born in 1858 and 1863 respectively - each have a strong preference for another marker - *lo lo* and *lo* respectively - support that the markers are not in random variation. But at exactly how that variation is ordered and at the social evaluation of the two markers, we can only guess.

For the obvious reason that linguistic data is often all there is, the linguistic embedding of the four discussed alternations is often easiest to study. The social embedding and the social evaluation are for the same reason impossible to recover in most cases. It is only in the second case study concerning the switch from *le* to *lo* in MDC, that we are able to make some educated guesses. It is also for this case study that the reconstruction of the transition problem of the features can be done with a fairly high degree of confidence.

In the first case study, I have reconstructed two scenarios for the source of the use of past marker *(h)a* with *le*. In these two scenarios, the actuation and the transition are of course related. In the third case study, the suggestion of contact-induced grammaticalization has implications for the actuation and the transition (probably from speakers bilingual in DC and English). In the fourth case study, however, the transition phase cannot be reconstructed due to lack of sociolinguistic data.

What the above discussion perhaps illustrates most clearly is that the kind of inferences that can be drawn from available data differ considerably from

case to case. In the case of the prospective markers, we cannot do much more than observe that there is variation, that the two markers are functionally equal, and that *lo lo* is probably a later innovation than *lo*. This is different in the 18th century case studies of *le* that are based on missionary data. Here, the number of plausible scenarios can be maximally reduced with only small cues from the data. Thus, these case studies are a good illustration of how we can work around the ‘filter’ that obscures missionary data and resulting controversies.

10 References

- Ameka, F. K. (2008). Aspect and modality in Ewe: a survey. In: Ameka & Kropp Dakubu (eds), 135–194.
- Ameka, F. K. & M. E. Kropp Dakubu (eds) (2008). *Aspect and modality in Kwa languages*. (= Studies in Language Companion Series 100.) Amsterdam & Philadelphia: Benjamins.
- Ameka, F. K. & M. E. Kropp Dakubu (2008). Imperfective Constructions: Progressive and Prospective in Ewe and Dangme. In: Ameka & Kropp Dakubu (eds), 215–289.
- Anonymous [ms]. *Grammatik der Creol-Sprache in West Indien*.
- Berg, M. van den (2007). *A grammar of early Sranan*. Ph.D. dissertation University of Amsterdam.
- Besten, H. den (ed) (1986). *Papers on Negerhollands, the Dutch Creole of the Virgin Islands* Amsterdam: Universiteit van Amsterdam.
- Bohnmeyer, J. (2002). *The grammar of time reference in Yukatek Maya*. München: Lincom Europa. (LINCOM studies in native American linguistics 44.)
- Böhner, Jo. ms [3.2.1]. *Die Geschichte users Heern und Heilandes Jesu Christi, aus den vier Evangelisten zusammengezogen, un aus dem Deutsch in die Creolsprache übersetzt zum Gebrauch in dem Versammlung Haus der Neger Gemeine*. Available online as Böhner1 (3.2.1.) in the NEHOL database <<http://corpus1.mpi.nl>>
- Böhner, J. ms [3.2.2]. *Die Handelingen of Geskiedenis van ons Heer en Heiland Jesus Christus ut die vier Evangelisten na een tesamenhang gefoegt*. Available online as Böhner2 (3.2.2.) in the NEHOL database: <<http://corpus1.mpi.nl>>
- Bruyn, A. & T. Veenstra (1993). The creolization of Dutch. *Journal of Pidgin and Creole Languages* 8: 29–80.
- Bybee, J. & W. Pagliuca (1987). The evolution of future meaning. In: A.G. Ramat, O. Carruba & G. Bernini (eds). *Papers from the 7th International Conference on Historical Linguistics*. Amsterdam: Benjamins, 109–122.
- Bybee, J., R. Perkins & W. Pagliuca (1994). *The evolution of grammar: Tense, aspect, and modality in the languages of the world*. Chicago & London: University of Chicago Press.

- Coetsem, F. van (1988). *Loan Phonology and the Two Transfer Types in Language Contact*. Dordrecht: Foris.
- Coghill, E. (2010). The grammaticalization of prospective aspect in a group of Neo-Aramaic dialects. *Diachronica* 27: 359–410.
- Comrie, B. (1976). *Aspect: an introduction to the study of verbal aspect and related problems*. Cambridge: Cambridge University Press.
- Diggelen, M. van (1978). Negro-Dutch. *Amsterdam Creole Studies* 2: 69–100.
- dJdJ 1926 = de Josselin de Jong (1926)
- Dolphyne, F. (1988). *The Akan (Twi-Fante) language: Its sound systems and tonal structure*. Accra: Ghana Universities Press.
- Dyhr, S.A. (2001). *Grammatik over det creolske sprog af Joachim Melchior Magens i en lingvistisk og historisk kontekst*. M.A. thesis Aarhus University.
- Graves, A. (1977). *The present state of the Dutch Creole of the Virgin Islands*. Ph.D. dissertation University of Michigan.
- Hall, N.A.T. (1992). *Slave society in the Danish West Indies: St. Thomas, St. John, St. Croix*. Baltimore: Johns Hopkins University Press.
- Hesseling, D.C. (1905). *Het Negerhollands der Deense Antillen. Bijdrage tot de geschiedenis der Nederlandse taal in Amerika*. Leiden: A.W. Sijthoff.
- Het Utrechts Archief. Accessed online 24 April 2014: <<http://www.hetutrechtsarchief.nl/collectie/archiefbank/archieftoegangen/zoekresultaat?mivast=39&mizig=210&miadt=39&miaet=1&micode=48-1&minr=2550840&miview=inv2>>
- Holm, J. (1986). Review of Stolz (1986). *Journal of Pidgin and Creole Languages* 1: 245–249.
- Jendraschek, G. (to appear). Future tense, prospective aspect, and irrealis mood as part of the situation perspective: Insights from Basque, Turkish, and Papuan. In: P. de Brabanter, M. Kissine & S. Sharifzadeh (eds). *Proceedings of the workshop Future tense(s)/Future time(s) held at the Societas Linguistica Europaea 43rd Annual Meeting (2010) in Vilnius, Lithuania*.
- Josselin de Jong, J.P.B. de (1924). Het Negerhollandsch van St. Thomas en St. Jan. *Mededeelingen der Koninklijke Akademie van Wetenschappen, afdeling Letterkunde* 57: 55–71.
- Josselin de Jong, J.P.B. de (1926). *Het huidige Negerhollandsch (Teksten en Woordenlijst)*. Amsterdam: Koninklijke Akademie van Wetenschappen.
- Klein, W. (1994). *Time in Language*. London: Routledge.
- Krifka, M., F.J. Pelletier, G.N. Carlson, A. ter Meulen, G. Link & G. Chierchia (1995). Genericity: an introduction. In: G.N. Carlson & F.J. Pelletier (eds). *The generic book*. Chicago: The University of Chicago Press, 1–124.
- Kropp Dakubu, M.E. (2008). Ga verb features. In: Ameka & Kropp Dakubu (eds), 91–134.

- Magens, A. (1883). [Letter from 23 February 1883 to Hugo Schuchardt]. Digitally available as AMAGENS in the NEHOL database <<http://corpus1.mpi.nl>>
- Magens, J.M. (1770). *Grammatica over det Creolske sprog som bruges paa de trende Danske Eilande, St. Croix, St. Thomas og St. Jans I Amerika. Sammenskrevet og opsat af en paa St. Thomas indföd Mand*. Copenhagen: Gerhard Giese Salikath. Dialogues reproduced in Hesseling 1905: 134–182.
- Magens, J.M. (2009) [1770]. Grammar of the Creole language as used on the three Danish Islands of St. Croix, St. Thomas and St. John in America. Compiled and written by a native of St. Thomas. Translated by Peter Bakker and Hein van der Voort. In: J. Holm & S. Michaelis (eds). *Contact languages: Critical concepts in language studies*. London & New York: Routledge, 15–48.
- Nelson, F. G. (1936). [Fieldwork notes]. Digitally available in the NEHOL database <http://corpus1.mpi.nl>
- Nevalainen, T., H. Raumolin-Brunberg & H. Mannila (2011). The diffusion of language change in real time: Progressive and conservative individuals and the time depth of change. *Language Variation and Change* 23:1–43.
- Oldendorp, C.G.A. (2000) [1768]. *Historie der caribischen Inseln Sanct Thomas, Sanct Crux und Sanct Jan insbesondere der dasigen Neger und der Mission der evangelischen Brüder unter denselben: Kommentierte Ausgabe des vollständigen Manuskriptes aus dem Archive der Evangelischen Brüder-Unität Herrnhut. Band 1* ed. by G. Meier, S. Palmié, P. Stein & H. Ulbricht. Berlin: Verlag für Wissenschaft und Bildung.
- Osam, E.K. (2002). The ingressive in Akan: a reconsideration. In Ameka, Felix K. & E. Kweku Osam (eds). *New directions in Ghanaian linguistics*. Accra: Black Mask, 113–126.
- Osam, E.K. (2008). Akan as an aspectual language. In: Ameka & Kropp Dakubu (eds), 69–89.
- Pontoppidan, E. (1881). Einige Notizen über die Kreolensprache der dänisch-westindischen Inseln. *Zeitschrift für Ethnologie* 13: 130–138.
- Rossem, C. van (2000). Het Negerhollands, Negerzeeuws, Negervlaams. In: J. Berns & J. van Marle (eds). *Overzees Nederlands, Lezingen gehouden op het symposion van de afdeling Dialectologie van het Meertens-Instituut op vrijdag 26 november 1993*. Amsterdam: Meertens Instituut, 40–62.
- Rossem, C. van (2013). Maternity visit on St. Thomas. Demographic information on the earliest stages of Negerhollands. *Revue Belge de Philologie et d'Histoire / Belgisch Tijdschrift voor Filologie en Geschiedenis* 91: 713–734.
- Rossem, C. van & H. van der Voort (1996). *Die Creol Taal. 250 years of Negerhollands texts*. Amsterdam: Amsterdam University Press.
- Sabino, R. (1988). The copula in vernacular Negerhollands. *Journal of Pidgin and Creole languages* 3:199–212.
- Sabino, R. (1990). *Towards a phonology of Negerhollands: An analysis of phonological variation*. Ph.D. dissertation, University of Pennsylvania.

- Sabino, R. (2012). *Language contact in the Danish West Indies: Giving Jack his jacket*. Leiden & Boston: Brill.
- Schmidt, J.C. (1788). Blandede Anmaerkninger, samlede paa og over Ejlandet St. Kroix i Amerika. In A. Bind (ed). *Samleren, et Ugeskrift*. Copenhagen: Laurits Hvid Bøgh.
- Schneider, E.W. (2002). Investigating variation and change in written documents. In: J.K. Chambers, P. Trudgill, & N. Schilling-Estes (eds). *The handbook of language variation and change*. Malden, MA: Blackwell, 67–96.
- Sensbach, J. (2005). *Rebecca's revival: creating black Christianity in the Atlantic world*. Cambridge: Harvard University Press.
- Sijs, N. van der (2012). *Gekaapte Brieven*. <<http://www.gekaaptebrieven.nl/tekst>>
- Stein, P. (1985). Die Anfänge der Verschriftung einer Kreolsprache: das Negerhollands im 18. Jahrhundert. In P. Sture Ureland (ed). *Entstehung von Sprachen und Völkern: Glotto- und ethnogenetische Aspekte europäischer Sprachen*. Tübingen: Max Niemeyer Verlag, 437–457.
- Stein, P. (1986a). Les premiers créolistes: Les Frères Moraves à St. Thomas au XVIII^e siècle. In: H. den Besten (ed), 3–18.
- Stein, P. (1986b). The documents concerning the Negro-Dutch language of the Danish Virgin Islands, St. Thomas, St. Croix, and St. John - Negerhollands -, in the Unitäts-Archiv (Archives of the Moravian Brethren) at Herrnhut. In: H. den Besten (ed), 19–31.
- Stein, P. (1995). Early Creole Writing and its Effects on the Discovery of Creole Language Structure: The Case of Eighteenth-Century Negerhollands. In J. Arends (ed). *The early stages of creolization*. Amsterdam & Philadelphia: Benjamins, 43–61.
- Stein, P. (2010). Einige Gespräche, die mündlich gehalten sind, woraus zu ersehen, was manche Schwarze, sonderlich verehlichte, für Streitigkeiten vor ihren Baas bringen, und sie von ihm schlichten lassen. In: G. Meier, P. Stein, S. Palmié & H. Ulbricht. *Christian Georg Andreas Oldendorp: Historie der caraibischen Inseln Sanct Thomas, Sanct Crux und Sanct Jan: Kommentarband*. Herrnhut: Herrnhuter Verlag, 248–258.
- Stolz, T. (1986). *Gibt es das kreolische Sprachwandelmodell? Vergleichende Grammatik des Negerholländischen*. Frankfurt am Main, Bern & New York: Lang.
- Sturtevant, E.H. (1947). *An introduction to Linguistics*. Bloomington: Indiana University Press.
- Van Name, A. (1871). Contributions to Creole Grammar. *Transactions of the American Philological Association* 1869–70: 123–167.
- Wal, M. van der (2013). *Brieven als Buit Corpus*. <http://brievenalsbuit.inl.nl/zeebrieven/page/>
- Weinreich, U., W. Labov & M. Herzog (1968). Empirical Foundations for a Theory of Language Change. In: W.P. Lehmann & Y. Malkiel (eds). *Directions for Historical Linguistics*. Austin: University of Texas Press, 95–188.
- Westergaard, W. (1917). *The Danish West Indies under company rule*. New York: Macmillan Company.

- Williams, J.P. (1984). Faithfulness of replication: eighteenth century Dutch Creole dialogues as artifacts of discourse. *Amsterdam Creole Studies* 7: 53–76.
- Winford, D. (1993). Directional serial verb constructions in Caribbean English Creoles. In: F. Byrne & J. Holm (eds). *Atlantic meets Pacific: a global view of pidginization and creolization*. Amsterdam & Philadelphia: Benjamins, 183–203.
- Wold, E.R. (1770). *Creool A B Buk voor die Deen Missioen na Westindien*. Digitally available as WOLD ABB in the NEHOL database <<http://corpus1.mpi.nl>>

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