On Berbice Dutch VO status

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Abstract:

Berbice Dutch, once the vernacular of the Dutch-owned Berbice and Canje plantation areas of what is now Guyana (South America), is a VO language, even though both its substrate languages (Ijo, the Kalabari variety in particular) and its superstrate (16th and 17th century Dutch) are taken to be OV (and Verb Second) languages. Along the lines of Bickerton's Bioprogram hypothesis (Bickerton 1984, et seq), universalist analyses have taken Berbice Dutch to be a perfect illustration of OV markedness. Following Kayne's Lexical Correspondence Axiom that states that every language exhibits an underlying VO order and that OV orders are the result of additional object shifts (cf. Kayne 1994), many scholars have taken OV languages to be syntactically more complex than VO languages. The emergence of Berbice Dutch VO would then be a reflex of a reduction of the complexity of a creole language in comparison to its substrate and superstrate languages (cf. Roberts 1999).

In this article we argue that Kalabari, unlike previous claims, is actually not a verb second language and that therefore the Berbice Dutch substrate language differs from its superstrate in not allowing surface VO structures. This, we subsequently argue, opens up the way to analyze the emergence of Berbice Dutch VO as a result of the interplay between first and second language acquisition. We conclude that VO word orders are actually likely to emerge in the Berbice Dutch contact situation and that, therefore, Berbice Dutch's VO status does not constitute evidence in favor of Bickerton's universalism or similar approaches (in line with Mufwene's 2001 and DeGraff's 2001, 2003 arguments against creole exceptionalism), nor in favor of an alleged universal VO base order.

In short, Berbice Dutch VO may directly result from the fact that Kalabari speakers would not recognize Dutch Verb Second (V2), as their native language lacked it, and that therefore they analyzed SVO orders resulting from V2 as plain VO orders. Children growing up at the plantation would then take this input as evidence for a VO target language. We furthermore argue that such a reanalysis of OV+V2 structures as VO structures by children, both in main and embedded clauses, got facilitated by the existence of so-called VO leakages in 16th and 17th century Dutch (along the lines of Weerman 1993).

Key words: Berbice Dutch, VO/OV, creole exceptionalism, Verb Second, Object leakages

1 Introduction

1.1 Bickerton's bioprogram and creole exceptionality

The present day discussion about what constitutes creole languages has to a large degree been determined by the work of Bickerton (most notably Bickerton 1980/1974, Bickerton 1981 and Bickerton 1984), one of the first to present universalist creolist hypotheses.

Bickerton attempts to resolve the mystery of language evolution by looking at data from first language acquisition and exploring possible evidence that creole languages have to offer. Concerning the latter, he imposes strict criteria on the creoles that he considers suitable for this purpose. First, only languages qualify of which the preceding pidgin did not last longer than one generation. Second, he does not allow languages into his definition of 'creole' that emerged in a situation where more than twenty percent of the population spoke the superstrate language. Third, he assumes the remaining eighty percent to have a diverse linguistic background, involving large groups of substrate speakers unintelligible to one another (though see Den Besten 2002 for a critical evaluation of this third criterion). These criteria were motivated by his claim that the innate language capacity could become fully active only in a situation with minimal interference from other linguistic environments.

Furthermore, Bickerton proposes that in this specific situation a creole language would emerge that to a large degree is a blueprint of what the innate language capacity in its purest form looks like. According to Bickerton the plantational pidgin in this context would be a linguistic system with very limited grammatical properties and vocabulary items derived from the source languages. Confronted with the absence of much of the structure regular natural languages possess, children exposed to such pidgins fall back on an innate language competence, which they use to create a grammatically fully-fledged language: the creole.

For his theory Bickerton, modifies Chomsky's parameter theory (e.g. Chomsky 1981) by assuming that each parameter has an unmarked or default setting: the value a parameter 'naturally' has for a newly born child and that will only be shifted to another setting if linguistic input requires this. Unless evidence for the marked value is provided, the child will resort to the unmarked or default value of the parameter. Crucially, if linguistic input lacks grammar and a child is unable to discover a structure in the data it

is confronted with, as would be the case when a pidgin is offered to the child as a mother tongue, it will fall back to the default settings of the parameter system.

Though Bickerton acknowledges that creoles exhibit structural properties similar to their source languages, he sees robust structural similarities across creoles that are far beyond the possibility of transfer or chance. According to him, those creoles reflect the default values of his bioprogram. Concretely, he constructs twelve parameters and deducts their defaults from his selection of creoles. A prominent and often discussed example, especially in discussions involving parametric variation in syntactic theory, is the word order parameter: Bickerton claims VO to be default, whereas OV is assumed to be marked or derived. The idea that VO is the unmarked order that emerges in creole genesis has also been adopted by Roberts (1999) who takes this to follow from Kayne's Lexical Correspondence Axiom that states that every language exhibits an underlying VO order and that OV orders are the result of additional object shift (cf. Kayne 1994). Under this view, and the assumption that displacement rules increase complexity (see Schaeffer, this volume and Berends, Hulk, and Sleeman, this volume) OV languages would appear to be more complex than VO languages, in the sense that the OV structures are derived and therefore involve additional instances of movement (in casu object shift), whereas VO structures reflect their base order. The emergence of Berbice Dutch VO would then be a reflex of a reduction of the complexity of the creole in comparison to its substrate and superstrate languages.

Bickerton's approach received a fair amount of criticism. Substratist approaches (Lefebvre's 1998 and Lumsden's 1999 Relexification Hypothesis is an example) dismiss Bickerton's hypotheses and instead propose that creole languages owe their grammatical structure mostly or exclusively to the influence of substrate languages, being, in the case of colonial plantations, mostly African languages spoken by the slave population. The uniformity Bickerton sees in creoles, substratism attributes to substrate effects, although often doubt is cast on the uniformity thesis as a whole as well (see, for instance Muysken 1988, Mufwene 1993, 2001 for an overview and discussion). But even if the languages Bickerton compares are as similar as he claims, this similarity is due to the fact that they all emerged under very similar conditions and in very similar language contact situations involving typologically similar groups of languages: one or several mostly West African substrates (i.e., Niger Congo) meeting a European superstrate (Romance/Germanic). Although, of course, there are plenty of European, as

well as West African OV languages, colonial language contact more often than not involved VO languages (i.e., French, Spanish, Portuguese, English), Dutch being the only exception to this rule (although one might argue that due to V2 this language displays a mixed system of OV and VO).¹ Traditional substratist views thus hold the African languages responsible for most of a creole's grammatical features whereas European languages presumably provided most of its vocabulary (see Muysken and Law 2001 for discussion), although variations to this distinction have also been proposed.

Also, more recently, DeGraff (2001, 2003 *et seq*) has strongly argued on various grounds that there cannot be any such thing as creole exceptionality and that creolisation is nothing but the result of the interaction of principles of first and second language acquisition that are no way deviant from those any other language contact situation. For him, creole languages, as any other contact language, are the result of children acquiring a target language that consists of a mixed input due to L2 overgeneralisation by non-native adults that try to speak the target language. Other arguments against creole exceptionality have been provided by Mufwene (2001) and Aboh (2015).

1.2 Berbice Dutch: the strongest evidence for Bickerton's bioprogram?

As a response to non-universalist approaches, examples were put forward of creoles that exhibit grammatical properties which correspond to a proposed default parameter, but whose sub- and superstrate languages have this parameter set for the marked value. Such examples would then constitute strong evidence in favour of universalist approaches. A well-known example comes from the rigid VO word order in Berbice Dutch creole.

Berbice Dutch word order deviates from both the substrate Ijo languages and the Dutch superstrate. Nigerian Kalaḥari, Berbice Dutch' most dominant substrate language is primarily SOV (cf. Jenewari 1977, Kouwenberg 1989, 1992) and can as such thus not

¹ In the very latest stages of colonialization (around 1880), German, another OV language (but, again, with V2), also made a modest contribution to creolisation, generating some VO creoles (amongst which Unserdeutsch and Namibian Black German). The substrates to these creoles are assumed to have been mostly VO (see, for instance, Deumert 2002 for discussion). As far as languages spoken by substrate populations are concerned, the only OV input has come from Khoekhoe (South Africa) and the languages of India and Sri Lanka, but in most instances VO substrates were also abundantly present in these contexts (through the languages of Indonesia, Mozambique and Madagascar).

be responsible for Berbice Dutch VO word order. In addition, Berbice Dutch superstrate, 16th / 17th Century Dutch, also employs an SOV word order, though it also exhibits Verb Second (V2) effects with respect to finite verbs in main clauses, a point that we will return to in more detail later on. Universalist creolists have claimed that the linguistic environment cannot be responsible for Berbice Dutch word order, since both its source languages display the marked OV order, though this has not been adopted by the creole. Berbice Dutch indeed applies SVO to almost every type of sentence. Under the universalist approach this would then be the result of the default setting VO-value of the linguistic VO/OV word order parameter. It thus looks as if Berbice Dutch creole is a prototypical example of a creole that has ignored its linguistic environment and allegedly has maintained some property default to the language bioprogram.

Hence, both Dutch and Kalabari are SOV in their word order, yet Berbice Dutch ended up being an SVO language, a structure in agreement with Bickertons bioprogram default for this parameter. For this reason Muysken (1983) argues that Berbice Dutch provides "[p]erhaps the strongest evidence thus far that the creole SVO order does not simply result from the contributing languages, but is typical of language genesis in general."

Naturally, the question arises as to whether Berbice Dutch is indeed a creole language that fulfils all criteria that Bickerton that Bickerton imposes on creole formation that reflects underlying default values (cf. Kouwenberg 1992). As Gross (2000), citing Netscher (1888), points out, in the beginning years of the plantation the number of slaves and colonizers was roughly the same. Only later, the percentage of superstrate speakers became well within the range of Bickerton's twenty percent.^{2,3}Also, although due to limited documentation it is not clear whether the pidgin preceding Berbice Dutch creole has lasted for more than one generation, generally, creolists who adopt Bickerton's framework tend to assume that creolisations occurs within this time frame.⁴ Moreover, lexical influences from the neighbouring Arawak population have been attested, although the influence of this language is much more limited than the other substrate languages and has not had any traceable non-lexical influences. Lexical items taken from Arawak are restricted mostly—though not exclusively—to flora and

² According to the National Archive, The Hague, Society of Berbice, 1720-1795, number access 1.0505, inventory number 10, the Berbice plantation did constitute one Dutch colonist for every fifteen slaves.

³ Note, though, that Kouwenberg (2015) argues that the plantation grew much faster (in terms of the number of slaves) than was originally estimated in Robertson (1993).

⁴ See Bickerton (1984) for a general discussion about the duration of pidgins in those circumstances, but see Arends (1995), Mufwene 2001, DeGraff 2001, 2003), for a more gradual approach.

fauna terms (e.g. *anwana (*'turkey vulture'), *karaba* ('crabwood tree') or *tukuma* ('larva') and do not yield more than a single percent of Berbice Dutch vocabulary.⁵

In this paper we argue, by contrast, that in fact the earlier-mentioned V2 property of Dutch, in combination with two other observations (one from Ijo, one from 16th and 17th Century Dutch) that thus far have not been taken into consideration in the study of Berbice Dutch genesis, is more likely to be responsible for the emergence of Berbice Dutch VO. We argue that the linguistic background at the plantation, without assuming any default status of VO orders, already provides the necessary conditions for the emerging creole to exhibit VO order. As a consequence, Berbice Dutch VO orders do not provide any evidence at all in favour of a universal SVO structure or in favour of Bickerton's bioprogram. In fact, the word order facts in Berbice Dutch may actually be taken to form a strong argument against creole exceptionalism.

2 Berbice Dutch, Kalabari, and 16th and 17th Century Dutch

Before evaluating two particular proposals about the emergence of Berbice Dutch VO, it first needs to be established in what ways Berbice Dutch word order differs from its substrate and superstrate languages. We first briefly discuss Berbice Dutch's rigid SVO structure. Then we focus on Kalabari's rigid OV pattern and the different slightly more flexible word order patterns in 16th and 17th century Dutch.

2.1 Word order in Berbice Dutch creole

If we want to study Berbice Dutch syntax, we are limited to a relatively recent variety of the language. The earliest source containing Berbice Dutch utterances that has been handed down is a text dating back to 1827, written by Swaving (Swaving 1827). This text shows some differences in word form and meaning compared to contemporary Berbice Dutch, but syntax does not appear to have undergone drastic changes (cf. Kouwenberg 1992). Since no further historical information is available, in the description of Berbice Dutch the contemporary variety will be the guideline.

⁵ Cf. Kouwenberg (2012:1,3) and Kouwenberg (1996: 5); examples taken from Kouwenberg (1994: 552 and onward). See Kouwenberg (2009) for more discussion on influence of other languages involves.

Berbice Dutch is rigidly SVO. Nearly all clause-types could be taken as 'basic', since variation in word orders is limited to a minimum. Take the following simple main clauses, showing word order with a single verb and a verbal cluster respectively:

(1)	0	sarte	di		gut	Berbice Dutch
	3SG	pour.PF	the		thing	
	She po	oured the stuff ⁶				
(2)	εk	jɛrma		kan	mjo	Berbice Dutch
	1SG	woman		can	make=3SG	
	My w	ife can prepare	it ⁷			

In this sentence type SVO constituent order is apparent, an order which can be observed throughout the language. As shown below *Wh*-clauses exhibit SVO order (3), unless the *Wh*-object is fronted to the sentence-initial position (4).

- (3) wat rul-a jεndε Berbice Dutch
 What. rul-IPF 2PL
 What is ruling you?⁸
- (4)
 hofele
 kεnε
 o
 ma
 deki
 Berbice Dutch

 How-many
 person
 3SG
 IRR
 take

 How many people will it carry?9

Interrogatives without question words are entirely similar to regular main clauses, except for their rising intonation:

(5) $ju \quad waf-t\varepsilon \quad ju \qquad bara?$ Berbice Dutch 2SG wash-PF 2SG hand Did you wash your hands?¹⁰

⁶ Kouwenberg (1994: 33)

⁷ Kouwenberg (1994: 33)

⁸ Kouwenberg (1994: 39)

⁹Kouwenberg (1994: 43)

¹⁰ Kouwenberg (1994: 34)

Finally, subordinate clauses remain SVO under all circumstances:

(6)	in	ha	musu	kenap	dang		Berbice Dutch				
	3PL	have	many	person.PL	there	there					
	wat	biça		di	Arwal	k					
	what.	speak.I	PF	the	Arawal	ς.					
	There	are mai	ny peop	le there who sp	eak Ara	awak ¹¹					
(7)	εk	nim	ka	afu	nim	di	gut	Berbice Dutch			
	1SG	know	NEG	if=2SG	know	the	thing				
	I don't know if you know the thing \dots^{12}										

Clause types that deviate slightly from the regular Berbice Dutch order, are cases of left-dislocation, where the object seems to be fronted:

(8) $ori \ \varepsilon k \ bugrafto$ Berbice Dutch 3SG 1SG bury-PF=3SG As for him, I buried him¹³

In this type of clause, the constituent placed in left-dislocated position, in this case the object, is hosted in sentence initial position. However, as the base object position is still filled by an additional clitic o, the structure remains SVO and does not provide any counter evidence to the observation that Berbice Dutch exhibits rigid SVO.¹⁴

2.2 Word order in Kalabari

Let's now discuss the syntax of Kalabari, the dominant Ijo language spoken in the linguistic environment where Berbice Dutch arose. This overview will concern contemporary Kalabari, as no description of its seventeenth century counterpart is available.

¹¹ Kouwenberg (1994: 57)

¹² Kouwenberg (1994: 57)

¹³ Kouwenberg (1994: 49)

¹⁴ Kouwenberg (1994: 424-428) also presents a number of cases with left-dislocated focuses objects in cleft constructions, but as these constructions are bi-clausal, they do not touch upon the Berbice Dutch's SVO status.

Kalabari basic word order is SOV, and it exhibits this pattern in a vast majority of sentence types. Consider, for instance, the following main clauses:

(9) 0 ve *biár*į Kalabari he thing want He wants something¹⁵

SOV order holds for most main clauses. First, let us again look at some sentence constructions, which in many languages tend to deviate with regard to surface word order. Kalabari shows no variation in this respect: (10)-(11), instances of interrogatives (with a Wh-term and one without a Wh-term), and (12), containing a subordinate clause, all maintain their SOV ordering, showing Kalabari's OV order to be very rigid.

(10)	<u> </u>	tọ	anga	múáar	į		Kalabari
	3SG.NOM.M	what	place	go-GEN	N		
	Where is he g	going to	go? ¹⁶				
(11)	į	ọ		sį́nķa			Kalabari
	you(sg)	him		call.FU	Т		
	Will you call	him? ¹⁷					
(12)	į	anį		júù	mú-á	kúma,	Kalabari
(12)		•		Ū.		•	Kalayari
	you(sg)	that		place	go-FAC-not	11	
	o ķóķį -	áā					
	he come.H	UT-not					
	If you don't g	go there,	, he wor	n't come	e ¹⁸		

Finally, Kalabari is also SOV in cases of left-dislocation for topicalisation. The topic is placed in sentence initial position, but is then repeated, often in the form of a (bound) pronoun, in the main clause, again leaving the SOV ordering intact.

iyeri kúma ári bélémam (13)į

Kalabari

 ¹⁵ Jenewari (1977: 425)
 ¹⁶ Jenewari (1977: 112)

¹⁷ Jenewari (1977: 131)

¹⁸ Jenewari (1977: 132)

you.sg TOP she you.sg love-FAC 'As for you, she loves you'¹⁹

Only under one condition does Kalabari allow an SVO word order: if the object of any given sentence is an embedded CP, this constituent must be extraposed to sentence final position, thus creating an SVO surface ordering:

(14) *i mbo biári imbo ingéri ibíī* Kalabari
 person want-IPF person alone be.good
 The person wants only himself to prosper²⁰

However, as in virtually all OV languages, complement clauses must be extraposed (cf. Philip 2013, Biberauer et al. 2014 and references therein), examples like (14) do not provide reasons to cast doubt on the rigidity of Kalabari, and Ijo varieties' SOV order.

2.3 Word order and finite verb placement in 16th and 17th Century Dutch

Modern day Dutch differs in various respects from 16th/17th Century Dutch, but its most basic structural characteristic have remained unaltered: Verb Second (V2) placement and SOV. Basic word order in both modern as well as 16th and 17th century Dutch is that of the subordinate clause, which is SOV, as illustrated in the complement clause of (15) below:

(15)	men	treck-t	,	een	boogh	SOO	lang	tot	17 th cent. Dutch
	one	pull-3S	G	а	bow	so	long	until	
	dat=se stucker		п	knars-t					
	that=sh	e	pieces		break-3	SG			
	One st	tretches	a bow u	until she	e breaks	to piec	es ²¹		

However, in matrix clauses, the application of V2 often leads to a VO surface structure when this clause contains only one verb, as illustrated in (16), thus explaining why in Dutch main clauses word order may deviate from OV. In this sense, Dutch is different

¹⁹ Jenewari (1977: 136)

²⁰ Kouwenberg (1992: 292), who shows that these constructions involve extraposed object clauses and should not be analysed as serial verb constructions.

²¹ Daan (1971:1)

from (more rigid) Berbice Dutch and Kalabari Ijo, which do not allow such word order alternations.

Vader 17th cent. Dutch (16)beminne ic mijn Ι love.1SG father my I love my father²²

Note that due to the 16th/17th Century Dutch V2 property, the SVO word order does not always surface in main clauses, e.g. if adverbials occupy the sentence-initial position (see (17)):

17th cent. Dutch *nochtans* verschillen=ze ongeloofelik veel (17)still *differ=they* much verv Still they differ a lot²³

Since such a VO surface structure only emerges in matrix clauses with a single verb, all other (non-finite) verbs remain in their sentence final base position. Then Dutch exhibits OV order again with respect to the final verb(s).

17th cent. Dutch (18)*k*=*socht* kopen slapen af te sleep buy.INF I=sought off to I sought to buy off (the act of) sleeping²⁴

However, it must be noted that 16th and 17th century Dutch word order was not as rigidly OV as it is in contemporary Dutch. For instance, in embedded clauses sometimes a VO order could be attested, a phenomenon referred to as an object leakage (cf. Weerman 1993):

(19) ioncfrouwe 17th cent. Dutch dat si ontmoet-en ene that meet-PL lady.O they а That they meet a $lady^{25}$

²² Hermkens (1973: 116)

 ²³ Hermkens and van de Ketterij (1980: 143)
 ²⁴ De Brune (1644: 180)

²⁵ Weerman (1993: 911)

We thus conclude that in the language spoken by the plantation holders on the Berbice plantation, both SOV and SVO surface orders must have been present. This means that the Berbice Dutch contact situation did not involve two rigid OV languages, but rather a contact situation with a very rigid OV substrate language (Kalabari Ijo) and a more flexible superstrate language that in addition, even though underlyingly an OV language, exhibits a mixed pattern with various derived VO orders (17th century Dutch). So now, the question immediately rises as to why a language contact situation with a rigid OV language and a language with an apparently mixed OV/VO nature resulted into a rigid VO language and not into a flexible or a rigid OV language. Is this a change that can only be explained under the assumption of a VO default setting only, or can it also be accounted for without such an assumption? If the latter is the case, Berbice Dutch no longer forms evidence for a VO default setting (a conclusion that raises doubt about this word order being less complex than OV structures than OV).

3 Non-universalist accounts of Berbice Dutch

The emergence of Berbice Dutch VO structures seems at first sight to make a strong case for a universalist approach to language genesis, but that does not entail that alternative scenarios are inconceivable. Instead of the universalist assumption of default parameter settings underlying Berbice Dutch syntax, the specific linguistic situation on the Berbice plantation may be the cause for the shift from OV to VO without alluding to any default parametric settings. In this second section we discuss two such accounts and some problems these proposals have been facing.²⁶

3.1 Kouwenberg (1992)

Kouwenberg (1992) is a non-universalist proposal to the explanation of Berbice Dutch linguistic properties, based on the main assumption that similarities between both suband superstrate surface features are at the core of the genesis of Berbice Dutch: what speakers perceived as being common to both languages is what was retained. As for the

²⁶ Naturally, these are not the only accounts or discussions of the origin of Berbice Dutch, but both focus explicitly on the emergence of its VO word order, which is the reason why we discuss them here. Other analyses can be found in Smith, Robertson & Williamson (1987), Kouwenberg (1996, 2009, 2015), and Gross (2000), among others.

differences between the source languages, Kouwenberg submits that both speakers of Kalabari, as well as those of Dutch, were willing to compromise to some extent, a process she refers to as linguistic negotiation; a situation emerged in which mutual intelligibility was the target. She argues, for instance, that the fact that Berbice Dutch is head-initial in some phrases (e.g. VPs, DPs and CPs), but not in other phrases (PPs and NPs are head-final) points to the effects of this process of linguistic negotiation: for the areas for which there was no overlap between Kalabari and Dutch, Kouwenberg assumed that situationally defined unmarked features, i.e. features that, due to the specific combination of linguistic properties of the sub- and superstrate languages, would have been either most salient or easiest to fit into the system, have been adopted into Berbice Dutch, for the simple reason that these would have been the easiest to learn. As opposed to universal unmarkedness, for which language-specific properties are irrelevant, Kouwenberg thus calls for an explanation, which considers markedness to be dependent on linguistic context.

The question now arises as to why word order had to be negotiated if both $16^{\text{th}}/17^{\text{th}}$ century Dutch and (Kalabari) Ijo exhibit OV. For Kouwenberg this is due to two different factors.

First she states that, although the Dutch base structure is SOV, in many cases it displays an SVO surface ordering due to its V2 property, especially in the kind of constructions that the slave population, according to Kouwenberg, would most likely be exposed to. Instead of the full inventory of Dutch sentence types, she assumes that in this specific situation mostly imperatives (which, in their finite form, lack a subject and are surface VO), simple sentences (i.e. without subordination or multiple verb constructions) and emphatic speech forms were used. This then may have led the native Kalabari speakers to assume SVO to be basic to Dutch word order.

Kouwenberg is correct when claiming that the linguistic environment may have triggered more SVO surface constructions. However, there must still also have been abundant SOV evidence. Any Dutch construction involving more than one verb (20), a negation (21), a (certain type of) adverbial (22), a separable imperative verb (23) or an infinitival imperative (24) indicate that the verb's base position is to the right of the object.

In (20) the main verb *ophalen* ('to pick up') is an indication of the original position of the verb, which includes the trace of the fronted auxiliary ga ('go'), which has been moved due to V2.

(20)	ik	ga_i	hem	t_i	ophalen
	Ι	go.1SG	him		pick.up.INF
	I will	pick him up			

In (21), verbal *zie* ('see') has been fronted, evidenced by the fact that the negation particle *niet* 'not' shows the left boundary of the VP and thus the original position of the verb.

Dutch

(21) ik zie_i het niet t_i Dutch I see.1SG it NEG I don't see it

The same applies to (22) where the original position of the verb should be to the right of *vaak* ('often').

(22)	hij	zie - t_i	hem	vaak	t_i		Dutch
	He see-3SG		him	often			
He sees him often							

Even imperatives can show signs of verb movement. For instance, the verb *opruimen*, which is a separable verb, leaves behind the prepositional particle *op* 'up' in its original position, when moving to the sentence-initial position:

(23) $ruim_i$ dat eens op t_i Dutch clean.IMP that once up 'Clean that up!'

And finally, imperatives in Dutch often take the shape of an infinitival imperative. Such imperatives, however, are always OV.

(24)	eten	kopen	Dutch
	food	buy.INF	

Buy food²⁷

Any of these sentence constructions, especially the imperative ones, are entirely imaginable to have been uttered in a plantation setting, all directly or indirectly reflecting Dutch OV. Linguistic evidence for the usage of prepositional particle verbs (as in (23)) also comes from Berbice Dutch expressions such as (25)-(27), where new verbs are created on the basis of Dutch prepositional particle verbs out of which the verb has moved.²⁸

(25) pasopo take.care To take care
(26) maklara prepare To prepare
(27) maskono clean

The verb in (25) originates from Dutch *op-passen* (up-fit 'look out'), where the verbal part *pas* moves out of the complex verb *op-pas* leaving the prepositional particle *op* behind.

(28) Pas_i op-t_i Fit up 'Look out!'

To clean

The same applies to *maklara*, which stems from Dutch *klaar-maken* ('ready-make'), where the verbal part must have been fronted, and *maskono* from *schoon-maken* ('clean-

Dutch

²⁷ Note that in Standard Dutch infinitival imperatives may also have their objects in postverbal position (e.g. *wegleggen, die bal* ('take away, that ball')), but in all those cases an intonational break is required between the verb and the object.

²⁸ All three examples taken from Kouwenberg (1992: 275)

make'), where the same applied. Hence, even a deprived language input would still contain clear cues that Dutch was not a simple SVO language; Dutch word orders were closer to Kalabari OV structures than a typical VO language. And these cues that reveal underlying OV order in Dutch should be easily recognizable to speakers of Kalabari, being an OV language itself. The question thus arises as to why Kalabari speakers would not recognize the similarities with their native language OV order.

This is where the second factor comes in. Kouwenberg argues that Kalabari, again like Dutch, shows SVO surface structures as well. Then, the presence of word orders that deviate from simple OV orderings in both languages may be the cause for Kalabari speakers not to recognize the similarity with Dutch word orders.

First, she points out that in Kalabari any object containing a verb is extraposed to the outmost right position, indeed creating SVO orders. But, why, then, would Berbice Dutch not simply have adopted this possibility, maintaining an SOV ordering in all other situations? Extraposition of complement clauses can hardly be said to explain a tendency of the Kalabari speakers toward SVO; in any other situation their language exhibits rigid SOV and, not unimportantly, Dutch exhibits extraposition of complement clauses too.

In addition, Kouwenberg points at auxiliary constructions, which seem to behave somewhat similarly to Dutch V2. She claims that a subset of Kalabari verb cluster constructions require certain auxiliaries to be placed before the object of the sentence, whilst the main verb remains in sentence final position, consequently producing surface word order very similar to Dutch main clauses that contain an auxiliary:

(29) *ini ìnè ofúnguru ḥa-áā* Kalaḥarị they able rat kill-NEG They can't kill rats²⁹

This verb second-like word order only occurs in combination with a limited set of auxiliaries, though among these are quite frequent ones such as equivalents of 'can', 'be able', 'begin' and 'repeat'. However, it is not clear whether these apparent Kalabari V2 constructions, would render its word order very similar to the Dutch orders. First, it should be noted that this construction is relatively marginal in Kalabari, at least in the contemporary variant (there are no sources of $16^{\text{th}}/17^{\text{th}}$ Century Kalabari). But, more

²⁹ Kouwenberg (1992: 292)

importantly, as Kouwenberg suggests herself, these auxiliaries are base-generated in left-peripheral position, a claim that seems to be confirmed by the observation that these alleged auxiliaries lack any kind of verbal inflection. Accordingly, these apparent auxiliaries cannot be considered verbal (auxiliaries) at all, but rather as temporal, modal or aspectual (TMA) particles base-generated in a higher slot above (in the I or C domain). Jenewari (1977) does not discuss this lack of inflection in his description of Kalabari, but examples in his grammar, as well as the examples and explanation given by Kouwenberg (1992), point toward a particle analysis in that no inflectional tense and aspect or mood features are ever realized on these particles by means of inflectional markers, whereas the sentence final verb does always show feature marking. As Kouwenberg (1989: 2) puts it: 'the entire structure is dominated by one IP, as is obvious from the fact that we find tense and negation marking on the final verb only.' Consequently, no verbal element can be assumed to appear in a left-peripheral position.

This claim is confirmed by other Ijoid languages, which display exactly the same pattern of base generation of a particle whilst the finite verb remains sentence final, as an example from Williamson's (1965) description of the North Central Ijo language Kolokuma illustrates:

(30)	eri	kurei	bani	saramo	tobou	deni-mi	Kolokuma
	he	can	run	fast	child	surpass-TMA	
	He cou	uld run	so fast l	ne surpassed the	e child/l	He could run faster tha	n the child ³⁰

Like in Kalabari (and the other Ijo languages), Kolokuma finite verbs remain sentencefinal, whereas its particles are generated in a higher position. Combined with the data from Kalabari Ijo, the evidence for a TMA particle interpretation of these elements is quite compelling. It seems that Kalabari speakers had no constructions comparable to Dutch verb second in their native tongue.

Therefore, it remains unclear, why the process of linguistic negotiation caused the emergence of Berbice Dutch SVO. Kalabari looked clearly OV (and lacked any relevant VO surface structures), whereas Dutch, despite a significant amount of surface VO orderings, still contained strong evidence for being an underlying OV language. Under the situation Kouwenberg sketches, a result where Berbice Dutch would have become an SOV language, possibly with (some kind of) V2 would thus have been more

³⁰ Kouwenberg (1989: 2)

likely. One might even argue that on Kouwenberg's assumptions, Kalabari speakers on the Berbice plantation should have recognized Dutch verb second on the basis of instances such as (29), rendering Berbice Dutch an OV language with V2. Hence, it remains an open question as to why Berbice Dutch became SVO, if SVO is not a default value for the VO/OV parameter.

3.2 Lightfoot (2006)

Lightfoot (2006), in a response to Roberts (1999), also opposes the claim that creoles have adopted some kind of unmarked value in the expression of their word order, a claim that could actually win ground given that both languages were OV languages with some kind of 'second property'. Instead, he proposes a cue-based, degree-0 learnability approach to acquisition, which should account for the VO feature of Berbice Dutch without having to rely on UG default values. Lightfoot takes the emerging creole to be the result of first language acquisition by children growing up on the plantation.

According to the degree-0-learnability proposal, language learners only base themselves on unembedded constructions. Among main clause SOV sentences with V2, the only signposts for an OV base structure would then be constructions as in (20)-(24) with negative elements, multiple verbs, verbs with a separable particle and infinitival imperatives. Since all these elements would, in Dutch, remain in their original position to the right of the object, they mark the underlying movement of the verb, and thus form evidence that the verb has moved.

In spite of the surface position of the finite verb, these constructions tell a degree-0 learner she is dealing with an OV language. However, if such evidence is obscured in some way, language learners may no longer recognize the OV starting point any longer and assume VO without movement. One possible instance of this, and the only one which Lightfoot elaborates on, is the position of negative elements. These, in Dutch, as (21) (repeated in (31)) shows, mark the original position of the verb as they occur to the right of the object. In Kalabari, however, negative particles are adjoined to the verb and move along with it (32):

(31) ik zie_i het niet t_i I see.1SG it NEG I don't see it Dutch

Kalabari

(32) í mú-ø-á?
 you.sg go-FAC-not
 Didn't you go?³¹

Like Kalabari the Berbice Dutch negative marker $kan\varepsilon$ is a clitic to the verb (and not a phrasal adverb, such Dutch *niet*), which therefore has obscured one of the indicators of Dutch SOV.³²

However, even if the scenario for negation is correct, it is hard to conceive of a scenario in which every kind of construction that would provide evidence for Dutch OV, would be obscured. Verb clusters are very common in Dutch, even in the simplest linguistic environments (e.g. child speech or speech directed to children). Furthermore, verbs with a separable prepositional particle are perhaps even more frequent than verb clusters. This would leave a vast amount of OV evidence to draw from, even if the Kalabari did manage to obscure some of it.

Finally, if the degree-0 hypothesis turns out to be untenable (and this is not at all an uncommon assumption in the field, see Roberts and Roussou 2003, Hale 2007 amongst many others for discussion), and children do in fact consider embedded clauses when they acquire the structure of their language, Lightfoot's claim turns out to be challenged, since embedded clauses are always SOV in Dutch.

4 Towards the outlines of an explanation of Berbice Dutch SVO

To assume that both Kalabari and Dutch would have been almost exclusively SVO in their surface structure, oversimplifies the situation and cannot account for a significant part of the linguistic reality on the Berbice plantation. The examples that prove Dutch base OV order form a substantial segment of Dutch clause structures and cannot be disregarded by first and second language learners, and the claim that Kalabari word order would have been obscured by a V2 property is unwarranted.

However, this does not entail that it is impossible to account for the Berbice Dutch VO emergence without taking VO to be a default word order. In this section we

³¹ Jenewari (1977: 120)

 $^{^{32}}$ For a more detailed discussion of the negative marker *kane* in Berbice Dutch, cf. Kouwenberg (2009, 2012).

present the outlines of an account that can predict the Berbice Dutch VO emergence without facing the problems that the previous accounts did. We base ourselves on the following two facts.

First, opposite to Kouwenberg, we stress that Ijoid languages lack V2 structures that could have given rise to VO surface orders. Consequently, SVO surface orders in Dutch have been different from the Kalabari counterparts involving TMA particles.

Second, 16th and 17th century Dutch is far from rigid SOV: considerable amounts of object leakages have caused this language to be (surface) SVO not only in its main clauses, but also in a large percentage of its embedded clauses. As discussed in section 2.3, it is a well-known fact that 16th and 17th Dutch allowed for more flexible word order patterns in causing (surface) structures to vary between SOV and SVO (see Weerman (1989) and Van Kemenade (2007) for an overview and discussion of this word order flexibility), a remnant of previous stages of the language which still exhibited morphological case distinctions.³³

Hermkens and Van De Ketterij (1980) discuss, among others, word order in seventeenth century subordinate clauses. Indeed, SVO word order is found repeatedly in seventeenth century texts. Take, for instance, the following sentence:

(33)	tsint	dat	de	gierig	heidt		17 th cent. Dutch
	since	that	the	greed			
	maeck-te onders		scheidt	van	have		
	make-PST.SG difference			nce	of	possession	
	Since	greed d	ifferenti	iated po	ssession	n ³⁴	

In modern day Dutch a construction such as (33) would be ungrammatical, as shown in (34).

(34)	*omdat	*omdat gierigheid		maak-te	Modern Dutch
	because	greed		make-PST.SG	
	onderscheid	van	bezit		

³³ Generally, it is assumed that these flexible word orders are remnants of a previous stage of the language which displayed morphological case (cf. Weerman 1989 and Van Kemenade 2007). Morphological case licenses freer word order, but not the other way round. Languages that lack morphological case do not necessarily require rigid word order, as is witnessed by contemporary Afrikaans, and 16th and 17th century Dutch.

³⁴ Hermkens and van de Ketterij (1980: 149).

difference of possession Since greed differentiated possession

In modern day Dutch this type of embedded clauses would demand a clear SOV ordering and the same applies to the following attested 17th Century Dutch sentences, whose word order is ungrammatical in Modern Dutch:

- (35) $dat \quad si \quad ontmoet-en \quad ene \quad ioncfrouwe$ 17th cent. Dutch That they meet-PL a lady That they meet a lady³⁵
- 17th cent. Dutch (36) *'t=schijnt* dat we moet-en It=appears that must-PL we de murchloose schonck vresen the pappy gift fear.INF It appears that we must fear the pappy gift³⁶

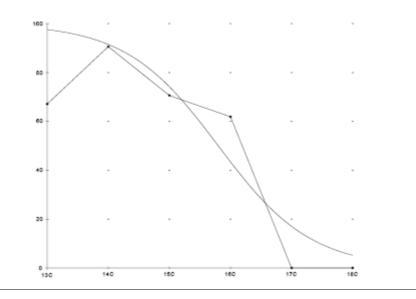
These examples prove that the Dutch colonizers of the sixteen hundreds must have had at least some SVO subordinate clauses in their repertoire.

Data presented by Cloutier (2008) confirm this tendency: a detailed count of various VO surface orderings in subordinate clauses shows that not until the eighteenth century did object leakages in Dutch disappear. This is illustrated below for directional prepositional phrases. As shown in (37), in the 16th century as much as 50 percent of the examples involving directional prepositional phrases (PPs like English *to the city*) follow the verb, whereas nowadays such a directional phrase to the right of a subordinate verb is forbidden.³⁷ As Cloutier argues, in the 16th century, the era in which the plantation holders acquired their mother tongue, object leakages (i.e. object leakages to the right of the verb's base position) were still highly common: even though the frequency of the construction was, among other factors, dependent on the type of object in question (DP or PP), the patterns are more or less alike.

³⁵ Weerman (1993: 911)

³⁶ Wijngaards (1967: 31)

³⁷ Cf. Cloutier (2008:43)



Hence, in the period in which the planters acquired their language (i.e. the end of the sixteenth century), VO surface subordination was still very frequent, an observation that we claim forms the last piece to the puzzle for a non-universalist account of Berbice Dutch word order.³⁹

If Dutch was indeed the target language on the Berbice plantations, learners were confronted with a language that must have been SVO-like in a substantial amount of its utterances, albeit for a different reason than Kouwenberg or Lightfoot assumed. The SVO percentage on the plantation may even have been higher than it would be in any other setting, if plantation owners had indeed used relatively simple and short constructions, often avoiding the usage of auxiliaries and subordination when addressing the slave population, as Kouwenberg (1992) suggests.

But it should be emphasized that even if the colonists had not simplified their output, there is no reason at all to assume that Kalabari learners differed in this or any other respect from L2 learners in general. Research on second language acquisition of German (see Clahsen and Muysken 1986 for discussion), like Dutch an SOV language

³⁸ Taken from Cloutier (2008: 44)

³⁹ Of course, many modern Dutch dialects, especially Flemish ones, have some degree of object leakage in embedded clauses, and also differ from Modern Standard Dutch in having verb-projection raising (i.e. surface Aux-O-V). Clearly, none of these dialects has developed general VO orders. This is due to the fact that for L1 learners, these patterns are still recognizable as basic OV structures. The major difference between the Flemish and the Berbice Dutch situation is that what formed the input for L1 learners was not only the Dutch spoken by the plantation holders, but overgeneralizations by Kalabari speakers as well (which were not always compatible with the basic Dutch grammar of that time).

with verb second, shows that adult learners of that language may also misinterpret the superficial SVO word order of main clauses as a depth structure, not because VO should in some way be seen as unmarked, but because German (and Dutch) verb second causes extensive SVO surface structures in main clauses.

However, one might wonder why language learners would ignore the signposts that provided evidence for Dutch V2. As pointed out above, given that Dutch allowed for object leakages, such signposts are no longer incompatible with a VO target analysis. They could be the result of object leakages in the other direction: leakages with objects appearing to the left of the verb in a VO language. The presence of object leakages thus made it possible for new language learners to reanalyse Dutch OV + V2 as a VO language.

An argument in favour of our analysis comes from the fact that according to Weerman (1993) something similar happened when Old English came into contact with other languages such as Old Norse.⁴⁰ He hypothesizes that the misinterpretation of the structural qualities of this language eventually changed English from SOV with V2, also facilitated by these object leakages.

Finally, given the existence of leakages in 16th and 17th century Dutch we can now also understand why the Dutch plantation owners would also adopt this structure (which they clearly must have done, as Berbice Dutch ended up an SVO language), an issue not addressed by Lightfoot (2006). If SVO utterances were considered ungrammatical by the Dutch speakers, what we know about hierarchical relations on the slave plantations would suggest that they would have been very likely to have disregarded these utterances. Such SVO utterances of the Kalabari speakers would not have been entirely ungrammatical; they were even, to a considerable degree, already present in the plantation holder's own language. Contact with the Kalabari speakers may then even have caused an increase in the frequency of SVO subordinate clauses, in turn confirming Kalabari's SVO hypotheses and allowing next generations to interpret their language input as SVO with occasional leakage to SOV instead of the other way around. When finally flexible word order died out, so did the possibility of leakage, rendering Berbice Dutch rigid SVO status.

5. Final remarks and discussion

⁴⁰ But see Thomason & Kaufman (1988) and Roberts (2007) for a critique on Weerman's account.

Berbice Dutch thus appears to be the product of the linguistic situation on the plantation it emerged on. The Ijo speakers were confronted with a language, which not only seemed to exhibit surface SVO orderings in main clauses, but also in a substantial share of its subordinates. Since Ijo languages apparently lack SVO surface structures it is understandable that the enslaved African L2 learners overgeneralized SVO to all sentence types, taking the superstrate OV orderings as instances of object leakage.

One might of course argue that this type of overgeneralization is still due to unmarkedness of VO in UG. However, nothing in our analysis requires that VO have an unmarked or default status. The sketched scenario already follows on the basis of well basic assumptions on first and second language learning. The Berbice Dutch VO emergence does not provide evidence for a default VO word order.

It is likely that the situation that we outlined for Berbice Dutch, is applicable to other language contact situations and instances of creole genesis. It may very well be a general tendency for these languages to turn out SVO in a setting where the superstrate is SOV with SVO surface structures, caused by V2 movement and/or object leakages, and the substrate is SOV. In our view, V2 and/or object leakages or similar phenomena must be necessary step in explaining SOV-SVO shifts in general language emergence. If we want to explain why language learners did not adopt the target language's evidence for OV or why superstrate speakers would not reject the SVO structures, at least some kind of word order flexibility is very likely to have been present in the superstrate language.

Our analysis, then, also predicts that not every creole language with both the substrate and superstrate languages being OV will end up being a VO language, something to be expected on universalist grounds. This prediction seems indeed born out. Den Besten (2002) shows that Cape Dutch, another Dutch descendant, has maintained the superstrate SOV with V2 property. This may very well be due to the fact that Cape Dutch substrate, Khoekhoe, exhibited, unlike, Kalaḥari, various other second position phenomena, which facilitated recognition of Dutch V2. Another example (among other examples) would be Nagamese (cf. Baishya 2004).

It may lead to interesting insights to see whether, everything else being equal, a more rigid superstrate would yield an SOV creole language. If it should, word order flexibility is indeed as crucial a factor as we hypothesised in this paper. Application of the suggested tendencies to a large sample of contact languages would provide a further test of our proposals.

References:

Aboh, Enoch (2015)

The emergence of hybrid grammar. Cambridge: Cambridge University Press.

Arends, Jaques (ed.) (1995)

The early stages of creolization. Amsterdam: John Benjamins.

Baishya, Ajit Kumar (2004)

The structure of Nagamese: The contact language of Nagaland. PhD Dissertation Assam University.

Besten, Hans den (2002)

Khoekhoe syntax and it's implications for L2 acquisition of Dutch and Afrikaans, In: Journal of Germanica linguistics 14: 3 – 56.

Biberauer, Theresa, Anders Holmberg, and Ian Roberts (2014)

A Syntactic Universal and its Consequences. In Linguistic Inquiry 45: 169-225.

Bickerton, Derek (1980)

Creolization, linguistic universals, natural semantax, and the brain, In: Richard Day (ed.), Issues in English Creoles: Papers from the 1975 Hawaii conference, 1-18. [Originally appeared in University of Hawaii Working Papers in Linguistics 1974, 6(3).125-41.]

Bickerton, Derek (1981)

Roots of language. Ann Harbor, MI: Karoma publishing.

Bickerton, Derek (1984)

The language bioprogram hypothesis, In: Behavioural and brain sciences 7: 173-221.

Bloomfield, Leonard W. (1933)

Language, New York: Holt, Rinehart and Winston.

Brune, Johan de (1644)

Wetsteen der vernuften, DBNL.

Chomsky, Noam (1981)

Principles and parameters in syntactic theory, In: N. Hornstein and D. Lightfoot (eds.), Explanation in Linguistics: The logical problem of language acquisition. London: Longman.

Clahsen, Harald and Muysken, Pieter (1986)

The availability of universal grammar to adult and child learners – A study of

the acquisition of German word order, In: Second language research 2: 93 – 119. Cloutier, Robert A. (2008)

West-Germanic OV and VO, the status of exceptions, PhD dissertation, University of Amsterdam.

Daan, Jo (1971).

G.A. Bredero, Kluchten. Culemborg: Tjeenk Willink – Noorduijn NV.

DeGraff, Michel (2001)

On the origin of creoles: A Cartesian critique of Neo-Darwinian linguistics, In: Linguistic Typology 5: 213–310.

DeGraff, Michel (2003)

Against Creole Exceptionalism, In: Language 79: 391-410.

Deumert, Ana (2002)

Standardization and social networks – The emergence and diffusion of standard *Afrikaans*, Standardization – Studies from the Germanic languages. Amsterdam: John Benjamins.

Hale, Mark (2007)

Historical Linguistics: Theory and Methods. Malden, MA: Blackwell.

Hermkens, Harrie (1973)

Inleiding tot het zeventiende eeuws. Den Bosch: Malmberg.

Hermkens, Harrie M. and Ketterij, C van de (1980)

Grammaticale interpretatie van zeventiende-eeuwse teksten. Groningen: Wolters-Noordhoff.

Holmes, John (1992)

An introduction to sociolinguistics. London: Longman.

Jenewari, Charles E.W. (1977)

Studies in Kalabari syntax, PhD dissertation, University of Ibadan.

Kayne, Richard (1994)

The Antisymmetry of Syntax. Cambridge, MA: MIT Press.

Kemenade, Ans van (2007)

Formal syntax and language change: developments and outlook, In: Diachronica 24: 155-169.

Kouwenberg, Silvia (1989)

SVO patterns in Ijo, Lecture at the workshop on comparative syntax of verbs in Niger-Congo and West-Germanic, University of Tilburg.

Kouwenberg, Silvia (1992)

From OV to VO Linguistic negotiation in the development of Berbice Dutch Creole. In: Lingua 88: 263-299

Kouwenberg, Silvia (1994)

A grammar of Berbice Dutch Creole. Berlin: Mouton de Gruyter.

Kouwenberg, Silvia (1996)

Grammaticalization and word order in the history of Berbice Dutch Creole. In: Baker, Philip & Anand Syea (eds.), Changing meanings, changing functions. Papers relating to grammaticalization in contact languages (Westminster Creolistics Series 2). London: University of Westminster Press. 207-218.

Kouwenberg, Silvia (2009)

The invisible hand in creole genesis: reanalysis in the formation of Berbice Dutch. In: Enoch Aboh and Norval Smith (eds.) Complex Processes in New Languages. Amsterdam/Philadelphia: John Benjamins. 115-158.

Kouwenberg, Silvia (2012)

The Ijo-derived lexicon of Berbice Dutch Creole: an a-typical case of African lexical influence. In: Angela Bartens & Philip Baker (eds.) Black through White. African words and calques which survived slavery in Creoles and transplanted European languages. London: Battlebridge. 135-153.

Kouwenberg, Silvia (2015)

Early morphology in Berbice Dutch and source language access in creolisation. In: Word Structure 8: 138-159.

Lefebvre, Claire (1998)

Creole genesis and the acquisition of grammar: The case of Haitain Creole. Cambridge: Cambridge University Press.

Lightfoot, David (2006)

How new languages emerge. New York: Cambridge University Press.

Lumsden, John S. (1999)

Language acquisition and creolization, In: M. DeGraff (ed.), language creation and language change: creolization, diachrony and development. Cambridge, MA: MIT Press,

Mufwene, Salikoko (ed.) 1993

Africanisms in Afro-American Language Varieties. Athens: University of Georgia Press.

Mufwene, Salikoko (2001)

The Ecology of Language Evolution. Cambridge: Cambridge University Press. Muysken, Pieter (1983)

Roots of language reviewed by Pieter Muysken, In: Language 59: 884-892.

Muysken, Pieter (1988)

Are creoles a special type of language?, In: Newmeyer, F. (ed.), Linguistics: The Cambridge survey II. Cambridge: Cambridge University Press.

Muysken, Pieter and Law, Paul (2001)

Creole studies. A theoretical linguists field guide, In: Glot International 5: 47-57. Netscher, Pieter (1888)

History of the colonies Essequebo, Demerary, and Berbice: From the Dutch establishment to the present day. Translated by W. E. Roth. 1929. 's Gravenhage: Martinus Nijhoff.

Philip, Joy (2013)

(Dis)harmony, the Head-Proximate Filter, and linkers. In: Journal of linguistics 47: 165-213.

Roberts, Ian (1999)

Verb movement and markedness, In: DeGraff, M. (ed.), Language Creation and Language Change: Creolization, Diachrony, and Development. Cambridge, MA: MIT Press.

Roberts, Ian (2007)

Diachronic syntax. Oxford: Oxford University Press.

Robertson, Ian E. (1993).

The Ijo element in Berbice Dutch and the pidginization/ creolization process. In S. Mufwene (ed.), Africanisms in Afro-American Language Varieties. Athens: University of Georgia Press. 296–316.

Roberts, Ian and Anna Roussou (2003)

Syntactic Change: A Minimalist Approach to Grammaticalization. Cambridge: Cambridge University Press.

Thomason, Sarah and Terence Kaufman (1988)

Language Contact: Creolization and Genetic Linguistics. University of California Press.

Smith, Norval, Ian E. Robertson & Kay Williamson (1987)

The Ijo element in Berbice Dutch. In Language in Society 16: 49-90.

Swaving, Justus G. (1827)

Swaving's reizen en lotgevallen: door hem zelven beschreven. Dordrecht: Blussé & Van Braam.

Weerman, Fred (1989)

The V2 Conspiracy. A synchronic and diachronic analysis of verbal positions in Germanic languages. Berlin/New York: Mouton - De Gruyter.

Weerman, Fred (1993)

The diachronic consequences of first and second language acquisition: the change from OV to VO. In: Linguistics 31: 903 – 931

Wijngaards, N.C.H. (1967)

Samuel Coster, Boere-klucht van Teeuwis de boer, en men juffer van Grevelinckhuysen. Zutphen: W.J. Thieme & Cie.

Williamson, Kay (1965)

A grammar of the Kolokuma dialect of Ijo. Cambridge: Cambridge University Press.