Exploring genealogical blends: The Surinamese Creole cluster and the Virgin Island Dutch Creole cluster

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Abstract

This paper explores digitally archived data from three genres of 18th and 20th century texts in two Caribbean Creole language clusters: the Suriname Creoles and Virgin Island Dutch Creole. They will be approached from the perspective of variation and change within varieties that were originally *genealogical blends*: languages that are made up of typological properties from different lineages from different parts of the world, Europe and West-Africa. We will focus on the expression of property concepts in relation to aspect marking, as this feature contrasts typologically for the relevant areas, and argue that genealogical blends are a useful notion to handle the variation found in the Creole language data. Comparing two language clusters in diachronic perspective yields stronger support for our central claim that the typological dependency between verbal property concepts and aspect-orientation is a robust one.
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1. Introduction: global harmony and genealogical blends

One of the dominant research topics in contemporary linguistics concerns Linguistic Typology, concerned with the study of diversity, the distribution of linguistic features and the dependencies between them, resulting in different language types. The notion of 'language type' assumes that certain properties of language are not randomly distributed among the languages of the world, but cluster into feature bundles. Based on Greenberg (1963), Comrie (1981:17) gives the example of such a dependency between two word order features: (a) VSO and (b) Preposition – Noun, where (a) implies (b). This predicts that there should not be VSO languages that do not have a Preposition Noun order in the prepositional phrase. Implications are often linked to Greenberg's notion of harmony: two orders between which there is an implication relation may be said to be harmonic. The dependencies have another explanation in the tradition started with Chomsky (1981), where macro-parameters were assumed to account for positive distributional correlations between specific features.

Macro-parameters are fundamental choices the language learning child makes that have wide ranging implications in the different parts of the grammar that the child constructs.

There has been considerable research over the years to establish these correlations, phrased in terms of macro-parameters and harmonies in large language samples, and then to explain them. However, Dunn et al. (2011), using Bantu, Indo-European, Uto-Aztecan, and Austronesian data for clausal, noun phrase internal, and adposition phrase internal orders, have argued that the implications claimed between feature specifications in the Greenbergian and Chomskyan traditions only hold for a particular lineage or language family, rather than being universally valid. Thus correlations or harmonies may be historical accidents resulting from cultural evolution and linked to specific lineages, rather than the direct result of universal cognitive and/or functional pressures. The result of Dunn et al. (2011) still needs to be extended to other linguistic domains where typologists and generative theorists have claimed dependencies, but it raises the stakes.

Correlations between linguistic features and structural dependencies face complex issues, and indeed establishing correlations and dependencies has become a complicated task (cf. also Bickel, 2015), requiring an additional diachronic perspective. This is particularly the case because many word order patterns have a wide areal distribution, suggesting earlier historical relations (cf. e.g. Dryer, 1989, 1992), and the same holds for other grammatical features (Nichols, 1992 and much later work).

Here we would like to explore a specific angle to this issue, rooted in the study of diachronic Creole corpora, namely *genealogical blends*. Suppose speakers of languages from family X are suddenly brought into contact with speakers of languages from family Y, does the resulting language contact and mixing produce a clash between the features of both language groups? Does this clash lead to internal variation in the resulting system, and how is this clash resolved over time? Does a new harmony emerge within the new genealogical lineage? Creoles show innovations as mixed languages (e.g. Muysken, 1988), combining different features, but the notion of being mixed is hard to define. Many creoles have mixed lexical stock, but this is hardly their defining feature. They may also have mixed morphology and phonology, mixed lexemic structure, mixed syntax and semantics (see also Bhatt and Veenstra, 2013). This may lead to a mixed typology, and provide a testing ground for the issue of whether a given dependency is simply a result of a specific historical development in a family (as argued in Dunn et al., 2011) or reflect a characteristic attribute due to cognitive properties of the system of language processing.

In section 2 we will illustrate the issue of dependencies by evaluating an earlier proposed macro-parameter, Pro-drop in Papiamentu, while in section 3 we will introduce the two main language clusters that form the basis for our empirical study of variation and change: the Virgin Islands Dutch Creole (VIDC) varieties and the Surinamese Creole (SurC) cluster, as well as the linguistic variable studied here.[1] Sections 4 (SurC) and 5 (VIDC cluster) focus upon the key area to illustrate our point: the relation between the expression of property concepts and aspectual distinctions, which has been argued to constitute a typological universal (see section 3.5). Section 6 is devoted to our main conclusions and a discussion of some further issues.

2. An example from Papiamentu: the Pro-drop parameter

To further illustrate the issue at hand, consider the Pro-drop parameter (Chomsky, 1981). The original idea behind linguistic parameters, which certainly seemed very attractive, was that grammatical differences between languages were tightly correlated. The language learning child only needed to pick up the more obvious differences directly from the linguistic input, and the more subtle differences would come for free. The example which triggered this line of thinking was whether the subject is obligatory or not. Originally, two language types were postulated, English-type languages and Spanish-type languages. In Spanish-type languages, verbal agreement is ''rich'', and the identity of the subject can be gleaned from the verbal inflection, as in *comemos* 'we eat'. In English-type languages, agreement is poor, and the subject needs to be overtly marked. With this difference, a number of other features emerge in Spanish and English, such as the (im)possibility of Subject inversion and of the passivized object in post-verbal position, the obligatory nature of expletives with weather verbs and impersonal verbs, and the possibility of subject extraction out of embedded clauses.

Consider now how Papiamentu, the Creole language from the Caribbean islands Aruba, Bonaire, and Curaçao fits into this typology (Law and Muysken, 2001). It has resulted from the interaction of the Ibero-Romance languages, with rich agreement systems, and West-African languages without person agreement. The following discusses how Papiamentu fares on the relevant features involved in the parameter.

Verbal agreement marking. As shown in Table 1, Papiamentu comes out squarely in the camp of ''poor'' inflection languages. Where English still marks third person, there is no marking at all in Papiamentu (as in most other languages labeled ''Creole'').

Absent subject pronoun. In line with this, it is generally impossible to leave out the subject pronoun, as in English, as shown by the ungrammaticality of (1b).

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[1] Author 2 analyzed the SurC materials, while Author 1 analyzed the VIDC materials used in this paper.

Table 1
Present tense for the verb 'eat' in English, Spanish, and Papiamentu.

English	Spanish	Papiamentu
I eat	(yo) como	mi ta kome
you eat	(tu) comes	bo ta kome
s/he eats	(el(la)) come	e ta kome
we eat	(nosotros) comemos	nos ta kome
you (all) eat	(vosotros) coméis	bosnan ta kome
they eat	(ellos/as) comen	nan ta kome

(1)   a.   *e ta kome*   [3SG PR eat]   's/he eats'
      b.   **ta kome*   [PR eat]   'eats'

Nonetheless, this requirement is not absolute. With generic subjects, in specific circumstances the pronoun may be absent:

(2)   *Ta bende flor.*   [PR sell flower]   'Flowers are sold (here).'

This is the same circumstance where in Spanish reflexive clitic *se* is used:

(3)   *Se vende flores.*   [RE sell.3SG flower.PL]   'Flowers are sold (here).'

In Papiamentu, an Ibero-Romance Creole, the reflexive clitic has not survived (Muysken, 1993), but the parallel construction is nonetheless possible.

Subject inversion. As in English, subject inversion is not possible in Papiamentu, as shown by the contrast in (4). Word order is relatively rigid.

(4)   a.   **ta kome Maria* [PR eat Mary] 'eats Mary.'
      b.   *Maria ta kome* [Mary PR eat] 'Mary eats.'

Passivized object in post-verbal position. The same holds for passive. Passivized objects cannot occur in post-verbal position, as shown by the contrast in (5):

(5)   a.   **ta   wordu komí   e   karne*.
            PR   PASS   eat.PP DET   meat
      b.   *E   karne ta   wordu komí*.
            DET   meat   PR   PASS   eat.PP
            'The meat is eaten.'

No expletive with weather verbs. While for the previous features Papiamentu mostly followed the English system, for weather verbs it does not. Ordinarily there is no subject, as in (6a), or a lexical subject, as in (6b), but an expletive subject pronoun, as in hypothetical (6c), does not exist:

(6)   a.   *Tabata yobe.*   [PST.PR rain]   '(it) was raining'
      b.   *Awa tabata yobe.*   [water PST.PR rain] '(it) is raining (water)'
      c.   **E tabata yobe*   [3SG PST.PR rain]   'it was raining'

No expletive with impersonal verbs. Since there is no expletive in Papiamentu, impersonal verbs also occur without subjects. A first example is the existential:

(7)   *Tin baliamentu.*   [EXIS dance]   'There is a dance.'

The same holds for verbs like 'seem':

(8)   *Parse ku   Maria ta kanta*.
       seem that Mary PR sing
       'It seems that Mary is singing.'

It also holds in subordinate clauses, as shown in (9):

(9) *Mi ta haña ku ta muchu lat pa nos bai.*
     1SG PR think that COP very late for 1PL go
     'I think it is too late for us to go.'

Subject extraction out of embedded clauses. Finally, Papiamentu is like Spanish as regard the possibility to extract a question word from the subject position in an embedded clause:

(10) *Ken bo ta kere (ku) ___ ta parse mi tata*?
      who 2SG PR believe (that) PR resemble 1SG father
      'Who do you think (that) ___ resembles my father?'

While in English the sentence is often judged ungrammatical with the complementizer 'that' present, in Papiamentu it makes no difference whether *ku* is present or not.

Summing up, Papiamentu is like English for the first four features, but more like Spanish for the last three. Since in the period of genesis of Papiamentu, its ancestor completely lost the ''rich'' Ibero-Romance inflection system (Muysken, 1993), assuming the Pro-drop parameter as a typological cluster would have predicted a complete switch to the English-type system (Table 2).

Table 2
Papiamentu as compared with these language types.

Phenomenon	English-type	Papiamentu	Spanish-type
Verbal agreement marking rich	−	−	+
Absent subject pronoun	−	(−)	+
Subject inversion	−	−	+
Passivized object in post-verbal position	−	−	+
No expletive with weather verbs	−	+	+
No expletive with impersonal verbs	−	+	+
Subject extraction out of embedded clauses with a complementizer	−	+	+

The fact that Papiamentu has retained a number of its Spanish-type features here suggests that whatever distinguishes English-type languages from Spanish-type languages is genealogical (e.g. western Germanic versus southern Romance) rather than directly the result of an underlying cognitive mechanism.[2] Functional considerations may also play a role, since absence of agreement inevitably requires another way of identifying the subject referent, as with an obligatory pronoun. Thus, contact with the relevant lexifiers has played an important role in the formation of Creole languages, and we will see that SurC and VIDC differ in how much contact they had.

3. Variation and change in two Caribbean Creole language clusters

In the following two sections we will explore two Caribbean Creole language clusters with respect to the issue of genealogical blends discussed in section 1 and illustrated in section 2: the cluster of varieties of VIDC that emerged on St. Thomas and neighboring islands and the SurC cluster in Suriname.[3]

3.1. The Suriname Creole cluster

The colonial enterprise and the trans-Atlantic slave trade brought about the emergence of several types of contact languages in Suriname, including seven Creole languages. The SurC language cluster includes Sranantongo, the

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[2] One reviewer correctly points out that no reference is made to possible African substrate languages here. Notice that it is not very clear which African languages to take into account in the study of the genesis of Papiamentu. Furthermore, there is not much systematic work we are aware of for the West-African languages regarding the range of constructions discussed here. Cf. DeGraff (1993) for further discussion.

[3] Please bear in mind that the use of the term 'cluster' for VIDC and the Surinamese Creoles is not standard. VIDC (sometimes referred to as Negerhollands) is commonly conceived of as a single language and the Surinamese Creoles as different though closely related languages. The term 'cluster' emphasizes that in both cases we have considerable variation between different varieties as well as close historical and linguistic connections.

language of the coastal Creole population and the language that many people in Suriname use as a lingua franca in daily life, as well as the languages of the various Maroon groups, Saramaka, Matawai, Aluku, Ndyuka, Kwinti and Pamaka. The Maroons escaped the hardships of life under slavery on the Surinamese plantations, settled in the forest of Suriname's interior and founded societies in relative isolation from European influence. The Saramaka are the oldest Maroon group of Suriname (e.g. Price, 1976, 1983), and their language underwent considerable influence from a Portuguese pidgin.[4] After the second Anglo-Dutch war (1665–1667) the Dutch took control over the colony of Suriname. Many English settlers, but not all, left in the following years, substituted by Dutch protestants, Huguenots, and Portuguese Jews in the late 17th century.

The African population was even more diverse than the European population. Borges (2014) summarizes the current state of knowledge, on the basis of a comparison of the data stored in the Trans-Atlantic Slave Trade Database (cf. Arends, 1995; van den Berg, 2007). The general consensus in the latter sources is that from 1650 to 1720, the majority of known slave imports to Suriname came from the Slave coast (Gbe languages) and the Loango area (Bantu languages) and just a very small percentage (less than 5%) originated from the Gold Coast (esp. Akan varieties).

3.2. The Virgin Islands Dutch Creole cluster

VIDC is the language of the population of African descent of the former Danish West Indies (currently US Virgin Islands). The Danish colony officially started in 1672 on the island of St. Thomas, and expanded to the neighboring islands of St. John in 1718 and St. Croix in 1733. VIDC is assumed to have developed on St. Thomas and to have spread to the other islands as the colony expanded (Sabino, 1990, 2012).

The colony attracted colonists from various other European countries, including also the Dutch Republic, England and France, as well as colonists from other Caribbean colonies (Dookhan, 1994; Stolz and Stein, 1986; Sabino, 1990; Arends and Muysken, 1992:51; van Rossem, 2013). The Dutch were most numerous and most influential in the early period (Dookhan, 1994:70). The majority of the VIDC lexicon derives from southwestern varieties of Dutch, i.e., Zealandic and coastal West Flemish (Hesseling, 1905; Sabino, 1990; van Rossem and van der Voort, 1996:20–21; van Rossem, 2013).[5]

The African population in the early period of the colony consisted predominantly of forced laborers, although there were some freedmen from early on (see Sabino, 2012). These Africans are assumed to be predominantly speakers of Akan, Ga, and Ewe (Stolz and Stein, 1986:117–118; Sabino, 1990:43–44; Justesen, 1980:350–360, cited in Stolz and Stein, 1986:118).

In the 1730s, Moravian missionaries, native speakers of German, settled on St. Thomas to convert the enslaved population to Christianity. At first, they used Dutch in their communication with the enslaved population, but over time they started using (a L2 variety of) the slaves' own language, VIDC (Stein, 1986a:6). Some twenty years later, Danish Lutheran missionaries followed their example. The missionaries produced Bible translations, hymn books, letters, sermons, and primers. The Moravians had some knowledge of Dutch (Stein, 1986a:6) and introduced Dutch, or sometimes German vocabulary and constructions when thought necessary to convey the word of God (Stein, 1986a:11). Conversely, VIDC features too different from their L1s may have been either consciously omitted or are lacking from the material because the missionaries failed to recognize or understand them. This should be kept in mind when interpreting the 18th century material (see section 5.1).

VIDC was at some point in time adopted by the locally born population of European descent. In 1770, the Danish national J.M. Magens, who was born on St. Thomas in a prominent planter family, published a grammar with dialogs in what we assume to be a planter variety of VIDC. In the 1920s, the Dutch researcher de Josselin de Jong documented a collection of folk stories in VIDC, as told by nine descendants of the enslaved population of the colony. At this time, VIDC was only spoken by older generations and, with some exceptions, no longer transmitted to younger generations (de Josselin de Jong, 1924:15–16). The dominant language of the remaining VIDC speakers in the early 20th century is English (Creole).

3.3. The corpus

Interestingly, comparable texts exist for the different clusters studied here, and from the same time periods, which allow us to do comparative diachronic work. We will explore three types of texts in this paper: (a) Gospel Harmonies

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[4] Cf. Lenders (1996) and Gallagher (2008) for more information on the Moravian missionary activities in Suriname. The missionaries lived and worked among Saramaka people from 1765 to 1813. In those 48 years, 26 brothers and 11 sisters had lived and worked there, baptizing 83 people in total (Lenders, 1996:146).

[5] Further, the lexicon contains reflexes of items from Hollandic or Standard Dutch (van Rossem and van der Voort, 1996:21), English, French, Portuguese or Spanish, Arawak (Island-Carib), and some African languages (den Besten and van der Voort, 1999:390). Furthermore, there are a number of Danish words (Stolz, 1984:39–45). Some words may stem from either Danish, Dutch, or English.

Table 3
The four VIDC translations of Lieberkühn's Gospel Harmony.

Source	Author	Code in Stein 1986b	In NEHOL as
Geskiedenis1 (G1)	Böhner	3.2.1	Böhner1
Geskiedenis2 (G2)	Böhner	3.2.2	Böhner2
Geskiedenis3 (G3)	Auerbach	3.2.3.1	Geskiedenis
Geskiedenis4 (G4)	Unknown	3.2.3.2	Geskiedenis, unknown

(translations of Lieberkühn's (1769) original Evangelienharmonie) in 18th century Saramaka and 18th century VIDC; (b) 18th century pedagogical 'planter's dialogues' in the Sranantongo and VIDC, written for new settlers, as is clear from their prefaces (Van Dyk c1765 and Weygandt, 1798 for Suriname and Magens, 1770 for VIDC); and (c) early 20th century transcribed trickster tales involving the character Anansi (Herskovits and Herskovits, 1936 for Suriname and de Josselin de Jong, 1926 for VIDC).[6] In sections 4 and 5 we discuss the SurC and the VIDC data respectively on the basis of a sample of the sources just mentioned, which will be accessible online at the time of publication.[7] In this sample, we have chosen comparable texts from the two language clusters for each of the above mentioned text types. Of the missionary sources, we have been able to choose a translation of the exact same source text in both VIDC and SurC, viz., section 25 of the Gospel Harmony, the Sermon on the Mount.

For VIDC, we have included four different translations of the same pericope (see Table 3). We have numbered them 1–4, which reflects the order in which we assume they have been written, but since all sources are undated, we cannot be entirely sure. As shown in Table 3, G1 and G2 have been written by Johann Böhner, who lived on St. Thomas from 1742 until his death in 1785 (Stein, 1986a:10–11). We assume that G3 has been translated by Johann Christoph Auerbach on the basis of the similarity between his handwriting and that used in G3.[8] Translation G4 is almost identical to the printed version of 1833.

With respect to the planter's dialogs, we have chosen two texts each from the VIDC and the SurC data. The first one is a dialog between two planter friends, and the second is a dialog between a planter and a tailor.

Finally, we have chosen an Anansi tale of which we have a parallel version in both language clusters. This tale relates how Anansi came to ride his antagonist as if he was a horse. There are two versions of this tale available in the SurC data, one by the principal informant Frederik Bekker (T30), the other by David Bottse (T31), discussed in section 4.4 (Table 8). The parallel VIDC tale LXXVI is discussed in section 5.3 (Table 11).

As discussed in sections 3.1 and 3.2, the three different types of sources represent different varieties of the language clusters: (i) 18th century Moravian religious texts[9]; (ii) planter's secular dialogs; and (iii) 20th century recorded folk stories. Our cross-language comparison of identical or very similar texts allows us to compare the expression of property concepts in the two language clusters on the one hand and between the three varieties on the other.

The data analyzed are digitally stored in the databases SUCA (Suriname Creole Archive) and NEHOL (Virgin Islands Dutch Creole Database).[10] The VIDC data in the NEHOL database have been made CLARIN-compatible (e.g. CMDI compatible metadata have been created for all resources (data and software), and all data categories used have been mapped to a data category in ISOCAT).[11] Thanks to the CLARIN-compatible metadata, all VIDC data can be searched with Trova, the search engine for annotation content archived at The Language Archive (see https://tla.mpi.nl/tools/tla-tools/trova/ for more information).

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[6] The word *Anansi* is believed to derive from Ashanti Twi language (Ghana), where *ananse* means 'spider'. Renowned Saramaccan story tellers told the American anthropologists Melville and Frances Herskovits several Anansi stories included in *Suriname Folklore* (1936). They narrated the tales in Sranantongo. Trickster tales about the character Anansi are widespread in the Caribbean and West Africa.

[7] The data sample is accessible online at hdl:11372/VC-1003. The data in the sample have been coded for the occurrence of property concepts (see further footnote 10).

[8] This suggestion has been made to us by Cefas van Rossem. See http://diecreoltaal.wordpress.com/ for a picture comparison of G3, G4, and a letter by Auerbach. Auerbach served on the Danish West Indies from 1766 until his death in 1792 (Het Utrechts Archief), so that G3 is not likely to have been written any later than 1792. It is probable that the author of G3 has considered Böhner's manuscripts for his translation.

[9] The Moravians were 18th century protestant missionaries from Herrnhut (Germany), and their denomination originated in the Reformation movement started by Jan Hus in Bohemia (now Czech Republic).

[10] The NEHOL database has been created in collaboration with the MPI Nijmegen, one of the CLARIN centres in the Netherlands, thanks to the CLARIN-NL-10-010 grant for the NEHOL project (www.clarin.nl/node/162). Their efforts and the financial support of CLARIN-NL are gratefully acknowledged. The NEHOL database is accessible at http://corpus1.mpi.nl/. The metadata and the actual data of the NEHOL database can also be accessed from the CLARIN Virtual Language Observatory: http://catalog.clarin.eu/vlo/search?fq=collection:TLA:+NEHOL. The SurC data are being prepared for public access.

[11] For a full overview of what 'CLARIN-compatible' means, the reader is kindly referred to http://portal.clarin.nl/node/4235#comp.

3.4. Comparing VIDC and SurC

Both varieties, VIDC and SurC, emerged in the late 17th century and stabilized in the early part of the 18th century, in the context of the Caribbean slave plantations and the complex interethnic interactions that characterized them. The two areas share a number of features, which allow us to compare them systematically:

- The linguistic background of the enslaved Africans: Gbe, Akan and Kikongo-speaking backgrounds in Suriname, Akan, Ga, and Gbe-speaking backgrounds on St. Thomas;
- A heterogeneous planter population, first English, then Dutch and Portuguese in Suriname, very mixed (with a predominance of coastal West-Flemish and Zealandic planters) on St. Thomas;
- The main lexifier language (English in Suriname, coastal West-Flemish/Zealandic on St. Thomas) was not the main official language of the colony for most of its history;
- The varieties involved were documented since the 18th century, particularly because there was a strong Moravian missionary presence in both colonies.

There were also some differences, which have led to a greater structural distance between the European lexifier and the resultant Creole in Suriname than in St. Thomas.

- First of all, the territory of Suriname was large and relatively inaccessible, while that of St. Thomas was small and accessible;
- Second, Suriname witnessed rapid growth of large plantations with many enslaved Africans, while on St. Thomas there was a tendency toward small plantations with low African: European ratios;
- Finally, there were large Maroon communities in Suriname, but on St. Thomas marronage by necessity must have been limited.

3.5. The linguistic variable under study: property concepts

As said, there will be one variable considered here: the expression of property concepts. They have been studied in some detail and show considerable differences between the clusters of languages contributing to the genealogical blends.

Property concepts, referring to properties, qualities or other characteristics of referents, are often expressed through adjectives, if a language has this category. Alternatively they may be expressed through words that are more nominal or more verbal (Thompson, 1988, 2004). Core categories of property concepts are DIMENSION, COLOR, AGE, and VALUE (Dixon, 1977). Other property concept categories are HUMAN PROPENSITY,[12] PHYSICAL,[13] FORM, MATERIAL, and GENDER (Stassen, 1997:168).

Property concepts in VIDC and the SurC cluster are expressed through items that may display flexible categorical status: they can be used as attributes as well as predicates. In predicate position, they sometimes act as verbs and sometimes they require a copular element.[14] In (11) they appear as modifiers preceding nominal heads when used attributively.

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[12] The category HUMAN PROPENSITY refers to psychological states and human sensations (Stassen, 1997:168), such as hungry, happy, sad, angry, cruel, proud.

[13] The category PHYSICAL refers to properties of objects or bodies, such as hard, soft, smooth, heavy, light, hot, cold, sweet, etc. (Stassen, 1997:168), thus excluding properties such as their COLOR, DIMENSION, FORM and MATERIAL, which are regarded as separate categories.

[14] When used predicatively, the property concept item refers to a property of the syntactic subject. As such, property concepts are typically expressed by intransitive predicates. The VIDC item *bang* in a sentence as *Want Herodes a bang Johannes* 'Because Herod was afraid of John' (Böhner, n.d.b:97; G2), discussed in section 5.1, is an exception since the source of the fear is encoded as a direct object to *bang*. Apparently, speakers of VIDC have associated verbal features such as transitivity to *bang*. We would like to stress however that there are no discrete boundaries between word classes, and therefore we do not want to make a distinction between true verbs and property concept items that behave as verbs. The reason that we count *bang* as a property concept item is that it refers to a property, quality, or other characteristic of the syntactic subject, in this case, a psychological state (HUMAN PROPENSITY).

Most research on property concept items focuses on those predicates that express a stative relation between the predicate and the referent, but such items may naturally also express a dynamic relation (a change-of-state). We have included items expressing a dynamic relation in our discussion for two reasons: (1) the distinction between a state and a resultant state of a dynamic process is often not so clear to make in actual data as it is in theory; (2) the occurrence of verbal property concept items in the VIDC data is quite low, and not infrequently they express a change-of-state when they occur.

(11)   *a*   <u>*dipi*</u> <u>*watra*</u>.   Dimension   PI N   Sranantongo
        DET   PI   N
        'the deep water'

Predicatively used property concepts come in two types in the SurC language cluster: they can be verbal or they can be complements to copular constructions, as in (12) and (13) respectively.

(12)   *A*   *krosi* <u>*weti*</u>   Color PI_v Sranantongo
        DEF   N   PI
        'The cloth is white' or 'The cloth has whitened.'

(13)   *A*   *krosi* *de*   *wetiweti*   Color   COP PI   Sranantongo
        DEF   NP   COP PI.REDUP
        'The cloth is white.'[15]

The COP PI construction in (15) resembles property predicate constructions in the European languages, as illustrated by the English translations of the examples, while the PI_v construction in (15) resembles property predicate constructions in historically related African languages[16]:

(14)   *Av&-a* <u>*fu*</u>   Color PI_v Ewe
        N-DEF   PI
        'The cloth whitened.'

(15)   *ntoma*   *no*   *a-wo*   Physical property PI_v Akan
        N   DEF PI
        'the cloth is dry.'

In VIDC, attributive property concepts likewise always appear before the noun they modify:

(16)   *di*   *doot*   *maa*   Physical property   PI N   VIDC
        DET dead mother
        'the dead mother'   (dJdJ 1926:28)

Further, VIDC has a highly restricted set of property words that function as verbal heads:

(17)   *am* *kaa* *doot*.   Physical property PI_v VIDC
        3SG PRF die
        'he is dead/has died.'   (dJdJ 1926:26)

(18)   *Mushi* *fulǝk*   *wa* *mi*   *weet* *a*   *doot*.   Physical property PI_v VIDC
        Much   people REL 1SG know PST die
        'Many people that I know died.'   (dJdJ 1926:26)

Some words occur as either verbal heads or complements to a copula:

(19)   *di*   *maa*   *a*   *kwaat*.   Human propensity PI_v VIDC
        DET mother PST angry
        'The mother got angry.'   (dJdJ 1926:16)

(20)   *mi*   *mi*   *kwaat*   Human propensity COP PI   VIDC
        1SG COP angry
        'I am angry.'   (dJdJ 1926:16)

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[15] Notice that this example contains a reduplicated property concept, something we will return to below.

[16] See Winford (1997), Migge (2000), van den Berg (2007, 2012), for more details. Sharma and Rickford (2009) show that the grammatical conditioning of copula absence in AAVE and Creole varieties is distinct from the patterns found in second language learning data, and thus needs be explained in terms of substrate transfer.

Table 4
Key typological properties under consideration here.

	Predicate property items	TMA
West African	Resultative verbal predicates	Aspect oriented
Western European	Adjectives	Tense oriented

Most property concepts, however, are expressed only as complements to a copula, at least in the 20th century VIDC materials.

(21)   *di mi wit*   Color COP PI   VIDC
         it   COP white
         'It is white' (dJdJ 1926:46)

Related to the topic of the expression of property concepts is the difference between the TMA (Tense-Mood-Aspect) systems of the Western European and the West African languages, something we do not have space to document here (but see Van Sluijs 2014 for VIDC and van den Berg and Aboh, 2013; Migge and Winford, 2009 for SurC). In the West African systems, Aspect is the key category, while in the Western European system, Tense is more important. West African property concepts are often expressed as stative resultative predicates, i.e., a property is described as the result of a change-of-state expressed through a verb, as in (14) and (15). This yields contrastive Table 4:

The link between TMA-orientation and property item expression is formulated as a typological universal in Stassen (1997) and Wetzer (1996), and thus lends itself to testing in terms of the notion of genealogical blend.

Stassen (1997) has formulated the following hierarchy of categories of adjectives: the further to the right of this scale a category is, the less likely it is to be encoded verbally (Stassen, 1997:169).

The Adjective Hierarchy				
HUM.PROP./	PHYSICAL/	DIMENSION/	VALUE/	MATERIAL
		COLOR	AGE	GENDER
			FORM	

Building on this, Stassen (1997:169) formulates the Human-Propensity Universal:

In a split-adjective language, human propensity predicates will be encoded by the verbal strategy.

This universal will be tested in this paper. Stassen explains the difference between property items in terms of 'Time Stability': "Properties such as 'sad', 'angry', and 'hungry' are typically non-permanent, in that they designate qualities of which it is conceivable, and even likely, that they will cease to be applicable to the subject at some point in time" (Stassen, 1997:171). The Time Stability Hypothesis (Givón, 1984) states that "events, properties, and classes form a semantic continuum, in which they are ordered in accordance with the degree to which they are 'permanent', or 'stable over time'" (Stassen, 1997:126). This hypothesis assumes an association between low time stability and verbalization, "[human-propensity predicates] can be expected to be encoded verbally in languages which are not radically nonverbal in their encoding of property-concept predicates" (Stassen, 1997:171). Stassen links tensedness to the expression of property concepts. He predicts that tensed languages strongly tend to have a nominal encoding strategy for property concepts, whereas non-tensed languages tend to use a verbal encoding for property concepts (Stassen, 1997:568). Furthermore, Stassen (1997:568) finds that languages with a mixed tense-aspect encoding system tend to be split-adjective languages.

The consequences of the correlation between TMA-properties and property items will be explored in the following sections for the Creole languages. In sections 4 and 5 the expression of property concepts in the Surinamese Creole language cluster and in the VIDC cluster are discussed and compared in more detail on the basis of their occurrences in the historical documents and early 20th century recordings. Crucial will also be that the plantation colonies differ in that in the Virgin Islands the lexifier was much more present, as argued in section 3.4.

3.6. The research program

In both case studies reported on here, we have a research program in which we treat the Creole language clusters as potential genealogical blends between European lexifiers and primarily the Gbe languages of West-Africa. For the TMA

markers and for property concepts, these languages differ considerably, as discussed below. Given our basic research question whether a set of features correlates either universally or in specific lineages, we can ask what happens in the case of genealogical blends. There are several sub-questions that we will discuss:

(23) a. What does the genealogical blend look like?
      b. Is there internal variation in the blend?
      c. How and why does the blend evolve over time?[17]

We study the expression of the range of concepts mentioned in section 3.3 on the basis of the text corpora described in section 3.1.

4. Property concepts in the Surinamese Creole cluster

4.1. Introduction

The expression of property concepts in the SurC cluster was briefly presented in section 3.3 above: Attributive property items precede the noun, predicative property items can occur as verbal heads or as complements in copular constructions. In this section we focus on predicative constructions.

There is a large literature on Sranan property concepts (Huttar and Koating, 1993, Huttar and Huttar, 1994; Winford, 1997; Migge, 2000, 2003a,b; Migge, 2006; Sebba, 1986; van den Berg, 2012; Aboh et al., 2013; McWhorter and Good, 2013). Most property items that appear as copular complements are reduplicated, as shown in (14) above (see Huttar and Huttar, 1997; Adamson and Smith, 2003; Migge, 2002, 2003b; Winford and Migge, 2007). Only if a property item expresses a temporary state, or it derives from a small set of so-called 'true' adjectives such as *bun* 'well' (Sranan, Ndyuka), *bunu/bumbuu* 'good/well' (Saramaccan), or it is an ideophone, such as *badaa* 'very broad', *pii* 'quiet' and *gufuu* 'very angry and quiet' in Ndyuka, and *pioo* 'black' in Saramaccan, the property item is not reduplicated.

(24) *en baka de so badaa*   COP PI.IDEO (Ndyuka, Goury & Migge, 2003: 175)
      3SG back COP so broad.IDEO
      'His back is so broad.'

Property predicates that appear as main verbs or verbal heads, are typically non-stative, process-denoting verbs (Huttar and Huttar, 1994; Winford, 1997; Migge, 2003a; McWhorter and Good, 2013). They can receive a stative reading, but that interpretation always follows from the completed process reading (Winford, 1997). They are typically unreduplicated, but reduplicated property predicates are also encountered.

(25) *Ay Nkola <u>bun</u> moo ipi   sama!*   PI$_V$(Ndyuka, Goury and Migge, 2003: 214)[18]
      yes Nkola good more many person
      'Yes, Nkola is better than most!'

(26) *Den <u>baakabaaka</u> mi buuku*   PI$_V$.RED (Migge, 2000: 222)
      they black-black   my trousers
      'They have made my trousers blackish.'

This section presented an overview of property concept expressions in the contemporary SurC. In the following sections we discuss their 18th century equivalents.

4.2. Gospel harmony

The Moravian missionaries set up several missionary posts in Suriname: in the city of Paramaribo, on the plantations, and in the interior. Among them was brother Wietz, who authored the Saramaccan gospel harmony studied in this section.

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[17] One reviewer notes correctly that our approach is built on the assumption that the documented texts are comparable, both across the two clusters, and over time within each cluster. This assumption is controversial, since particularly the 18th century VIDC texts have been questioned regarding their authenticity; this has not been the case so much for the SurC texts. We want to stress that we have tried to maximize the comparability of the texts at least across the two clusters. Currently van Rossem (in press) is exploring ways of gauging the authenticity of the 18th century VIDC materials.

[18] The postposed adverb *moo* supports the PIv analysis of *bun* in this example.

Table 5
Property concept expressions in the Gospel Harmony.

Property concepts	# in Gospel Harmony	
PI-ATT	81	
PI-PRED	56	% of PI-PRED
COP 1 PI (*DE*)	9	16.1
COP 2 PI (*TAN*)	9	16.1
PI$_V$	38	67.8

Wietz' Gospel harmony (Wietz, 1792) includes several instances of property concept expressions. They are illustrated in the following examples: (27) illustrates an attributively used property item, (28) and (29) show predicatively used property items with two copula's *de* 'be' (<English 'there') and *tan* 'be' (<English 'stand'),[19] and lastly, (30) exemplifies the use of a property concept expression as a main verb.

(27)   *a   sa   da   ju   na   limbo gamja*   PI N
       3SG IRR give 2SG LOC clean place
       'He will give you (in) a clean place.' 'He
       will assign you to a clean place.'

(28)   *so leki unu Tatta na   liba tan sara helpi dem   somber*   COP1 PI
       so like 2PL father LOC life IPFV pity help DET.PL person
       na   tulu   faasi   tu
       LOC complete   manner   too
       'So like your Father in life is having mercy (and) also helping them completely.'

(29)   *Bunu heddi   na   dem dissi de   limbo na   hatti*   COP2 PI
       good fortune LOC 3PL REL   COP clean LOC heart
       'Good fortune to them, who are pure of heart.'

(30)   *So srefi unu meki unu kandea limbo da   dem   sombre*   PI$_V$
       so like 2PL make 2PL candle light give DET.PL person
       'Similarly, you will let your candle shine for the people.'

Table 5 presents an overview of all property concept expressions in the Gospel harmony. It shows that there are far more instances of PI$_V$ than of COP PI; *de* and *tan* are evenly distributed.

Altogether, there was some variation, but the majority of the property concepts was expressed by verbal items.

4.3. Plantation dialogs

The Suriname Creole Archive holds two 18th century books of instruction in Sranantongo, the main language of interethnic communication at the time: a language guide by Van Dyk (c1765) and a revision written by Weygandt in 1798. Both authors have firsthand knowledge of the language; van Dyk was a plantation manager on a coffee plantation, and Weygandt worked as an auctioneer of books in Paramaribo. Although Weygandt's version is clearly a revision of Van Dyk's guide, there are linguistic differences between the two guides that cannot be solely explained in terms of language change over time, even though there is a time interval between the two sources of some 45 years, in which the language changed considerably (Smith, 1987, Arends, 1989, Bruyn, 1995, van den Berg, 2007). Some differences are stylistic, others suggest different language-varieties, including a variety that may be

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[19] There is no copula *tan* in contemporary Saramaccan but it is found in the historical sources. Contemporary Saramaccan has a preverbal marker *ta* with a 'continuation' interpretation that is related to *tan*. Various studies report on the origins and development of the copula systems of the Surinamese Creoles; the reader is referred to Smith (1987), Arends (1989), McWhorter (1999), Migge (2002), van den Berg (2007) and Van de Vate (2011).

Table 6
Property concepts in two comparable dialogs in Van Dyk (c1765) and Weygandt (1798).

Property concepts	# in Van Dyk c1765	# in Weygandt 1798	
PI-ATT	5	9	
PI-PRED			% of PI-PRED
COP 1 PI (*DE*)	0	2	28.6
PI$_V$	11	5	71.4

Table 7
The distribution of *de* in the dialogs of Van Dyk (c1765) and Weygandt (1798).

Dialog nr.		Van Dyk (c1765), 1206 words					Weygandt (1798), 1937 words				
		PI$_V$	de + V	de + PI	de + bun	de + PP/NP	PI$_V$	de + V	de + PI	de + bun	de + PP/NP
VD	Wey										
2=	1	3	2	0	0	4	3	6	0	0	10
3=	2	8	1	0	0	1	5	8	0	1	2
5=	3	6	0	0	1	1	4	6	3	0	2
7=	5	0	2	0	0	4	1	7	3	2	5
11=	9	5	7	1	1	3	5	18	2	0	6
Total		22	12	1	2	13	18	45	8	3	25

associated with the Africans and their descendants ('Nengretongo') and a European variety ('Bakratongo') (van den Berg, 2007).[20]

Both guides include word lists and dialogs, exemplifying various types of discourse in Sranantongo, also found in the historical sources on VIDC, including a house visit and the purchase of a new attire. They correspond to dialogs 4 and 6 in Weygandt's text. While five Weygandt dialogs can be traced back to van Dyk (c1765), Weygandt's dialogs 4 and 6 have very little in common with any dialogs in van Dyk (c1765), except for a few phrases, but they match nicely with the VIDC texts (see section 5.3). Dialogs 4 and 6 of the van Dyk manual do not correspond to any dialogs in Weygandt (1798), but they have their setting in common with the Weygandt dialogs. They are comparable in terms of size (tokens), so that a comparison of property concept expressions in the dialogs is still useful, in particular with the VIDC data in mind. Consider Table 6.

Table 6 shows that we find more instances of PI$_V$ in van Dyk's text than in Weygandt's text and further that COP1 PI is restricted to Weygandt. Because the number of COP1 PI in the selected Weygandt dialogs is very small (*n* = 2), we collected all instances of *de* in predicative constructions and PI$_V$ in parallel dialogs of Van Dyk and Weygandt in order to see if it is true that Van Dyk has more PI$_V$ and COP1 PI occurs more frequently in Weygandt's text.[21]

Table 7 shows that van Dyk (c1765) and Weygandt (1798) differ significantly in their proportions of *de* + main verb (V) occurrences (12 out of 1206 words versus 45 out of 1937 words; Chi Square test, $\chi2 = 7.1$, $p < 0.01$; Fisher's exact test $p = 0.0059$). On the other hand, Van Dyk (c1765) and Weygandt (1798) do not differ significantly in their proportions of COP (*de* + *bun*, *de* + PP/NP) occurrences (15 out of 1206 words versus 28 out of 1937 words; Chi Square test, $\chi2 = 0.2$, $p = 0.64$; Fisher's exact test $p = 0.75$). In short, van Dyk and Weygandt are similar in the distribution of COP PI. Van Dyk and Weygandt differ, however, in the use of PI$_V$: Van Dyk has significantly more instances of PI$_V$ than Weygandt (22 out of 1206 words versus 18 out of 1937 words; Chi Square test, $\chi2 = 4.6$, $p = 0.03$; Fisher's exact test $p = 0.034$). These findings underscore the pattern that emerged from the comparison of the two dialogs discussed above (Table 6); PI$_V$ occurs more frequently in Van Dyk's text than in Weygandt's text. If one accepts that the emergence of PI$_V$ in Early Sranan results from transfer from the languages of the enslaved, a high incidence of PI$_V$ in a text may indicate that the documented variety displays more African, less European characteristics.

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[20] Furthermore, in terms of representativeness, i.e. the fit between a text sample and the population it stands for (Schneider, 2002), Weygandt's (1798) manual may be more representative and less idiosyncratic than van Dyk (c1765) manual. The former is printed and published in Suriname to be distributed among Europeans in Suriname and the Netherlands to promote a urbane variety of Sranantongo. The latter is printed in the Netherlands with Dutch readership in mind in order to prepare them for plantation life in the Dutch colonies (van den Berg, 2007:29).

[21] Combinations of *de* and *bun* are listed separately as the word categorial status of the items *de* and *bun* is difficult to determine.

Table 8
Property concepts in tales T30 and T31.

Property concepts	# in T30		# in T31	
PI-ATT	0		7	
PI-PRED	7	% of PI-PRED	21	% of PI-PRED
COP 3 PI (A(BI))	2	28.6	4	19.0
COP 1 PI (DE)			6	28.6
PI$_V$	5	71.4	11	52.4

4.4. Anansi stories

Table 8 presents an overview of property concepts in the tales analyzed in this paper.

Interestingly, COP1 PI (de) alternates with PI$_V$ preceded by the imperfective aspect marker e (spelling variant i) co-occur in the latter text, as shown by (31) and (32). While the former underscores the ongoing nature of the activity, the latter emphasizes state of being.

(31) *Mi papa siki*, *a* *i* *beifi* *nạŋga kɔrsu na hoso.*
       1SG father sick 3SG IPFV shiver with fever LOC house
       'My father is sick, he is shivering with fever in the house.'

(32) *Mi Tata Tigri, luku fa mi dɛ beifi.*
       1SG father Tiger look how 1SG COP shiver
       'My father Tiger, look how I am shivering!'

4.5. Summing up

Property concept expressions in the SurC cluster constitute an genealogical blend as traces of both African and European characteristics of property concept expressions are encountered: Property predicates generally act as main verbs (PI$_V$) in the SurC cluster in the past as well as the present, similar to their equivalents in the African languages that contributed to the emergence of the SurC cluster. Instances of COP PI are, however, also encountered, but they are limited to particular items, serve a particular function or express a specific meaning (state of being), that can be traced back to their equivalents in the contributing European languages. Our findings suggest that PI$_V$ may be less frequent in more formal styles, but more research is needed to confirm this.

5. The Virgin Islands Dutch Creole cluster[22]

5.1. The Gospel Harmonies

In the Gospel Harmony translations, property concepts are in principle expressed as complements to a copula, *wees*:

(33) *jender Vader a* <u>*wees blie*</u>, *dat em a sal kik mi Dag;*   COP PI
       2PL father PST COP glad that 3SG PST FUT see 1SG day
       'Your Father was glad that he would see my day.'   (Böhner, n.d.a:123; G1)

(34) *en die selve Mensch a* <u>*wees fraai*</u> *en Godtvreesig*   COP PI
       and the.same human PST COP good and god-fearing
       'and he was good and god-fearing.'   (Böhner, n.d.a:16; G1)

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[22] The counts in the tables in this section are based on a selected sample that is optimally comparable between the VIDC and the SurC data (see section 3.3). These data are provided in a supplemented data/Excel file, see footnote 10. These results are often complemented with observations from the entire sources that the sample is drawn from to illustrate the representativeness of the sample. These complementary observations are the result of efficient search queries in the NEHOL database, made possible by Trova, the search engine of The Language Archive (TLA), MPI Nijmegen (see section 3.3).

Table 9
Property concept expressions in four versions of the Gospel Harmony.

Property concepts	G1		G2		G3		G4	
PI-ATT	49		50		55		42	
PI-PRED	49	% of PI-PRED	46	% of PI-PRED	50	% of PI-PRED	50	% of PI-PRED
COP 1 PI (*BEN*)	33	67.3	32	69.6	37	74.0	33	66.0
COP 2 PI (*WEES*)	14	28.6	13	28.3	13	26.0	16	32.0
COP 3 PI (*KOM*)	1	2.0	0	–	0	0.0	1	2.0
COP 4 PI (*BLIEV*)	1	2.0	1	2.2	0	0.0	0	–
PI$_V$	0	–	0	–	0	–	0	–

(35) *As   noe Jesus a   <u>wees</u> <u>moeh</u> van die Reis*   COP PI
      when now Jesus PST COP   tired of   DET journey
      'When Jesus was tired of the journey'   (Böhner, n.d.b:51; G2)

As Table 9 shows, all property concepts in the sample are expressed with a copula or semi-copula.

In the overall corpus of Gospel Harmony translations, we have been able to find only two property concepts that are sometimes a verbal head, and sometimes a complement to a copula: *dood* (derived from the Dutch adjective *dood* 'dead') (36)–(37), and *bang* (derived from the Dutch adjective *bang* 'afraid'; contemporary Danish has *bange*) (38)–(39).

(36) *tee Herodes a   ka   dood.*   PI$_V$
      until Herod   PST PRF die
      'Until Herod had died/was   (Böhner, n.d.a:14; G1)
      dead.'

(37) *Em ben dood.*   COP PI
      3SG COP dead
      'He is dead.'   (Böhner, n.d.b:206; G2)

(38) *Want   Herodes a   bang Johannes*   PI$_V$
      because Herod   PST fear John
      'Because Herod was afraid of John.'   (Böhner, n.d.b:97; G2)

(39) *want   sender a   wees bang voor die Hodio sender.*   COP PI
      because 3PL   PST COP   afraid for   DET jew   3PL
      'Because they were afraid of the Jews.'   (Böhner, n.d.b:125; G2)

5.2. Plantation dialogs

In the planter dialogs, there are no instances of property concepts expressed as a verbal head (see Table 10 for the expression of property concepts in the two sample dialogs).

However, property concepts occur as verbal heads in a proverb section preceding the dialogs. These are the items *doot/ dood* that we also found in the Gospel Harmony,[23] and *qwaet*, derived from the Dutch adjective *kwaad* 'angry', as in (41).

(40) *As   pover Volk   doot, Guwerneer no   hoor, as   rik Volk   dood, Guwerneer ka   hoor.* PI$_V$
      when poor people dead governor NEG hear when rich people dead governor PRF hear
      'When poor people die/are dead, the governor doesn't hear [about it], when rich people die/are dead,
      the governor has heard [about it].'   (Magens, 1770:34)

(41) *As   Volk   ka   qwaet na   Ju, sender gief Ju Makut for   tap Water.* PI$_V$
      when people PRF angry LOC 2SG 3PL   give 2SG basket COMP tap water

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[23] But note that *doot* in (40) could also possibly be a complement to a zero copula, which is reflected in the alternative translation 'are dead', although one reviewer comments that this is less likely.

Table 10
Property concept expressions in the two dialogs analyzed from Magens (1770).

Property concepts	#	
PI-ATT	7	
PI-PRED		% of PI-PRED
COP 1 PI (*BIN*)	8	61.5
COP 2 PI (*WEES*)	5	38.5
PI$_V$	0	–

'When people are angry at you, they give you a basket to tap water.'   (Magens, 1770:35)

The item *bang* only occurs once, as a complement to a copula:

(42)   *Mie bin bang, Ju Syssie sa neem die groot Ganganie die le woon hieso.*
        1SG COP afraid 2SG sister FUT take DET big fool REL IPFV live here
        'I am afraid your sister will take the big fool that lives here.'   (Magens, 1770:71) COP PI

5.3. Anansi stories

The de Josselin de Jong, 1926 folk stories are relatively rich in property concepts expressed as verbal heads, but it seems to concern only a small group of specific items: *doot*, *bang*, and *kwaat* encountered in the other sources, but also *mu* from Dutch *moe* 'tired':

(43)   *Mi kaa mu mi di.*
        1SG PRF tired with it
        'I am tired of it.'   (dJdJ 1926:22)   PI$_V$

Of these four items, only *kwaat* also occurs as a complement to a copula in the folk tales:

(44)   *Ham a see: mi mi kwaat, wa ju kaa praat də walgeet.*
        3SG PST say 1SG COP angry what 2SG PRF talk DET truth
        'She said: I am angry, what/but you have spoken the truth.'   (dJdJ 1926:16)   COP PI

The items *doot*, *kwaat*, and *mu* express a change-of-state, as we can tell from their context in the available data, but this is only directly attested for *doot* 'die' and *kwaat* 'get angry':

(45)   *Di grootnom a see am, by di han fa shi grootkin an sa doot.*
        DET prophet PST say 3SG by DET hand of 3s.POSS grandchild 3SG FUT die
        'The prophet said to him, that he would die by his grandchild's hand.'   (dJdJ 1926:12)   PI$_V$

(46) *Den di maaa kwaat.* then DET mother PST angry 'Then the mother got angry.' (dJdJ 1926:16) PI$_V$ The items *doot* and *mu* combine with the perfect marker *ka* to express a state:

(47)   *Kurí biti, Jan, Jan, Jan, kurí biti: pushi ka dot!*
        run outside John John John run outside cat PRF die
        'Hurry outside, John, John, John, hurry outside: the cat is dead/has died!'   (dJdJ 1926:64)   PI$_V$

(48)   *So sini a bəgín plan pos along di zeewatə [. . .] fo am res wani am kaa mu.*
        so 3PL PST start plant post along DET seawater COMP 3SG rest when 3SG PRF tire
        'So they started planting posts along the sea for him to rest when he would be tired.' (dJdJ 1926:26) PI$_V$

The item *mu* only co-occurs with perfect marker *kaa*.[24] By contrast, the combination of the perfect *kaa* with the change-of-state item *kwaat* has not been attested: *kwaat* always combines with a copula to express a state in the data.

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[24] But the last speaker of VIDC, Mrs. Stevens, uses *mu*, as pointed out by one reviewer.

Table 11
Property concept expressions in tale nr. LXXVI de Josselin de Jong (1926:59–60).

Property concepts	#	
PI-att	9	
PI-pred		% of PI-PRED
COP 1 PI (*mi*)	2	66.7
COP 2 PI (*wees*)	1	33.3
PI$_V$	0	0.0

Three other items occur as verbal heads. The first of these, *kout* occurs as a verbal head in example (49) in the construction *lista di kout* 'let it cool down', which occurs twice in de Josselin de Jong, 1926 in total. *Kout* 'cold' occurs with a copula once as shown in (50).

(49)   *Een   fosiku   kitl   pupa   am   a   kook di,   du di   nee   fo   lista di   kout.*
       INDF enormous kettle porridge 3SG PST cook 3.INAN do 3.INAN down COMP let 3.INAN cold
       'He cooked an enormous kettle of porridge, put it down to let it cool down'   (dJdJ 1926:52)   PI$_V$

(50)   *Bontshipudn   mi   heet*, *bontshipudn   mi   kout.*
       pease.pudding COP hot   pease.pudding   COP cold
       'Pease pudding is hot, pease pudding is cold.'   (dJdJ 1926:62)   COP PI

The second one is *dos* 'thirsty' (from Du. *dorst* 'thirst'), which occurs once as a verbal head in de Josselin de Jong, 1926, and twice with a copula:

(51)   *Sini dos   fo   watə.*
       3PL   thirst for water
       'They are thirsting for water.'   (dJdJ 1926:30)   PI$_V$

(52)   *Ham a   wees dos.   Ham na   kan kri watə.*
       3SG   PST be   thirsty 3SG NEG MOD get water
       'He was thirsty. He couldn't get water.'   (dJdJ 1926:13)   COP PI

The third item is *drok* 'dry' (cf. Du *droog*), which occurs both as a verbal head and as an attributive property concept item.

(53)   *Astə də   fel   a   drok*, *am a   lo   froko di.*
       after DET skin PST dry   3SG PST go sell   it
       'After the skin had dried, he went to sell it.'   (dJdJ 1926:44)   PI$_V$

(54)   *Də kui   a   wees een drok kui.*
       DET cow PST be   INDF dry   cow
       'The cow was a dry cow.'   (dJdJ 1926:21)

Table 11 summarizes our findings for the analyzed story in de Josselin de Jong, 1926. As Table 11 shows, the number of occurrences of property concept expressions is rather limited for this text, but this is the case for most texts. This section has focused on the few occurrences of property items as verbal heads in de Josselin de Jong, 1926, but most occurrences of property items by far combine with an overt copula in these texts. Table 11 is representative to illustrate this point, despite the low number of occurrences and the absence of any verbal property concept expressions, particularly in comparison to Table 8.

5.4. Summing up

There are definitely property concepts that are expressed as verbal heads in VIDC, but they seem restricted to only a handful of items that seem to be more or less constant over the various sources – in as far as they are used.[25] Thus VIDC

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[25] There may of course have been more such items that did not occur in the data or that we overlooked, but our search was pretty thorough.

differs crucially from SurC in showing a preference for property items with copulas. This can be explained through its history: on St. Thomas contacts between the Africans and the Europeans were much more intensive than in Suriname.

Three of the property items expressed PI$_V$ in VIDC, *kwaat, bang*, and *mu* express emotional states. *Mu* may express emotional and physical tiredness. These items fall into Stassen's category of HUMAN PROPENSITY (Stassen, 1997:168). The item *doot* may be categorized as PHYSICAL. Recall the hierarchy of categories of adjectives formulated by Stassen (1997): the further to the right of this scale a category is, the less likely it is to be encoded verbally (Stassen, 1997:169):

The Adjective Hierarchy				
HUM.PROP./	PHYSICAL/	DIMENSION/	VALUE/	MATERIAL
		COLOR	AGE	GENDER
			FORM	

The Human-Propensity Universal formulated by Stassen (1997:169) makes the right prediction for VIDC, which is a split-adjective language in that a few property concepts are expressed as verbs while most combine with a copula.

> In a split-adjective language, human propensity predicates will be encoded by the verbal strategy.

This hypothesis assumes an association between low time stability and verbalization, "[human-propensity predicates] can be expected to be encoded verbally in languages which are not radically nonverbal in their encoding of property-concept predicates" (Stassen, 1997:171). However, only the four items mentioned occur as verbal heads, and of these even *kwaat* 'angry' – which is used with *ka* in the 18th century data – is used as a complement to a copula to express a state in the 20th century folktales. Other typical human-propensity predicates that Stassen mentions, such as 'hungry', 'happy', 'sad', 'cruel', and 'proud' (1997:168) are adjectives in VIDC, expressed as complements to a copula:

(55) *Ham   a   wees   hunggu.*
      3SG   PST be   hungry
      'He was hungry.'   (dJdJ 1926:22)   COP PI

(56) *So   am   a   wes   so   bli   fo   ho*
      so   3SG   PST   be   so   happy   COMP   hear
      'So she was so happy to hear'   (dJdJ 1926:47)   COP PI

(57) *So   Bru   Tekoma   a   wees   plesí.*
      so   brother   Ntikuma   PST   be   pleased
      'So Brother Ntikuma was happy.'   (dJdJ 1926:36)   COP PI

These universals proposed by Stassen about the relation between tensedness and the expression of property concepts make a right prediction for VIDC, which is a mixed tense-aspect encoding language, however with a predominance of tense marking and of nominal property concepts.

6. Conclusion and further discussion

In this paper we have developed the idea of a genealogical blend: the potential clash of typological features, to test to which extent there is a structural dependency between the features of a particular language cluster. We then illustrated this notion in section 2 with the pro-drop parameter in respect to Papiamentu, and showed that, using the 'genealogical blend' of Papiamentu as a yardstick, this parameter does not hold together very well. Section 3 briefly presented the two language clusters under study here (SurC and VIDC), the basic properties of the property concepts and their expression, and our research strategy. In sections 4 and 5 the main results, in parallel, are presented for the SurC cluster and the VIDC cluster.

Returning to our research question we can now test whether the properties of the two Creole clusters indeed follow from the hypothetical universal proposed by Stassen (1997) and Wetzer (1996).

a. *What does the genealogical blend look like?* Both language clusters show property items with and without copula's, reflecting their dual genealogical ancestry.
b. *Is there internal variation in the blend?* There is variation, also in the early sources, which in Suriname may be linked to speech style (formal/informal) and type of Creole (rural/urban).

c. *How does the blend evolve over time?* Eventually, the SurC settle on a pattern in the 20th century where the majority of the property items are verbal, with a few specific exceptions. In 20th century VIDC most property items require a copula, with a few specific lexical exceptions, as we have shown.

Thus, while we find variation in the expression of property concepts in both clusters, the West African pattern with predicative property concepts as stative verbal predicates is much more prevalent in SurC, and the European adjectival pattern is much more present in VIDC. This is in line with differences in the demographic history and settlement patterns of the two Caribbean regions. Contact with the European languages was much more intense in the Virgin Islands than in Surinam.

Work on Tense and Aspect in the two clusters also suggests a correlation between Aspect prominence and the verbal expression of property items, confirming the typological hypothesis of Stassen (1997) and Wetzer (1996).

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Appendix A. Supplementary data

Supplementary data associated with this article can be found, in the online version, at http://dx.doi.org/10.1016/j. lingua.2015.12.004.

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