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Volume 1

Pieter Muysken & Norval Smith (eds.)

SUBSTRATA VERSUS UNIVERSALS IN CREOLE LANGUAGES

**SUBSTRATA VERSUS UNIVERSALS
IN CREOLE GENESIS**

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**The Genesis of Haitian:
Implications of a Comparison of Some Features of the Syntax of Haitian,
French, and West African languages**

Hilda Koopman

Several issues arise in the debate concerning the genesis of creole languages, among others the following:*

- (1) (i) Is the grammar of a creole language influenced by that of its superstrate language, and if so, to what extent;
- (ii) Is the grammar of a creole language influenced by that of its substrate languages, and if so, to what extent;
- (iii) Are there certain aspects of the structure of creole grammars which are *a priori* unmarked, thus reflecting unmarked settings of parameters, due to defective linguistic input in the learning environment.

We will attempt here to shed some light upon these questions, by examining the case of Haitian, and comparing some of its syntactic characteristics with those of the superstrate language (French), and with those of several of the (West African) substrate languages.

The Government Binding framework, and more generally generative grammar, assumes a certain (idealized) picture of language learning: the language learner comes equipped with fixed analytic principles associated with a number of parameters. The values of some or all of these parameters are set on the basis of clues in the primary linguistic data in non-creole language learning. In language learning resulting in the creation of a creole, it is proposed (see, in particular, Bickerton 1981, 1984a, 1984b) that due to the

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impoverished linguistic input, no evidence is present to enable these parameters to be set. Consequently, creole speakers were forced to assume default or unmarked settings for certain parameters.

Regarding the specific issues in (1), Bickerton (1984b) makes the following claims for creole languages: they basically reflect unmarked parameter settings, with all marked features resulting from the influence of the superstrate language. He furthermore claims that *considerations of some recent developments in general linguistics will show why substratum influence could not have made any significant contributions to the situation*. (Bickerton, 1984b, p3-4).¹ Bickerton (1984b) also presents a list of creole properties that he claims are the reflection of unmarked parameter settings, including the following: all Ss are tensed, all maximal projections and Vs can be focused, and the focused V must leave a copy at the extraction site.²

The question arises whether there was or is indeed a qualitative difference between language learning involved in the creation of a creole and "normal" first language learning. (See also Lightfoot (1985) for discussion). Was, in the case of Haitian, the data base sufficient, for the creators of Haitian to set the values of parameters that can normally be set on the basis of primary data? The answer to this question will be extremely difficult to give, given the great many unknown variables: How does a child in a normal language learning situation arrive at its parameter settings? What are the primary data on the basis of which it does this? What primary data did the first Haitian speakers have access to? How structured were these? What did early Haitian look like?

In this paper, we will attempt to shed some light upon these questions, by examining the case of Haitian, and comparing some of its syntactic characteristics with those of the superstrate language (French), and with those of several of the (West African) substrate languages. As far as the genesis of Haitian is concerned, we assume the following minimal picture: the first native speakers of Haitian were confronted with the necessity of discovering what the parameters of their native language — Haitian — were. This had to be done on the basis of primary data consisting of some form of contact language resulting from a multilanguage contact situation involving (at least) French and West African languages. We will argue, on the basis of evidence deriving from a comparison of some features of the syntax of (contemporary) French, Haitian and West African languages, that

- there are neither linguistic nor historical reasons for assuming that there was a qualitative difference between the language learning of the

first native speakers of Haitian and first language learning under usual circumstances;

- there are some clear cases of superstrate influence (li) and many clear cases of substrate influence (lii); there are no theoretical reasons for excluding substrate influence.
- Potential cases that would serve as evidence for (liii), are extremely hard to find, and would require very sophisticated argumentation.

1. A comparison

1.1. Introduction

The following comparison focuses on lexical properties of verbs, paying particular attention to the distribution of infinitival complements, and certain other aspects of the lexicon. Some other syntactic features will be discussed in section 3.

The data from West African languages are based essentially on fieldwork on Kru languages (Vata, Koyo, Bete, Dida...), and Kwa languages (Baoule (Akan), Abe). Occasionally, we will also draw upon our fieldwork on Mande (Mahou), and Gur (Moore). It will be shown that these languages share a number of characteristics, which are also characteristic of many other West African languages, such as Yoruba for instance. The presence of a number of common properties will allow us to refer to general West African properties, and avoids the objection that it is implausible to speak of substrate influence on the basis of the features of one particular West African language, like Yoruba for instance, for which it might be difficult to show that its speakers were at the right place at the right time.³ It should be noted that, given our present state of knowledge, the comparison will necessarily be preliminary, and does not claim to be exhaustive in any sense.

1.2. Lexical properties of verbs

By virtue of the Projection Principle proposed in Chomsky (1981), the lexicon plays a central role in determining syntactic representations:

- (2) *Projection Principle*: Representations at each syntactic level (i.e. LF, D- and S-structure) are projected from the lexicon in that they observe the "lexical" properties of lexical items. (Chomsky, 1981, p29)

As well as information concerning phonetic form and meaning, the lexicon contains information about the thematic structure of a lexical item, and specifies its subcategorization (i.e. categorial) and selectional features. Obvi-

ously, languages differ in the categorial features of lexical items, (but not particularly in their thematic structure which, we assume, is largely derivable from their meaning). One might ask, then, what the categorial features are for the languages that we compare. If these are similar, basic structures will be similar by virtue of the Projection Principle (abstracting away from independent parameters establishing word order). If they are dissimilar, basic structures will differ, which in turn can have consequences for other properties. In Haitian, for example, *tough*-movement constructions are absent. But this may simply be due to the absence of appropriate predicates that take infinitival complements, together with the fact that *tough*-movement can only occur in infinitival clauses.

In the following comparison, we will show that the lexical properties of Haitian and W. African languages are parallel to a great extent, and differ from the French ones in many respects.

1.3. General lexical properties

As far as the lexical properties of one, two and three place predicates are concerned, postponing for the moment the case in which one of the arguments is realized as a complement clause (cf 2.4.), or the external argument is a pleonastic pronoun (cf section 3), the following picture obtains (recall that this comparison is by no means exhaustive):

One place predicates			
(3)	French	Haitian	W. African
a. Intransitive	"dormir"	dòm	
b. Unaccusative	"venir"	vini	idem
c. Middle	"couler"	cule	

Where in French, superficially intransitive verbs clearly fall into several classes, a distinction which (at least for (3a) versus (3b)) is available to the language learner on the basis of simple sentences, (i.e. selection of the auxiliary *avoir* or *être*), the same type of evidence does not exist in Haitian nor in West-African languages; no syntactic process seems to be sensitive to the distinction.⁴

Two place predicates seem basically to have identical properties in the languages under discussion, and will therefore not be discussed.

The situation concerning three-place predicates is summarized below. Note that we will henceforth abstract away from word order, unless stated otherwise.

(4)	French	Haitian	W. African
a.	"donner" NP PP	bay NP(IO) NP(DO)	V NP(IO) NP(DO)
b.	"mettre" NP PP	mete NP PP	V NP PP

Double object constructions do not occur at the level of surface structure in French; they do occur in both Haitian and W. African languages.⁵ It should be noted that besides double object constructions, some West. African languages (Kwa) allow for the serial verb construction as an alternative construction. Whatever the analysis of these constructions may be⁶, however, it should be pointed out that the constructions in (4a) and (4b)⁷ also occur.

The absence of overt syntactic processes sensitive to different classes of one place predicates, and the presence of double object constructions are therefore characteristics shared by Haitian and W. African languages, which distinguish them from French.

1.4. Complement clauses

Let us next consider the case in which one of the arguments is a complement clause, focusing in particular on the distribution of infinitival complements: what type of complement clause is selected by what kind of verb?

First some preliminary remarks. We will focus on a small set of verbs leaving out of consideration complementation properties of aspectual verbs, causative verbs and perception verbs. This, because there seems to be diversity in their realization within W. African languages⁸ and their syntactic properties have not been well established. Moreover, we will only distinguish between two types of complement clauses, which we will call, for convenience, *tensed complement* clauses and *infinitival* clauses. This distinction is certainly too rough, but it will be sufficient for the purposes of this paper. The usual criteria apply to determine whether a clause is finite or infinitival: roughly, a finite clause contains a finite verb or INFL and a lexical subject; an infinitival clause does not contain a finite verb or INFL and cannot — usually — contain a lexical subject. It will be clear that these criteria are not sufficient to determine for each language whether a given clause is *finite* or *infinitival*. However, for the languages we have looked at, there always exist language specific criteria that allow one to decide. This point may be illustrated in Haitian, for instance. Although no problems arise for the classification of most clauses, the status of other complement clauses is not immediately obvious. This is the case for example for complement clauses introduced by *pu* (cf Koopman & Lefebvre (1982), or complement clauses of causative verbs:

- (5) a. *m vle [pu l vini]*
 I want *pu* 3rd come
 'I want him/her to come'
 b. *m fè [l vini]*
 I made 3rd come
 'I made him/her come'

Leaving aside, for the sake of the discussion, the possibility that morphemes realizing INFL may occur in the complement clause in (5a), but not in (5b)⁹, the problem arises whether these should be considered to be tensed or infinitival complements. The absence of (overt) subject-verb agreement removes one possible criterion. Another criterion could be provided by Case theory. Does *li* in (5a) bear nominative or accusative Case, i.e. is *li* assigned nominative Case by a tensed INFL, — the complement clause would be a tensed clause — or accusative Case by *pu*, much in the same way as in English *for him to come*? If so, the complement clause would rather be an infinitival complement. The same problem arises for (5b). The absence of an overt case system in Haitian, however, or the absence of surface distinctions in the form of the pronoun makes it impossible to decide this issue on the basis of simple forms.

Other criteria, however, such as wh-extraction and the distribution of anaphors help us decide that the complement in (5a) is tensed, and the one in (5b) infinitival. The wh-extraction of the subject of a tensed clause (i.e. a nominative subject) requires the appearance of *ki* in the COMP immediately adjacent to the extraction site; the presence of *ki* is otherwise prohibited (cf Koopman, 1982):

- (6) a. *ki mūn ki (pu) t te vini a*
 which person *ki* (pu) INFL come DET
 'Who had (to) come'
 b. *ki mūn (*ki) u we t*
 which person you saw
 'Who did you see'
 c. *ki mun u kwe ki t te vini a*
 which person you believe *ki* INFL come DET
 'Who did you believe came'

Extraction of the subject in (5a) and (5b) yields the following examples:

- (7) a. *ki mun u vle ki pu t vini*
 which person you want *ki* pu come
 'Which person did you want to come'

- b. *ki mun u fè t vini*
 'Which person did you cause to come'

Thus, extraction of the subject of the embedded clause in (5a) patterns with extraction of the subject of a tensed clause (6a), indicating that (5a) behaves as a tensed sentence: extraction of the subject in (5b) patterns with non-nominative NPs, indicating that (5b) is an infinitival clause with its subject Case marked by the causative verb.

Yet another test, the distribution of anaphors, leads to the same conclusion. As an effect of the Binding theory, pronouns must be free and anaphors bound in their Governing Category. The following examples from English are possible, since the pronoun and anaphor in (8a, b) are respectively free and bound in their GC — roughly the S or NP containing a governor and a SUBJECT; (8c), with a nominative anaphor, is excluded because the GC does not contain an antecedent:

- (8) a. [_{GC} They would like very much for *them* to come
 b. [_{GC} They would like very much for *each other* to come
 c. *They would like [_{GC} that *each other* would come

The question arises of what the distribution of pronouns and anaphors is in the subject position in the examples in (5). The absence of any surface distinction between pronouns and reflexives ((9) is ambiguous) obliges us to examine the distribution of another type of anaphor, the anaphor *lòt* which must be bound to *yun* in its GC (NP or S) in order to yield the reciprocal interpretation (10a):

- (9) *l wè l*
 3rd saw 3rd
 'He saw him' or 'he saw himself'
 (10) a. *yun we lòt*
 one saw other
 'They saw each other'
 b. **yun we [foto lòt]* (no reciprocal interpretation)
 one saw picture other
 c. **yun kwe [lòt ale]* (no reciprocal interpretation)
 one think other left
 (11) a. **yun vle [pu lòt fètèli]* (no reciprocal interpretation)
 one want pu other shave

- b. [yun fè lòt bwe dlo]
 one make other drink water
 'they make each other drink water'

(11a) is excluded, since the antecedent *yun* for the anaphoric *lòt* is not contained in its GC. (11b) is possible, however: *lòt* is Case marked, and therefore governed, by the matrix verb, and the S containing the governor also contains an antecedent *yun*. The impossibility of the reciprocal interpretation in (11a) thus shows that (5a) patterns with tensed clauses; the grammaticality of (11b) that the complement of the causative verb *fè* patterns with infinitival complements.

A cluster of properties, the possible occurrence of morphemes of INFL, wh-extraction phenomena, and the distribution of anaphors lead to the conclusion that complement clauses headed by *pu* are opaque tensed clauses containing a subject marked for nominative Case.

Following these preliminary remarks, let us now turn to the comparison of the complementation properties of modal verbs, raising verbs and control verbs. In each case we will find differences which set French apart from Haitian, and the W. African languages. We will first discuss the data that will be summarized in table 1 below.

1.4.1. Modal verbs

In French, modal verbs (*devoir*, *pouvoir*, etc) can only be followed by an infinitival complement. In Haitian, modal verbs may select either an infinitival complement or a tensed clause complement, as the following examples drawn from Magloire-Holly (1982) indicate:

- (12) a. *za te dwe PRO vini*
 John TNS have-to come
 'John should have come' (from Magloire-Holly ex. (15))
 b. *za te ka vini*
 J. TNS be-able come
 'John could have come' (from Magloire-Holly ex. (14a))
- (13) a. *za te dwe pu l vini*
 J. TNS have-to pu he come
 'John should have come'
 b. *za ka pu l vini*
 J. be able pu he come
 'John may come' (from Magloire-Holly ex. (35))

The situation seems to be variable in W. African languages. In many of these, the Kru languages for instance, modal verbs (in as far as they exist) may only select a tensed clause complement:

- (14) *dálá minò lè à wló wlí í* (Vata)
 money be-possible and it leave hands in
 'Money can be lost'

In others, the same situation obtains as in Haitian: in some others, still modal verbs represent serial verbs. In general, however, the situation in Haitian and W. African languages seems to be similar.

1.4.2. Raising verbs

A striking difference between French and Haitian/W. African languages concerns raising verbs like *sembler* "seem". These verbs select a tensed complement clause or an infinitival complement clause which admits raising through the special property of S' deletion, a process that renders the S' boundary of the infinitival complement transparent for government. Verbs with this property seem to be lacking altogether in Haitian and W. African languages.

1.4.3. Control verbs

Control verbs can be divided into two-place predicates (subject control) and three-place predicates (subject or object control). We will discuss these in turn.

In French, control verbs like "vouloir" have the property of selecting either an infinitival complement containing a PRO controlled by the subject of "vouloir", or a (subjunctive) tensed complement clause:

- (15) a. *Il_i veut [PRO_i venir]*
 He wants to come
 b. *Il_i veut qu'il_j vienne*
 He wants that he come

The embedded subject pronoun in (15b) must be understood as being disjoint in reference. Three-place control verbs like subject control *promettre* allow for both infinitival and tensed complements (16), an object control verb like *permettre* on the other hand only allows for infinitival complements:

- (16) a. *J'ai promis à Jean [de PRO venir]*
 I promised John to come
 b. *J'ai promis à Jean que je viendrai*
 I promised John that I would come

- (17) a. *Elle a permis à Jean de PRO venir*
 She allowed John to come
 b. **Elle a permis à Jean qu'il vienne*
 She allowed John that he come

In Haitian, the situation is different from that in French. Most two-place predicates like *vle* "want" select either an infinitival complement or a tensed complement (18a, 18b). Others, only select a tensed complement (18c):

- (18) a. *li vle vini*
 s/he wants to come
 b. *li vle pu l vini*
 he wants pu he come
 'he wants to come' or 'he wants him to come'
 c. *m gē pu mvini / *m gē (pu) PRO vini*
 I have-to pu I come
 'I have to come'

Contrary to French, however, the pronoun in (18b) is free, and can be either coreferent or disjoint in reference.

Three-place predicates in general do not allow a complement clause to be realized as an infinitival complement; it must be a tensed clause. The only exception we have found up till now is the verb *pomet* "allow" which only admits an infinitival complement, not a tensed one. However, it is interesting that this verb is felt as clearly coming from French.

- (19) a. *yo pomèt mwē [pu yo ale] / * [(pu) PRO ale]*
 they promised/told me to leave
 b. *yo pomèt mwē yo ap vini*
 they promised me that they were coming
- (20) a. *yo mādē/di Mari pu l ale*
 they asked/told Mary pu she leave
 b. **yo mādē/di Mari (pu) PRO pati*
 they asked/told Mary to leave

It should be noted that most equivalents of three-place control verbs like *convaincre*, *ordonner*, *forcer*, *pardonner*, *persuader*, etc. are very hard or impossible to find. This fact is important, since it is equally difficult in W. African languages.

The situation in West. African languages is similar to that in Haitian. The realization of a complement of a two-place control predicate is in the first

instance a tensed complement with a coreferent pronoun:¹⁰

- (21) a. *Ò wá` nā Ò ká ml̩ Kru (Vata)*
 s/he want na s/he FUT-A leave
 'S/he wants to leave'
 b. *ñ kólò yē ñ dī sáká Kwa (Akan)*
 s/he want ye s/he eat 'rice'
 'S/he wants to eat rice'

However, these languages also allow the complement to be realized as a gerund:

- (22) a. *Ò wá` sákáá l̩l̩ Vata*
 s/he wants rice-DET eating
 'S/he wants/likes to eat the rice'
 b. *ñ kólò sáká ñ` dī Abe*
 s/he wants/likes rice DET eating
 'S/he wants to eat the rice'

Moreover, sentential complements of three-place predicates cannot surface as an infinitival complement (again with the exception of subject control verbs in Mahou). We should point out that — as in Haitian — three-place control verbs are hard to find.

- (23) a. *Ò nyÉ` mÒ Ò gbāgbàgbàw̩l̩ nā Ò ml̩ Vata*
 s/he gave you her/his word na s/he leave
 'S/he promised you to leave'
 b. *à nyÉ` yué nyicè nā wà ml̩ Vata*
 s/he gave children road na they leave
 'S/he allowed the children to leave'

The data discussed in this section can be summarized in the following table:

Table 1

	French	Haitian	W. African
Modal verbs	[_{S'} -T[* [_{S'} +T	[_{S'} -T[[_{S'} +T[[_{S'} -T[(variation) [_{S'} +T[
Raising verbs	[_{S'} -T +S' deletion [_{S'} +T	*	*
Control verbs			
'vouloir'	[_{S'} -T[PRO _i [_{S'} +T[pron _{ij}	[_{S'} -T[PRO _i [_{S'} +T[PRO _{ij}	gerunds [_{S'} -T[PRO _{i,j}
'promettre'	[_{S'} -T [_{S'} +T	*	*
'permettre'	[_{S'} -T *	*(but <i>pemet</i>) [_{S'} +T	* [_{S'} +T

The picture that emerges is clear: although the phonetic shape of the Haitian verbs is clearly derived from French, their selectional properties are rather different from those of French, and strikingly similar to those observed in W. African languages.

1.5. Further distribution of infinitival complements

In French, as in other Indo-European languages, infinitival complements not only occur as complements of verbs, but in a variety of other environments as well. They basically alternate with tensed complements.

First consider the distribution of clauses as complements of the other lexical categories N, A, and P, summarized in the following table:

Table 2

French	Haitian	W. African
N [_{S'} -T	*	*
N [_{S'} +T	N [_{S'} +T	*
A [_{S'} -T	*/A [_{S'} -T	*
A [_{S'} +T	A [_{S'} +T	A [_{S'} +T
P [_{S'} -T	*/P [_{S'} -T	*
P [_{S'} +T	P [_{S'} +T	?? ¹¹

As the table indicates, infinitival complements and tensed complements occur with all lexical categories in French:

- (24) N: *le désir de partir*
the wish to leave
l'histoire qu'il est parti
the story that he left
A: *anxieux [de PRO partir]*
anxious to leave
anxieux [que Jean parte]
anxious that John leave
P: *pour/avant de /afin de... [de PRO partir]*
in order to /before/..
pour/avant/afin [que...]
in order/before/that S

Tensed complement clauses may occur with all lexical categories in Haitian:

- (25) a. N: *istoua li te ale a*
the story that he had left
b. *desi li pu l pati*
desire his pu he leave
'his desire to leave'
c. A: *li sètè l ap vini*
s/he certain that she will come

but infinitivals have a much more restricted distribution, and seem to be excluded in NPs.

- (26) N **desi li (pu) PRO pati*
wish his to leave

The contrast between (25b) and (26) is particularly interesting: (25b) is felt as a French form, but yet, in contrast to the French equivalent, the complement must be tensed and cannot be infinitival.

With APs and PPs, the situation is more complex. Thus, certain adjectives may only be followed by an infinitival clause (in the control reading), others only by a tensed clause (cf (27a) and (27b) versus (25c). Ps must generally be followed by a tensed complement, with the exception of the purposive preposition *pu* or the preposition *sā*:

- (27) a. A *pè PRO ale/ *pe (pu) l ale*
afraid to leave

- b. *sètē PRO ale
certain to leave
- c. *avā PRO ale/ avā l ale
before leaving
- d. pu/sā PRO māze
in order to eat/without eating

In W. African languages, complement clauses have an even more restricted distribution than in Haitian: they are excluded from NPs in many languages (Vata, Bete, Koyo (Kru), Mahou (Mande), Abe (Kwa)).^{12, 13} Tensed clause complements may possibly occur, however, in APs. In general, they do not occur with Ps. This fact can easily be explained: the functions fulfilled by the category P in W. African languages are much more limited than those in Indo-European languages, and are basically restricted to locatives. Thus, neither temporal, purposive, nor instrumental Ps occur: but these are precisely the Ps which can take clausal complements. Infinitival complements do not occur with either N, A or P.

Finally, the distribution of infinitival complements in indirect wh-questions and relative clauses remains to be considered. Table 3 summarizes the distribution:

Table 3

	French	Haitian	W. African
Indirect wh-questions	[_S -T	*	*
	[_S +T	[_S +T	[_S +T (concealed) ¹⁴
Relative clauses	[_S -T	*	*
	[_S +T	[_S +T	[_S +T

Table 3 shows the difference between French and Haitian/W. African languages on the one hand, and the similarity between Haitian and W. African languages on the other: infinitival wh-questions or infinitival relative clauses do not occur in Haitian, nor in W. African languages. Their equivalents in Haitian are rendered by tensed *pu* complements:

- (28) a. *m māde u ki sa pu m fè* / **m māde u ki sa (pu) PRO fè*
I ask you what *pu* I do
'I ask you what to do.'

- b. *mūn ki pu fè saa* / **mūn pu PRO fe saa*
someone *ki pu* do that
'someone to do that'
- c. *mūn pu m wè a* / **mun (pu) PRO we a*
someone *pu* I see DET
'someone to see'

Before going on to discuss some further properties, let us briefly summarize our findings up to this point.

The lexical properties of verbs in Haitian and W. African languages are parallel to a great extent, and differ in general from those in French. Moreover, the same gaps occur (absence of *seem*, rarity of three place control predicates...) Some Haitian verbs, however, have the same properties as French verbs, properties that are not observed in W. African languages. Interestingly, these verbs seem to be precisely those for which there is no equivalent in W. African languages (cf the case of *pemet*). This same tendency is also observed for other lexical categories: a general resemblance to W African properties, but a parallelism with French in those categories that W. African languages lack (i.e. purposive P, the P *sā* 'without', etc). The further distributional properties of infinitival complements are identical in Haitian and W. African languages, i.e. a general absence of infinitival indirect wh-questions and infinitival relatives.

1.6. Other lexical properties

Further Haitian/W. African parallelisms in the lexicon concern "body-state" verbs (such as "to have a headache..."), and weather verbs.

In W. African languages body-state verbs typically take the following form: "X "hits" NP (lit "head hits me", (I have a headache), "Stomach is whipping me" (my stomach is aching), *heat burns my skin* (I am hot) *sickness is hitting me* (I feel sick)).

In Haitian, similar expressions occur, although the class of verbs is much more limited, and at first sight corresponds to the one expressed in French by *avoir mal*:

- (29) *vāt mwē ap fè m mal*
tet mwe ap fe m mal
'stomach/head ASP hurts me

Weather verbs which select for a pleonastic subject (*pleuvoir*, *neiger*, *venter*) do not exist in either Haitian or in W. African languages. They translate as

idioms of the following type:

- (30) a. *lapli ap tōbe* Haitian
rain is falling
'It is raining'
b. *loraž ap grōde*
thunderstorm is rumbling
'It is thundering'
- (31) a. *lagO IUa* Vata
rain is weaving
b. *mijO nO* Abe
water is walking
c. *ofo o fuofuo* Abe
sky/gods ASP rumble
'It is thundering'

Note that the absence of the French type of weather verb cannot be attributed to the absence of pleonastics: pleonastic pronouns do occur, as we will see below.

2. Discussion

The picture emerging from the comparison we have provided in section 1 is clear. First, W. African languages share many properties amongst themselves, and secondly, these properties which include both lexical and syntactic properties tend also to be characteristic of Haitian:

- Lexical properties: i.e. double object constructions, the selection of complement type by V, A, N and P, the absence of raising verbs like *seem*, the rarity of three-place control predicates, the realization of *weather* predicates, and to a lesser extent of body-state verbs.
- Distributional properties: the absence of infinitival indirect wh-questions and infinitival relatives.

These properties are by no means the only ones: they can be added to many others mentioned in the literature:

- The position and function of the determiner *la* in Haitian (Lefebvre, 1982)
- Serial verb constructions
- The predicate cleft construction

- Verbal relatives¹⁵
- The use of the verb *to surpass, exceed*, to express comparison
- The absence of headless relatives (Koopman, 1982b)
- The overt subject/object asymmetries in both main and embedded clauses (Koopman, 1982b)
- The use of the (phrase or sentence final) particle *-o* (see also Singler, 1985)

as well as certain other properties

- The properties of negation
- The properties of coordination (use of one conjunction to conjoin all categories in French, but use of different conjunctions for NPs and other categories in Haitian and W. African languages)
- The absence of Q-float, absence of the impersonal construction.

Haitian also shares properties with French, which are not shared with W. African languages: these are basically limited, however, to lexical properties and word order properties. French lexical properties occur especially for (sub)categories lacking in W. African languages: verbs like *pemet* in Haitian that lack a simple equivalent in W. African languages have the French property of only admitting an infinitival complement; verbs like *māde*, "ask" that exist in both French and W. African languages have the W. African property of only admitting a tensed complement. The general tendency thus seems to be that the properties of Haitian and W. African languages coincide, that one finds the same gaps (the rarity of three place-control verbs, the absence of raising verbs like *seem*), or that these gaps are filled up with properties coming from French. The same remarks carry over to functions expressed by the category P. The basic word order properties, such as the respective order of heads and their complements, coincide with those of French, and not with those of W. African languages which often have mixed or regular head final properties. The position of certain other elements also coincides with that of French, and not with W. African languages. In Haitian, numerals and the wh-quantifier *ki* for example, occur in prenominal position, just like in French. In W. African languages, however, numerals — without exception — occur postnominally. Wh-quantifiers occur postnominally in what seems to be the overwhelming majority of W. African languages.

Apart from these agreements with either general W. African features or

French features, there exist of course many cases in which all these languages basically have the same grammar (Bounding theory, etc), abstracting away from specific mechanisms used to get round certain problems like subject extraction.

In some respects, finally, Haitian syntax neither resembles that of French, nor that of W. African languages. Examples which may illustrate this point, however, turn out to be extremely difficult to find. Pleonastic pronouns seem to represent such a case. Besides the pleonastic pronoun *li*, associated to an S' (corresponding to French *il* and 3rd person pronouns in W. African languages), Haitian has a zero pleonastic pronoun for existential constructions introduced by the verb *ge*, where French uses *il*. The equivalent of this construction does not appear to exist in W. African languages. The interesting aspect of this zero pleonastic pronoun then is that it overtly marks a distinction neither marked in French nor present in W. African languages.

Given this general overview, we can now return to the implications with respect to the issues in (1i)-(1iii) repeated here for convenience:

- (1) (i) Is the grammar of a creole language influenced by that of its superstrate language, and if so, to what extent;
- (ii) Is the grammar of a creole language influenced by that of its substrate languages, and if so, to what extent;
- (iii) Are there certain aspects of the structure of creole grammars which are *a priori* unmarked, thus reflecting unmarked settings of parameters, due to defective linguistic input in the learning environment.

Clearly the answer to (1i) is positive, although the extent of influence is rather limited, basically, as we have seen in Haitian — and perhaps quite generally — to lexical properties and word order parameters. It is easy to see how these properties, which are readily available in primary data came into Haitian via the contact language. As far as (1ii) and (1iii) are concerned, we will now argue that the Haitian-W. African parallelism represents a case of substrate influence, and that potential cases for (1iii) are extremely hard to find.

Let us start with the problem of how to account for the Haitian-W. African parallelism. Two hypotheses can be formulated:

- These properties of present day Haitian came into the language through substratal influence from W. African languages, via the contact language;

- W. African languages and Haitian resemble each other simply because they accidentally happen to be characterized by the same values for certain parameters.

According to the latter hypothesis, the quite extensive and impressive parallelism between Haitian and W. African languages would be completely fortuitous. This raises of course the question of why the pattern is not much more random. Moreover, in accordance with Bickerton's (1984b) hypothesis that unmarked parameter values are obtained if one subtracts from the creole grammar those of the superstrate derived properties, all the properties noted above would have to be unmarked. But this leads to many problems and to totally implausible claims. Consider double objects, for example. These are non-existent in French surface structures, but occur in Haitian and W. African languages. Suppose first that double object constructions represent the unmarked case, i.e. the language learner would not have to learn that a certain verb admits a double object construction. This leads one to expect that French children would quite spontaneously produce sentences like **donner Jean la pomme*.¹⁶ However, as far as I know, such utterances are not found. What seems to happen, is that children deduce the properties on the basis of primary data. Universally, it may be the case that the indirect and direct object of verbs like *donner* can be realized as *NP PP* as *NP NP* or as both. There seems to be no reason to suppose that one of these options is less marked than the other: primary data will contain clear and abundant evidence, and — a point which cannot be stressed enough — the classical argument for unmarked values of parameters, that is that the property can otherwise not be deduced from the primary data, remains without force. As we will argue below, the double object constructions could become a property of Haitian, because they were a property of the contact language or pidgin that constituted the primary data for the first native speakers of Haitian. The contact language or pidgin in turn could have contained the double object construction by means of the well-documented process of relexification involved in second language learning (see, among others, Muysken, 1981).¹⁷

The same point may be illustrated for the predicate cleft construction. It is argued in Koopman, 1984, chapter 6, that this construction represents a case of movement of a verb to a non-verbal position (the equivalent of wh-movement for verbs). Further properties of the construction fall out from the ECP and Bounding theory. If it is an unmarked property to admit this con-

struction, as Bickerton claims, one would expect the French or English child to produce instances of it spontaneously. Again, this does not seem to happen. Why not? This may be simply explained if primary data are needed to deduce its existence (here, the choice of the parameter $x=V$ for *wh*-movement of x), as well as to determine other properties of this construction. It is not difficult to imagine how occurrences of the predicate cleft construction might lead to this result: it is probably sufficient to determine that a verb occurs in a non-verbal position, that is, a position from which it cannot assign its theta roles, and is related to a verbal position.

Or take the fact that Haitian and W. African languages use different conjunctions for the coordination of NPs and the coordination of other categories. Now, certainly, it is highly unlikely that anyone would want to argue that this represents the unmarked case. Surely, the use of the same conjunction for all categories would be expected to represent the unmarked case.

Consider finally Bickerton's claim that the unmarked value for *S* is to be tensed. Note that this might be true. It does not seem, however, that creole languages have anything special to contribute to this issue: no case can be made on the basis of creole languages like Haitian, simply because of possibility (1ii), which cannot be excluded on linguistic grounds, as we will show below. A potential case drawn from a language contact situation can only arise in situations in which both the superstrate and substrate languages have the same property, e.g. regarding distribution of infinitival clauses, and the resulting language had tensed clauses instead. Interestingly enough, such cases seem to be non-existent, a fact that might support our assumptions about language learning: lexical properties must be determined on the basis of evidence, either positive (some verb takes both a tensed and an infinitival complement) or indirect negative (failure of a certain property to show up leads to the conclusion that that particular verb does not have that property).¹⁸ Bickerton claims that other evidence can be derived from the similarity between creole languages. However, the syntactic similarity between creole languages (with different substratum languages) is by no means established, and needs to be supported by *analyses* of superficial similarities, i.e. by comparing creole grammars, not creole data.

In sum, then, there seems to be no reason to suppose that any of the phenomena discussed above is unmarked. Primary data will contain clear and abundant evidence, and the classical argument for unmarked values of parameters, that is that the property can otherwise not be deduced from the primary data, remains without force. If the arguments presented above are

correct, and if many properties are determined on the basis of primary data, it follows that there will be few cases in which Haitian syntax drastically differs from that of French or W. African languages — a fact we noted above. It will also follow that it will be extremely difficult to find potential cases supporting Bickerton's claims about markedness, and that these will require quite complex argumentation.

Could the Haitian-W. African parallelism be accounted for through the influence of the substratum languages (cf (1ii))? If so, how did W. African properties come to be properties of Haitian? We will argue that they can be explained through substrate influence, limiting ourselves to lexical properties, distributional properties, and the predicate cleft construction and verbal relatives.

The Haitian-W. African parallelism as to lexical properties can readily be explained. Suppose that the proto-form of Haitian, the contact language that constituted the primary data for the creators of Haitian, contained enough information to deduce the lexical properties of verbs. This proto-Haitian was spoken by African slaves, fugitives and the free population, as a second language, next to their native African languages. A well-documented process in second language learning and in language contact situations (see, among others, Muysken (1981)), is the process of relexification, i.e. the transfer of lexical properties from the native language to the target language.¹⁹ Thus, if the primary data that constituted the input for Haitian contained the W. African features, via the process of relexification, both the similarities in lexical properties and the particular gaps that we have noted can be accounted for.

The process of relexification, however, cannot account for other similarities, like distributional properties of infinitives (absence of infinitival indirect questions and infinitival relatives), or the presence of certain construction types (predicate cleft or verbal relatives).

The absence of infinitival relatives and infinitival indirect questions might be accounted for, however, given reasonable assumptions about how language learning proceeds. Consider first languages that have these constructions. How does the child come to know this? Apart from the fact that the general structure of the language might lead him to expect their occurrence, such an expectation in itself would not be sufficient. It seems once again reasonable to assume that the child needs primary (positive) data to determine that the expected construction indeed occurs (of course primary data are also necessary to fill in the details of the construction (the choice of

COMP, INFL,...)) Suppose now that the general structure of the language leads the child to expect the existence of indirect *wh*-questions, and infinitival relatives. (One might, for example, propose this expectation to be based upon the occurrence of infinitival complements, and the alternance of infinitival and tensed complements in lexical representations as is the case in Haitian.) If these constructions fail to show up in the primary data, the child, lacking positive evidence, would decide that the constructions are not part of his language. Note that it would also have no way of determining the specific details. Thus, non-occurrence in the primary data would serve as indirect negative evidence. If this is correct, the problem reduces to that of the primary data. Could the primary data that served as input to the formation of Haitian have lacked infinitival relatives and infinitival indirect questions? It is very likely that this was indeed the case: these constructions do not occur in W. African languages, and are not that frequent in French — thus, learning them as a second language learner would require a great deal of exposure to French.

Consider finally the predicate cleft construction and verbal relatives. These constructions are absent in French, but present in Haitian and W. African languages.²⁰ How could these constructions have come into Haitian? Again, it seems likely that they came in via the contact language. To determine whether or not the language one is learning admits the movement of a verb to the equivalent of an *A*-bar position, requires positive evidence: so the question again reduces to whether the contact language could have contained them. There is no *a priori* reason why this might not have been the case, and in fact in present day contact situations involving the same languages, such as Ivorian French for example, occurrences of both the verbal relative and the predicate cleft construction can be observed.²¹

In sum, then, a very likely scenario can be constructed to account for Haitian-West African parallelism. This scenario depends upon the assumption that the establishment of the values for the parameters under discussion proceeds on the basis of primary data, which the relevant primary data probably consisting of main clauses (see Koopman, 1983 for one argument illustrating how data contained in main clauses is sufficient to establish a value for a parameter), and one depth embeddings, which allow one to determine complementation properties. If this is correct, there is no reason to suppose that the parameters yielding the properties above are ordered in a certain way, nor that creoles choose unmarked values by necessity. This does not imply that unmarked values never need to be associated to other parameters. It is

clear for example that unmarked parameters must be associated to the conditions of the Binding Theory, since there would be no other way to determine the minimal domain.

What remains, then, of the wide-spread belief that creole languages somehow represent more simple, less marked systems than their ancestors? This might be true in a sense: thus, due to their particular genesis, many historical residues and probably less frequent constructions requiring a lot of exposure for learning, failed to be passed on. Moreover, creole languages may be less marked than their input languages, if one considers the overall markedness of certain subsystems. This may be the case for properties determining the word order of heads and complements: internal irregularities disappear, and a uniform order of lexical heads with respect to their complements results.²²

For this scenario to be plausible, it remains to be shown that there is some historical plausibility to it. So, what does it require? Basically the existence of a contact language that must have been more than rudimentary: it must have contained at least embeddings, and syntactic constructions like the predicate cleft construction. Moreover, for such a contact language to have developed and for relexification to have taken place, some time must have elapsed during which African languages must have been spoken. Both these conditions are very likely to have occurred. First, the existence of an expanded contact language before its acquisition as a native language is in agreement with the findings of Sankoff & Laberge (1973), who show, basing themselves on a contemporary situation in which a contact language (Tok Pisin) is acquired by native speakers, that there is an increase in complexity as the pidgin develops, and that there is no sudden break or qualitative jump between the pidgin and the new native language. Second, the historical evidence largely leaves open the possibility of an expanded contact language having arisen, and of African languages having continued to be spoken as well.²³ Because of the high mortality, low birthrate, mass suicides, and mass desertions on the labour intensive sugar plantations²⁴, massive importations of slaves took place.²⁵ New speakers of African languages were thus arriving all the time. Also, emancipation was initially encouraged, which yielded a native free black population. Desertion constituted a real problem. It was facilitated in St-Domingue, because 2/3 of the island was in enemy hands (Spanish). Escaped slaves set up communities in St-Domingue, elected their own leaders, cultivated the soil, and constructed barricades against invaders. The extent of the problem can be read off the following quote from Hall 1971,

(p 65): "Colonists lived in fear of being suddenly ruined by the loss of all their slaves. Planters going to bed at night owning 100-200 slaves could not be sure of waking up the next morning with even one". These circumstances leave plenty of space and time for African languages to be spoken and learned. Finally, black slaves and the free population exercised a considerable amount of economic power. The French colonists depended on the slave-operated markets for the trading of goods and for the provisioning of cities and villages with food; so much so, that when the Code Noir (French slave law) of 1685 outlawed both the legal and the illegal markets, the colonial authorities protested and the French government changed the law the following year to allow them to continue. The market situation thus was not only a source of contact with French; it also provided slaves with a motivation for learning the language that would open the door to freedom: slaves used their control over the market in order to purchase their freedom.

To conclude, then, clear cases of syntactic influence of the superstrate language exist. This influence, however, is limited basically to certain lexical properties (particularly for those type of verbs or prepositions that are non-existent in the substrate languages), and word order properties. Since these features are transparently available in simple French clauses, they are probably easy to learn for the second language learner, and could therefore easily have been features of the contact language that constituted the primary data for the first native speakers of Haitian.

The influence of substrate languages was shown to have been much less restricted. We have argued that there exist traces of a common West African substrate. The existence of common properties has the advantage of avoiding the search for one particular West African language that served as basis for the *syntax* of Haitian. This is particularly important given the unreliability of the historical data about the origins of the slave population. The naming of African tribes in the slave trade is notoriously imprecise. Curtin (1969), for example, writes that Europeans used to name nationalities by the name of the shipping port and that particular names like *Arada/Allada* should "...probably be interpreted" as "people sold by Allada", not as "people from Allada" (Curtin, 1979, p 196). Moreover, it avoids the difficulties of equating cultural influence with substratum influence.

We have argued, on the basis of considerations of first language learning, of evidence deriving from second language learning and of evidence from multilingual contact situations involving the same set of languages, that many of the (common) West African properties must have come into Haitian via an expanded contact language. The existence of such an expanded contact lan-

guage prior to the creation of Haitian is consistent with both the demographic and historical evidence. Moreover, the available historical evidence provides for enough time for an expanded contact language to have developed. There is thus no reason for assuming that the acquisition of Haitian was qualitatively different from that of Tok Pisin.

We have been unable to find any cases that would illustrate Bickerton's hypothesis that the first native speakers of creole languages had to assume unmarked parameter settings for certain parameters the value of which could, in the case of normal language learning, be set on the basis of primary data. This — we argued — can be explained if positive (or indirect negative) evidence is always needed to set these parameters. There is therefore no reason to assume that all parameters have unmarked parameter settings associated with them.

NOTES

- 1) Bickerton does not actually demonstrate this, however. We will argue below that there are no linguistic reasons to exclude substrate influence.
- 2) It is difficult to take this list very seriously since virtually no analysis is presented of the properties listed. For example, Bickerton states that in the unmarked case all movement is cyclic COMP-to-COMP, thus excluding NP movement as an unmarked option. But he also states that "all transitive verbs with agent subjects may appear as intransitive verbs with theme subjects". This property strongly suggests derivations in which NP-movement is involved. (see, among others Burzio, 1981).
- 3) Bickerton, 1981, 1984 uses this point as one of his major objections against any substrate influence.
- 4) It is possible, however, that other processes may provide arguments for the existence of different classes of one-place predicates. For a case in point, see Koopman, 1984 (p 26).
- 5) With the sole exception — to our knowledge — of Mande languages.
- 6) There is some evidence from nominalizations in Abe and Baoule that the underlying structure of the *take NP give NP* and *take NP mettre PP* constructions is the following: [_v [_v take] [_v metre]] NP PP (disregarding the order of V with respect to its complements), where *take* is a verbal Case marker which requires adjacency with the NP, forcing the NP to move next to *take*, thus yielding the structure: [_v [_v take NP] V] t PP. Cf Koopman, in prep.
- 7) In Fon (4b) may not surface as such: the direct object must necessarily be preceded by the verb *take*.
- 8) For example, aspectual notions expressing *start*, *finish* are either realized as morphemes in INFL, as verbs taking infinitival complements or gerunds, as serial verbs if the language has serial verbs, or as a mixture of the two. Causative verbs are realized either in terms of verbal morphology, as verbs taking tensed complements, as verbs taking infinitival complements, or as serial verbs.

9) A first indication that the complement in (5a) is a tensed complement and in (5b) an infinitival complement. Possible occurrence in a given complement of morphemes in INFL, was taken as the main criterion for tensedness in Koopman & Lefebvre (1982).

10) With the exception of Mahou (Mande), where it is an infinitival complement.

11) For a possible case, see Koopman, 1984, p71.

12) In some cases, as in the following example from Abe, structural ambiguity may arise, because both a tensed sentence and a nominalization would have the same surface structure:

- (i) [Yàpí yí] jò
[? the leaving of Yapi/? that Yapi left] story

This ambiguity immediately disappears, however, in the case of transitive verbs. (ii) shows that tensed complements are excluded, (iii) that they are nominalizations:

- (ii) *[yàpí dí sáká] jò
[yapi eat rice] story
- (iii) yàpí sáká ní` dí jò
Yapi rice DET eating story
'the story of Yapi's eating of the rice'

13) If complementation in these languages is indirect, by way of a small clause complement, as proposed in Koopman (1984), the exclusion of tensed complement clauses could be explained by the same mechanism that excludes the occurrence of small clauses in NPs in general (cf *the consideration of Bill sick).

14) Indirect questions often surface as concealed questions resembling relative clauses. Syntactically they behave as indirect questions, i.e. S' and not NP (cf Koopman, 1984).

15) These constructions have been called *redoublement verbal*, (*verb doubling*) in Piou (1982). There is evidence from many African languages that they are to be analyzed as a type of relative clause with a verbal head. We will refer to them as verbal relatives for this reason.

16) This surface order *is* found in French imperatives. Utterances like *donne lui la pomme* are of course common.

17) Alternatively, it might be proposed that creole languages have double object constructions, because they basically lack the category P. It is simply not true however that creoles lack the category P: just as in the substrate languages, P fulfills more limited functions than we are used to in Indo-European languages.

18) See Chomsky (1981) for discussion of this point for the English verb *want*.

19) Although the term relexification is generally considered to be the transfer of a lexical item and its meaning, it is quite natural to extend it to include other lexical properties.

20) In W. African languages, at least as far as Kru and Kwa languages are concerned, verbal relatives seem to be more widely spread than predicate cleft. The presence or absence of predicate cleft varies even in closely related languages. This might be related to the frequency of their use. In some languages, for example, predicate cleft is widely used in different construction types (declarative sentences, but also very frequently in yes-no questions), in others their use and functions seem to be much more limited.

21) Bickerton objects to this type of evidence on the basis of the failure of many substrate features to be transferred in the case of Hawaiian creole. Note however that we are discussing Haitian,

and the logical problem whether or not the primary data could have contained occurrences of these constructions. There is no principled reason why this failure of transference in the case of Hawaiian creole should have any implications for other creoles.

22) See Koopman 1984 for a discussion of the importance of the properties the category P and PP for the determination of word order parameters. This importance possibly also accounts for the V-complement order in creole languages where the superstrate language had verb final order (cf the case of Berbice Dutch which is prepositional and has verb complement order; Dutch has prepositions (i.e. Case is assigned rightwards), but is verb final). Note, however, that Berbice Dutch also has locative postpositions. An analysis of the properties of the category P is required in order to determine the correctness of the above hypothesis.

23) See also Singler, 1985, for discussion.

24) Cf Gwendolyn Midlo Hall (1971) for a very interesting discussion of the situation during this period.

25) Sugar plantations relied almost exclusively upon the African slave trade to maintain the work force (things started changing towards the end of the slave trade period. Debien (1967) for example shows that for a particular plantation the entire work force of 150 slaves had to be renewed between 1765 and 1778).

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Substrate Diffusion*

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The relative importance of universals and substrata in the formation of creoles has far-reaching implications for our understanding of language genesis, transmission and change, making the issue quite central not only to creole studies but also to general linguistics. That is why it is important that we attempt the kind of reasoned synthesis of extreme positions that could be of more general value. In this article I will argue that while linguistic universals do indeed appear to play an important role in the selection of creole features, substrate influence and diffusion are much too useful in explaining creole genesis to be dismissed. Indeed, universals alone fail to provide convincing answers to be the crucial questions.

Bickerton (1981) argues that many of the features common to certain creoles (but not their European lexical-source languages) resulted from the same linguistic universals which, he claims, play an important role in children's acquisition of their first language: the "innate bioprogram that determines the form of human universals" (p. 134). In order to establish that the creole syntactic peculiarities which he discusses could only have arisen from such innate linguistic universals, Bickerton must try to refute the possibility of influence from common substrate languages. Crucial to his argument is the fact that some of these features are found in the creoles of both the Caribbean and Hawaii, the latter of which "shares none of the substratum languages of the other creoles" (p. 72). Moreover, Bickerton must also deny the possibility of substrate features from other creoles having contributed to Hawaiian Creole English via diffusion. He claims to have evidence

that these similarities could not have come about through diffusion of a pre-existing contact language, since it was precisely the features Hawaiian

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