Chapter 11

The Haitian Creole copula and types of predication: A Word-and-Pattern account

Alain Kihm

CNRS, Université Paris-Diderot

Haitian Creole is a French-based creole language spoken by about 10 millions people in Haiti. In Haitian Creole the copula consists in the two forms *se* and *ye* and it may not be expressed. The present paper argues that, despite claims to the contrary, the Haitian Creole copula is a verbal lexeme realized through two overt suppletive stems and a phonologically null stem. Selecting one stem or the other does not depend on inherent and/or contextual inflectional features as in English *am* vs. *is* vs. *was* vs. *were*, but on the syntax and semantics of the predicate headed by the copula lexeme.

1 Introduction

In Haitian Creole (HC), a French-based creole spoken by about 10 millions people in Haiti, the copula is expressed via two overt forms *se* and *ye* and it may also not be expressed. Various studies, most of them couched in syntactic transformational terms, have been devoted to this variation (Valdman 1978, Damoiseau 1985, DeGraff 1992, Kihm 1993, Déprez & Vinet 1997, Déprez 2003). The main debate centred around the issue of whether the two overt forms are verbs (e.g. Valdman 1978, Kihm 1993) or pronouns (DeGraff 1992) or both (Déprez 2003).

Here I will try to support the four following assumptions: (i) the Haitian Creole copula is a verb throughout; (ii) the two overt forms are word forms in the sense of Matthews (1972), realizing alternative suppletive stems of the copular lexeme; (iii) the lexeme also includes a null stem, devoid of phonological substance; (iv) selecting one stem or the other (including the null stem) does not depend on inherent and/or contextual inflectional features as is often the case (cf. English *am* vs. *is* vs. *was* vs. *were*, *go* vs. *went*), but on the syntax and semantics of the predicate headed by a given form of the lexeme.

The Haitian Creole stem alternation thus differs not only from the English instances just mentioned, but also from cases where the phonological shape of an item merely



depends on the syntactic environment, i.e. on what the item appears next to. Zwicky (1985, 1990) gives several examples, such as the French singular possessive determiners which take on the masculine form when preceding a feminine item beginning with a vowel: e.g. mon ombrelle 'my sunshade', not *ma ombrelle (cf. une ombrelle 'a sunshade'). Yet, as argued by Zwicky (1985), it wouldn't make sense to assume that the gender feature common to both components of the NP [mon ombrelle] is not the same as in e.g. ma maison 'my house'. What is in fact needed to account for such an apparent mismatch is a rule of referral stipulating that the shape — but not the content — of feminine singular possessive determiners is identical to that of masculine singular possessive determiners just in the case that the adjacent word begins with a vowel. (For rules of referral also see Stump 2001: 36–37) And note that the adjacent word need not be the head noun: cf. mon ancienne maison 'my old house'.

In Haitian Creole, in contrast, inserting *se* or *ye* or nothing audible depends not on the shape of what follows, but it is related to the lexical category of the complement to some extent and, more importantly, to the semantics of the predication type. The *ser/estar* alternation in Portuguese and Spanish may provide an analogue (Mateus et al. 1989: 98–102), except for the fact that *ser* and *estar* are likelier to represent two distinct lexemes than distinct stems of the same lexeme as in Haitian Creole. In the latter, as we shall see, the equivalent of the *ser/estar* contrast is the *se* vs. nothing contrast. Now, it is not detrimental to parsimony to assume a null stem of a given lexeme, provided it belongs to a paradigm whose other members are all overt forms, so that the content of the null form can be unambiguously retrieved thanks to contrast with the overt forms' contents (see Sag et al. 2003 on the copula in African-American Vernacular English). Lexemes devoid of phonological realization would be much harder to justify, in contrast. Moreover the conditions on *ye*'s insertion find no equivalent in the *ser/estar* alternation, while supporting the suppletive stem hypothesis.

What I am proposing, therefore, is a fully lexicalist account which accounts for most of the facts and avoids the unnecessary complexities and implausible assumptions of the previous syntactic treatments. First I review the facts. Then I show how these facts can be accounted for by assuming one copular lexeme, the lexical entry of which mentions several stems, each of which identifies a particular lexical entry of type *word*, whose valence and semantics are subsets of the valence and semantics of the lexeme. Collocations of these words with tense-mode-aspect (TMA) markers are realized via realization rules written in an Information-based Morphology (IbM) format (Crysmann & Bonami 2015).In the conclusion, I point out what remains, to my mind, in need of an account and I suggest some lines of research that might lead to a fuller understanding of the Haitian Creole copula, especially from a diachronic viewpoint.

2 The facts of the HC copula

Part of the Haitian Creole copula's paradigm can be retrieved from the following examples (Déprez 2003: 135, 136, 139; Fattier 2013: 201) :

- (1) Jan se yon pwofesè. John cop inder teacher 'John is a teacher.'
- (2) Jan chapantyè.John carpenter'John is a carpenter.'
- (3) Jan malad. John sick 'John is sick.'
- (4) Jan nan lekol la. John in school DEF 'John is at school.'
- (5) Elifèt te anba tab la.
 E. PST under table DEF
 'Elifèt was under the table.'
- (6) Se frè mwen Jan ye.

 COP brother 1SG John COP

 'It is my brother that John is.'

As mentioned above, three forms come out from these examples:, (i) se in (1) and (6), obviously from French c'est /sɛ/ 'it is'; (ii) the null form in (2)–(5); (iii) ye in (6), from French est /ɛ/ 'is' or i(l) est /jɛ/ 'he is'.

Let us first compare (1), where the copula is realized as *se*, with (2) where it is not realized at all. The difference seems to lie in the syntactic category of the complement, an NP in (1) and a NOM in (2) (Sag & Wasow 1999: 84). And note that *chapantyè* in (2) can be modified by an attributive adjective: e.g. *Jan bon chapantyè* 'John is a good carpenter'.

The crucial difference, however, actually resides in the individual-level (permanent, identificational) character of the property predicated by means of *se*, in the present case being a professor (Carlson 1977, Diesing 1988, Chierchia 1995, Kratzer 1995). *Se*'s complements need not be indefinite NPs involving the indefinite determiner *yon* 'a' as in (1). Whenever the complement denotes some obviously permanent quality of the subject, determination can be dispensed with. See for instance the following extract from a poem by Bonel Auguste (Chalmers et al. 2015: 20), where being man's limit is presented as a defining property of man's dream:

(7) Rèv lòm se limit lòm. dream man cop limit man'Man's dream is man's limit.' (Le rêve de l'homme est la limite de l'homme)

Despite the absence of the definite articles one sees in the French translation, *limit lòm* is a definite NP in (7) by virtue of being a genitive construction whose complement lòm is

itself definite as it refers to the maximal set of human beings (see Lyons 1999:181–184 on "class generics"; Huddleston & Pullum 2002:407; Kihm 2003). Bare nouns (i.e. NOMs) are also acceptable under the same conditions as in *Mari se fanm* 'Mary is a woman' (Glaude 2012), alternating with the almost synonymous *Mari se yon fanm*. In French as well, in a somewhat literary register, *Marie est femme* is an acceptable alternative to *Marie est une femme*.

Given this, (2) appears to be ambiguous, in the sense that being a carpenter may be viewed as a permanent, individual-level quality of John, or as just a stage-level description of what John is at the time the sentence is uttered. Nouns denoting professions or trades typically trigger that kind of ambiguity, always allowing for referentially equivalent predicates with or without *se*. (For similar facts in French, see Kupferman 1979, Boone 1987)

The individual- vs. stage-level contrast can also be made manifest in adjective predicates. Contrary to the received idea that Haitian Creole adjectives are in fact stative verbs that never need a copula, Damoiseau (1996) demonstrates on the basis of a corpus study that for more than half of the items (including *malad*) adjective predicates without an overt copula as in (3) imply a stage-level interpretation, while the same with *se* as in *Jan se malad* are understood as predicating an individual-level property of the subject (also see Pompilius 1976). This is patently shown by the distinct clefting strategies implied by either possibility. Clefting stage-level predications (no overt copula) is done by way of "doubling" as in (8) (Déprez 2003: 146):

(8) Se damou Jan damou. COP in.love John in.love 'John Is in love.'

Compare *Se manje Jan manje* {cop eat J. eat} 'John did eat'. Clefted individual-level predications (involving *se*), in contrast, are like (6). See (9) (Damoiseau 1996: 157):

(9) Se grangou li ye. cop unscrupulous 3SG cop 'S/he is unscrupulous.'

Interestingly *grangou* also has the stage-level meaning 'hungry', in which case clefting employs the same strategy as for *damou* 'in love' in (8): *Se grangou Jan grangou* 'John Is hungry'.

Example (4) shows the copula is not realized when the complement is a PP. However, not all PP complements behave alike: PP complements, locative or not, predicating a potentially permanent situation require *se* as shown in (10) and (11) (Déprez 2003: 141–142):

(10) Tout sa se pou ou. all this cop for 2SG 'All this is for you.'

(11) M pa te di ou vi mwen se nan navigasyon.

1SG NEG PST tell 2SG life 1SG COP in navigation

'I did not tell you my life is in navigation.'

The descriptive generalization therefore seems to be that the copula is realized as *se* before a noun, adjective or prepositional phrase denoting a potentially individual-level property of the subject, while it has no exponent when the denoted property is potentially stage-level. I hedge this statement with "potentially" because it seems to be rare that being viewed as a stage or individual-level property does not to some extent depend on the intentionality of the speaker rather than being entirely anchored in the ontology of the property itself.

In (5) one might wonder whether *te* is not actually the past form of the copula. Two considerations oppose this supposition. First, complementary data show *te* to be a past tense marker (a 'particlexeme' in Zwicky's 1990 terminology) that may combine with other undisputable TMA markers. See the following examples from Fattier (2013: 199, 201):

- (12) Li te gen twa zoranj. 3SG PST have three orange 'S/he had three oranges.'
- (13) Li t(e) ap boukanen mayi.
 3SG PST PROG roast maize
 'S/he was roasting maize.'

Yet, there still might exist two homophonous *te*, one a past marker, the other the copula's past form. Actually, such an assumption would have history on its side, since *te* obviously comes from the French imperfect *était* 'was' and/or the past participle *été* 'been' and the TMA sequence in (13) can be traced back to the obsolete and/or dialectal French past progressive periphrase *était après* or *(a) été après*.

Synchronically, however, there is good reason not to regard *te* as the past copula, namely that transposing (6) into the past gives us *Se frè mwen Jan te ye* 'It's my brother that John was', not **Se frè mwen Jan te*, as we would expect if *te* was the past copula. I will therefore assume that the past tense marker *te* in (5) "precedes" (if one may say so) the same null form of the copula as is evidenced in (2)–(4).

Example (6) illustrates both the use of *se* in clefts and the copula's third form *ye*. Let us begin with the latter. Its peculiarity is to require a gap to its immediate right. The gap, the foot of a long distance dependency (LDD) (Sag et al. 2003), may be part of a cleft as in (6) or of a WH-construction as in (14) from a poem by André Fouad (Chalmers et al. 2015: 62):

(14) Di m kijan lavi te ye. tell 1sG how life PST COP 'tell me how life was.' (dis-moi comment était la vie.)

Note it wouldn't do to simply state that *ye* must be followed by nothing (meaning an utterance-final pause). Something may indeed occur after it, provided it is not a complement, but rather dislocated material as in (15) (Tessonneau 1980: 18) or an adjunct as in (16) (Déprez 2003: 148):

- (15) Sa l' ye nèg la ki marye avè fi a? what 3SG COP man DEF REL marry with girl DEF 'What is he, the man who married the girl?'
- (16) Nonm nan te pi gran m te ye lè sa a. man def pst more big 1SG pst cop time dem def 'The man was bigger than I was at that time.'

Conceivably ye's immediate follower in (16) is a gap whose filler is gran 'big'. Note that ye is neutral as to the stage vs. individual-level contrast. This is expected since ye only occurs in clauses involving LDDs, whose neutral, declarative or noncomparative counterparts may involve either type of predication: e.g. the answer to (15) might be Nèg la ki marye avè fi a se yon pwofesè 'The man who married the girl is a professor', while a possible non-comparative counterpart of (16) would be Nonm nan gran 'The man (is) big'.

As mentioned, the fact that initial *se* in (6) lacks a subject has led some authors to cast doubt on its verbal character (DeGraff 1992) or to define it as an "introducer" — whatever that may be — distinct from copular *se* (see discussion in Valdman 1978).Yet, null subjects do exist in Haitian Creole as shown by the following two examples (Déprez 1992a:24; Déprez 1992b:198):

- (17) Rete yon nèg nan kay la.
 remain one man in house DEF
 'There remains one man in the house.'
- (18) Sanble Mari renmen Jan. seem Mary love John 'It seems that Mary loves John.'

Such unrealized subjects correspond to expletive subjects in languages like English or French where nullity is disallowed: compare *Il reste un homme dans la maison, Il semble que Marie aime Jean*. But note that in 17th century French *sembler* and *rester* could be used without expletive *il* in sentences quite similar to (17) and (18) (Haase 1935: 15–16). The null subject of *se* in (6) and in such sentences as *Se vre* {cop true} 'It's true' (French *C'est vrai*) falls under this generalization. Although *se*'s initial /s/ obviously originates in the French neutral pronoun *ce* of *c'est* 'it is', this is highly unlikely ever to have had any relevance in the fully emerged Creole — that is since the end of the 18th century — where *se* has become an unanalysable item, contrary to what I argued in Kihm (1993). I therefore conclude that *se* is a verbal copula across the board, and it belongs to the small

set of verbs that allow expletive null subjects, a feature to be mentioned in its lexical definition.

Se presents still other properties. First, contrary to what the examples so far may suggest, it is not limited to third person. See (19) from a poem by Solèy (Chalmers et al. 2015: 22) where its subject is the clitic form *m* of *mwen* 'I, me', occurring with all verbs (cf. *m pati* 'I left'):

(19) M se espas nan mitan de pyebwa.

1SG COP space in middle two tree

'I am the space between two trees.' (je suis l'espace entre deux arbres)

And see (16), which shows that *ye*, like *se*, is compatible with all person-number values. An intriguing property of *se* is its position vis-à-vis TMA markers and the negator, as illustrated in the three following examples (Glaude 2012: 39; Valdman 1978: 240; Cavé in Chalmers et al. 2015: 46):

- (20) Jan se pa te papa w. John cop neg pst father 2sg 'John wasn't your father.'
- (21) Sa se va yon gwo nouvèl. that COP FUT INDF great news 'That will be great news.'
- (22) Se tap yon tan pèdi.

 COP PST.PROG INDF time lose

 'It would be time lost.' (Ce serait une perte de temps)

As shown by (20) the grammatical order is se < NEG < TMA, whereas it is NEG < TMA < V with all other verbs, including ye (cf. 14). Examples (20)–(22) suggest that all simple or complex TMA markers are admissible with se. However, not all native speakers accept se va and se ap.¹

Another peculiarity of *se* is that the possibility of its being preceded by all subject pronouns gets drastically reduced whenever it combines with TMA markers and/or the negation. The pronoun is then obligatorily 3sG, it is left-dislocated and only the emphatic form *li-mèm* may be used. See the following contrast (Déprez 2003: 151):

- (23) * Li se te zanmi mwen. 3SG COP pst friend 1SG Intended: 'S/he was my friend.'
- (24) Li-mèm, se te zanmi mwen. 3SG-self COP PST friend 1SG 'S/he was my friend.'

¹I am grateful to Jean Noël Whig for these judgments.

The same ungrammaticality affects *Li se pa zanmi mwen contrasting with Li-mèm, se pa zanmi mwen 'S/he isn't my friend' and *Ou(-mèm) se (pa) te zanmi mwen, whose grammatical alternative is Ou (pa) te zanmi mwen 'You were (not) my friend', using the null form of the copula. In (24) the subject of se is therefore the null subject bearing 3sG as its only possible value.

Déprez (2003: 151) relates the ungrammaticality of *Ou(-mèm) se... to that of French *Toi, c'est/c'était mon ami next to Elle/lui, c'est/c'était mon ami(e). There certainly is truth in this parallel. Yet it does not account for the well-formedness of Ou se zanmi mwen 'You are my friend' or Jan se zanmi mwen 'John is my friend'. In fact, it seems to be a true generalization that se modified by TMA markers and/or the negation only selects for the null subject, so that Jan in (20) is actually left-dislocated as is li-mèm in (24) and as is Jean in the French equivalent Jean, c'est/c'était mon ami. This — as it is not so obvious as with pronouns — has to be checked with careful prosodic analyses.

Another noteworthy fact is the neutralization of the stage- vs. individual-level contrast with non-third person subjects and inflected *se*, since *Ou (pa) te malad* 'You were (not) sick' is the only negative and/or past counterpart of the positive present contrasting pair *Ou malad* 'You're sick' and *Ou se malad* 'You're a sick person'.

Finally, it is worthwhile noting that *se* may be elided as *s'* before *yon* 'a' yielding the portmanteau /sɔ̃/. See the following lines by Solèy (Chalmers et al. 2015: 22):

(25) Labote / s' on zwazo benyen an san.
beauty COP INDF bird bath in blood
'beauty / is a bird bathed in blood.' (la beauté / est un oiseau ensanglanté)

This confirms, if need be, that *se* is unanalysable as a single word despite its etymology. As for the null form, it is compatible with all TMA markers and the negator, as shown by (5) as well as by (26) (Glaude 2012: 49) and (27) (DeGraff 2007: 114):

- (26) Jan ap doktè. John prog doctor 'John will be a doctor.'
- (27) Duvalye pa prezidan Ayiti.

 Duvallier NEG president Haiti

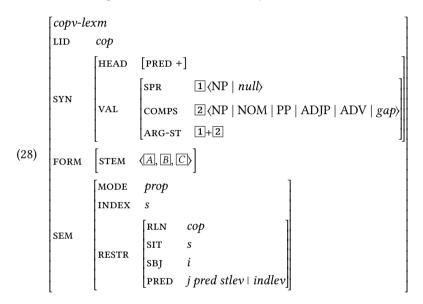
 'Duvallier isn't the president of Haiti.'

As Glaude points out, (26) cannot mean 'John is being a doctor', quite normally in fact: interpreting the progressive as a future is a general possibility, and the only one with stative verbs (Fattier 2013). The positive counterpart of (27) is *Duvalye prezidan Ayiti* 'Duvallier is the president of Haiti', whereas the negative of the also acceptable *Duvalye se prezidan Ayiti* is *Duvalye, se pa prezidan Ayiti* (see above).

3 A formal account of the Haitian Creole copula

In this section I will only try to account for the clearest facts as exemplified in (1)–(6). What I leave aside for future research will be set out in the conclusion.

As stated in the introduction, I assume the Haitian Creole copula to be one verbal lexeme realized as three stems, one null, selected according to predication type. This lexeme can be represented as the lexical entry below:



That is to say, the Haitian Creole copula is a predicator whose valence includes (i) a specifier that is a possibly unrealized NP; (ii) a complement that may be an NP, a NOM, a PP, an adjective phrase, an adverb (e.g. *Se konsa* 'It's so'), or a gap. Recall that NOM is the label for noun phrases unspecified for (in)definiteness, such as *chapantyè* in (2).

Let me also point out that Haitian Creole personal pronouns are best analysed as members of the NP category. There seems to be no good reason, in particular, to view their reduced forms (see Table 1) as anything but phonological clitics, since (i) reduced and unreduced forms alternate without change of meaning; (ii) sequences of reduced forms and TMA markers or verbs do not give rise to any particular phonological phenomena as is the case with English contracted auxiliaries (Bender & Sag 2000). For instance, 3sG li may but need not reduce to l when preceding a vowel-initial verb or TMA marker, e.g. l ap chante $\sim li$ ap

Expressions headed by the copula are propositions about some situations and they are semantically restricted to predicating stage-level (*stlev*) or individual-level (*indlev*) properties of a given subject. This has to be specified, since it conditions the choice of

	sg	pl
1	mwen / m	nou / n
2	ou / w	nou / n
3	li / l	yo / y

Table 1: Haitian Creole personal pronouns

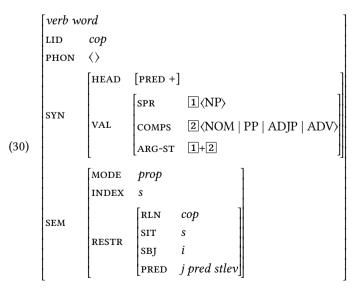
the proper stem among the three stems that realize the copula, tagged A (the null stem), B (*se*), and C (*ye*) according to degrees of nondefaultness.

The syntactic environment calling for the null stem (A) is summed up in (29):

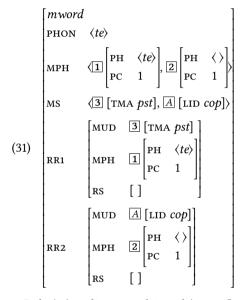
(29) Jan (pa) (te) (bon) chapantyè / malad (anpil) / nan lekol la / konsa. John (NEG) (PST) (good) carpenter sick (very) in school DEF so 'John is/was (not) a (good) carpenter/(very) sick/at school/so.'

That is to say, the copula's null stem is required if (i) the subject is an NP; (ii) the complement is a NOM, or an ADJP, or a PP, or an adverb; (iii) the denoted property is viewed as being transitory, that is of the stage-level sort. Whatever the complement, the copula may be negated and/or specified for some TMA value.

The question now is to relate the copula's stems to the syntactic and semantic properties calling for one or the other. Since (28) describes the lexeme labelled COP, each of the stems may be viewed as realizing a word-form of the lexeme, each word-form with its own lexical entry. The A stem is thus assigned the following lexical entry, where the phonological form is represented as the empty list, and the valence and semantics are subsets of the lexeme's valence and semantics:



Suppose now we want to account for the predicate *te bon chapantyè* 'was a good carpenter' (French *était bon charpentier*). Following Bonami (2015), I assume Haitian Creole collocations such as *te chante* 'sang, used to sing' to be periphrases, that is multiword morphological units involving an ancillary and a main element, in which the former is a marker instead of a verb as in the English periphrase *has sung*. (See Van Eynde 1994 and Sag 2012 for the relevant notion of marker as a non-head element selecting a head and assigning it features.) The only difference between *te chante* and the case at hand is that the main verb's stem has no phonology associated with it. Hence the following realization rule for the collocation of the past marker *te* with the null stem of the copula, using Information-based Morphology formalism (Crysmann & Bonami 2015):



Rule (31) realizes a multiword (*mword*) comprising the marker *te* and the null copula tagged A pointing to the relevant word-form and stem. Owing to this tagging we ensure that $\langle te \rangle$ will be inserted in the right syntactic and semantic contexts.

Note the reverse selection (RS) feature is given no value in (31). The function of this feature is to ensure that, in periphrases such as *has sung*, the main verb's form (e.g. the past participle) stands in the context of the ancillary item that requires it (e.g. *have*). In Haitian Creole, however, the form of the main verb never depends on the marker in collocation with which it assumes a given TMA value. Being a word, on the other hand, *te* includes a COMPS feature [VFORM *finite*] in its lexical entry.

In the morphophonological (MPH) tier of the rule, the phonological (PH) form \langle te \rangle and the null stem are assigned the same position class (PC) 1. This is in order to avoid the awkward statement that te "precedes" something that is actually not there. From a morphophonological viewpoint, we may therefore consider te in te bon chapantyè a portmanteau word amalgamating the marker and the null stem, somewhat similar to French du for \langle de le \rangle .

Rule (31) will also account — *mutatis mutandis* — for the collocations $ap \langle \rangle$ and $pa \langle \rangle$ of (24) and (25).

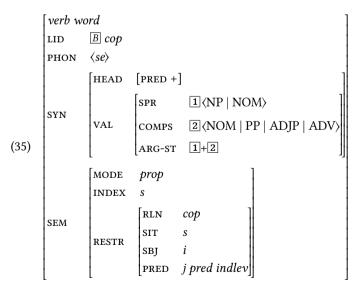
Let us now tackle *se*. The syntactic environments calling for it are not so easy to sum up in one example. At least three are necessary, discounting for the moment the issue of the position of TMA markers and the negator:

- (32) Mari se yon (bon) profesè / fanm / sè ou / malad. Mary COP INDF (good) teacher woman sister 2SG sick 'Mary is a (good) teacher / a woman/ your sister / a sick person.'
- (33) Se vre / konsa / yon lòt bagay.

 COP true so INDF other thing

 'It's true / so / another thing.'
- (34) Vi mwen se nan navigasyon. life 1SG COP in navigation 'My life is in navigation.'

Se is thus shown to be required when (i) the subject is an NP as in (32) and (34) or is null as in (33); (ii) the complement is an NP as in (32), or a NOM whose head clearly denotes some permanent quality such as being a woman, or an adjective phrase denoting an individual-level property as in (32) and (33), or a PP with the same type of denotation as in (34), or an adverb such as *konsa* in (33). Owing to questions about its valence, I leave aside *se* in clefts such as (6), although I'm confident it can be shown to represent the same lexeme as *se* in the other contexts. The lexical entry for the *se* word-form of the copula is therefore (35):



I assume the present tense reference of se in examples (32)–(34) is a corollary of its not being modified by any TMA marker, so that there is no question of a "zero" marker. Hence the following realization rule for se in, for instance, (32) with yon chapantyè as a complement:

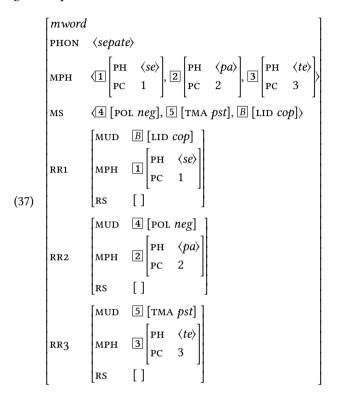
$$\begin{bmatrix} mword \\ PHON & \langle se \rangle \\ MPH & \boxed{1} \begin{bmatrix} PH & \langle se \rangle \\ PC & 1 \end{bmatrix} \\ MS & \boxed{2} [TMA prs], \boxed{B} [LID cop] \\ MUD & \boxed{2} [TMA prs] \\ MPH & \boxed{1} \begin{bmatrix} PH & \langle se \rangle \\ PC & 1 \end{bmatrix} \\ RS & \boxed{1} \\ RS & \boxed{1} \\ RR2 & MPH & \boxed{2} \begin{bmatrix} PH & \langle se \rangle \\ PC & 1 \end{bmatrix} \\ RS & \boxed{1} \\ RS & \boxed{1} \\ RS & \boxed{1} \\ \end{bmatrix}$$

In accordance with the "paradigmatic" view of TMA retrieval, [TMA prs] and the stem's realization are assigned the same phonology and position class.

What about the position of TMA markers and the negator as illustrated in (20)–(22)? Considering only the sequence \langle se te \rangle , one would be tempted to see it as one word *sete* meaning 'was/were', which would then have to count as a fourth stem of the copula or as an exceptionally synthetic inflection of the second stem. There are several hitches to that solution. First, one would have to deal with the fact that this putative word could be broken up by the negator pa, as one sees in (20). Infixes do exist, yet assuming pa to behave as an infix just in this case will certainly be felt to be too costly. The only solution coherent with the *sete* hypothesis would then be to view as one word not only it, but also the sequences \langle se pa te \rangle 'was/were not' and \langle se pa \rangle 'am/is/are not'.

It seems to me to be simpler and less offensive to Occam's razor to posit special realization rules such that TMA markers and the negator — a natural class as exponents of analytic inflection including polarity — exceptionally follow rather than precede the main verb when it is *se.* As usual, the explanation for such a crazy behaviour is bound to be diachronic to some extent: cf. French *c'est pas* /se_pa/ 'it isn't' — but *c'était pas* /sete_pa/ 'it wasn't', which confirms te's identity as a TMA marker and shows the COP < NEG < TMA ordering to be a Haitian Creole innovation consequent to te's emergence.

Rule (37) accounts for the sequence (se pa te) of se pa te yon bon chapantye 'wasn't a good carpenter':



This rule should be contrasted with the rule accounting for the "normal" order /pa te V/ of, e.g., *pa te chante* 'didn't sing':

$$\begin{bmatrix} mword \\ PHON & \langle patechante \rangle \\ MPH & \langle 1 | \begin{bmatrix} PH & \langle pa \rangle \\ PC & 1 \end{bmatrix}, \begin{bmatrix} 2 \\ PH & \langle te \rangle \\ PC & 2 \end{bmatrix}, \begin{bmatrix} 3 \\ PH & \langle chante \rangle \\ PC & 3 \end{bmatrix} \end{bmatrix}$$

$$MS & \langle 4 | [POL neg], [5] [TMA pst], [C] [LID chante] \rangle$$

$$\begin{bmatrix} MUD & 4 | [POL neg] \\ MPH & 1 \end{bmatrix} \begin{bmatrix} PH & \langle pa \rangle \\ PC & 1 \end{bmatrix}$$

$$RR1 & \begin{bmatrix} MUD & 5 | [TMA pst] \\ MPH & 2 \end{bmatrix} \begin{bmatrix} PH & \langle te \rangle \\ PC & 2 \end{bmatrix}$$

$$RR32 & \begin{bmatrix} MUD & 5 | [TMA pst] \\ MPH & 2 \end{bmatrix} \begin{bmatrix} PH & \langle te \rangle \\ PC & 2 \end{bmatrix}$$

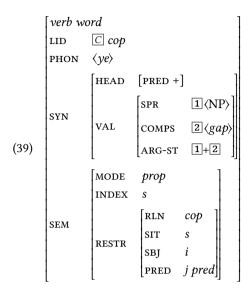
$$RR1 & \begin{bmatrix} MUD & C | [LID chante] \\ MPH & 3 \end{bmatrix} \begin{bmatrix} PH & \langle chante \rangle \\ PC & 3 \end{bmatrix}$$

$$RR1 & \begin{bmatrix} RR1 & MPH & 3 \end{bmatrix} \begin{bmatrix} PH & \langle chante \rangle \\ PC & 3 \end{bmatrix}$$

$$RR1 & \begin{bmatrix} RR1 & [] \end{bmatrix}$$

The main difference — apart from the fact that *chante*, like all verbs but *se* and raising verbs (see above), does not accept null subjects — lies in the respective position classes. It is particularly noteworthy that the mutual ordering of the negator and the TMA marker is fixed: pa < TMA. It is this sequence that appears as a block on the "wrong" side when the verb is *se*.

Examples (6) Se frè mwen Jan ye 'It's my brother that John is' and (14) kijan lavi te ye 'how was life' suffice to illustrate the third stem's environment: its subject must be an NP and its complement a gap related to clefting as in (6) or questioning as in (14). Hence the following lexical entry:



As mentioned above, *ye* is neutral as to whether the predicated property is a stage-or individual-level one. Its occurrance in just one environment justifies my ranking it as the most non-default stem. On the other hand, the mutual ranking of the null stem and *se* in terms of defaultness may be judged moot. The numbers of triggering contexts are the same, and I can't see any good reason why stage-level properties should be deemed more default than individual-level properties. Be it as it may, since stems must be tagged in any event and nothing much hangs on the relative ordering of *se* and the null stem, I maintain the ranking of (28).

4 Conclusion: What has been done and what remains to do

Haitian Creole facts lie precisely at the interface of morphology and syntax, and it has been the aim of the present article to show how a word-based morphological model is especially fit to do justice to such an inherently morphosyntactic character.

Formalizing the data as I just have done is a necessary step in understanding how things work. It doesn't tell us, however, why things work the way they do, it doesn't explain why things are as they are. Explanation in the real sense of the term has to come from outside formal grammar. In the case at hand, the likeliest source is diachrony, that is the sociolinguistic conditions under which Haitian Creole emerged and the nature of the linguistic input at the origin of this emergence.

As to the first point, our best hypothesis is that Haitian Creole emerged between the 1680's and the end of the 18th century as a consequence of the massive importation of African slaves into Haiti, officially a French possession from 1697 to 1804 (see Holm 1989:382–387; Faraclas et al. 2007), and that it was mainly the product of a process of

second language acquisition (SLA) by adults in adverse conditions, where the target language French could only be acquired in an unguided fashion, "on the job", and was not actually acquired, but only a basic variety of it (Klein & Perdue 1997), which later expanded into a full-fledged language. The Africans' knowledge of their first languages (the substrate) played a role in this process, although apparently no direct one in the copula issue.

Where it may have proved influential is in the fact that the stage- vs. individual-level contrast is active in what seems to have been Haitian Creole's main substrate language, namely Fongbe (Lefebvre 1998). In Fongbe according to Ndayiragidje (1993: 63) "only predicates whose argument structure includes an event position — *Stage-Level Predicates...* may be clefted, contrary to those that do not include that position — *Individual-Level Predicates*" (my translation). This is what makes the difference between e.g. *gbà* 'to destroy' and *sè* 'to know'. In Haitian Creole as well the same difference obtains between *kraze* 'to destroy' and *konnen* 'to know' so that (40) is grammatical, whereas (41) — possibly meaning 'John does know that language' — is not (Lefebvre 1990 — and see (8)–(9):

- (40) Se kraze Bouki kraze kay la cop destroy B. destroy house DEF 'What Bouki did to the house was destroy it.'
- (41) * Se konnen Jan konnen lang sa a.

 COP know J. know language DEM DEF
 Intended: 'John does know that language.'

The *se* vs. null form contrast therefore appears to be a special case of this overarching contrast permeating the whole verbal lexicon, which seems to be more central in Fongbe than it is in French, though it is present in the latter as well.

Concerning the French input, on the other hand, we unsurprisingly hold no recording of the sort of 17th century French in which the arriving slaves were addressed or could pick up from the native French speakers they were in generally unpleasant contact with. That it was a colonial koinè not too different from the central Parisian dialect, we can be reasonably sure of (Chaudenson 2004). Whether it was the full language or a foreigner talk reduction of it, we don't know, though there is evidence that the full lexifier languages were used in the Caribbean plantations where creole languages emerged (Alleyne 1980).

What we can and must do then, is first try to account for the facts that have been pushed under the rug in the present work, in particular the strange behaviour of *se* according to whether it is or is not modified by TMA markers and/or the negation, and why is then the stage- vs. individual-level contrast neutralized. Secondly, we should look up 17th century French grammar, using such ressources as Haase (1935), in order to determine as much as possible to what extent the Haitian Creole system inherits from its lexifier's system. For instance, although the substrate is likely to have been influential as suggested above, there probably is a relation between the distribution of *se* and the

null stem — requiring individual and stage-level complements respectively — and the distribution of c'est and il/elle est preceding a nominal complement in 17^{th} century as well as contemporary French (Kupferman 1979, Boone 1987, Zribi-Hertz to appear). All this, however, belongs to the to-do tray. Let's hope it won't linger there too long.

References

- Alleyne, Mervyn C. 1980. Comparative Afro-American: An historical-comparative study of English-based Afro-American dialects of the New World. Vol. 11. Karoma Publishers, Incorporated.
- Bender, Emily & Ivan A. Sag. 2000. Incorporating contracted auxiliaries in English. In Ronnie Cann, Claire Grover & Philip Miller (eds.), *Grammatical interfaces in HPSG*, 17–32. Stanford: CSLI Publications.
- Bonami, Olivier. 2015. Periphrasis as collocation. Morphology 25. 63–110.
- Boone, Annie. 1987. Les constructions «il est linguiste»/«c'est un linguiste». *Langue française* (75). 94–106.
- Carlson, Gregory N. 1977. A unified analysis of the English bare plural. *Linguistics & Philosophy* 1(3). 413–456.
- Chalmers, Mehdi, Chantal Kénol, Jean-Laurent Lhérisson & Lyonel Trouillot (eds.). 2015. Anthologie bilingue de la poésie creole haïtienne de 1986 à nos jours. Arles: Actes Sud / Atelier Jeudi Soir.
- Chaudenson, Robert. 2004. *La créolisation: théorie, applications, implications.* Editions L'Harmattan.
- Chierchia, Gennaro. 1995. Individual-level predicates as inherent generics. In Gregory N. Carlson & Francis J. Pelletier (eds.), *The generic book*, 176–223. Chicago: The University of Chicago Press.
- Crysmann, Berthold & Olivier Bonami. 2015. Variable morphotactics in information-based morphology. *Journal of Linguistics* 51(1). 1–64.
- Damoiseau, Robert. 1985. *Nature et fonction des monèmes 'se' en créole haïtien.* Tech. rep. Port-au-Prince: Centre de Linguistique, Université d'État d'Haïti.
- Damoiseau, Robert. 1996. Les adjectivaux en créole haïtien. In Daniel Véronique (ed.), *Matériaux pour l'étude des classes grammaticales dans les langues créoles*, 151–161. Aix en Provence: Publications de l'Université de Provence.
- DeGraff, Michel. 1992. *Creole grammars and acquisition of syntax: The case of Haitian*. University of Pennsylvania dissertation.
- DeGraff, Michel. 2007. Kreyòl Ayisyen, or Haitian Creole (Creole French). In John Holm & Peter L. Patrick (eds.), *Comparative Creole syntax: Parallel outlines of 18 Creole grammars*, 101–126. London: Battlebridge.
- Déprez, Viviane. 1992a. Is Haitian Creole really a pro-drop language. *Travaux de recherche sur le créole haïtien* 11. 23–40.
- Déprez, Viviane. 1992b. Raising constructions in Haitian Creole. *Natural Language & Linguistic Theory* 10(2). 191–231.

- Déprez, Viviane. 2003. Haitian Creole se: A copula, a pronoun, both or neither? On the double life of a functional head. In Dany Adone (ed.), Recent developments in creole studies, 135–173. Tübingen: Max Niemeyer Verlag.
- Déprez, Viviane & Marie-Thérèse Vinet. 1997. Predicative constructions and functional categories in Haitian Creole. *Journal of Pidgin and Creole Languages* 12(2). 203–235.
- Diesing, Molly. 1988. Bare plural subjects and the stage/individual contrast. In *Genericity* in natural language: Proceedings of the 1988 tübingen conference, 107–154.
- Faraclas, Nicholas, Don E. Walicek, Mervyn C. Alleyne, Wilfredo Geigel & Luis Ortiz. 2007. The complexity that really matters: The role of political economy in creole genesis. In Umberto Ansaldo, Stephen Matthews & Lisa Lim (eds.), *Deconstructing Creole*, 227–264. Amsterdam: John Benjamins.
- Fattier, Dominique. 2013. Haitian Creole. In Susanne Michaelis, Peter Maurer, Martin Haspelmath & Maria Huber (eds.), *The survey of Pidgin and Creole languages*, vol. II, 195–204. Oxford: Oxford University Press.
- Glaude, Herby. 2012. Aspects de la syntaxe de l'haïtien. Paris: Anibwé.
- Haase, A. 1935. *Syntaxe française du XVIIe siècle*. Nouvelle édition traduite et remaniée par M. Obert avec l'autorisation de l'auteur. Paris: Delagrave.
- Holm, John. 1989. Pidgins and Creoles. Cambridge: Cambridge University Press.
- Huddleston, Rodney & Geoffrey K. Pullum. 2002. *The Cambridge grammar of the English language*. Cambridge: Cambridge University Press.
- Kihm, Alain. 1993. What is it that you said? A study of obligatory focalization in two creoles and beyond. In Francis Byrne & Donald Winford (eds.), *Focus and grammatical relations in Creole languages*, 141–162. Amsterdam: John Benjamins.
- Kihm, Alain. 2003. Haitian construct state nominals: A creole contribution to the theory of genitive phrases. In Dany Adone (ed.), *Recent developments in creole studies*, 203–222. Tübingen: Max Niemeyer Verlag.
- Klein, W. & Clive Perdue. 1997. The basic variety (or: Couldn't natural languages be much simpler?) *Second Language Research* 13. 301–347.
- Kratzer, Angelika. 1995. Stage level and individual-level predicates. In Gregory N. Carlson & Francis Jeffry Pelletier (eds.), *The generic book*, 125–175. Chicago: The University of Chicago Press.
- Kupferman, Lucien. 1979. Les constructions *Il est médecin / C'est un médecin*. Essai de solution. *Cahiers de linguistique* 9. 131–164.
- Lefebvre, Claire. 1990. Stage and individual predicates: Additional evidence from Haitian and French. Université du Québec à Montréal, ms.
- Lefebvre, Claire. 1998. *Creole genesis and the acquisition of grammar: The case of Haitian Creole*. Cambridge: Cambridge University Press.
- Lyons, Christopher. 1999. Definiteness. Cambridge: Cambridge University Press.
- Mateus, Maria Helena Mira, Ana Maria Brito, Inês Duarte, Isabel Hub Faria, Sónia Frota, Gabriela Matos, Fátima Oliveira, Marina Vigário & Alina Villalva. 1989. *Gramática de língua portuguesa*. 3a edição. Lisboa: Editorial Caminho.
- Matthews, P. H. 1972. *Inflectional morphology. A theoretical study based on aspects of Latin verb conjugation*. Cambridge: Cambridge University Press.

- Ndayiragidje, Juvénal. 1993. Clivage du prédicat en fongbe. In Alain Kihm & Claire Lefebvre (eds.), Aspects de la grammaire du fongbè. Etudes de phonologie, de syntaxe et de sémantique. Paris: Peeters.
- Pompilius, Pradel. 1976. *Contribution à l'étude comparée du créole et du français : morphologie et syntaxe*. Port-au-Prince: Editions Caraïbe.
- Sag, Ivan A. 2012. Sign-Based Construction Grammar: An informal synopsis. In Hans C. Boas & Ivan A. Sag (eds.), *Sign-Based Construction Grammar*, 69–202. Stanford: CSLI Publications.
- Sag, Ivan A. & Thomas Wasow. 1999. Syntactic theory: A formal introduction. Stanford: CSLI Publications.
- Sag, Ivan A., Thomas Wasow & Emily Bender. 2003. Syntactic theory: A formal introduction. 2nd edition. Stanford: CSLI Publications.
- Stump, Gregory T. 2001. *Inflectional morphology. A theory of paradigm structure*. Cambridge: Cambridge University Press.
- Tessonneau, Louise. 1980. *Contes créoles d'Haïti*. Paris: Conseil international de la langue française.
- Valdman, Albert. 1978. Le créole : structure, statut et origine. Paris: Klincksieck.
- Van Eynde, Frank. 1994. *Auxiliaries and verbal affixes. A monostratal cross-linguistic analysis.* Leuven dissertation.
- Zribi-Hertz, Anne. to appear. Les pronoms démonstratifs. In *La Grande grammaire du français*, Actes Sud.
- Zwicky, Arnold M. 1985. Rules of allomorphy and phonology-syntax interactions. *Journal of Linguistics* 21. 431–436.
- Zwicky, Arnold M. 1990. Syntactic representations and phonological shapes. In Sharon Inkelas & Draga Zec (eds.), *The phonology-syntax connection*, 379–397. Chicago: The University of Chicago Press.