Nominal Predication, Relative Clauses, and *Wh*-Extraction
The Amazing Syntax of Haitian Creole *Se*

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It is suggested that *se* is a vector and a referring element, an anaphor in nominal predication, functioning as a pseudo-copula. It sets an equative relationship between its only argument, a nominal predicate, and its antecedent. As a vector, it interferes with negation and *wh*-elements: (a) it cannot acquire its antecedent over negation, (b) its antecedent can be neither a Φ-specified scalar nor a vector, and (c) any *wh*-complement must be fronted by relativization, where it is replaced by scalar *ye*, so as to avoid a mismatch with object relative *ke.* It appears that the later is buried alive because of its frequent mismatch with vectors. The amazing syntax of *se* further supports the theory of syntax proposed in Desouvrey (2000) and subsequent works.

Keywords nominal predication, TMA, vector, scalar, relative clauses, *wh*-extraction, merge, features, coreference.

1. Introduction

Morpheme *se* is used in Haitian Creole[1] (hereafter HC) as a copula with nominal predicates, but not with adjectival or other types of predicates, and in cleft constructions. This is illustrated in (1). However, what makes this element remarkable is that its syntax shows a number of puzzling facts, as I will show throughout: (a) *se* cannot be negated, (b) its subject cannot be a relative pronoun nor a *wh*-operator, (c) in any environment where movement occurs, it alternates with an allomorph, *ye,* (d) it is not in a perfect complementary distribution with its allomorph *ye,* (e) it is incompatible with TMA, and (f) its *wh*-predicate cannot stay in situ.

(1) a. Jeneral la *(se) volè.
general the SE thief
'The general is a thief.'

1 The Creole reported in this paper is spoken everywhere, except perhaps the Northern part of Haiti, by both bilingual and monolingual speakers. By the extension of its vocabulary which includes concepts mostly accessible to and spread by literate speakers, it is an avant-garde dialect, vigorously rejected by the partisans of leveling down, for some reasons that can't be mentioned here. Conveniently, the current orthography, poorly designed and inadequate, is mostly used in this paper. I shall tackle HC orthography and other related matters when time allows.

b. Jeneral la (*se) fou.
Jeneral the SE crazy
'The general is crazy.'

c. Jeneral la *(se) nan fet la.
general the SE in party DET.
'The general is in the palace.'

d. Se jeneral la ki volè kob la
Se jeneral the that steal money DET
'It's the general that stole the money.'

All of the accounts of this element I know of are embedded within some version of the generative framework. Déprez (2000) reports that *se* is either treated as a pronoun (DeGraff 1992, Lumsden 1990), a copula verb (Déprez and Vinet 1997), before presenting her new analysis of this element as just a functional head under Chomsky's (1995) Minimalist assumptions. Generally, these papers bring some factual insights, and every reasonable descriptive hypothesis on the nature of *se* seem to have been explored. However, the puzzling use of this element remains a mystery that the theoretical machinery underlying these works is unable to resolve.

In this paper, I wish to suggest a novel account of morpheme *se*, which is strictly based on features and their interaction. Assuming that it is a vector and a referring element, I will show that its syntax will become crystal clear in the theory advocated in Desouvrey (2000) and subsequent work.

In the next section, I take a fresh look at the so-called Tense-Mood-Aspect (TMA) system in HC, in order to show that *se* is not a member of that paradigm. Then in section 3, I present the only new claim specific to this paper, namely the Equative Nominal Enhancement Requirement, as well as the Constraints on Merge, already discussed in Desouvrey (2000), which takes the center stage in HC syntax, while presenting some basic tenets of the theory I build on. In section 4, the core of this article, copular *se* and its allomorph *ye* are swiftly and thoroughly unraveled; I show that the grammar uses two strategies to avoid a vector effect and a merger mismatch: deletion of *se*, and buffering, a process we come to know thanks to our understanding of relative

clauses. Section 5 strengthens the analysis by shedding further light on *wh*-extraction from verbal predicates. In section 6, use of *se* in non-predicative contexts is discussed. Finally, in section 7, the paper is concluded with some remarks.

2. An overview of TMA in HC

In HC tenses are expressed with various preverbal particles, usually classified in the literature as TMA markers, which seems to be intended to mean that the notion of tense is basically different from that of more familiar languages like English or French for instance. It might be a convenient way to deal with those particles in a language that is devoid of any special verb morphology. All verbs are indeed invariable and their shapes in most cases do not distinguish them from nouns, adjectives or prepositions. Thus in a HC sentence, the verb is usually preceded with tense and mood particles, which may precede some other verbs dedicated to aspects. In the absence of a preverbal particle the verb expressed a past event in relation with the present, perhaps similar to what is referred to as present perfect in English descriptive grammars. This is illustrated in (2). The following abbreviations are used: PP (present perfect), PAP (past perfect), PROG (progressive), COND (conditional), NF (near future), RP (recent past), SF (simple future).

(2) a. Musieu dòmi.
He PP sleep
He has slept.

b. Musieu te dòmi.
He PAP sleep
He had slept.

c. Musieu ap dòmi.
He PROG sleep
He is sleeping.

d. Musieu pral dòmi.
He the NF sleep
He is going to sleep.

e. Musieu a dòmi.

He SF sleep

He will sleep.

f. Musieu fek komanse dòmi.

He RP start sleep

He has just start sleeping.

g. Musieu te resi dòmi.

He PAP RESULT sleep

He had finally slept.

As Spear (1990: 119) points out, “[these particles] are preverbal auxiliaries which meet the criteria typically advanced for auxiliary-hood ...” Such an observation is correct and, indeed, I take these preverbal elements to be auxiliaries, a class of verbs only dedicated to TMA. Besides verbs, they accompany adjective, prepositional and nominal predicates, as seen in (3), (4) and (5) respectively.

(3) Jean te/ap fou.

Jean AUX fou

'Jean was/will be crazy.'

(4) Ti-Kongo te nan vole / nan Kouri / nan zen / nan sosiete.

Ti-Kongo PAP in stealing / on run / in trouble / in society

'Ti-Kongo was in stealing / on the run / in trouble / in a secret society.'

(5) Jean te/ap protestan.

Jean AUX evangelist

'Jean was/will be an evangelist.'

As seen above, the absence of a TMA marker in the sentence amounts to a present perfect as well an actual habit. For instance *Musieu manje* means either 'he has eaten' or, in a context of illness, 'currently he eats/can eat'. Now, the absence of an auxiliary in (3) and (4) yields a copular sentence without copula, as seen in (6) and (7). Here the present perfect reading disappears, leaving the habitual reading, which amounts to a present tense, as indicated by the English

translation. Normally, it is an event that starts at some point in the past, however remote that point is, and that continues to the present. In fact, if the starting point of the event is near the present time, the speaker can use the recent past auxiliary *fek*, as in *Jean fek fou* 'Jean has just become crazy'.

(6) a. Ti-Kongo nan vole / nan kouri / nan zen / nan sosiete.
Ti-Kongo in stealing / in run / in trouble / in society
'Ti-Kongo is in stealing / on the run / on the job / in a secret society.'

(7) Jean fou.
Jean PF fou
'Jean is crazy.'

With nominal predicates, however, the absence of an auxiliary either indicates a change in the state of the subject of the predicate or the speaker knowledge. For instance, *Jean protestan* expresses an inchoactive process, either *Jean* becomes an evangelist or the speaker comes to know it. In another context, it can mean *Jean the protestant,* as in the following example.[2]

(8) --Nou konen Jean resi jwenn visa ameriken.
You know Jean AUX get visa American
'You know Jean finally gets an American visa.'
--Jean frè Paul?
Jean brother Paul
'Jean the brother of Paul.'
--Non, Jean protestan.
No Jean evangelist
'No, Jean the evangelist.'

As well, certain place names appear as a bare predicate, without a copula. In such a case, the predicate has a locative value, as illustrated in (9). Here again, the meaning is ambiguous, as it expresses that the subject is related to the place one way or another.

2 One can have also expressions of the type: *Jean Mercedes* 'Jean who owns a (or loves, etc.) Mercedes'

(9) a. Madam Jean New York.
Mrs Jean N. Y.
'Mrs Jean is in N.Y. / Mrs Jean who lives in N.Y. / Mrs Jean from N.Y.'
b. Ti Kongo Canada.
'Ti Kongo is in C./ Ti Kongo from C.'

It turns out that HC does not have a present tense auxiliary, or copula, hence the varieties of copula-free predicates observed, and all of them allow multiple readings. However, for one type of predicate, the one with an equative value, it appears that the language uses an alternative. Such a morpheme is *se*, as seen in (10).[3]

(10) a. Paul se volè.
Paul SE thief
'Paul is a thief.'
b. Mesieu yo se reptilien.
Men DET SE reptilian
'Those men are reptilian.'

Thanks to this morpheme, a perfect copular sentence with an equative value is obtained. Specifically there is no confusion with any reading allowed by the null present perfect or the lack of morphology on verbs and nouns. Simply put, *se* only has an equative reading, while the null TMA allows various readings, further illustrated in (11b,c,d,e).

(11) a. Paul volè.
b. Paul has stolen
c. Paul the thief
d. Paul becomes a thief.
e. Paul is a thief.

Is *se* a TMA auxiliary? We have seen above that all auxiliaries, including the null present

3 In the dialect considered here, sentences where the indefinite determiner is present, as in **Jean se yon vole/yon doktè*, etc. (e.g. DeGraff 1997), are ungrammatical. They become acceptable when the predicate is modified by an adjective or a relative clause: *Jean se yon bon doktè.* 'Jean is a good doctor.'

perfect, are compatible with nouns, verbs and adjectives. Thus if *se* were an auxiliary, it would not be used only with nominal predicates; instead, it would be compatible with adjective, prepositional, and verb predicates as well; cf. (12). I am lead to take *se* to be a referring element with a triple nature: a copular anaphor, a pronoun, and a deictic element. If *se* is instead a referring element, it must have an antecedent, which can be easily tracked down with an adequate theory of coreference.

(12) a. Musieu (*se) fou.
He SE crazy
He is crazy.

b. Timoun yo (*se) nan mango.
children DET SE in mango
'The children are picking mangoes.'

c. Paul (*se) nan kouri / nan volè / nan travay.
Paul in run / Paul in steal / Paul in work
'Paul is on the run / Paul is in stealing / Paul is on the job.'

Indeed, *se* clearly shows its nature in two other constructions in HC grammar. First, it is used to identify oneself, someone or something, much like French *c'est* 'it is', as exemplified in (13). Such a use is different from the copular-like construction seen above.

(13) a. Alo, se Paul, pitit Marie a. (in a telephone call, Paul is the caller)
Hello, this Paul, son Marie DET
Hello, this is Paul, Marie's son.

b. Kisa building sa a ye? -- Se oun universite.
What building that the YE? -- SE an university.
What is this building? -- It's an university.

c. Kimoun ki telefone a?-- (Se) Paul.
Who that phone the? -- SE Paul.
Who called?-- It's Paul.

In addition, *se* is used in cleft constructions, which HC takes one step further than French. In

effect, arguments and verbs can be clefted in HC, while French allows only arguments in this construction. This is illustrated in (14). It is important to mention that *se* cannot be clefted, unlike verbs; compare (14d) and (15d). This fact is consistent with the assumption that *se* is not a copula verb; as discussed below, it is rather a member of the predicate. Notice the appearance of the allomorph *ye* instead of *se* in (15c) (see below).

(14) a. Paul vann machin nan.
Paul sell car THE
Paul has sold the car

b. Se Paul ki vann machin nan.
Se Paul who sell car DET
It's Paul who has sold the car.

c. Se machin nan Paul vann.
Se car the Paul sell
It's the car Paul has sold.

d. Se vann Paul vann machin nan.
Se sell Paul sell car DET
Paul really sold the car. (he didn't rent it out)

(15) a. Paul se ameriken.
Paul se American
Paul is an American.

b. Se Paul ki ameriken.
Se Paul who American
It's Paul who is an American.

c. Se ameriken Paul ye.
It's an American Paul is.

d *Se (se) Paul (se) ameriken

While (15d) is downright bad, TMA auxiliaries can be more or less clefted, as shown in (16).

(16) a. Paul te sou.

Paul PP drunk

Paul was drunk.

b. Se (?te) Paul ki te sou.

Se PP Paul that PP drunk

It's Paul who were drunk.

c. Se sou Paul te sou.

Se drunk Paul PP drunk

d. Se (?te) sou Paul te sou.

Se PP drunk Paul PP drunk

It's drunk Paul was.

It appears that *se* is not in the same paradigm as TMA auxiliaries, and indeed it behaves differently from those elements. It must accompany nominal predicates with an equative meaning. In the next section, I turn to the internal composition of *se*, namely its features and the properties of the latter.

3. Feature analysis

In the theory of features and constraint interaction advocated in Desouvrey (2000), syntactic elements bear various abstract features, for instance Case, reference, that may or may not have apparent morphological realizations in a given language. Features are organized in a tree structure, and appear in different tiers, similar to nonlinear phonological representations. In addition, syntactic elements belong to two classes: vector and scalar, according to whether or not they have an omega node in their tree structure (cf. Desouvrey 2008a,b). Unlike scalar elements, vectors have scope and direction, which further constrain their behavior. Finally, the syntactic structure is composed of simple binary constituents whose projections seem to have no theoretical interests.

In a theory that crucially uses features, the first step toward an account of any syntactic event is to find the features of the interacting elements. Indeed, a feature can be seen only via its interaction with other features. As mentioned earlier, this may not be obvious in a language such as HC which shows almost no morphology on most of its inventory. However, from studies in

other languages, we know under which conditions two syntactic elements can merge in order to form a phrasal constituent (see below). We also know the strategy used in natural languages to circumvent an inadequate feature specification, which can prevent some needed mergers from occurring. Therefore, with the benefit of hindsight, I suggest that nouns in HC are specified neither for phi-features nor omega-features; they are thus a special type of scalar. I claim further that this underspecification is a necessary condition for (17), which may not be enacted otherwise. Suppose that the rationale for (17) is to ensure that only intended equative NPs, not locative ones, can be constructed with *se*.[4] So, if every noun were omega-specified, there would be no distinction between locative and non locative NPs, and therefore *se* would be used with both. On the other hand, if all the paradigm of nouns were phi-specified, (17) could not exist, for there would be no empty slot in the tree where the enhancement can take place, under the natural assumption that a feature cannot be deleted from the lexicon. A third logical possibility would be to assume that the lexicon contains two different paradigms: one with omega-specified nouns and another with phi-specified ones. This can be ruled out on the following ground. The nominal paradigm must be open so that any locative can become an equative by change in the real world, and vice versa.

(17) **Equative Nominal Enhancement Requirement**
Equative nominal predicates must be enhanced with Ω-feature prior to their deployment in the syntax.

The nonlinear representations make it possible to posit that there is just one morpheme *se*. It appears as an anaphor in predication and a full referring element elsewhere. As for *ye*, I suggest that it is a scalar allomorph of *se*, that is, it is Φ-specified, which explains its restricted use in contexts where (17) is irrelevant, mostly when no underspecified NPs are present. As I will show, this is the most amazing piece of feature and constraint interaction ever seen in syntax; in effect a scalar element, namely *ye,* can only cooccur with moved vectors. These hypotheses are conveniently summarized in (18).

4 At this point, I can't say whether (17) is peculiar to HC or a universal tool to convert scalar nominals into vectors for the purpose of predication. If the second possibility is true, one can claim that predicate nominals have to be vectors in all languages having such a construction. Israeli Hebrew data (cf. Boron 1983) tend to lend some credence to the universality of (17).

(18) **The nature of *se*/*ye***

a. *Se* and its allomorph *ye* are referring elements.

b. Predicative *se* is a vector anaphor, i.e., its root node is Ω-specified.

c. *Ye* is a scalar allomorph of *se*, i.e. its root node is Φ-specified.

Moreover, lexical elements may not freely merge to form phrasal constituents. In any structure-building merger, the merging elements must have compatible features, as discussed in Desouvrey (2000). Let H and A be respectively a head and an argument, and *f*, *t* features. The merger of the head and the argument can only take place under either condition in (19).

(19) **Constraints on merge (COM)**

a. The head and the complement bear identical features: H(f) vs. C(f).

b. They are both feature free: H(0) vs. C(0).

c. The head has a feature while the complement has no relevant feature: H(f) vs. C(0).

Other combinations of features may not appear, for a strategy of avoidance is generally applied earlier, during the building stage of the input; otherwise deletion of the offending material may take place. Specifically, mergers of the types *H(0) vs. C(f), *H(f) vs. C(t) are not expected to ever occur in natural languages. Moreover, in the same paradigm, the three conditions in (19) may exist at the same time. However, specified forms are always favored over unspecified forms, so that the order of preference is: (19a) >> (19c) >> (19b). This is an effect of the blocking principle (cf. Aronoff 1976, Lumsden 1992, etc.), an adaptation of which is given below.

(20) **Blocking Principle**

Elements with (relevant) features must be used before unspecified ones.

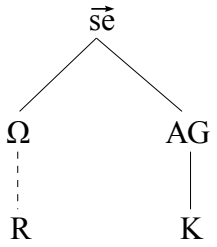
The features of *se* can only be known by observing their interaction with those of other elements. The latter include nominals, relative pronouns, personal pronouns, and *wh*-elements, features of which will be discussed as I proceed.

4. The spurious copula

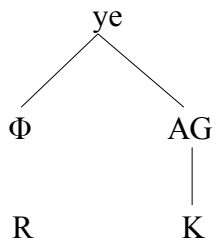
Se and *ye* appear in the structure to fill in the role of a missing copula, or TMA. In the present perspective, they are crucially different from copulas in French and English-like languages, as well as TMA markers in HC, to the extent that the later are not referring elements. While a TMA typically links a subject with a predicate, which may be either nominal, adjective or prepositional, *se* is used only with equative nominals. It takes one argument and it may have an appropriate antecedent. If the later exists, it is reanalyzed as the subject of a new complex predicate in which *se* is an anaphor. Otherwise it is a deictic element and the subject of the predicated. This view turns out to be the keystone to understand the syntax of *se*.

Since *se* and *ye* are referring elements, they have a referential branch in their feature tree. The later includes an AG node (a class node for agreement) that dominates another class node, K, unspecified for Case (nominative or accusative). *Se* has an omega node (vector), while *ye* has a phi-node (scalar). They dominate a floating R-node, which means that their nature can change in the derivation by linking the floating R-node, as shown in (21a) and (21b). On the other hand, NPs have a root node, which I take to be unspecified in HC, and an R-node holding a terminal feature, or R-feature, as is the case for referential expressions; see (21c).[5]

(21) a.

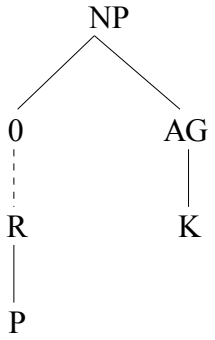


b.



5 Notice that there is no association line that links a 0-node to an R-node, as seen in Desouvrey (2006) with Chinese data. This complication is ignored here, since nothing hinges on it.

c.



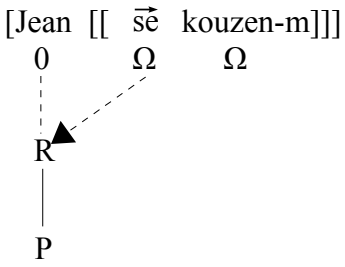
The full representations in (21) will be simplified; class nodes and features that are not crucial to the outcome of the structure will be omitted. Non-crucial nodes are obviously AG, which is common to almost every element, and therefore may not be problematic for the merging process. All involved elements are NPs devoid of case morphology and therefore I take them to be unspecified for case features, just like NPs in English, for instance.[6]

Consider a simple predicative sentence like (22). Vector *se* targets the R-node of *Jean*, indicated by the arrowed line. This sentence is grammatical, since *se* is compatible with both its antecedent and its argument. In effect, it merges perfectly with the NP, enhanced with Ω-feature under (17); it is as well compatible with its antecedent, whose the root node is unspecified. In effect, from Desouvrey (2008a), we know that anaphors, unlike pronouns, must be compatible with the root node of their antecedent; that is, either both have the same root node or one has an unspecified root node. There is no head complement relationship, since there is no merger.[7] However, the appearance of *ye,* as in (23), is ruled out, since mismatch is not allowed. Indeed, *se* is in a Ω-Ω relationship with the complement, while *ye* is in a *Φ-Ω relationship. Since an equative nominal will always be a vector by (17), *ye* will always clash with them, and one can therefore keep it off the stage for the time being.

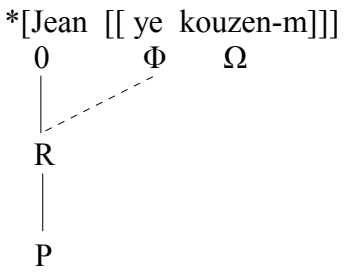
6 Notice that although *se* is an anaphor, it cannot be used as a complement of a verbal predicate, and therefore cannot be an anaphor of the subject. HC has nothing similar to English *self* or Chinese *ziji*. I ignore this fact here.

7 It seems that the antecedent of *se* is generated as an independent structure, like a topic. If there is a pause, *se* becomes a pronoun and the subject of the predicate. The pause cannot exist in the predicative construction because an anaphor is bound to its antecedent by its root node, while a pronoun has a weaker R-node-bound relationship with its antecedent.

(22)

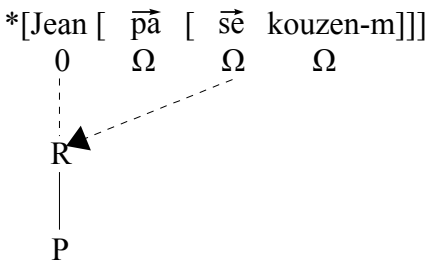


(23)



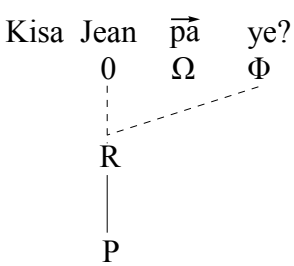
As expected under the vector theory (cf. Desouvrey 2008a), copular *se* is incompatible with vector negation, since a vector cannot pass or receive a feature by crossing a higher vector (superiority effect), as seen in (24). Interference with negation, which seems to be universally a genuine vector, is an important hint to diagnose a vector effect. On the other hand, scalar *ye* can be negated, since it does not interfere with vector scope, as seen in (24b), to which I will return later on.

(24) a.



'Jean is not my cousin.'

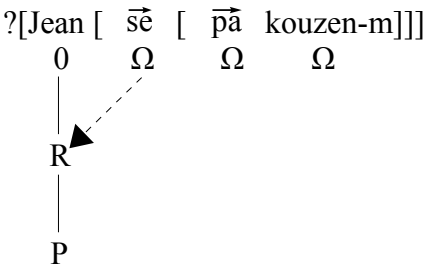
b.



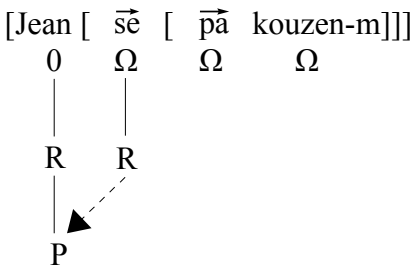
'What isn't Jean.'

One can show that a vector effect really takes place in (24a). In effect, if the nominal predicate is merged first with negation, then with *se*, the resulting structure is somewhat acceptable. As seen in (25), in order to acquire its antecedent, *se* does not have to spread over a higher vector. Now the obvious question is why (25a) is not systematically used instead of deleting the anaphor (see below). It is important to keep in mind that in (22) *se* is a member of the predicate, that is, the latter is neither *se* nor the nominal, but both of them, functioning as a compound. Now, since in HC negation must precede the predicate, structure (25a) may not be fully acceptable, anymore than ?*Jean te pa vini* 'Jean had not come', where auxiliary *te* and the verb should make up the verbal predicate. The rule of deletion of *se,* independently needed, is presumably less costly than altering the normal order of things during the building of the structure. I will return on this non-optimal structure. By the way, notice that this structure is fully acceptable is the antecedent is followed by a pause, in which case se is a pronoun and the subject of the predicate, (25b).

(25) a.

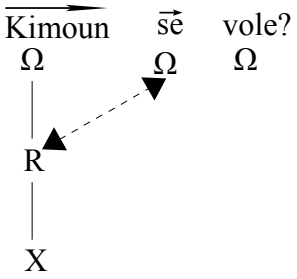


b.



Likewise, a *wh*-operator cannot be the antecedent of copular *se.* The fact is, two vectors cannot acquire each other. In effect, by targeting the R-node of the operator, the anaphor violates the scope priority of the *wh*-operator. This type of vector effect, namely vector-to-vector spreading, is a corollary of the conditions discussed in Desouvrey (2008a). It should be noted that

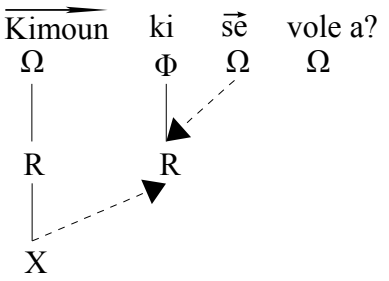
verbal predicates either cannot take an interrogative subject in HC. However, the rationale is different, as I will show later on.

(26) * 

Due to various constraints, some of which being seen above, copular *se* encounters a number of difficulties, and the grammar must use some strategies to overcome them. Two main strategies are available: deletion of *se* and use of a relative pronoun as a buffer. I discuss them in turn.

4.1 Deletion

Since *se* is a vector anaphor, its antecedent can be neither a vector nor a scalar. Recall an anaphor must be passed an R-node, but the root of the latter must be compatible with the root of the anaphor. This means that the antecedent of *se* can only be a 0-specified element, essentially NPs and personal pronouns. The appearance of any other elements as antecedent of the copula yields an ill-formed structure. Thus, when the subject is relative pronoun *ki*, which has a phi-root node, ungrammaticality results in, as seen in (27). Obviously, the problem is that the Φ-specified root node and the Ω-specified root node clash in this structure. (I will return to the internal structure of (27).)

(27) * 

I suggest that this type of problem is resolved by deletion of the pseudo copula. This process

takes place as a last resort to rescue the structure, as shown in (28).

(28)

Kimoun	ki	~~sɛ̀~~	vole	a?
Ω	Φ	Ω	Ω	

Who that SE thief the?

'Who is the thief?'

Likewise, the ill-formed negated structure in (24a) in which *se* out-scopes the negation is repaired by deleting the offending pseudo-copula.

(29)

[Jean [	pà	[	~~sɛ̀~~	kouzen-m]]]
0	Ω		Ω	0

Jean not se cousin my

'Jean is not my cousin.'

My assumption is that *se* mimics the auxiliaries in order to perform its copular function. Thus, since *se* is a vector, it must be the case that the auxiliaries described earlier are vector as well. If this view is correct, it is expected that *se* cannot cooccur with tense, since it would have to out-scope any TMA marker in order to acquire an R-node. This prediction is fulfilled, as seen in (30).

(30) Jean ap (* sɛ̀) ameriken kanmem.

Jean FUT *se* American anyway.

Jean will be an American citizen for sure.

Before considering the buffering process, we may ask whether the nominal predicate has to be a vector. To answer this question, one has to thoroughly analyze this type of predicate in other languages with a such construction, a task that falls beyond the objectives of this paper. That been said, however, nominal predicates in Israeli Hebrew (IH) exhibits a certain similarity with HC. As reported in Doron (1983), IH has two types of negation: a sentential negation and a phrasal negation. Interestingly, with nominal predicates phrasal negation is excluded. In my view this is an important hint that a vector effect takes place in the system.

4.2 Buffering

By virtue of (17), which applies only to equative predicates, the argument of *se* will always be Ω-specified. However, this state of affairs yields an OCP effect, as it is normal under such circumstances where a syntactic domain contains two elements with an identical feature (cf. Desouvrey 2000, etc.) When the complement of *se* is a nominal, as opposed to a *wh*, the sentence is normal with an unavoidable OCP violation. In effect, although predicate NPs are vector under (17), they may not move to avoid the OCP effect. In fact, movement is possible via relativization, but it carries a different meaning (see below).

Unlike NPs, however, a *wh*-predicate cannot stay in situ. This fact contrasts sharply with HC verb predicates, which optionally allow *wh*-movement (see below). This is illustrated in (31). Notice that an in situ *wh*-predicate may be acceptable only as an echo-question. *Ye* does not even allow the echo-question interpretation, since as a scalar, it will never appear in the input under the ban of *H(f) vs. C(t). Descriptively, *ye* appears only when the structure includes a fronted *wh*-element; a fact that prompts Déprez (2000) to claim that *ye* is a resumptive pronoun, that is, an overt trace of *wh*-movement. This is not the case, however, as I will show.

(31) a. Koman Jean ye? /*Jean se/ye koman?
*How Jean YE
'How is Jean?'

b. Kikote kob la ye? /*Kob la se/ye kikote?
Where money the YE
'Where is the money?'

c. Kimoun ou ye? /*Ou se/ye kimoun?
Who you YE
'Who are you?'

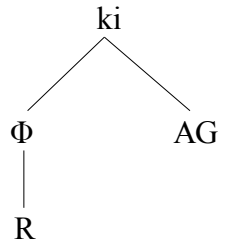
d. Kibo Ti-Kongo ye? /*Ti-Kongo se/ye kibo?
Where Ti-Kongo YE
'Where is Ti-Kongo.'

e. Ki lè li ye la a? /*li se/ye ki lè la a?
What hour it YE there DET

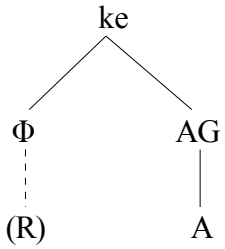
'What time is it now?'

The view adopted here is radically different. It relies on the treatment of relative clauses, as developed in Desouvrey (1997, 2008a, etc.). Just as in French, I take *ki* to be a relative pronoun with a Φ-specified root node that expands to an R-node, as seen in (32a). A less obvious fact, however, is that there is a mostly non-overt object relative *ke*. The latter is accusative-specified while *ki* is caseless. As is usually the case for object relatives, *ke* can be used as a pronoun or an anaphor, which is warranted by the following feature structure, (32b), in which the R-node is unattached, allowing it to be used only in a transitory step of a derivation.

(32) a.

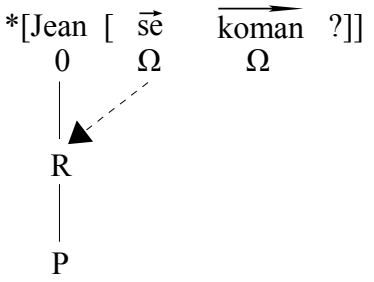


b.



On the light of what precedes, let's see how the grammar deals with a *wh*-predicate, such as *Koman Jean ye?* cf. (31a). (33a) must obviously be the natural input for this sentence, since *se* and the *wh*-element, inherently a vector, perfectly pair up. A direct evidence is the fact that (33a), unlike (33b), is acceptable as an echo question, which uses a pitch accent presumably to end the derivation, despite the OCP effect, a phenomenon frequently observed in other grammars (see my past research cited above). It should be emphasized that (33b) contains a fatal feature mismatch, Φ vs. Ω, which natural grammar generally avoids.

(33) a.



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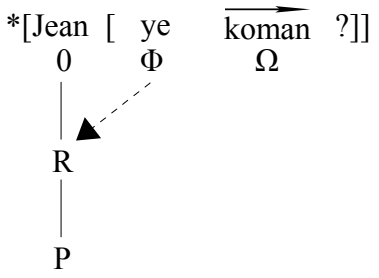
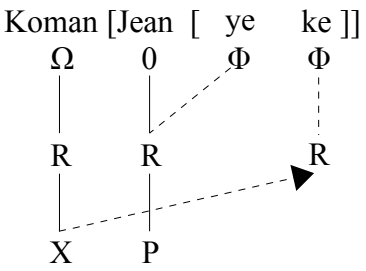


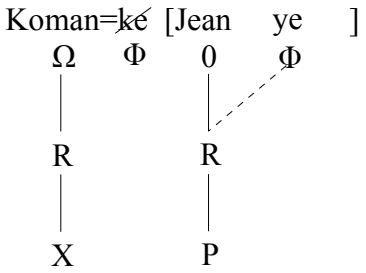
Input (33a), though perfect, is a dead-end that may yield nothing more than an echo question. We know that normally OCP violation is repaired by moving the *wh*-element out of the problematic domain. A scalar complement would adjoin to the subject, while a vector would move to the left edge of the clause (cf. Desouvrey 2000, 2007, 2008a,b). However, if the head is as well a vector, as is the case of (33a), the *wh*-complement cannot move to out-scope it. To exit this dead-end, the grammar resorts to the relativization strategy in a new alternative input. Thus, instead of the natural input (33a), the *wh*-element is generated as an independent structure, while its natural position is held by a proxy, the object relative pronoun, as shown in (34). This structure as well is incorrect, however, since it contains the same kind of feature mismatch as (33b), namely Ω vs. Φ. The fact is, in (34) a wrong lexical element is computed. Indeed, there exists a scalar allomorph of *se*, *ye*, which can be correctly merged with the relative pronoun, as shown in (35a). This explains the surprising fact that a scalar element can cooccur only with a moved vector, a tricky phenomenon that is the source of many incorrect analyzes. In (35a) relative *ke* has its R-node attached and is therefore a pronoun, otherwise the ban on line-crossing would be violated. Relative *ke* must close up with its antecedent, to which it adjoins, and is deleted to avoid the feature clash, as shown in (35b) (cf. Desouvrey 2008a). Notice that the terminal features X and P being not in the same plane, there is no line crossing in the representation.

(34) * $\overrightarrow{\text{Koman}}$ [Jean [$\vec{\text{se}}$ ke]]
Ω 0 Ω Φ

(35) a.



b.



It is important to note that the buffering process must be used anyway, even with a *wh*-locative. Consider the sentence in (36). My assumption is that auxiliaries are all vector, and *se* just mimics them. If one replaces the locative NP by an appropriate *wh*-element, input (37a) obtains. Just as in (33a), w*h*-movement is forbidden, since the vector auxiliary must preserve its scope. Therefore, *wh*-fronting can only be realized via relativization, which would fail if the vector AUX and the scalar relative were to be merged, as shown in (37b). Since the auxiliary has no scalar allomorph, the mismatch problem is avoided by merging *ye* with the relative, as shown in (37c). To put it another way, *ye* comes to serve as a buffer between the relative and the auxiliary. Being not a vector, *ye* can be controlled by the subject through the auxiliary, and as usual, the scalar relative moves to the *wh*-operator and is then deleted.[8] What is tricky in this type of construction is that the relativization strategy must be coupled either with a morpheme alternation (*se* to *ye*) or a morpheme insertion (*0* to *ye*), what accounts for the fact observed in Déprez (2000) that *se* and *ye* are not in perfect complementary distribution.

8 Notice that in (37d) the trace is shown for the reader's convenience, and has no theoretical existence. Furthermore, after the movement of the relative, *ye* comes to be adjacent to the auxiliary and is seemingly in a bad complement relationship with it (* Ω vs Φ). However, this may not matter, since at this point the derivation reaches is maximal extension, namely 3 (see Desouvrey 2007).

(36) Ti-kongo te Canada.
Ti-kongo PP Canada
'Ti-kongo was in Canada.'

(37) a. Ti-kongo $\overrightarrow{te}$ $\overrightarrow{kibò}$?
0 Ω Ω
Ti-kongo PP where

b. * $\overrightarrow{Kibò}$ [Ti-kongo [$\overrightarrow{te}$ ke]]
Ω 0 Ω Φ

c. $\overrightarrow{Kibò}$ [Ti-kongo [$\overrightarrow{te}$ [ye ke]]]
Ω 0 Ω Φ Φ

d. $\overrightarrow{Kibò}$ =~~ke~~ [Ti-kongo [$\overrightarrow{te}$ [ye *t*]]]
Ω Φ 0 Ω Φ

As a way of conclusion to this section, let us tackle the following puzzle. HC has three locative *wh*-elements: *kibò*, *kote*, and *kikote* 'where'. While *kibò* and *kikote* are equal and interchangeable in all contexts, *kote* (often reduced to *kot*), as a predicate, shows a slightly different pattern in that it allows a *ye*-less *wh*-question. This is illustrated in (38) and (39).

(38) a. Kote Jean?
Where Jean
b. *Jean kote?
c. Kote Jean ye?
'Where is Jean?'

(39) a. *Kikote / kibò Jean?
Where Jean
b. *Jean kikote / kibò?
c. Kikote / kibò Jean ye?
'Where is Jean?'

Structures (38a) and (38b) consist of the merger of a head with a complement. It is a matter to find out of the two merged elements which one is the head. Since both elements can be either an

argument or a head, it must be the case that the notion of head is merely a function of the relative positions of the involved elements. Since HC is a rigid SVO language, it is natural to suppose that in a merger of two elements, the left-side one is the head. If so, (38b) and (39b) are excluded, since the unspecified head, *Jean*, cannot match its complement, as seen above; cf. *H(0) vs. C(f). Instead, the derivation must proceed from an alternative input provided by the relativization strategy. In fact, the relativization would yield (40a), which is ill-formed for the same reason as (38b) and (39b), since the head *Jean* cannot take the Φ-specified relative as a complement. To avoid this problem, the grammar must use scalar *ye* to absorb the feature of the relative pronoun. In other words, *ye* takes *ke* as its only argument and Jean as its antecedent, as shown in (40b). The scalar relative moves to its antecedent, the *wh*-vector, and then is deleted, as usual, to signal the mismatch, yielding (40c), the desired result.

(40) a. *Kote [Jean ke]
Ω 0 Φ

b. Kote [Jean [ye ke]]
Ω 0 Φ Φ

c. Kote= ~~ke~~ Jean ye?
Ω Φ 0 Φ

Naturally, such a derivation to avoid a misplaced head is too costly. If so, the grammar may avoid it by directly assigning the left side position to the specified element at the building stage, which yields (38a). The latter is the mirror-image of (38b) and does not need any derivation, since the head is now specified. Now it remains to explain why the mirror image of (39b), namely (39a), is not grammatical. I claim that the difference between (38) and (39) is that *ki kote* and *ki bò* 'what side/place' are bi-morphemic, while *kote* 'there/where' is made up a single morpheme. Both bò and *kote* are locative adverbs or nouns that can be used in various contexts. In addition, *kote* is also a locative relative pronoun and an interrogative pronoun, as seen in (41), just like English *where*, which can be either a relative or an interrogative element.

(41) a. Nan peyi (kote) Jean ale a, travay pa difisil pou jwenn.
In country (where) Jean went the, work not difficult for find.
'In the country where Jean went, work is not difficult to find.

b. M se oun pov k'ap trenen tou patou, kote m pase m se etranje.
I SE a poor that ap hang about everywhere, where I pass I SE stranger.
'I am a poor person that is hanging about everywhere, wherever I go, I am a stranger.' (from a popular song)

So, if the *wh*-elements in (39) are bi-morphemic, two mergers take place, as shown in (42a). The mirror image would be (42b) (= 39a)). It appears that this derivation is ambiguous in that speakers would parse it as (44c), a structure with a completely different meaning, where *Jean* is a the complement of *bò* (or *kote*). As discussed in Desouvrey (2007), natural language grammars precisely try, at various degrees of success, to avoid such structure-building ambiguity in a derivation, hence the exclusion of (39a).[9]

(42) a. *[Jean [ki bò]
Jean what place
b. *[[ki bò] Jean]
c. Ki [bò Jean]
What place Jean
'What are Jean's whereabouts?'

In this section, I show that the relativization strategy is used because of the impossibility to move a lower vector over a higher vector. In addition, a *se*-to-*ye* alternation must take place to avoid the mismatch of the relative pronoun with *se*. In other cases, *ye* is inserted (even in non equative structures) because a 0-specified subject or a vector auxiliary cannot take the Φ-specified relative pronoun as a complement.

5. More on *wh*-extraction

The fact that *wh*-predicates cannot remain in situ sharply contrasts with verbal predicates in which *wh*-complements can either remain in situ or move to the front of the clause, as seen in

9 I am not saying there are no ambiguities in natural languages. Rather some ambiguities resulting from perhaps a non-crucial derivation, as is the case of (44), a type of garden path sentence, are eliminated. That is, a normal derivation with the relativization strategy is always possible, but the grammar would use the shortcut, if it were not to give rise to an ambiguous sentence. Perhaps, if the other alternative does not exist, the derivation would proceed despite the ambiguity (see Desouvrey 2007 for a similar case in French).

(43).

(43) a. Marie bo kimoun?
Marie kiss who?

b. Kimoun Marie bo?
'Who did Marie kiss?' (a and b)

c. Ou rete kibò?
You live where

d. kibò ou rete?
'Where do you live?' (c and d)

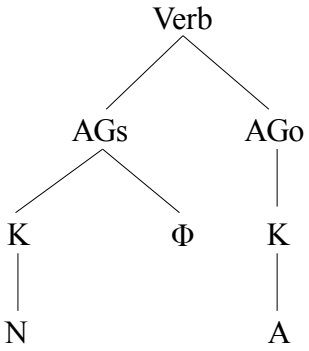
e. Dam nan vini koman?
Lady the come how

f. Koman dam nan vini?
'How did she come?' (e and f)

Suppose that HC verbs are scalar and their AGs node only contains a bare Φ-node with no actual phi-feature extension and a case node that holds the nominative feature. As for their AGo node, it extends only to a K-node, then to accusative case; there is no Φ-node on the object side, as shown in (44a). On the other hand, the tree-structure of a *wh*-operator consists of a bare K-node and the referential scheme, at the root of which is omega, as seen in (44b). On this view, it is expected that verbs can take any scalar subject, 0- or Φ-specified, but not *wh*-subjects, since their Φ-node would clash with the operator Ω-node. They support any kind of complement compatible with their accusative case, since AGo includes neither an Ω-node nor a Φ-node, just like French and English verbs (cf. Desouvrey 2007, 2008a).[10] Notice that the referential branch do not interfere with case feature, as its nodes appear on a different plane.

10 HC differs from French and English-like languages whose *wh*-operators must contain at least a bare phi-node, which enables them to appear in subject position of all verbs.

(44) a.



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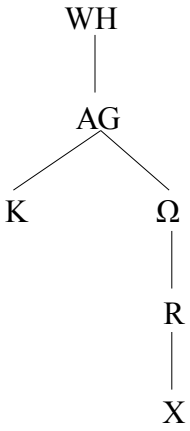
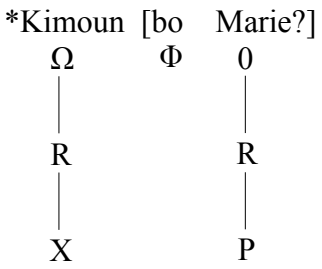


Under this view, sentence (45a) is correctly ruled out, since the Φ-node of the verb clashes with the Ω-node of the operator with which it tries to pair up. (We may point out that, unlike *se*, the verb needs two arguments, a subject and a complement, and therefore it is the head of both.) In fact, structure (45a) cannot be generated by the grammar; instead the subject relative pronoun is merged with the verb, yielding a restrictive clause to the operator, as seen in (45b). Notice that under this view of relativization, the operator is a stand-alone element in the structure; it assigns a R-feature to the relative pronoun, which is the true argument of the verb. To put it differently, the relative pronoun is acting as a buffer between the Φ-node of the verb and the Ω-node of the operator.

(45) a.



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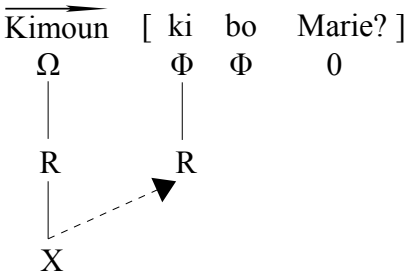
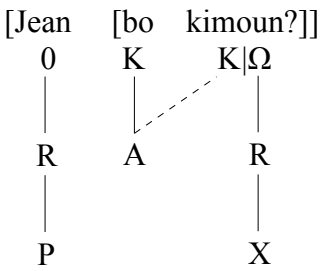


Unlike *wh*-subjects, *wh*-objects merge normally with verbs. Having no Φ-feature on its AGo, the verb sees only the K-node of the operator, to which it assigns accusative case. Structure (46) is thus perfect. It is important to note that unlike languages like French or English, *wh*-operators are not specified for case and therefore they may not move under an accusative OCP with the verb (cf. Desouvrey 2000, 2005, 2007). The question is how and why object operators in HC can optionally appear to the front of the clause.

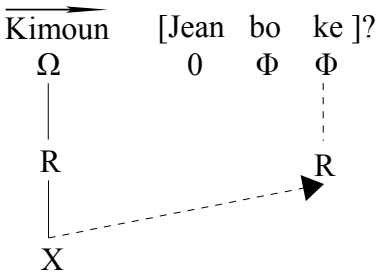
(46) a.



In HC, *wh*-complements can only be raised by relativization. As in the case seen above, the verb merge with relative *ke*, forming a restrictive clause to the operator, as seen in (47a). The relative pronoun adjoins to its antecedent and then is deleted to signal the mismatch, as seen in (47b). This operation of fronting of *wh*-operators, which need not take place, is an effect of the harmonic process that occurs in natural languages, presumably to ease its acquisition. In a given

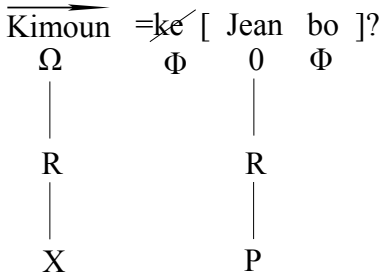
class of syntactic elements, or paradigm, if a constraint or an operation applies to one element, over time it will apply vacuously to all other elements as far as no other constraints are violated in the process. In some languages, certain class of speakers may be resistant to an harmonization, which gives rise to dialectal variation.

(47) a.



(input)

b.



Consider now the case where a *wh*-element is a noun complement. Since NPs are 0-specified at the root of their referential branch, it is predicted that, as a head, they cannot merge with *wh*-elements. This prediction is indeed fulfilled, as can be seen in (48b), which might be acceptable as an echo-question. Unlike (48a) in which both the head and the complement are 0-specified, (48b) shows a 0-specified head trying to pair up with an Ω-specified complement.

(48) a. Paul dechire liv Marie a.
Paul tear book Marie the
Paul tore Marie's book.

b. ?*Paul dechire liv kimoun?
Paul tear book who?
Whose book did Paul tear?

Interestingly, extraction by relativization may not be possible either, since relative pronouns

are Φ-specified, and therefore cannot be selected by the unspecified head noun, as seen in (49). In such a case, a well formed *wh*-sentence can only be obtained by using a personal pronoun (0-specified) instead of the relative pronoun, as seen in (50), which is the desired output. As in the cases seen above, the *wh*-element is factorized, so to speak, but is duplicated by the third person pronoun instead of a relative pronoun. Being not a relative anaphor and having no case feature, the third person pronoun must stay in situ.

(49) *Kimoun [Paul dechire [[liv ke] a]]
Ω 0 Φ

(50) Kimoun [Paul dechire [[liv li] a]]
Ω 0 0

In the literature, the notion of resumptive pronoun is currently used to account for the appearance of *li* in (52), and more generally for the appearance of any pronoun in the place of a moved element. On this view, common to all versions of generative theory, the object relative pronoun does not exist, and appearance of the subject relative *ki* seems to be another (unrelated) phenomenon named doubly-filled complementizer. In the present theory, however, there is no complementizer and the doubly filled complementizer is nothing but a manifestation of the relativization strategy. A resumptive pronoun cannot exist either in this theory. In effect, it supposes that the lexicon can be accessed in the course of the derivation. In my perspective, this is unlikely. Every element that appear in the output must be present in the input; the only difference possible between the input and the output is deletion of offending materials, which usually appears at the end of the derivation, as a last resort. Simply put, the computational component obeying its own rules creates the simplest input, or natural input, which the syntax works out according to its own requirements. If syntactic constraints cannot be satisfied by movement, the natural input is scrapped away, and the computational component must provide an alternative one with new lexical items, with the proviso that no further meanings are introduced. In other words, the alternative input must be semantically equivalent to the would-be natural input. For instance, since *Mary likes Paul* is a canonical type of English sentence, *Mary likes who* must be a natural input, which cannot give rise to a well-formed sentence for reasons discussed in Desouvrey (2007). The alternative input, *Mary does like who*, does not introduce

new semantics, and can be improved in the syntax. One cannot say that *do*, absent in the input, is introduced lately in the course of the derivation to allow *wh*-movement.

6. Deictic *se*

The sentences in (51) illustrates the fact that the antecedent of *se* may be absent. In such a case, *se* is no longer a member of the predicate; it is rather its subject. It merges with its argument, which is enhanced with omega-feature under (17), just as discussed above. It should be emphasized that the only difference with copular *se* is that the antecedent is intended to be missing.[11] Therefore, just like copular *se*, deictic *se* is not compatible with an adjective predicate. On the other hand, its predicate can obviously be negated and accompanied with TMA.[12]

(51) a. Se (pa) pitit Marie.
It (not) child Marie
'It's (not) Marie's child.'

b. Se (pa) kouzen-m.
It (not) cousin my
'It's (not) my cousin.'

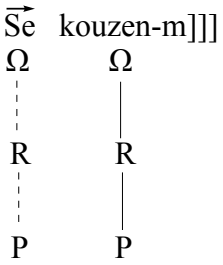
c. Se te boubout li.
It PP lover his
'It was his lover.'

I tentatively take a deictic to be an autonomous referring element with a variable R-feature, whose value is by default that of its argument. On this view, the R-node of *se* is validated and is expanded to a *P*-feature, that of its argument, as illustrated in (52).

11 Déprez (2000) mentions her previous analysis (Déprez and Vinet 1997) in which *se* is composed of two distinct morphemes, *s* and *ye* (and its alleged clitic form *e*), an idea she attributes to Kihm. She refers to a type of popular sentence like *apa li ! é li sa !* 'here he comes, it's him that' (see her footnote 12), where *e* appears instead of *se*. In my opinion, this example does not support such a view; it is a typically popular sentence in which a consonant is omitted, a frequent phenomenon in HC.

12 Certain adjectives can be the argument of deictic *se* (at least in the dialect considered here). In fact, they are most likely French expressions: *se bon*, *se vre* 'it's good/true' (cf. French *c'est bon, c'est vrai*), versus *?se interesan, ?se fou* 'it's interesting /crazy'.

(52)



Deictic *se* appears as well in cleft constructions, which are illustrated in (53). (53a) is a normal predicative sentence, as discussed above. Both its subject and its predicate can be clefted, as shown in (53b) and (53c) respectively. Notice that relative *ki* appears when the subject of the predicate is clefted, while *ye* shows up when the predicate itself is clefted.

(53) a. Paul se doktè.
Paul SE doctor
Paul is a doctor.

b. Se Paul ki doktè.
SE Paul that doctor
It's Paul who is a doctor.

c. Se doktè Paul ye.
SE doctor Paul YE
'Paul is a doctor for sure.'

The question that arises is obviously whether (53a) is the natural input for the clefted sentences. It is easy to see that (53b) and (53c) do not derive from any operation on (53a). Indeed, just like nominal predicates, verb predicates and their arguments can be clefted in HC with the help of deictic *se*, as seen in (54). Thus if (53a) were the input to (53b,c), one would have to derive (54b-d) from (54a), which is not a nominal predicate, hence incompatible with *se*. Since in the present theory no lexical insertion can take place in the course of the derivation, any derivational relationship between a clefted sentence and its non-clefted counterpart must be discarded, whatever the type of the predicate.

(54) a. Jean penture kay la.

Jean paint house DET

Jean has painted the house.

b. Se Jean ki penture kay la.

SE Jean that paint house DET

It's Jean who has painted the house.

c. Se kay la Jean penture.

SE house the Jean paint

It's the house that Jean has painted.

d. Se penture Jean penture kay la.

SE paint Jean paint house DET

Jean really has just painted the house.

The analysis I will propose for cleft constructions is intimately bound with my treatment of relative clauses (cf. Desouvrey 1997, 2008a, and above). The clefted element is generated as the complement of *se* in an independent structure, and it is replaced by a relative pronoun in what would have been the original clause. This is the familiar relativization strategy used by a variety of languages to move elements when direct movement or merger are banned. On this view, the input for (53b) and (53c) must be (55a) and (55b) respectively. It may not be (56), since vector *se* cannot pair up with scalar *ke*, as we know. Object relative *ke* moves to its antecedent, vectorized under (17), and is deleted to avoid the mismatch, as shown in (57a). In (55a), on the other hand, anaphor *se* cannot take the scalar relative as its antecedent, and therefore is deleted in the output, (57b), just as seen above.

(55) a. [Se $\overrightarrow{\text{Paul}_i}$] [ki_i $\vec{\text{se}}$ $\overrightarrow{\text{dokte}}$]
Ω Φ Ω Ω

b. [Se $\overrightarrow{\text{doktè}_i}$] [Paul ye ke_i]
Ω 0 Φ Φ

(56) *[Se $\overrightarrow{\text{doktè}_i}$] [Paul $\vec{\text{se}}$ ke_i]
Ω 0 Ω Φ

(57) a. [Se doktè=~~ke~~][Paul ye]

b. [Se Paul$_i$] [ki$_i$ $\overrightarrow{\text{dokte}}$]

All of the sentences in (54) but (54d) can be handled with exactly the same analysis, namely relativization with *ki* (subject) or *ke* (object), then movement and deletion of relative *ke*. Now in HC, the determiner follows the noun. Therefore, under the present treatment of relative clauses, the question is whether the relative clause adjoins to the determiner or to the nominal. It turns out that both cases are possible in HC, as seen in (58). In (58a), where the relative pronoun adjoins to the determiner, i.e. the NP, the speaker insists that Jean painted the house not another thing, for instance the fence or the garage. In (58b), however, the interlocutor knows that Jean has painted some house he has not yet seen. In this case, the whole relative clause is embedded and appears in a different timing tier (cf. Desouvrey 1997, 2008a, etc.). (Determiner *la* becomes *a* when the preceding element has a vocalic ending.)

(58) a. [Se kay la=~~ke~~] [Jean penture]
It house the that Jean paint.
It's the house that Jean painted (not something else).

b. Se kay=[~~ke~~ Jean penture] a.
It house that Jean paint DET
'Here is the house that Jean has painted.

Let us consider now the structure for (54d). As can be seen, a copy of the verb is clefted while the original clause remains intact, presumably because the verb is not a referring element and therefore cannot be replaced by a relative pronoun. I wish to suggest that the clefted copy becomes a matrix verb whose the complement is the original clause. Therefore, the relative pronoun appears in the *se* clause and its antecedent is the subject of the complement clause, consistent with Desouvrey (1997, 2008a), as shown in (59).

(59) [$\overrightarrow{\text{Se}}$ $\overrightarrow{\text{penture}}$ ~~ke~~$_i$] [Jean$_i$ penture kay la]
Ω Ω Φ

The assumption here is that only phonetic content of the verb is copied, so that the clefted verb has no feature and can be enhanced with Ω-feature under (17), just like NPs.[13] As a result, the

13 Grimshaw (1997) suggests that English light verb *do* results from the failure of lexical verb *do* LCS to be parsed.

verb copy and relative *ke* (a scalar) do not form a good merger, and therefore the relative has to be deleted to signal the mismatch. We may note that in this case, the derivation proceeds anyway, since there is no other way to link both clauses, only the object relative pronoun can be use in complementation.

7. Conclusive remarks

It appears that in the auxiliary paradigm, an element is missing. The grammar of HC avoids this problem by using a referring element mimicking an auxiliary. Anaphor *se* takes a nominal as its only argument, thus forming a new predicate, and relays it to its antecedent. As a result, the antecedent and the argument of *se* become in an equative relationship. The evidence show that *se* is a vector that requires its complement to be enhanced with Ω-feature as well. This analysis provides evidence that *ye* is a scalar allomorph of *se,* which appears in relativization, since *se* cannot pair up with the relative pronoun. *Ye* must also be used in contexts where *se* can't show up, mainly as a buffer between an auxiliary and relative *ke*, absorbing the phi-node of the relative. It is suggested that *se* is used as a full referential element in cleft constructions. Given the non-linear mechanisms, there is no need to postulate multiple element *se.* Rather some features are latent in the tree structure and are activated in the environment where predication is ruled out. It is important to mention that nothing except perhaps (17) is peculiar to HC. The mechanisms used, namely OCP, vector effects, the relativization strategy, the nonlinear nature of coreference are firmly grounded, and have been successively used to account for various phenomena in other grammars.

However, it is unclear whether *se* being a vector is an accident or the grammar crucially needs this feature to perform predication under (17). While it is not possible to answer this question here, one may point out that Israeli Hebrew, a language that uses a similar mechanism for nominal predication with an equative value, presents some striking analogy with the fact

While I agree with this view, I suggest in Desouvrey (2008a) that it may not be the all story. In my view, the non-parsing possibility does exist, though not as a constraint, but as a universal mechanism to be used when needed to create new elements. Our views departs further when Grimshaw claims that light *do* has to exist in English, given the interaction of the constraints. Verb clefting phenomena in HC rather seem to support the idea that English is just 'lucky', so to speak, to have such a verb in its inventory. If *do* did not exist, English would have a sentence like **what said you say?* instead of *what did you say?* On the other hand, if HC had something like English *do*, (44) would be **se penture Jean fe kay la* (*fe* means *to do* or *to make* in HC). In any event, Grimshaw's insight could explain various syntactic reduplications in natural languages.

discussed here, suggesting that the predicative pronoun is a vector as well. For instance, Doron (1983) reports that the pronoun accompanying nominal predicates cannot cooccur with sentential negation and what she refers to as short *wh*-movement, i.e. a *wh*-subject in a simple clause (see her chapter 3). It seems that the presence of sentential negation creates a vector effect between the subject and the copular pronoun.

In addition, I am led to provide an account of relative clauses and *wh*-extraction in HC. The latter heavily builds on the former. It turns out that relative clauses in HC is not significantly different from similar phenomenon in French and English, as discussed in Desouvrey (2008a). I propose that HC has two relative pronouns, *ki* (subject) and *ke* (object), showing that the latter is buried alive, precisely because of its involvement in *wh*-extraction and nominal predication. In effect, *wh*-elements and predicate nominals are vector, whose omega-feature clashes with the phi-feature of relative *ke*. As a result, it has to be deleted. Moreover, under the harmonic process speakers extend the deletion rule to every context, which they do without any resistance from other speakers in the context of a Creole language. As is usually the case with the harmonic process, certain speakers, including bilingual ones, are resistant to its application and therefore still use *ke* in many contexts, which prompts many to incorrectly assume that relative *ke* is not good Creole.[14]

This kind of analysis may lead to a better understanding of Creole genesis. For instance, under the hypothesis of relexification (e.g. Lefebvre 1998), one can look for whether in a suspected substrate an element is missing in the auxiliary paradigm. If so, one has to investigate what strategy is used to overcome this limitation as well as the feature specification of the involved elements.

14 We may note that the educated, hence bilingual, speakers refuse to consider themselves as competent speakers of the Creole language, hence their obsession of a pure variety never exposed to any contact with French. The assumption seems to be the following: if you don't speak French (i.e. illiterate in Haiti), you are a legitimate speaker and whatever you dare to say in Creole should be the rule; performance mistakes and inexact knowledge do not matter. As it is saying, the dominant class, under the appearance of nationalism, uses the Creole to make the people dumb (*dekonen*).

References

Aronoff, Marc (1976). *Word formation in Generative grammar.* Cambridge: MIT Press.

Chomsky, Noam (1995). *The Minimalist Program*. MIT Press, Cambridge, Mass.

DeGraff, Michel F. (1992). The syntax of predication in Haitian. In *NELS* 22.

DeGraff, Michel F. (1997). Nominal Predication in Haitian and in Irish. *WCCFL* 16.

Déprez, Viviane (2000). Haitian Creole SE: A Copula, A Pronoun, Both or Neither?. In *Recent Developments in Creole Studies*, D.Adone ed., Max Niemeyer Verlag, Tubingen, 135-173.

Déprez, Viviane, and Marie-Th. Vinet (1997). Predicative Constructions and Functional Categories in Haitian Creole, *Journal of Pidgin and Creole Languages*,12:2, 1-32, John Benjamin, Amsterdam.

Desouvrey, Louis-H. (1996). Case Tier, Clause Structure and the Nature of the Complementizer Trace Effect. Ms.

Desouvrey, Louis-H. (1997). Relativization in French without Complementizer. Proceedings of CLA 1996. Calgary Working Papers in Linguistics.

Desouvrey, Louis-H. (2000). Romance Clitics and Feature Asymmetry: An Autosegmental Based-Approach. Doctoral dissertation, UQAM.

Desouvrey, Louis-H. (2002). Adverbs, Negation and OCP Effects. www.semanticsarchive.net

Desouvrey, Louis-H. (2003). The Proper Treatment of Coreference Relations. www.semanticsarchive.net.

Desouvrey, Louis-H. (2005). Romance Clitic Clusters: The Case Connection. In Heggie, L. and F. Ordóñez (eds), *Clitic and Affix Combinations*. Amsterdam: John Benjamins.

Desouvrey, Louis-H. (2006). Underspecification and Long-Distance Antecedent: The Case of Chinese Ziji. www.semanticsarchive.net

Desouvrey, Louis-H. (2007). Wh-Interrogatives: The OCP Cycle. www.semanticsarchive.net.

Desouvrey, Louis-H. (2008a). Vector Effects on Wh-Interrogatives. http://ling.auf.net/lingBuzz/000755/ and www.semanticsarchive.net.

Desouvrey, Louis-H. (2008b). Superiority Effect and Clitic Placement in European Portuguese. http://ling.auf.net/lingBuzz/000764.

Doron, Edit (1983). Verbless Predicates in Israeli Hebrew. http://pluto.huji.ac.il/~edit/edit.

Grimshaw, Jane (1997). Projection, Heads, and Optimality. Linguistic Inquiry, 28,3, 373-422.

Lefebvre, Claire (1998). *Creole Genesis and the Acquisition of Grammar: The Case of Haitian Creole*. Cambridge University Press, Cambridge, UK.

Lumsden John (1992). Underspecification in Grammatical and Natural Gender. *Linguistic Inquiry*, 23, 469-486.

Lumsden, John. 1990. The Bi-Clausal Structure of Haitian Clefts. *Linguistics*, 28:741-759.

Spears, Arthur K. (1990). Tense, Mood, and Aspect in Haitian Creole Preverbal Marker System. In V. Singles ed., *Pidgin and Creole Tense-Mood-Aspect Systems*. John Benjamins, 1990.