

PREDICATE RAISING AND SEMANTIC TRANSPARENCY IN MAURITIAN CREOLE
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0. Introduction *)

In this paper I wish to present a case study of Creole development. The general thesis is that a paramount factor in the genesis and early development of a Creole language is the tendency to maximize semantic transparency (1). A Creole language is a composite product of native transmission (the source language or substrate input), of borrowing (the target language or superstrate input), and of linguistic innovation. It is, in particular, the latter contribution, that of innovation, which distinguishes Creole languages from ordinary, non-Creole ones. Innovation occurs in two forms: it consists in the re-analysis and re-interpretation of existing linguistic constructions and the reshaping of lexical meanings, i.e., in the remodelling of substrate and/or superstrate input, and in the spontaneous creation of totally new means of expression. Our thesis is that both forms of innovation are guided and constrained by the principle of maximization of semantic transparency.

A definition of the notion of semantic transparency is not easy to give. Intuitively, what is meant is that a semantically transparent expression, so to speak, bears its meaning on its face. Thus, an expression in some language structured in the following way, where "#" indicates word-boundary, and "-" morpheme boundary:

(1) # see - possible - cause - present - continuative - 3sg
A-nom # B-acc # C-dat

would be considered a great deal less transparent than, e.g.

(2) # A # now # continuously # cause # C # can # see # B #

Attempts have been made in Seuren & Wekker (1985), Seuren (1986), to provide something in the way of a more operational definition

of semantic transparency. It is said that semantic transparency is enhanced by uniformity, simplicity, and universality of the expressions employed. Uniformity implies identity of expression for identity of meaning: no arbitrary word or morpheme classes, and sameness of structural position for identical semantic or functional roles. Simplicity means minimal structural processing in the relation between surface structure and semantic analysis, and also a maximization of perceptual clarity. Universality implies a maximal use of expressive means that are least marked from the point of view of linguistic universals. The simplicity factor will eliminate morphological structures and processes, if it is true that morphology represents a separate level of grammatical processing (2). It is, anyway, remarkable that Creole languages are characterized by a virtually total absence of morphology. Given this, the uniformity criterion dictates that word order will be largely fixed so that the functions of subject, object, indirect object, will be uniformly marked by the position of the constituent with respect to the verb. The criterion of perceptual clarity will dictate a preference for the (fixed) order Subject-Verb-Object (SVO) (with the indirect object either between the verb and the direct object without any preposition, or, preferably, after the direct object and with a dative preposition (3)). Here again we find that Creole languages invariably have SVO word order, and that very few exceptions are allowed, if any at all, with respect to this order. Other predictions can be made, but they would hardly be relevant for our present purpose. What counts here is the functionally motivated principle in Creole languages that they have a rigidly fixed SVO word order. This is what the present case study is about.

We shall see that Mauritian Creole (MC) syntax has a rule of Predicate Raising (PR), clearly taken from French, where it is closely associated with the verb *faire*. This rule, also found in German and Dutch (and associated with a far larger class of verbs than in French), has the peculiarity of being exceedingly opaque, i.e., of leading to constructions which have a badly disturbed order of nominal arguments with respect to the verb and thus require a great deal of processing to relate grammatical surface structures to their semantically analytical representations. In spite of this opacity, MC has borrowed this rule from the superstrate language (French), but, and this is what will attract our attention, in such a way that no violation can occur of the fixed SVO word order. The rule of PR is subject, in MC, to heavy restrictions which, at first sight, look haphazard and irrational, but, on closer inspection, seem motivated by the principle of semantic transparency.

In section 1 the rule of PR will be presented and commented upon, with examples from German, Dutch, and French (although the rule occurs in large numbers of languages). In section 2, it will be shown that PR is a rule of MC syntax. It will then become clear that PR in MC conforms strictly to the principles of semantic transparency outlined above, in spite of the threat of opacity inherent in the rule.

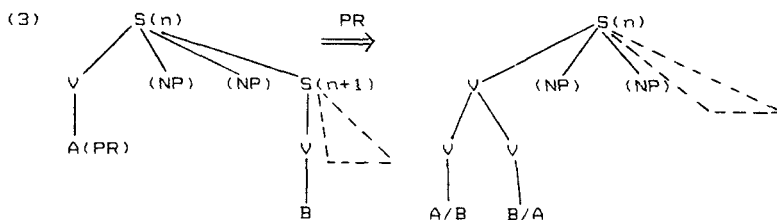
A quick methodological observation seems in order here. There has, in recent years, been a great deal of controversy over the role of spontaneous linguistic innovation or 'creation' vis-à-vis the role of substrate or superstrate influence in the genesis of Creole languages. (The other form of linguistic innovation, i.e., re-analysis of constructions and resemanticization of lexical items, is hardly mentioned at all in this debate.) The controversy was sparked off by combative attempts (Bickerton 1975, 1981) to assign a dominant role to creative innovation, at the expense of transmission and borrowing. At the same time Bickerton criticizes contemporary creole studies for methodological laxity: too often origins of lexical items or grammatical features are sought arbitrarily in substrate, superstrate, or even adstrate languages, including their dialectal forms. Bickerton speaks of the "cafeteria principle": everything is up for grabs. While recognizing that there is much truth in Bickerton's criticism, we must also make two observations against Bickerton. First, any explanation in terms of linguistic input is to be preferred to an explanation in terms of creative innovation, given the simple fact that language acquisition normally is almost entirely a question of take-over, not of creation, which, apparently, puts far heavier demands on a learner. This is true irrespective of the methodological problem of identifying the linguistic source for Creole languages. And secondly, by giving undue preference to creative innovation, Bickerton has simply added to the cafeteria's counters. In practice, with Bickerton's approach, even more is up for grabs than before. One is now free to pick not only from the transmission and the borrowing counter, but also from the creative innovations counter. Bickerton would like us to pick preferably from the latter, but the net effect of this will be simply that creolists feel less inhibited to do so than they, with good reason, did before.

Our position in this debate is a sober one: preference is given to historical explanations in terms of linguistic input from substrate or superstrate languages. The principle of selection is simplicity, or the principle of minimal distance: the simplest and most direct derivation from any of the possible input languages or dialects is the preferred one. (The word

possible in the preceding sentence is of crucial importance. It embodies the indispensable condition that any linguistic derivation that is postulated must fall within the range of historical possibilities, - no mean collateral for any derivational hypothesis.) This simplicity (or minimal distance) principle often involves, apart from the historical factors, a balance between phonological, grammatical, and semantic modifications with respect to the postulated input. It is the contention of the present paper that whatever distance there is between the original postulated input or inputs and the eventual result must, for any solid hypothesis, be seen to conform to the principle of semantic transparency. The innovation which was at work in the coming about of that distance is taken to be constrained by the principle of maximal semantic transparency. And only when all historical explanations fail will one be entitled to make one's careful and hazardous pick from the spontaneous innovations counter in the cafeteria. And here, more than anywhere else, the choice will again be constrained by the criterion of semantic transparency.

1. The rule of Predicate Raising

PR is a rule, frequently found in the languages of the world, whereby the verb of a complement clause or subject clause is raised from that clause into the higher clause and is united with the higher clause verb under a complex V-node. The lower S-node is eliminated, and all material dominated by it is re-attached to the higher S in the order of occurrence (4). In the following I shall adopt McCawley's (1970) hypothesis of underlying VSO-order, which makes for a streamlined and unified description of the rules of PR (5). The general format of the rule is as follows:



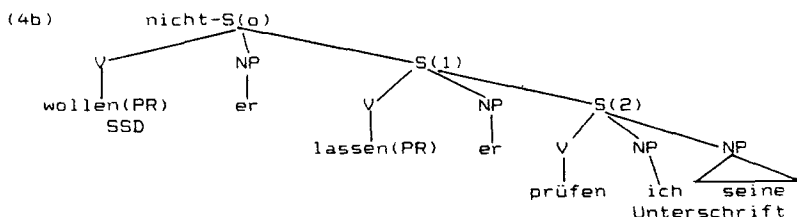
That is, on the S(n)-cycle the S(n)-verb A triggers PR. The lower

verb B is attached to the right or to the left of A (depending on whether we have right-PR or left-PR), and any material under S(n+1) is reattached under S(n) starting with the original position of S(n+1).

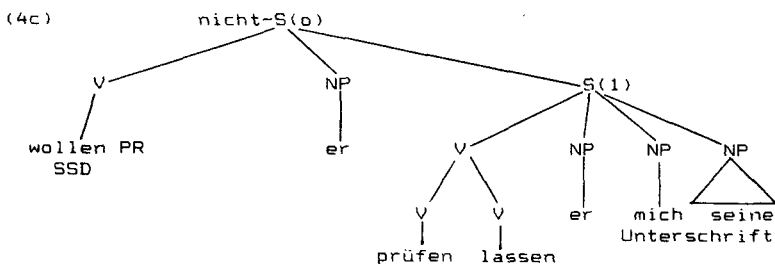
The rule is rampant in German and Dutch. German has left-PR but Dutch, like French, has right-PR. Let us consider a few German and Dutch examples. (In order to avoid unnecessary complications we shall invariably take subordinate clauses in these two languages, since in main clauses the finite and infinite parts of the verb are separated in virtue of a special rule for main clauses.) Take the German clause:

- (4a) ... weil er mich seine Unterschrift nicht prüfen lassen
 because he me his signature not check let
 wollte
 wanted
 (... because he didn't want to let me check his
 signature)

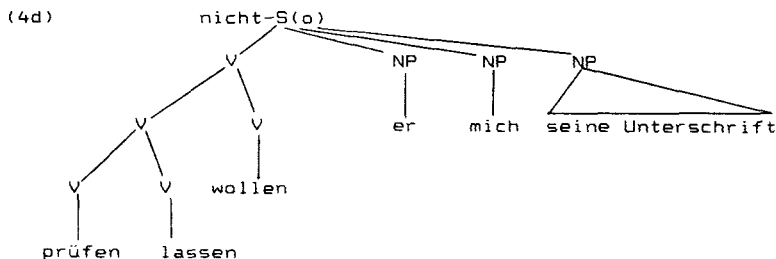
The derivation is as follows. Let (4b) be the semantic input structure:



For simplicity's sake the negation (nicht) is hyphenated with S(0) (the correct treatment of negation is not our concern here). The S(0)-verb *wollen* induces ('triggers') two cyclic rules, first Secondary Subject Deletion (SSD) - often also called "Equi-NP-Deletion" -, whereby the lower subject is deleted under certain conditions of identity, and secondly PR. The S(1)-verb *lassen* induces just PR (6). The S(2)-cycle passes vacuously; on the S(1)-cycle PR is applied, so that the tree now looks as follows:



S(2) has disintegrated: Its verb is united with the S(1)-verb, and its two NPs are now new arguments of S(1). (The nominative form ich ("I") has been replaced by the accusative form mich ("me"). The details of this process are not discussed.) We see that the lower verb (prüfen) has been attached to the left of the higher verb (lassen). The next cycle, S(0), gives first SSD, whereby NP (er) of S(1) disappears, and then PR:



A postcyclic rule will then move the whole V-cluster to the far right, and the morphology will take care of the proper form in the finite verb wollte (we have neglected tense).

The corresponding Dutch example is:

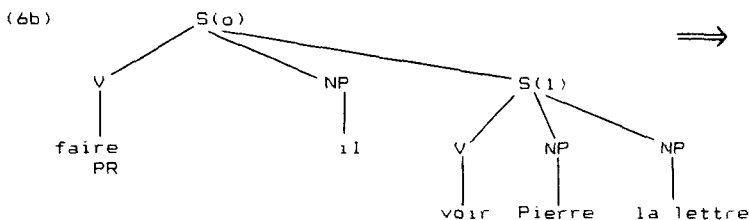
- (5) ...omdat hij mij zijn handtekening niet wilde laten
 because he me his signature not wanted let
 kontroleren.
 check

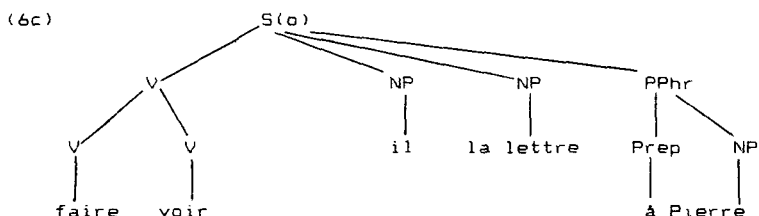
Due to the fact that Dutch has right-PR, the order of the verbs in the eventual verbal cluster is the mirror of what we find in German. Other than that, the derivation is identical.

French, like Dutch, has right-PR. But the rule is much more restricted in French than in either German or Dutch (7). In French, PR is obligatory for **faire** (make, do), and optional for **laisser** (let), **voir** (see), **entendre** (hear), **envoyer** (send) – the latter three with heavy restrictions. Some isolated idiosyncratic cases are probably also best analysed with PR, such as **donner à boire/manger** (to give to drink/eat). It is a regular feature of PR in the languages where it occurs that if the lower S(n+1) is transitive, its subject turns up as a dative, after PR in S(n). French clearly shows this feature, at least when S(n+1) is not passivized, in which case the semantic subject turns up as an agent phrase, with the agentive preposition **par** (by). Another regular feature of PR across languages is the fact that there tends to be no passive morphology when PR applies to a passivized S(n+1) (8). French thus has both (6a) and (7a):

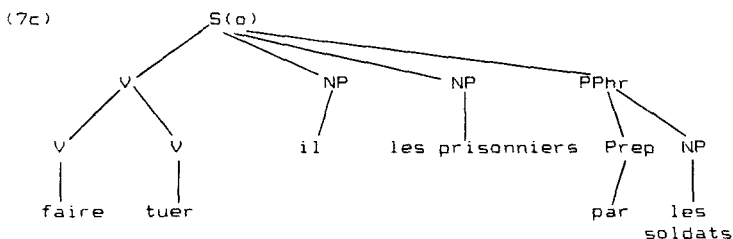
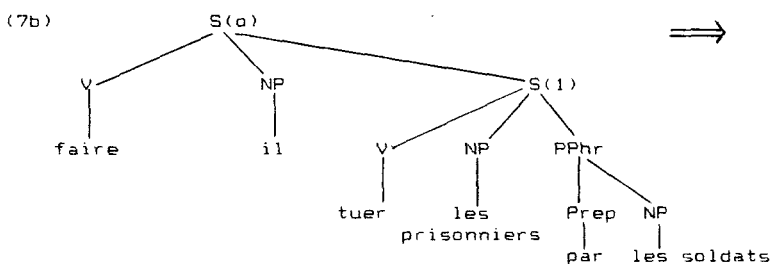
- (6a) Il fera voir la lettre à Pierre.
 he will-make see the letter to Pierre.
 He will make Pierre see the letter.
- (7a) Il fera tuer les prisonniers par les soldats.
 he will-make kill the prisoners by the soldiers.
 He will have the prisoners killed by the soldiers.

The former is derived from (6b), resulting in (6c) (neglecting tense):





The derivation of (7a) is analogous, but with S(1) passivized (without passive morphology):



It will be clear that PR is the opposite of a semantically transparent rule. In Dutch and German it is quite normal for PR to operate repeatedly on successive cycles. If on each application one or more nominal arguments are raised to become

nominal arguments of the higher S, the result will be, as is easily seen, that the nominal arguments of all the varying depths are ranged together at one end of the clause, while the verbs are ranged together at the other end. The listener is thus saddled with the task of sorting out which arguments belong to which verbs. In (4a) and (5) there are only two successive applications of PR, and the result is still easy to process and natural. But if PR applies on, say, three successive cycles, while on each cycle new nominal material is acquired, the result becomes stilted and hard to process:

- (8) ...weil ich Johann Maria den Hund die Zeitung holen zu
 because I Johann Maria the dog the paper fetch to
 lassen lehren sah.
 let teach saw
 (... because I saw Johann teaching Maria to let the
 dog fetch the newspaper)

Sentences with three successive PR-applications but without new nominal material taken along on each cycle are much easier and a great deal more natural (9).

- (9) ...weil ich dort stehen zu bleiben versuchen sollte
 because I there stay to remain try had-to
 (... because I had to try to remain standing there)

We may say that (9) is far more transparent than (8), and the difference is brought about by the fact that (8) has a host of NPs strung together as well as a sequence of four verb forms, whereby the listener is faced with the task of reconstructing which NPs belong to which verbs and in which functions. In (9) there is only one NP, which is subject to all four verbs of the verbal cluster. In French constructions like (8) are not possible, given the very restricted set of PR-taking verbs. A sentence like:

- (10) Je lui ai vu laisser faire sortir le monsieur par Jean.
 I him have seen let make go out the gentleman by Jean
 (I saw him allow that the gentleman was made to leave by
 Jean)

is just over the edge, and if instead of the clitic pronoun lui

(him) a full NP is used in the dative, there is not even a grammatical possibility to provide a position for such a dative full NP, due to what may be called "constituent crowding". (The underlying thought would have to be expressed through different grammatical means, not by threefold application of PR.) A double application of PR seems to be the most French can do:

- (11) Il laissera faire sortir le monsieur par Jean.
he will let make go out the gentleman by Jean
(He will allow that the gentleman is made to
leave by Jean)

Yet the French version of PR is not very transparent either, mainly because of the dativeization (with concomitant change in position) of the lower subject when there is also a lower object.

What we now notice in Mauritian Creole is that, on the one hand, the list of PR-including verbs is very much larger than in French (it virtually equals the German list in size), while, on the other hand, the conditions on PR application are so restricted that no semantic opacity will occur, as it does occur in German and Dutch. We shall see that the grammar of MC blocks any PR application where nominal material from different levels of embedding is serially arranged (as in (8) above), while it guarantees that subjects and objects will always find themselves in the appropriate fixed position with regard to their verbs, i.e., in proper SVO-order. Only occasionally will an intransitive subject come to stand to the right of its verb. In the following section we shall have a closer look at the rule of Predicate Raising in Mauritian Creole.

2. Predicate Raising in Mauritian Creole

Before we can demonstrate the working of PR in MC we must first look at another rule of MC, the rule of Verb Syncopation (VS). This is probably a late rule (postcyclic), and removes the final vowel of the verbs that are sensitive to it (10). It is generally said (Baissac 1980: 54; Stein 1984: 74) that syncopation takes place when the verb is followed by a complement:

- (12a) Mo fin mâze.
I perf eat
(I have eaten)

- (12b) Mo fin mât diri-la.
 I perf eat rice-the
 (I have eaten the rice)

This formulation of VS is correct as far as it goes, but incomplete. A more precise formulation is the following: a verb that is susceptible of VS, i.e., marked <+VS>, is syncopated just in case it is not VP-final and not followed by either VP or S.

That is, when V is followed by an indirect or direct object, or by a manner adverbial, or any other constituent belonging to the same VP, V is syncopated (if <+VS>, of course). The well-known indeterminacies or subtle differences observable according to whether a given constituent is inside or outside the VP are clearly reflected by this rule. Thus, in (13a) the advverb boner (early) functions as a purely temporal operator, and is thus outside the VP. But in (13b) it is not so much a temporal operator as a manner adverbial, and is thus part of VP, as is shown by the syncopated form mât (eat):

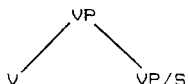
- (13a) Zwazo sâte boner.
 birds sing early
 (Birds sing early.)
 (13b) § Li fin mât boner zordi (11)
 he perf eat early today
 (He has eaten early today)

Likewise, in (14a) the place adjunct "in the road of progress" forms more of a unity with the verb mars (walk) than in (14b), as is made clear in the translation. This difference is apparently reflected in the fact that the place adjunct is inside the VP in (14a) but outside it in (14b):

- (14a) § Nu fin mars dâ simê progre.
 we perf walk in road progress
 (We have taken the road of progress.)
 (14b) Nu fin marsê dâ simê progre.
 (We have walked on the road of progress.)

What interests us more, however, in this context, is the fact that VS does not apply when V is followed immediately by an embedded VP or S, even though the VP or S are themselves

constituents of the VP to which V belongs. That is, in a constellation like:



V is not syncopated. Consider the following examples:

- (15a) § Li ti truve ki mo pa kapav marse.
 he past see that I not can walk
 (He saw that I could not walk)
- (15b) § To pa kong ki ete akolad? (12)
 you not know what be accolade
 (Don't you know what an accolade is?)
- (15c) § Al gete kisanla sa.
 go see who that
 (Go and see who that is)
- (15d) § To truve Kapitén kimanyer li onet. (13)
 you see Captain how he honest
 (You see how honest the Captain is)
- (15e) § Li pe lite pu dibut lor so propre lipye.
 he cont fight for stand on his own feet
 (He is fighting to stand on his own feet)
- (15f) § Zot dispoze fer tu depâs.
 they disposed make all expenses
 (They are willing to take on all expenses)
- (15g) § Li ti degaze mâze.
 he past hurry eat
 (He ate in a hurry)

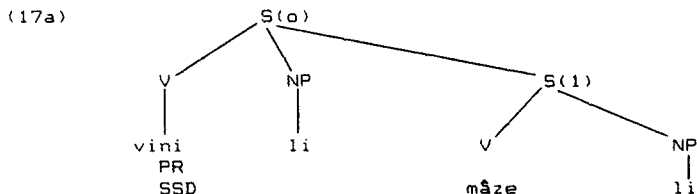
In (15a-e) V is followed by an embedded clause (but see note 13). In (15e) the verb is followed by a complementizer (pu) and its VP. In (15f,g) the verb is followed by another verb and not syncopated. By extrapolation from the other cases we infer that in these cases the verb is followed by an embedded bare VP, precisely like English *You must go* or *I hardly need tell you*. It is examples like (15f,g) that provide the principal clue to PR in MC.

Consider now the following examples:

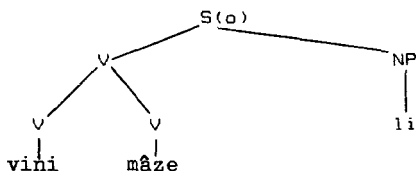
- (16a) Li vin mâze. (*vini)
 he come eat
 (He comes to eat)

- (16b) Papa pe al marse. (*ale)
 dad cont go walk
 (Daddy is going on foot)
- (16c) § Mo fin tan dir sa. (*tade)
 I perf hear say that
 (I've heard that said.)
- (16d) § Bizê kon rekôpâs lelep. (*kone)
 need know reward people
 (One must know to reward the people.)
- (16e) § Li sey kasyet so col. (*seye)
 he try hide his collar
 (He tries to hide his collar)
- (16f) § Li rod tâde. (*rode)
 he try hear
 (He tries to hear)
- (16g) Lapli pe komâs tôbe. (*komâse)
 rain cont begin fall
 (Rain is beginning to fall)
- (16h) § Les dres to kostim. (*lese)
 let iron your suit
 (Have your suit ironed)

One notices immediately that, contrary to (15f,g), in all these examples the shortened verb form is required. This means, in the terms of the analysis as carried out so far, that in (16a-h) the first verb form is not followed by an embedded VP, as we assumed to be the case for (15f,g). But now the question arises: if there isn't an embedded VP, then what do we have here? And the answer appears to be that what we have here is PR, so that the second verb form is united with the first under one complex V-node, as, e.g., in (6c) and (7c) above. Now the first verb satisfies the condition for VS, since it is neither VP-final nor followed by VP or S. Hence it is syncopated. The derivation of, e.g., (16a) is now seen to be as follows (leaving out irrelevant details):

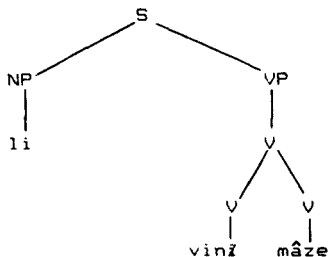


SSD (17b)
PR



The standard procedure (see note 5) will convert this into:

(17c)



Now the verb *vini*, which, as we have seen, is <+VS>, must be syncopated since it is neither VP-final nor followed by VP or S.

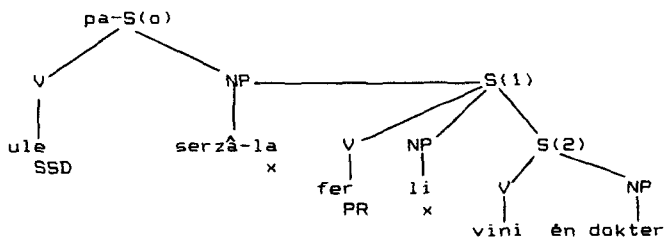
We have observed that in (16a-h) the full verb form is ungrammatical. This means that in those cases PR is obligatory. But this is not so in all cases where a PR-inducing verb is used. In (18), for example, PR is optional:

- (18a) 5 Serzâ-la pa ule fer vin ên dokter. (*vini)
sergeant-the not want make come a doctor
(The sergeant doesn't want to call a doctor.)
- (18b) Serzâ-la pa ule fer ên dokter vini. (*vin)
(id.)

(18a) is attested (Virahsawmy), and PR has applied under *fer* (make), and perhaps also under *ule* (want), although the effect of

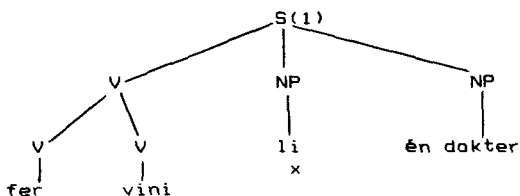
that application is not visible (we shall take it that no PR takes place under ule). The derivation is then as follows:

(19a)



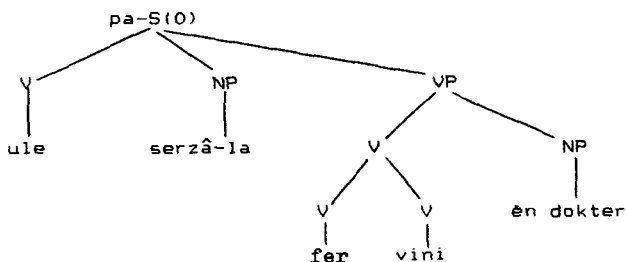
(19b)

PR
⇒

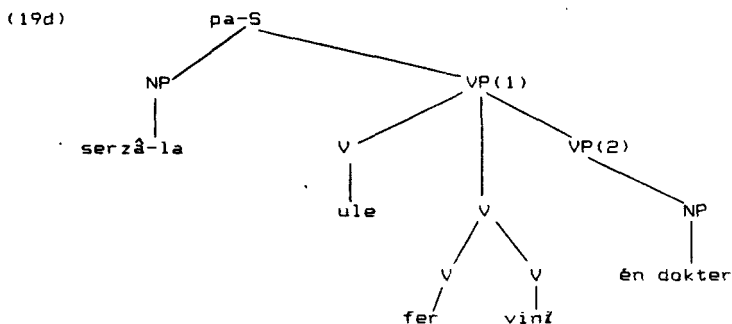


(19c)

SSD
⇒

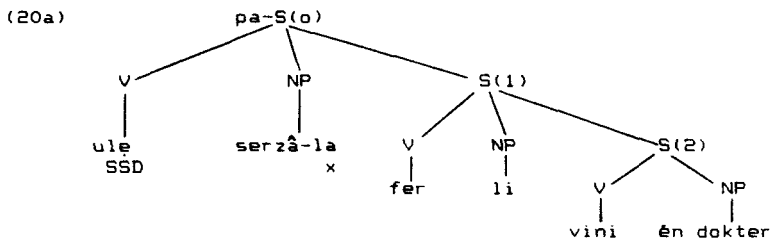


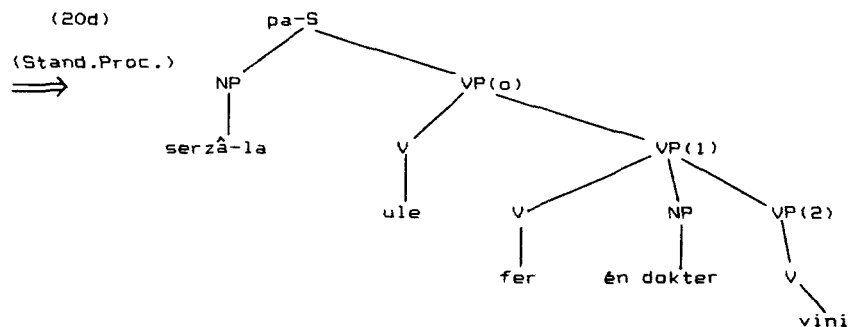
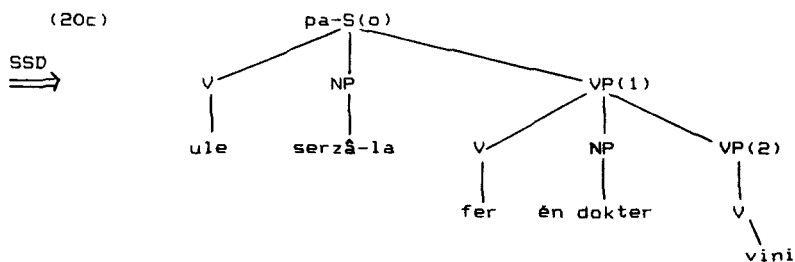
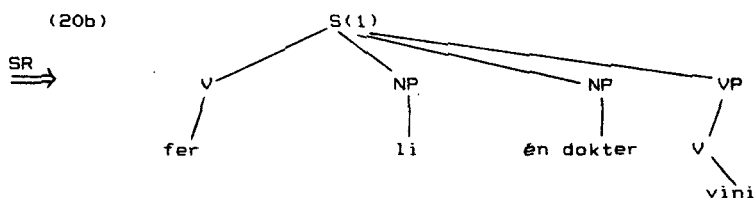
(S(1) becomes VP by the general rule that an S that loses its subject becomes VP.) Standard NP-VP conversion (note 5) now gives:



The final -i of vini is regularly syncoated by VS. (Note that, since ule is marked <-VS> (see note 10), we cannot see whether ule is part of a verbal cluster under V, or followed by VP, as in (19d). Either analysis is possible; under the former, PR has applied on the ule-cycle, i.e., on S(0); under the latter analysis no PR has applied on that cycle, but only SSD, as happens with English want.)

But we also have (18b) as a good MC sentence, as all informants asserted. Clearly, PR cannot have applied there. What has happened in (18b) must then be the same as what we see in its normal English translation: The sergeant doesn't want to make a doctor come. The English verb make induces not PR, but Subject Raising (SR), as is well-known (14). So the derivation of (18b) is as in (20):





Here, clearly, VS does not apply to vini because it is VP-final.
 The impatient reader will now begin to wonder: does the MC verb *fer* induce PR, as in (19), or SR, as in (20)? The answer is that *fer* induces PR, but that does not mean that PR always

materializes, since it is subject to a number of conditions. If these are not fulfilled, not PR but SR is applied. (18) is an intermediate case, where PR is allowed (optional). In general, PR is optional in MC when the lower S(n+1) has only one NP, the subject. This subject-NP then ends up after its own verb, as is shown in (19d), and not in the regular surface position for subjects; i.e., before the verb, as in (20d). But if it ends up after the verb it does so as an object-NP to the complex V-cluster, and VS applies without a hitch.

It must be observed in this connection that some informants expressed a clear preference for (18b) over (18a). This preference vanished, however, when a 'light' NP was used instead of the standard weight *ên dokter*. With *twa* (you) for *ên dokter* we get:

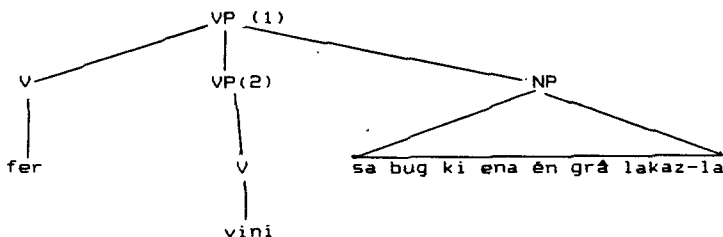
- (21a) *Serzâ-la pa uleⁱfer vin twa.*
 (The sergeant doesn't want to call you.)
 (21b) *Serzâ-la pa ule fer twa vini.*
 (id.)

Here both forms were considered equally acceptable. So we should perhaps formulate the conditions for PR in such a way that when S(n+1) is intransitive and its subject is 'light', then PR is truly optional, but the heavier the subject-NP the greater the obstacle for PR, and SR will be the preferred option. If this is correct we will find that very 'heavy' NP's will effectively block PR. And this is indeed what we find. Consider sentence (22):

- (22) *Ki fer to pa ule fer vini sa bug ki ena ên grâ lakaz-la?*
 why you not want make come that fellow that have a big house-the
 (Why don't you want to call that fellow that has a large house?)

The order of the constituents in this sentence would suggest that PR has applied: we find the same order as in (18a), with the derivation (19a-d). But we note that VS has not applied to *vini* in (22), whereas it has applied in (18a). If the surface structure of (22) were identical of that of (18a), i.e., (19d), then VS should apply and (22) should be ungrammatical. But it is not ungrammatical. What we have here is an instance of what is known as 'Heavy'-NP Shift, a highly universal rule whereby

'heavy' NPs are shifted to the far right. This rule applies late, in the postcycle. We thus take it that (22) has a derivation identical to (20), followed by 'Heavy'-NP Shift, which makes the NP under VP(1) swap places with VP(2), with the result:

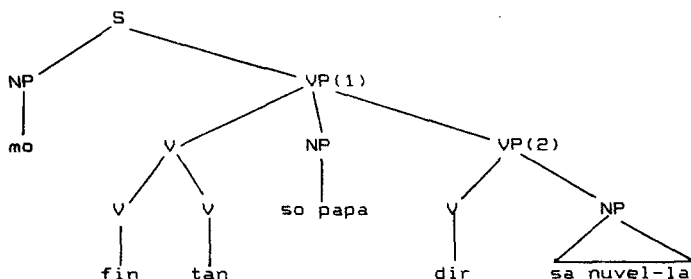


Now we see that VS does not apply to vini, since vini is VP-final; the NP following it is not part of the VP(2) of vini, but of the higher VP(1). We thus conclude that in (22) PR has been blocked on the fer-cycle (S(1)), so that SR has applied (15). There are also cases where PR is categorically blocked and SR is inevitable. Examples are:

- (23a) 9 Mo kuzê pu fer mwa gagn ên bô travay. (*gagn mwa)
 my cousin fut make me get a good job
 (My cousin will get me a good job.)
- (23b) Mo fin tan so papa dir sa nuvel-la. (*dir so papa)
 I perf hear his dad say that news-the
 (I've heard his father tell that news.)

In these two sentences not PR but SR has applied, as is clear from the order of the constituents. And, moreover, PR is not even optionally allowed here. Let us, for the sake of clarity, have a look at the postulated surface structure of (23b):

(24)



The reader will have no difficulty reconstructing this surface structure, following the rules and principles given. He will also note that *tan* is syncopated (from the full form *tâde* (hear), see note 10), and he will see that this is precisely according to the book: *tan* is neither VP-final nor followed by VP or S. If *dir* (say) were <+VS>, which it is not, it would have to be syncopated as well. In fact, *gagn* (get) in (23a), which stands in an analogous position, is syncopated.

(The complex V-node V<V<fin> V<tan> > is motivated by the assumption that the form *fin* is an auxiliary verb, indicating perfect tense, that takes PR (see note 10). Under this assumption it follows that it must always be syncopated. Notice, as has been observed (note 10), that it also occurs in reduplicated form, *fin-fini*, with an intensified perfect meaning. This form is never syncopated, since reduplicated verb forms never are).

We note that if PR had applied in these cases, the subject of the lower verb (*mwa* in (23a), and *so papa* in (23b)) would have ended up after its verb, to be followed by the object-NP. That is, there would have been a stringing together of NPs at one end and of verbs at the other, a situation which we have described as being the opposite of transparent. It thus appears that MC has taken measures to prevent that from happening. It is up to us now to formulate the measures taken. This we can do as follows:

(25)

Conditions on PR in MC

For PR-inducing verbs, PR is obligatory when the lower S lacks an overt subject and there is at most one remaining NP (object) and/or an agent-phrase;
PR is optional when the lower S has no more than one NP

(subject) (but: the 'heavier' this NP, the less PR is acceptable);

PR is blocked in all other cases. When PR does not apply and there is an overt subject-NP in the lower S, then SR applies.

Given these conditions it follows that NPs of varying depth cannot be linearly arranged (as happens regularly in German and Dutch). This is easily shown: if on an S(n)-cycle PR applies, and S(n) has itself an overt NP(1) as subject, then this may be juxtaposed to some NP(2) from the lower S that has disappeared as a result of PR. But now either NP(1) is the subject of the whole clause or sentence, and will thus be moved up to become the P of the NP-VP (=SVO) structure of the sentence by what we have called the standard procedure (note 5), or there is a higher cycle S(n-1). But in that case PR is blocked on S(n-1) (in case the V of S(n-1) induces PR) so that NP(1) + NP(2) cannot as a block be raised into S(n-1). Instead, NP(1) will either be deleted (by SSD) or be raised on its own (by SR), so that the two NPs will never end up in strict juxtaposition in surface structure.

For the same reason the infamous "crossing dependencies" will never occur. Crossing dependencies are a mathematical consequence of unrestricted repeated application of right-PR with new NP-material taken along on each cycle. Dutch is feared for its crossing dependencies. Sentence (5) given above and repeated here, illustrates this clearly:

(5) ..omdat hij mij zijn handtekening niet wilde laten controleren

Hij is subject to wilde and laten; mij is subject to laten; zijn handtekening is object to laten, - as indicated by the crossing lines. Crossing dependencies not only make for dense opacity, they also make for great problems in the theory of grammar if PR is not accepted as a rule of grammar. However, the conditions as given in (25) automatically prevent the occurrence of crossing dependencies. (It is interesting to note that crossing dependencies are also systematically avoided in French, though by different means.)

Further consequences of this specific way of applying PR are that semantic objects of lower Ss always follow their V (except when moved by WH); that semantic subjects (except relatively

'light' ones) cannot follow their V; that any surface manifestation of a V with its subject and its object will have the form SVD.

Only when a semantic object has been made the grammatical subject of a passive S can it end up before its V, i.e., when SR applies. MC does have some form of passive, though it is relatively rarely used, and there is no passive morphology, just as in most other Creole languages. It distinguishes itself from those by having an agent phrase, which other Creole languages usually lack. The preposition used for the agent phrase is *ar* or *ek* (from French *avec* (with)). But this preposition has a primary meaning of "to" as in the dative; the passive agent meaning is secondary and derived, and thus only selected when the dative meaning or function is excluded. Consider the following pair of sentences:

- (26a) *Mo fin tan dir sa nuvel-la ar so papa.*
I perf hear say that news-the by his father
(I've heard that news being told by his father)
- (26b) *Mo fin tan sa nuvel-la dir ar so papa.*
(I've heard that news being told to his father)

As appears from the word order in (26a) and (26b), respectively, PR has applied in the former, and SR in the latter. In the latter, (26b), PR must have been blocked by the conditions of (25). The lower S is passive, i.e., lacks an overt subject. The only reason for the blocking can now be the fact that there are too many nominal arguments left. The agent phrase does not count as an argument, as appears from (25), so the conclusion is that *ar so papa* is a dative and has, therefore, blocked PR. In fact, informants assure me that the dative meaning is the only possible meaning for (26b). In (26a), however, PR has applied, which means that *ar so papa* must be an agent phrase, which is indeed what informants insist on.

3. Conclusion

All this points at one conclusion: there is, apparently, a 'conspiracy' in MC to prevent PR from having opaque effects. The rule of PR appears to be constrained by considerations of semantic transparency. Otherwise, the conditions found for the application of PR would seem ad hoc or even absurd.

If this analysis is correct, we witness a rather radical innovation of MC with respect to its target or superstrate language, French. The fact that MC has the rule of PR at all must be due to superstrate influence: French has the very prominent faire-construction, which is PR. That being so it would be mere speculation to come up with any other historical or innate source, - if we go by the methodological principles outlined in Section 1. But in taking over PR from French, MC has, first, drastically widened the class of PR-inducing verbs, and, secondly, drastically restricted the conditions of application, thus, as we have seen, safeguarding semantic transparency.

To the extent that I have been able to ascertain, the following verbs take PR in MC:

fer (make)	rode (seek)	refize (refuse) (17)
vini (come)	komâse (begin)	pâse (think)
ale (go)	tâde (hear)	deside (decide)
lese (let)	seye (try)	espe (hope)
kone (know)		

(The verb *ule* is not listed. As has been said, we may regard it as taking PR, but since it does not take VS there seems to be no way of deciding.) This list is curious: all the verbs mentioned, with exception of *deside* (decide), have a counterpart in German and Dutch that takes optional or obligatory PR. Apart from *deside*, the MC class is a proper subset of the German or Dutch class of PR-verbs. (And the fact that the German or Dutch equivalents of *deside* do not take PR does seem an idiosyncrasy.) What this means in terms of linguistic universals is hard to say at this stage of our investigations. It is virtually unknown, at present, what sort of verbs induce PR in the various languages in the world, - apart from the well-known fact that verbs meaning "cause" and "let, allow" are always prime candidates. But what governs the selection of the other verbs of the class is still hidden from our view. The facts gathered from MC strongly suggest a universal strategy for widening the class, but no more can be said right now.

This concludes our case study of PR in MC in the light of the transparency thesis for Creole languages.

Notes

*) I wish to thank my Mauritian friends, in particular Dev Virahsawmy and Panchanand Syya, as well as those who attended talks I gave on this subject, for their patience in checking my data and discussing them. It is thanks to them that I now feel sufficiently confident about the data to use them as the factual foundation for the theoretical construct erected in this paper. If I am still wrong about details it is not their fault.

(1) See, e.g., Slobin (1977), (1980); Naro (1978); Haiman (1980), (1983), (1985); Seuren & Wekker (1985); Seuren (1986).

(2) See, e.g., Bayer et al. 1985.

(3) Whereas the perceptual advantage of the SVO order is obvious (subject and direct object are separated from each other by the verb), it is less clear what, if any, perceptual advantage there is in the position or positions found for the indirect object.

(4) For a detailed description and motivation of the rule, see Seuren (1985: 79-86; 172-188).

(5) For the standard procedure, whereby VSD is changed into SVO (or NP-VP), see Seuren (1985: 128-130). (This standard procedure is an automatic consequence of the grammatical processing of Tense.)

(6) For an almost complete list of the forty-odd verbs in Dutch that induce obligatory or optional PR, see Seuren (1985: 184). The German list is largely similar.

(7) For a detailed description for PR for *faire* and *laisser*, see Seuren (1972), which also contains a critique of Kayne's treatment of the same phenomenon, as published in Kayne (1975: 202-220).

(8) Dutch does occasionally allow for passive morphology under PR, under heavily constrained and ill-understood conditions.

(9) One can, of course, also say:

(i) ...weil ich versuchen sollte, dort stehen zu bleiben.

since PR is optional for *versuchen* (try). SSD, however, is obligatory for this verb. In (i) only SSD, but not PR, has applied.

(10) An alternation between a full and a syncopated verb form is found in all Indian Ocean French Creoles as well as in the Creole of Louisiana (Stein 1984: 73-74), but the conditions for syncopation differ considerably from one language to another. We are concerned only with VS as it occurs in MC. In MC, verbs ending in *-e* are usually <+VS>; so is *vini* (come) and, though

doubtfully, *sorti* (leave), and, in our analysis at least, *fini*, the auxiliary for perfect tense. Verbs ending in Consonant +y/w +e (e.g. *abitye* (be used to), *kontinye* (continue), *zwe* (play)) do not take VS. Nor do, e.g., *aste* (buy), *aksepté* (accept), *môtre* (show), *ule* (want). Some verbs show morphophonemic alternation: *tôbe/tom* (fall), *râtre/rât* (enter), *vâde/van* (sell), *tâde/tan* (hear), *dimâde/diman* (ask), *reste/res* (live, stay). *Ete* (be) has the null morpheme ("Ø") as its syncopated variant. Reduplicated verbs are never syncopated: *Mars-marse* (take a good walk). The form *fin* (perfect tense) is probably best regarded as the syncopated form of *fini* (lit. finish). It occurs in reduplicated form with intensified perfective meaning: *fin-fini*, and is then never syncopated. (See below, in connection with ex. (24).)

(11) Sentences marked "\$" are actually attested. Almost all of them are from the works of Dev Virahsawmy, Mauritian author and linguist.

(12) The word *akolad* may be taken to be the subject of *ete* (be). We note that *ete* is not syncopated, i.e., reduced to zero (see note 10). We also note that in the rare cases where, in MC, the subject is allowed to follow its verb, VS does not apply:

- (i) *Fin mâze bonom-la?*
 perf eat man-the
 (Has the man eaten?)

This is no doubt because postposed subject-NPs come to stand to the right of the VP whose subject they are, and are not incorporated into it.

(13) This case is intriguing. *Kapitén* is the semantic subject of the lower clause ("how honest the Captain is"), but it has been lifted from its clause into the main clause, and has been replaced by the anaphoric pronoun *li* (he). One would expect *Kapitén* now to be the grammatical (not the semantic) object of *truve* (see), and one would expect VS to apply, giving *truv*. Yet the form attested is *truve*, without VS. What this means is not entirely clear. It would seem that either the rule that lifts *Kapitén* from its clause is postcyclic and later than VS, or, more probably perhaps, VS is sensitive to semantic function. We must leave this question open for the moment.

(14) See, e.g., Postal's excellent study of Subject Raising in Postal (1974).

(15) It may well be mentioned, in this context, that the notion of Verb Phrase is not dispensable in the theory of grammar, as some would have it. On the contrary, the phenomena connected with

VS and PR in MC make it abundantly clear that VP is an essential ingredient in the theory of grammar.

(16) Repeated application of PR in MC is possible, in spite of the conditions given in (25). Take, e.g.:

- (i) *Mo fin sey les dres kostim-la.*
I perf try let iron suit-the
(I have tried to have the suit ironed.)

where PR has applied on the *les*-cycle and on the *sey*-cycle (and, if our analysis of *fin* is correct, also on the *fin*-cycle).

(17) *Syea* informs me that under WH-fronting of an object-NP VS applies normally:

- (i) *Ki to fin tan dir?*
what you perf hear say
(What have you heard being said?)

where *tâde* would be ungrammatical. Only with the verbs *refize* (refuse), *pâse* (think), *deside* (decide), and *espere* (hope) does VS not apply under WH-fronting:

- (ii) *Ki to refize fer?*
what you refuse do
(What do you refuse to do?)

where the syncopated form *refiz* would be ungrammatical. This detail will not be investigated further here.

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