

TENSE AND ASPECT IN MAURITIAN CREOLE

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1.0 In this paper¹ the semantic values and syntactic behaviour of the temporal and aspectual pre-verbal particles in Mauritian Creole French are described. Aspect is considered here solely as a modification of a three-way temporal system (past, present, future). The behaviour of two other items which may occur pre-verbally and which modify the assertion of the speaker are also considered.

The paper has a double purpose. Its primary aim is to describe adequately an area of Mauritian syntax that has been misinterpreted to date.² This description will then serve as a contribution to the description of, if not proto-Creole, then at least the proto-Creole of the French Creole dialects of the Indian Ocean (Réunion, Seychelles, Mauritius, Rodrigues).

I make no claims as to the definitiveness of this analysis. It is of necessity tentative, since it is based largely on data obtained from a very small number of informants³ who, obviously, can only partially represent the entire Mauritian speech community. All are, or have been, resident in New Zealand for varying lengths of time, and all speak French and English. Creole is, however, their preferred vehicle of communication amongst themselves (social gatherings, etc). It is the first language learnt in all cases, and was the language used predominantly in the home (in Mauritius). Some data came from commercially-recorded *ségas* (songs), but all the examples thus obtained were checked against the usage of my informants, or against their knowledge of variations of usage among other more or less identifiable sectors of the Mauritian community. While it seems likely that more data from a wider range of informants would clarify the obscurities that remain, since many of these are undoubtedly factors in the very complex socio-linguistics of Mauritius⁴, I would hope that the broad outline of my analysis will prove to be valid.

2.0 The temporal and aspectual particles may be considered as constituents of the Auxiliary, within a framework (simplified) such as the following

P	→	NS + VS	P	=	sentence
VS	→	Aux + VG	NS	=	nominal syntagm
VG	→	$\left\{ \begin{array}{l} \text{Copula} + \left\{ \begin{array}{l} \text{NS} \\ \text{AS} \\ \text{PS} \end{array} \right\} \\ \text{V} + (\text{NS}) + (\text{PS}) \end{array} \right\}$	VS	=	verbal syntagm
			Aux	=	auxiliary
			VG	=	verbal group
			AS	=	adjectival syntagm
			PS	=	prepositional syntagm
			V	=	verb

Which constituents of Aux may actually occur depends on the subcategorisations of V (or on the presence of Copula), which in the above formulation will be handled in the lexicon in the form of categorial lexical features (e.g. *don(e)* 'to give' : [+transitive, + attributive, . . .], *mâz(e)* 'to eat' : [+tr, -attr, . . .], *al(e)* 'to go' : [-tr, +attr . . .], etc). The lexical features will specify the

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2. Baker 1972:106-110; Corne 1970:13-15.
3. I wish to thank here in particular Mr Vadivel Vencatachellum, whose patience has been little short of miraculous, and also Messrs Ed Hojird, Dev Mooten, Joseph Gaiqui and Abdool Oodally. Any errors of fact herein are attributable solely to the questions I asked, not to any linguistic aberrations on their part.
4. See Baker 1972:5-38.

aspectual compatibilities of any given verb (or of Copula), but these compatibilities are only marginally relevant to this paper. The simplest rewrite of Aux appears to be the following (a more complex version including a constituent Mod (modality) is discussed later).

Aux	→	T + (A)	Aux	=	auxiliary
T	→	{Pres} {Pas} + (Fut)	T	=	tense
A	→	{FutAsp} {Asp} + (Asp)	A	=	aspect
FutAsp	→	{FutInd} {FutDef}	Pres	=	present
Asp	→	{Prog Com PasImm}	Pas	=	past
Pres	→	ϕ	Fut	=	future
Pas	→	ti ⁵	FutAsp	=	future aspect
Fut	→	{a, ϕ}	Asp	=	aspect
FutInd	→	va	FutInd	=	indefinite future
FutDef	→	pu	FutDef	=	definite future
Prog	→	(a)pe	Prog	=	progressive
Com	→	{fin, in, n}	Com	=	completive
PasImm	→	fek	PasImm	=	immediate past

A general constraint is that any given constituent of Asp may only occur once.⁶ There are other constraints, which will be discussed shortly. In fact, not all the combinations of particles that may occur (after all constraints have been observed) do in fact occur for all speakers – in other words, there are some gaps in the system, particularly where *fek* is concerned.

3.0 The Temporal System

Given the rewrite of T:

$$T \rightarrow \begin{Bmatrix} \text{Pres} \\ \text{Pas} \end{Bmatrix} + (\text{Fut})$$

the temporal system of Mauritian includes the Present Tense, the Past Tense, the Future Tense (Pres + Fut) and the Future-in-the-Past (or Conditional) Tense (Pas + Fut).

3.1 The Present Tense

The Present (or the Non-past) is generally “marked” by the absence of any particle:⁷

li mâz so larak ‘he drinks hisarrak’
li vin nuar ‘he becomes black’

3.2 The Past Tense (*ti*)

The Past is marked always by *ti*

mo ti malad ‘I was sick’
mo ti mâze ‘I ate’

5. The transcription of Mauritian used here is that set up in Come 1970. Cf. also the orthography set up for Seychelles Creole French in Corne, in press.
6. The case of *fek fek* is an apparent exception, to be discussed later.
7. Certain verbs, however, are inherently past, at least in some contexts:
li mâke perdi so lavi ‘he nearly lost his life’ (he missed lose his life)
My assertion (Come 1970, p.56, note 6 and paragraph 7.3.9, pp.25-6) to the effect that in negation the completive Aspect particle *fin* may be omitted, now appears to be erroneous, except with *pâkor* ‘not yet’: li pâkor mâze ‘he has not yet eaten’

The presence of *ti* in any given sentence in the main clause often affects the semantics of any aspectual particle in a subordinate clause.

li ti dir mua li pu ale 'he told me he would go'
 lôtâ, ler mo pu al dormi, mo ti plore 'in the past, when I used to go to sleep, I would cry'

3.3 The Future Tense (*a*, ϕ)

The Future is generally marked by *a*, and derives from an underlying sequence of Pres + Fut $\rightarrow \phi + a^8$

In the rewrite of Aux, Fut is marked as being optional:

$$T \rightarrow \left\{ \begin{array}{l} \text{Pres} \\ \text{Pas} \end{array} \right\} + (\text{Fut})$$

This optionality concerns *solely* the choice of Future time. However, even when Fut is chosen, the surface realisation *a* is optional when a Future Aspect particle is chosen. In other words, the Future Aspect (if present) subsumes Future time, and Fut may be rewritten as *a* or ϕ .

This statement is true only on an historical basis. Synchronically, the aspectual nature of the Indefinite Future (or Possible Future) *va* does not appear to be distinguished from the Future Tense, so that *a* and *va*, or *a va*, are stylistic and/or social variants. The use of *va* alone seems characteristic of Frenchified Creole (*va* being phonologically identical to the 3rd singular present of French *aller* 'to go', used also aspectually in French as a *futur progressif*⁹). My informants tend to use either *a* alone, or the sequence *a va*, with no discernible difference of meaning.¹⁰

a (and *va*, *a va*) is used to convey a prediction, by the speaker, of possible future events:

mo a truv u dimê 'I'll see you tomorrow' (as we have just arranged)
 li a gañ en baba 'she will have a baby' (if she isn't careful)
 to a va malad si to mâz sa 'you will be sick if you eat that'
 (speaker supposes so, but there is some doubt)

8 Fut may alternatively be rewritten as *ava*, so that the rules given would then be

$$\begin{aligned} \text{Aux} &\rightarrow T + (A) \\ T &\rightarrow \left\{ \begin{array}{l} \text{Pres} \\ \text{Pas} \end{array} \right\} + (\text{Fut}) \\ A &\rightarrow \left\{ \begin{array}{l} \text{FutDef} \\ \text{Asp} \end{array} \right\} + (\text{Asp}) \\ \text{Fut} &\rightarrow \textit{ava} \\ \text{FutDef} &\rightarrow \textit{pu} \end{aligned}$$

This would entail an obligatory (for most speakers) deletion of *ava* if *pu* is chosen (see now footnote 12). Although I do not wish to make an issue of it here, it is my contention (v. also Corne 1971:102) that Creole languages are Indo-European, or at least, that French Creole languages are derivable from a late 16th or early 17th Century variety of French. In this connection, it is interesting to note that Dubois and Dubois-Charlier (1970) postulate the following structure for the constituent Aux in modern Standard French:

$$\begin{array}{l} \text{Aux} \rightarrow \text{Tps} + (\text{Parf}) + (\text{M}) + (\text{Parf}) \\ \text{Tps} \rightarrow \left(\left\{ \begin{array}{l} \text{Futur} \\ \text{Subj} \end{array} \right\} \right) + \left\{ \begin{array}{l} \text{Prés} \\ \text{Pas} \end{array} \right\} + \text{Pe} + \text{No} \end{array}$$

Tps	= tense	Prés	= present
Parf	= perfect	Pas	= past
M	= modal	Pe	= person
Futur	= future	No	= number
Subj	= subjunctive		

The sequence Futur + Prés produces the Future Tense while Futur + Pas produces the Conditional.

9. Dubois & Dubois-Charlier 1970:105.

10. In Seychellois, *pu* appears to translate the Indefinite or possible Future, while *a (va)* often appears to translate the Definite Future:

u a mâze kamem u pa ule 'you will eat, even if you don't want to'
 letâ sa maladi i nepli pu egziste 'when that sickness will no longer exist'

It may be noted in passing that my data contradicts Baker's assertion (1972:109) that *a va* and *va* are simply contextually conditioned variants (occurring before a verb beginning with *a-*, e.g. *aste* 'to buy'), although this is indeed the most common case.¹¹

The semantic coalescing of *a*, *va*, and *a va* produces some sequences of three Aspect markers, in apparent contradiction to the rewrite of Aux; in this case, for such speakers and in such contexts, Fut is rewritable as $\{a, (a)va, \phi\}$. At the same time, it explains why my informants are doubtful as to the acceptability of sequences of three constituents of A including *pu*.

A constraint on the occurrence of *a* is that the Future Progressive is obligatorily constructed of a sequence Fut + FutInd + Prog (*(a) va pe*), since a sequence Fut + Prog (*a + pe*) is homophonous with *ape* (variant of *pe*, see 4.2 below). A further constraint appears to be that *pa* 'negation' + Future is obligatorily constructed for some speakers of a sequence Fut (ϕ) + FutDef (*pu*) – see below, 4.1.

3.4 The Future-in-the-Past (Conditional) Tense (*ti a*)

The Conditional derives from an underlying sequence of Pas + Fut.

si to ti.aste lavian, li ti a mât li 'if you bought the meat, he would eat it'

The statement above concerning the use of *va* and *a va* as variants of *a* is true here, too; thus, the above sentence may occur as:

si to ti aste lavian, li ti (a) va mât li

Furthermore, the Definite Future (*pu*) may replace the Future or the Indefinite Future:

si to ti aste lavian, li ti (a) pu mât li

with no discernible difference of meaning. Thus the Conditional may be analysed thus:

$$\text{Pas} + \left\{ \begin{array}{l} \text{Fut} \\ (\text{Fut}) + \text{FutAsp} \end{array} \right\}$$

The Conditional Completeive (or Conditional Perfect) is discussed below, 4.3.

4.0. The Aspectual System

Aspect can only exist in Mauritian as a modification of a temporal framework, and is therefore always a product of T (Tense) + A (Aspect), the present tense being unmarked on the surface.

11. Although only marginally relevant to this paper, a number of facts concerning the 3rd person singular pronoun *li* may be noted:

(a) Before any sequence of temporal and/or aspectual particles beginning with *a-*, *li* (as subject) may be optionally replaced by *i*:

si li vini, i a va dâse 'if he comes, he will dance'

i a truve he will see'

i a pu mâze he will eat'

kâ i a n repar so loto 'when he will have repaired his car'

si letâ bô, i a kapav vini 'if it is fine (weather), he will/might be able to come'

Liza, i ape zigile 'Liza is wriggling'

ki to piti ape fer? i ape mâze 'what is your child doing? he is eating'

(b) The sequence *li pa* 'he + negative' may be replaced by *i apa*:

i apa kapav vini 'he is unable to come'

i apa kapav fer so somej 'he is unable to sleep'

(c) One of my informants uses *i ena* 'there is, there are' as well as *ena* (v. Come 1970:40, 8.5.1.4 (a)) and this form also occurs in some *ségas*:

(i) *ena ki koz biê frâse* 'there are (some people) who speak French well'

(Cf. Seychellois (*i*) *ana* 'there is, there are').

Whether this is contextually determined in any way is not clear (this informant is no longer resident in New Zealand), but it is evident that this usage is in any case archaic (cf. Baker 1972:61 n2), since my other informants are unanimous in rejecting *i ena*, in favour of *ena*.

Note also that in Seychellois, the 3rd person singular pronoun (subject) is *i*; *i* may also occur as a "reprise" of a 3rd person singular or plural subject:

ban piti i reste dâ mō lakaz 'the children (they) remain in my house'

dîlo i sal 'the water (it) is dirty'

The rewrite of A:

$$A \rightarrow \left\{ \begin{array}{c} \text{FutAsp} \\ \text{Asp} \end{array} \right\} + (\text{Asp})$$

gives rise to a variety of aspectual combinations, once the general constraint – any given constituent of Asp may occur only once – is taken into account. I will discuss firstly the combinations of Tense and Aspect, including however the Future Tense and the Future Aspect under the same heading:

$$\left\{ \begin{array}{c} \text{Pres} \\ \text{Pas} \end{array} \right\} + (\text{Fut}) + (\text{FutAsp}) + \text{Asp}$$

and then the various combinations of Aspect + Aspect will be dealt with.

4.1 The Aspects of the Future

As noted above (Future Tense), the Future Aspect subsumes Future time, and Fut may be rewritten as ϕ when FutAsp is present:

$$\left\{ \begin{array}{c} \text{Pres} \\ \text{Pas} \end{array} \right\} + \text{Fut} + \text{FutAsp} \rightarrow \left\{ \begin{array}{c} \phi \\ ti \end{array} \right\} + \{a, \phi\} + \{va, pu\}$$

The Indefinite or Possible Future Aspect (*va*) has already been discussed.

The Definite (or Immediate) Future Aspect is marked by *pu*, and is used to convey certainty about the future, about predetermined or regularly scheduled events.¹²

- (a) Pres + (Fut) + FutDef \rightarrow (*a*) + *pu*

mo pu truv u dimê 'I'll see you tomorrow' (as usual)

li pu gañ en baba 'she will have a baby' (she is already pregnant)

to pu malad si to mâz sa 'you will be sick if you eat that' (it is deadly poison)

kâ li vini, li (*a*) pu mâz sa kari la 'when he comes he will (definitely) eat that curry' (he will *have* to eat it)

- (b) Pas + (Fut) + FutDef \rightarrow *ti* + (*a*) + *pu*

This has been discussed above, the Future-in-the-Past (Conditional) Tense. The distinction between the Indefinite Future (*va*) and the Definite Future does not appear to be retained here.

4.2 The Progressive Aspect (*pe* or (*a*)*pe*)

The Progressive is marked generally by *pe*, which has a variant *ape*. Baker (1972:108) states: "An archaic variant of */pe/* is */ape/*. This form is now rarely heard in conversation, but it is not uncommon in the lyrics of Kreol songs known as 'ségas' where it may perhaps be preferred for rhythmic reasons. This appears to be an intermediate form between 'après' [sic] (the only form noted by Baissac . . .) and the current form */pe/*." I can not really argue with this statement, except to say that my informants do indeed generally use *pe*, except in combination with the Immediate Past marker *fek*, when *ape* seems to be preferred.¹³ (*a*)*pe* may mark habitual action, as well as continuing action.

The following combinations of T + Prog occur.

- (a) Pres + Prog \rightarrow ϕ + (*a*)*pe*

mo (*a*)*pe* mâze 'I am eating'

li nek *pe* mâzmâze 'he is always nibbling'

12. The Immediate Future may also be handled by the use of *pre pur* 'to be on the point of': *mo pre pur fini mo larak* 'I am on the point of finishing my (alcoholic) drink' (Corne 1970:42-43, TCA *pur*). It must be noted here that the sequence *a + pu* is suspect wherever it occurs. None of my informants appear actually to use it, except in paradigms produced during work sessions. It certainly is not used at all in Seychellois. If the sequence is in fact agrammatical, then the alternative set of rules given in footnote 8 are correct.
13. In Seychellois, *ape* appears to occur at least as frequently as *pe*, but my data are inconclusive on this point.

(b) Pas + Prog → *ti + pe*

li ti pe sâte 'he was singing'

My informants tend to prefer *pe* following *ti*, rather than *ape*.

(c) The Future progressive is obligatorily constructed with the Indefinite Future Aspect: a sequence Pres + Fut + Prog → $\phi + a + pe$ produces *a pe* which is homophonous with Pres + Prog → $\phi + ape$.

Pres + (Fut) + FutInd + Prog → $\phi + va + pe$

kâ li a vini, mo (a) va pe travaj 'I will be (busy) working when he comes (will come)'

ape does not occur after *va*.

My informants disagree as to the acceptability of a sequence Pres + (Fut) + FutDef + Prog → $\phi + (a) + pu + pe$

? li (a) pu pe sâte 'he will be singing'

It seems probable that a speaker using *(a) va* as a free variant of *a* (Future Tense) would be able to produce *(a) pu* in this context, by the application of the same rule (FutAsp → {FutInd, FutDef}), but I do not know whether this form in fact occurs in everyday usage. One informant is categorical in his rejection of it, on the grounds of "cacophony" and "lack of logical meaning". This second reason seems the more likely explanation, in that there would appear to be a semantic incompatibility between a definite future aspect and a progressive aspect (although a combination of an immediate past aspect and a progressive aspect does occur).

(d) Pas + (Fut) + FutInd + Prog → *ti + (a) + va + pe*

si ban la pa ti vin apel li, li ti (a) va pe mâze aster la 'if that group (of people) had not come to call him (away), he would be (busy) eating right now'

Again, *ti a pe* does not occur (homophonous with *ti ape*, (b) above), and there is the same uncertainty concerning *ti (a) pu pe* as for *(a) pu pe*, (c) above.

4.3 The Completive Aspect (*fin*, *in*, *n*)

The Completive is marked by *fin*, which has two contextually conditioned variants.

in may optionally replace *fin* after all 3rd person (singular or plural) subjects except *li* 'he, she, it'. However, my informants hesitate to accept *in* following *a*, *va*, *pu* and *ti*, and frequently reject such sequences categorically.¹⁴

n may optionally replace *fin* (and does so frequently) following *pa* 'negative', *ti*, *a*, *li*, *mo* 'I', *to* 'you (singular, informal)', *u* 'you (singular, formal, polite)', *nu* 'we', *ki* 'who, whom, which, that'. Less frequently, *n* occurs after *va*, *pu*, and after a shortened form, *zo*, of *zot* 'you (plural), they'.¹⁵

14. The fact that some of my informants sometimes hesitate to reject such sequences as **a va in* is perhaps explainable on the basis of analogy. Since *fin* may occur following, for example, the Future tense (*kâ Zorz a fin repar so loto* 'when George will have repaired his car'), the force of simple analogy suggests the possibility of **a in*. An example (possibly agrammatical) of this type of sequence is given in Corne 1970:15:

mo pa kone si li ti pu vini, mem si mo ti a va in diman li 'I do not know if he would have come, even if I had (would have) asked him'

The Seychellois pronoun *i* 'he, she, it (subject)' and its use in "reprise" of the subject has been noted above. In Seychellois, *in* is better analysable as *i + n*:

sô kat lapat i n kole 'his four feet (they) were stuck'

and it seems at least possible that there is some link between this and the fact that *in* in Mauritian occurs only in the 3rd person.

15. Cf. Baker 1972:108: "/*fin*/ and /*in*/ are ... interchangeable". He then gives the following example (retranscribed in my orthography): *en linðdasið t in arive* 'flooding had occurred'. This is either a printing error, or an error of analysis, and should surely read *en linðdasið ti n arive*. In Corne 1970:14, *n* is noted as occurring after *sə* 'that (pronoun)', but this now appears to be erroneous.

The following combinations of T + Com occur

$$(a) \text{ Pres + Com} \rightarrow \phi + \begin{Bmatrix} \text{fin} \\ \text{in} \\ n \end{Bmatrix}$$

Zorz $\begin{Bmatrix} \text{fin} \\ \text{in} \end{Bmatrix}$ bez li 'George (has) hit him'

$\begin{Bmatrix} \text{zot} \\ \text{zo n} \end{Bmatrix} \begin{Bmatrix} \text{fin} \\ \text{in} \end{Bmatrix}$ mâze 'you/they have eaten'

$$(b) \text{ Pas + Com} \rightarrow ti + \begin{Bmatrix} \text{fin} \\ n \end{Bmatrix}$$

This corresponds to the pluperfect in English (or French)

apre ki mo ti n eksplik li sa zafer la, li n ale 'after I had explained that business to him, he left'

$$(c) \text{ Pres + Fut + Com} \rightarrow \phi + a + \begin{Bmatrix} \text{fin} \\ n \end{Bmatrix}$$

kâ u a $\begin{Bmatrix} \text{fin} \\ n \end{Bmatrix}$ repar u loto 'when you (will) have repaired your car'

$$(d) \text{ Pas + Fut + Com} \rightarrow ti + a + \begin{Bmatrix} \text{fin} \\ n \end{Bmatrix}$$

mo ti a $\begin{Bmatrix} \text{fin} \\ n \end{Bmatrix}$ bez li, si li ti $\begin{Bmatrix} \text{fin} \\ n \end{Bmatrix}$ dir mua kujô 'I would have hit him, if he had called me an idiot'

In the case of (c) and (d) above, Fut may be replaced by the sequence (Fut) + FutInd:

kâ u (a) va fin repar u loto 'when you (will) have repaired your car'

mo ti $\begin{Bmatrix} a \\ (a) va \end{Bmatrix}$ fin marie, si mo pa ti mizer 'I would have got married, if I was not poor'

Whereas in the Conditional, the distinction between the Future Tense, the Indefinite Future Aspect, and the Definite Future Aspect is not retained, FutInd and FutDef are not interchangeable when followed by Com:

$$(e) \text{ Pres + (Fut) + FutDef + Com} \rightarrow (a) + pu + fin$$

?kâ li (a) pu fin gañ so piti, li pu don tua li 'when she will have had her child, she will give him to you'

My informants disagree as to the acceptability of this sequence (cf. the Progressive Aspect, 4.2 (c) above).

$$(f) \text{ Pas + (Fut) + FutDef + Com} \rightarrow ti + (a) + pu + \begin{Bmatrix} \text{fin} \\ n \end{Bmatrix}$$

mo ti (a) pu fin marie ar li, si so papa pa ti kas mo lagel 'I would have married her, if her father had not beaten me up'

The distinction between *ti (a) pu fin* and *ti (a) va fin* ((d) above) is that the sequence with *pu* is more imminent, more definite ('I had the girl, the ring, the preacher, everything was set for the marriage, but my father-in-law-to-be decided to push my face in . . .')

The sequence *ti (a) pu n* appears to have some kind of restriction on its occurrence, the nature of which is not entirely clear:

si so papa pa ti aret mua, mo ti (a) pu fin bez li 'if his father had not stopped me, I would have hit him'

While this sentence is acceptable, when *n* replaces *fin* my informants prefer to embed an underlying sentence *mo bez li* into a principal sentence containing *fini* 'to finish'; this gives

si so papa . . ., mo ti (a) pu n fini bez li

rather than

? si so papa . . . , mo ti (a) pu n bez li

(g) The Conditional Perfect ((d) and (f) above) is not always distinguished from the Conditional, but this appears to be linked to some extent to the presence of *ti* (see 3.2 above, the Past Tense):

mo ti a va fer li, me mo okipe pur lêstâ 'I would do it, but I am busy right now'

mo ti a va fer li, me mo ti okipe 'I was going to do it, I would have done it, but I was busy'

4.4 The Immediate Past Aspect (*fek*)

The Immediate Past is marked by *fek*. While Goodman (1964:65-66, 80) designates *fek* as an aspectual particle, Baker (1972:110) calls it a "pre-verb"¹⁶ and includes it in a class comprising *âkor* 'still (and expected to terminate shortly)', *tuzur* 'still (and expected to continue indefinitely)', *nek* 'merely, only', *nepli* 'no longer',¹⁷ *mem* 'even' (only when following *pa* 'negation'), and *biê* 'really, indeed'. In my 1970 monograph (p.32) I included *fek* as a member of a verbal sub-class including also *kapav* 'possibility, to be able', *bizê* 'necessity, to have to', and *ule* 'to wish, want, desire', on the grounds that these four "words" appeared to share certain syntactic traits. A closer examination of the facts suggests that *fek* is indeed an aspectual particle.

The following combinations of T + PasImm occur.

(a) Pres + PasImm → ϕ + *fek*

li fek al labutik, u âvi li al âkor en ku? 'he has just been to the shop (and come back again), do you want him to go (there) again?'

(b) Pas + PasImm → *ti* + *fek*

li ti fek al labutik, mo pa kone kot li n ale apre 'he had just gone to the shop (and come back again), I do not know where he went to afterwards.'

(c) Pres + Fut + PasImm → ϕ + *a* + *fek*

My informants hesitate to accept either this string, or the equivalent

Pres + (Fut) + FutInd + PasImm → ϕ + (*a*) + *va* + *fek*

? mo (a) va fek fini 'I will have just finished'

but agree that Pres + (Fut) + FutDef + PasImm → ϕ + (*a*) + *pu* + *fek* is acceptable:

mo (a) pu fek fini 'I will have just finished'

This is perhaps a question of the semantic compatibility of *pu* Definite or Immediate Future with *fek* Immediate Past.

(d) Pas + Fut + PasImm → *ti* + *a* + *fek*

li ti a fek fini mâze, si laklos pa ti sone 'he would have just finished eating, if the bell hadn't rung'

Here, my informants reject the (theoretically possible) sequence Pas + (Fut) + FutDef + PasImm → *ti* + (*a*) + *pu* + *fek*, but the reason for this is not clear. **ti* (*a*) *va fek* is rejected also.

However, *ti a* $\left\{ \begin{smallmatrix} n \\ fin \end{smallmatrix} \right\}$ *fek* (see below) is considered as the equivalent of *ti a fek* — this concurs with Baker's comment quoted above, but also with the already noted tendency not to distinguish the Conditional and the Conditional Perfect.

Thus far, the combinations of T + A given in Table 1 have been considered.

16. Baker adds (footnote 4, p.117): "Many speakers treat *fek* as an aspect marker . . . 'John has just gone out' . . . would be *Zâ fek sort*: rather than *Zâ in fek sorti* [my transcriptions]. (Cf. British 'she has just left' with American 'she just left'.)"

17. *nek* is treated as a product of a "restriction" transform (Corne 1970:26) while *nepli* is treated as a product of a "negative" transform (Corne 1970:23-24).

Table 1

Pres	Pas
Pres + Fut	Pas + Fut
Pres + (Fut) + FutInd	Pas + (Fut) + FutInd
Pres + (Fut) + FutDef	Pas + (Fut) + FutDef
Pres + Prog	Pas + Prog
Pres + (Fut) + FutInd + Prog	Pas + (Fut) + FutInd + Prog
?Pres + (Fut) + FutDef + Prog	?Pas + (Fut) + FutDef + Prog
Pres + Com	Pas + Com
Pres + Fut + Com	Pas + Fut + Com
Pres + (Fut) + FutInd + Com	Pas + (Fut) + FutInd + Com
?Pres + (Fut) + FutDef + Com	Pas + (Fut) + FutDef + Com
Pres + PasImm	Pas + PasImm
?Pres + Fut + PasImm	Pas + Fut + PasImm
?Pres + (Fut) + FutInd + PasImm	*Pas + (Fut) + FutInd + PasImm
Pres + (Fut) + FutDef + PasImm	*Pas + (Fut) + FutDef + PasImm

5.0 Aspect + Aspect

One possible rewrite of A

A → FutAsp + Asp

has already been dealt with above. The other possible rewrite is

A → Asp + Asp

This corresponds to the following possibilities, given that (a) any given constituent of Asp may only occur once, (b) the Completive Aspect (*fin, n*) is incompatible with the Progressive Aspect (*pe, ape*):

Prog + PasImm
Com + PasImm

PasImm + Prog
PasImm + Com

An apparent exception is the occurrence of *fek fek*:

li fek fek fer sa 'he has only just, this minute, right now, done that'

This is best considered as an example of reduplication,¹⁸ in that the reduplicated *fek fek* emphasises the immediacy of the completion. As such, it may be safely excluded from this discussion.

5.1 Progressive and Immediate Past

(a) Pres + Prog + PasImm → ϕ + *ape* + *fek*

nu ape fek koz u la 'we are just talking about you'

The semantics of the Immediate Past Aspect are difficult to grasp in this context, but my informants accept this sequence without hesitation. The preference for *ape* rather than *pe* in combination with *fek* has already been noted.

(b) Pres + PasImm + Prog → ϕ + *fek* + *ape*

nu fek ape koz lor Zorz 'we are just talking about George'

There appears to be no difference of meaning between these two sequences (a) and (b).

(c) Pas + Prog + PasImm → *ti* + *ape* + *fek*

18. Baker 1972:102; Come 1970:53-55.

- (d) Pas + PasImm + Prog → *ti + fek + ape*
 nu ti ape fek koz u 'we were just talking about you'
 nu ti fek ape koz lor Zorz 'we were just talking about George'
 li ti fek pe lir lagazet 'he was just reading the newspaper'
- (e) Pres + $\left\{ \begin{array}{l} \text{Fut} \\ (\text{Fut}) + \text{FutInd} \end{array} \right\} + \text{PasImm} + \text{Prog} \rightarrow \phi + \left\{ \begin{array}{l} a \\ (a) + va \end{array} \right\} + fek + pe$
 letâ to pu râtre, li a (va) fek pe sorti 'when you (will) come in, he will just be
 (?have just been) going out'

The FutDef (*pu*) appears to be unacceptable here. The possible incompatibility of *pu* and *ape* has been noted above, 4.2.

- (f) Pas + Fut + PasImm + Prog → *ti + a + fek + pe*
 li ti a fek pe vini 'he would be just coming'

The sequences (e) and (f) above do not seem to be in fact very common, and may conceivably be the product solely of work sessions held at a desk in front of a tape-recorder. The sequence *ti (a) va fek pe* seems to be excluded.

5.2 Completive and Immediate Past

- (a) Pres + Com + PasImm → $\phi + \left\{ \begin{array}{l} \text{fin} \\ \text{in} \\ n \end{array} \right\} + fek$
 kot li ete? li n fek al labutik 'where is he? he has just gone to the shop' (and is not back yet)

This may be contrasted with the sentence already given (Pres + PasImm, 4.4)

li fek al labutik, u âvi li al âkor? 'he has just been to the shop (and has come back again) . . .'

and also with (b) below.

- (b) Pres + PasImm + Com → $\phi + fek + fin$
 li fek fin al labutik 'he has just (this minute) gone (out to go) to the shop'

This sequence appears to imply a greater degree of immediacy than *fin + fek*.

- (c) Pas + Com + PasImm → *ti +* $\left\{ \begin{array}{l} \text{fin} \\ n \end{array} \right\}$ + *fek*
 (d) Pas + PasImm + Com → *ti + fek + fin*
 li ti $\left\{ \begin{array}{l} \text{fin} \text{ fek} \\ \text{fek} \text{ fin} \end{array} \right\}$ buar so dite, letâ Zorz ti apel li 'he had just drunk his tea, when George called him'

There appears to be no difference of meaning between these two sequences.

- (e) Pres + $\left\{ \begin{array}{l} \text{Fut} \\ (\text{Fut}) + \text{FutInd} \end{array} \right\} + \text{Com} + \text{PasImm} \rightarrow \phi + \left\{ \begin{array}{l} a \\ (a) + va \end{array} \right\} + \left\{ \begin{array}{l} \text{fin} \\ n \end{array} \right\} + fek$
 mo $\left\{ \begin{array}{l} a \\ (a) va \end{array} \right\} \left\{ \begin{array}{l} \text{fin} \\ n \end{array} \right\}$ fek ale 'I will have just left'

The Definite Future may also occur here, presumably by analogy with the sequence containing the Indefinite Future (this gives a sequence containing three constituents of A).¹⁹

Pres + (Fut) + FutDef + Com + PasImm → $\phi + pu + n + fek$

si to al get li aster, li pu n fek ferm so laport 'if you go to see him now, he will have just closed his door'

19. I assume that one other sentence in my collection occurs for a similar reason:
 ? li pu fek fin fer sa 'he will have just done that'
 although I have not noted any sentence like:
 ? li a (va) fek fin fer sa

- (f) Pas + Fut + Com + PasImm $\rightarrow ti + a + \left\{ \begin{matrix} fin \\ n \end{matrix} \right\} + fek$
 li ti a $\left\{ \begin{matrix} n \\ fin \end{matrix} \right\}$ fek fini mâze, si laklos pa ti sone 'he would have just finished eating if the bell hadn't rung'

The sequence *ti (a) va fin fek* does not occur, and *pu* seems to be excluded also in this context.

The combinations of T + Asp + Asp given in Table II have been considered.

Table II

Pres + Prog + PasImm	Pas + Prog + PasImm
Pres + PasImm + Prog	Pas + PasImm + Prog
Pres + Fut + PasImm + Prog	Pas + Fut + PasImm + Prog
Pres + (Fut) + FutInd + PasImm + Prog	*Pas + (Fut) + FutInd + PasImm + Prog
*Pres + (Fut) + FutDef + PasImm + Prog	*Pas + (Fut) + FutDef + PasImm + Prog
Pres + Com + PasImm	Pas + Com + PasImm
Pres + PasImm + Com	Pas + PasImm + Com
Pres + Fut + Com + PasImm	Pas + Fut + Com + PasImm
Pres + (Fut) + FutInd + Com + PasImm	*Pas + (Fut) + FutInd + Com + PasImm
Pres + (Fut) + FutDef + Com + PasImm	*Pas + (Fut) + FutDef + Com + PasImm

6.0 The Constituent *Mod* ("modality")

An alternative rewrite of A is

$$A \rightarrow \left\{ \begin{matrix} \text{FutAsp} \\ \text{Asp} \\ \text{Mod} \end{matrix} \right\} + (\text{Asp})$$

$$\text{Mod} \rightarrow \left\{ \begin{matrix} \text{kapav} \\ \text{bizê} \end{matrix} \right\} \begin{matrix} \text{'possibility'} \\ \text{'probability'} \end{matrix}$$

I postulate this rewrite²⁰ to account for the meanings of 'possibility' and 'probability' of *kapav* and *bizê*, respectively.

6.1 *bizê* 'probability'

The use of *bizê* as a modality appears to be restricted to the following two cases:

- (a) Pres + *bizê* + Prog $\rightarrow bizê pe$
 li *bizê pe fer sa* 'he is probably doing that'
- (b) Pres + *bizê* + Com $\rightarrow bizê fin$
 li *bizê fin al lakaz* 'he has probably gone home'

In both cases, *kapav* is preferred to *bizê* to indicate that there is some doubt about the assertions made.

In the following two cases, my informants are doubtful as to whether the sense may be construed as 'probability':

- (c) Pres + *bizê*
 li *bizê ale* 'he must go', ?'he probably goes'

20. I suspect that further research is necessary to clear up some of the anomalies that remain. For example, *fek* does not seem to occur after Mod, and with Mod only the Present tense occurs (or, in the case of *kapav*, the Future tense as well). As it stands, this rewrite does account for most of my data, but not entirely convincingly, and it will in fact be rejected below.

- (d) Pas + *bizê*
li ti bizê ale 'he had to go', ?'he probably went'

6.2 *kapav* 'possibility'

As a modality, *kapav* may occur only in the following sequences. Where Asp does not occur, the resulting sentences are ambiguous.

- (a) Pres + *kapav*
li kapav ale 'he may go' and 'he can go'
- (b) Pres + Fut + *kapav*
li a kapav vini 'he may come' and 'he will be able to come'
- (c) Pres + *kapav* + Prog → *kapav pe*
li kapav pe fer sa 'he may (might) be doing that'
- (d) Pres + *kapav* + Com → *kapav fin*
li kapav fin mâze 'he might have eaten'
- (e) Pres + Fut + *kapav* + Prog → *a kapav pe*
li a kapav pe mâze 'he might be eating'
- (f) Pres + Fut + *kapav* + Com → *a kapav fin*
li a kapav fin mâze 'he might have eaten'

6.3 *Kapav* and *bizê* also occur in embedding transforms including TC^{Inf} (Corne 1970:30-34)²¹ and TC^{Em} (Corne 1970:40, paragraph 8.5.2). These are illustrated below.

In TC^{Inf}, a small group of verbs including *bizê* 'to be obliged', *kapav* 'to be able', *get(e)* 'to see',²² *ule* 'to wish, want', and perhaps others, allow the presence of aspectual particles.²³ The derivation of a sentence such as

li ti ule pe mâz lavian (olie bujô bred) 'he wanted to be eating meat (instead of a bouillon of brêdes),²⁴

may be represented as in Fig. 1.

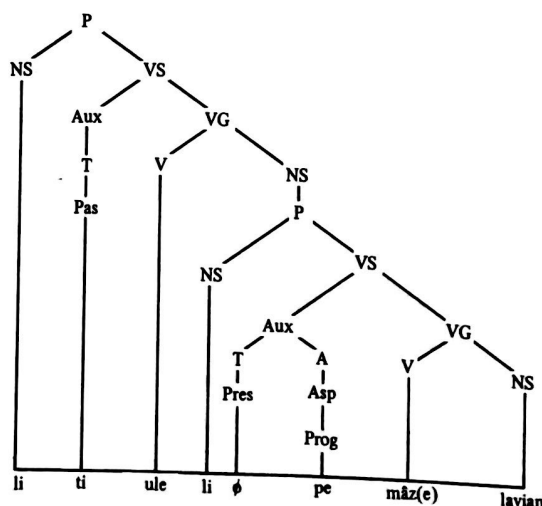


Fig. 1

21. TC^{Inf} in Mauritian corresponds to the "infinitive transformation of completives" in French (Dubois & Dubois-Charlier 1970:239-240).
22. Cf. Corne 1970:34, where *get(e)* + particles is analysed, perhaps erroneously, as a special case of a relative clause with the subordinator *ki* omitted. In Seychellois, *uar* 'to see' behaves similarly: *mô ti uar Frâsua ape plere* 'I saw François crying'.
23. Most other verbs appear to exclude aspectual particles:
li kumâs marse 'he begins walking'
24. *brêdes* 'plant spp.' See Hollyman 1970:14-15.

Similar derivations will account for sentences such as the following:

(a) with *bizê* 'to be obliged'

li ti *bizê* pe travaj 'he should have been working, he had the obligation to be working'

li ti *bizê* fin travaj 'he should have worked, he had the obligation to have worked'

li fek *bizê* ale 'he has just had to go'

(b) with *kapav* 'to be able'

mo ti a *kapav* pe travaj 'I could have been working' (at this moment, but I'm not because I'm lazy)

mo ti a *kapav* fin travaj zordi 'I could have worked today' (but the day is over now and I've wasted it)

In some Presentative Structures (TC^{Em}) various elements may occur as the verb of the principal clause, with no surface subject (Corne 1970:33, 40). These include: *fode*, *fodre*, *fale*²⁵ 'it is necessary that', *vomie* 'it is better that', *ala* 'voilà que'²⁶, *kumâ dir*, *kuma dir* 'it is as if', *posib* 'it is possible that', *êposib* 'it is impossible that', . . .

posib li malad 'it is possible that he is sick'

bizê may also occur here, but only with the "full" sense:

pa *bizê* u mok dimun 'it is not necessary that you laugh at people, you shouldn't laugh . . .'

kapav in this structure has only the meaning 'it is possible that, maybe, perhaps':

kapav li pe mâze 'perhaps he is eating'

kapav li n fek mâze 'perhaps he has just eaten, he might have just eaten'

ti a *kapav* ena ki koz frâse 'there might be (some people) who speak French'

This construction is not always the exact equivalent of *kapav* as a modality:

kot li n ale? li *kapav* fin al lakaz 'where has he gone? (he has gone), maybe he went home'

kot li ete? *kapav* li fin al lakaz 'where is he? he might have gone home (but maybe he's still around here somewhere)'

In a sentence such as the following:

fe*k* ena trua, la 'there has just been three of them'

*fe*k** is of course a constituent of Aux.

6.4 My rewrite of A including Mod accounts for the following facts: (i) in their modal meanings, *kapav* and *bizê* may not be preceded by any aspectual particles; (ii) in their "full" sense, *kapav* and *bizê* occur as verbs sharing certain syntactic patterns with other verbs; (iii) in TC^{Inf}, *kapav* and *bizê* have only their "full" sense; (iv) in TC^{Em}, although *kapav* has its modal sense of 'possibility', it behaves in the same way as *bizê*. There is, however, a residue of facts that are not accounted for.

(a) A sentence such as:

ti pu *bizê* ena trua, la – kot zot? 'there ought to be three of them – where are they?'

poses a problem of semantic interpretation, in that *bizê* does not appear to have the sense of 'necessity', nor that of 'probability'.

(b) My informants disagree as to the acceptability of:

? li *kapav* pu vini 'he might come'

25. Also, in "refined" Creole, *fo*, *devre*.

26. Untranslatable into English unless a context is given. E.g. *ala mo mari vini* 'there is my husband coming, here comes my husband'

(c) Reduplication of *kapav* is possible:

li kapav kapav fer sa 'with some difficulty, he could perhaps do that'

As an example of normal verbal reduplication (v. Corne 1970:53) this corresponds, for example, to:

li ule ule fer sa 'he really wants to do that'

My informants however disagree as to the acceptability of both of these sentences, but agree that *bizê* can not be reduplicated. The reduplicated *kapav kapav* can also be analysed as a sequence Pres + Mod + *kapav*, with *fer* embedded by TC^{Inf}.

The "modal" use of *kapav* and *bizê* may be more satisfactorily handled as a case of TC^{Inf}, with the "modal" sense specified in the lexicon along with features blocking the occurrence of any constituent of A preceding. The Progressive and Completive aspect particles *pe* and *fin* occurring after *kapav* and *bizê* are then accounted for by the type of derivation illustrated in Fig. 1 above. Such an approach also avoids having identical lexical items appearing as totally different parts of speech, but (in the case of *kapav* in TC^{Em} and as Mod) with the same (or very similar) meaning. It therefore seems, at the present stage of research, that the rewrite of A including a constituent Mod is to be rejected.²⁷

7.0 The temporal and aspectual system (excluding Mod) of Mauritian as described here is a symmetrical system with the usual gaps to be expected of any natural language. Of the various combinations described, some appear to be infrequent in everyday usage, but grammatical nonetheless. Some of the imbalances of the system are clearly due to the fact that the language is essentially an unwritten language. As such, it is evolving fairly rapidly, with French being one major phonological and syntactic influence (of which the shift of *va* from an aspectual use to a temporal use is the most striking example), while another is the usual analogical levelling processes (for example, the use of *pu* replacing *va* (replacing *a*) and producing sequences of three constituents of A).

The temporal and aspectual system of the closely-related, although somewhat more conservative, Seychelles Creole should turn out to be accounted for by the same rules as postulated here, although some modifications (notably concerning Future time and Future aspect) will doubtless be necessary. Similarly, these rules should also account for the underlying structures (the surface structures will require additional phonological rules) of Reunion Creole, although I advance this assertion very tentatively in view of the severely limited data on Reunion Creole at my disposal.

If the postulated underlying structure is an accurate representation of the facts, the rules given should turn out to be those of French, or, more precisely, of the spoken French of the

27. The same appears to be so for French, also. The structure of Aux in French as postulated by Dubois & Dubois-Charlier 1970, mentioned above, includes a constituent Mod. Without going here into the details, it can be shown that the postulated rules in their present form do not work for French, producing such anomalies as **il a dû être venu*. They can be rewritten so as to produce both *il doit être venu* and *il a dû venir* 'he must have come' while excluding the unacceptable **il a dû être venu*. However Mod, which in this formulation includes only *devoir* (erroneously glossed as 'necessity' instead of 'probability') and *pouvoir* 'possibility', can be handled in French, as in Mauritian, more economically by TC^{Inf}. If Mod is included, Dubois' rules for French can be reworked along lines something like the following:

Aux → T + (A)

T → ({ Fut }) + { Pres } + Pe + No
 { Subj }

Pas → { Imperfect }
 { Past Historic }

A → { Mod + (Parf) } + Inf }
 { (Parf) + { Mod } }
 { Asp }

Parf → { avoir } + Past Participle
 { être }

Here, Parf is considered as an aspect, various constraints need to be specified, and so on. But such a rewrite would still account for only *some* of the facts (cf. Benveniste 1959).

16th or 17th Centuries. The French surface structures are consistent with this hypothesis, although a detailed study remains to be done.

Ti, a, va, pu and *(a)pe* are discussed in Goodman 1964:78-88. *Fin* undoubtedly comes from French *finir*, and while the development of *in* and *n* may be explainable purely on phonetic grounds, this remains to be established. *Fek* is discussed in Goodman 1964:65, especially footnote 77. The underlying structure of *Aux* as postulated for modern French by Dubois and Dubois-Charlier, while inaccurate, can be adjusted (see footnote 27) to account for the facts better than it does, and the result of such an adjustment looks strikingly similar to the structure set up here for Mauritian. Again, a detailed study of this area also remains to be done.²⁸

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28. As this paper goes to press, some additional evidence has come to hand which indicates that *Com* and *Prog* are not always incompatible (v. 5.0 above):
 mo ti a n ape mâze 'I would (probably) have been eating'
 The context *ti a* appears to be a necessary precondition, however.