The Predicate Marker *li* in Mauritian Creole¹

DIANA GUILLEMIN

University of Queensland d.guillemin@uq.edu.au

Abstract

There is a morpheme *li* in Mauritian Creole (MC), which is homophonous with the 3sg pronoun (meaning 'he', 'she', 'it', 'him', 'her'), and which, in the early creole, occurs frequently between the subject and the predicate in affirmative, present tense clauses. It occurred only with count nouns, and initially served to mark the subject as singular and referential. Following the loss of the French determiner system in the early stages of creolization, the new language lacked determiners to mark these semantic features on NPs. I propose that *li* may have originated as a resumptive pronoun, co-referential with the subject, but following the grammaticalization of new determiner elements to mark the semantic contrasts of [±definite] and singular vs. plural, *li* has now grammaticalized into a predicate marker (PM). Its presence is sensitive to both the nature of the predicate, and to the definiteness and specificity features of the subject NP. It now occurs only in non-tensed affirmative clauses, to provide a source of quantification when there are no other sentential operators to bind variables.

My analysis is within the framework of Truth Conditional Semantics, where indefinite NPs are analyzed as variables that get introduced into the discourse, and must be bound by an operator to yield a closed proposition, with a truth value. Drawing on a comparison with a cognate morpheme i in Seychellois Creole, I claim that its path to grammaticalization is linked to that of the specificity marker la.

This paper is organized as follows: Section 1 is a brief overview of the MC determiners which emerged following the collapse of the French determiner system. In Section 2, I look at the occurrence and distribution of li in the early creole, and the gradual bleaching of its semantic features. Section 3 comprises my theoretical framework and the definition of terms used for my analysis. In Section 4 I explain the distribution and behaviour of li in modern MC. In Section 5 I look at the occurrence of the cognate morpheme i in Seychellois Creole, which patterns differently from MC li. Section 6 concludes this paper.

Keywords

Definiteness, Determiner, Grammaticalization, Grammaticalization, Indefinite, Mauritian Creole, Predicate, Predication, Quantification, Referentiality, Semantics, Seychellois Creole, Specificity

¹ I thank Mary Laughren for her guidance with the development of this paper. I am also grateful to two anonymous reviewers for their most useful comments. All recommendations have been taken into consideration. I take responsibility for any remaining inconsistencies.

1. Introduction

1.1. From French to creole: A new determiner system

Mauritian creole is a French based creole with SVO word order, just like its lexifier, but unlike French, it lacks inflectional morphology and there is no copula. Tense, Mood and Aspect (TMA) are expressed by pre-verbal markers. Another significant change from French to Creole was the incorporation of the French determiners into a large number of the nouns that they modified. Determiners in French serve to mark the semantic contrasts of [±definite] and singular vs. plural, but it seems that their function was not recognized by the speakers of the early creole (Chaudenson 1981, Baker 1984, Grant 1995, Strandquist 2005) ². The immediate consequence was that bare nouns, in the early creole, occurred in various syntactic configurations, with ambiguous interpretations between (in)definite and singular vs. plural interpretations, as shown in Table 1:

	Features	French	MC	English
	singular [-definite]	une table		a table
Count nouns	plural [-definite]	des tables	latab	some tables
	singular [+definite]	la table		the table
	plural [+definite]	les tables		the tables
Mass nouns	ss nouns [–definite]		dilo	water
	[+definite]	l'eau		the water

Table 1: [±definiteness] and singular plural features are lost in the very early creole

The new determiners that emerged over a period of approximately 130 years from the mid 18th century to the end of the 19th century are:

- The indefinite singular determiner enn. It first appears around 1820.
- The definiteness and specificity marker *la*, which also emerges around 1820, and which initially only marks singular nouns³. Unlike the other determiners, which precede the NP, *la* is DP final.
- · The demonstrative sa which serves to mark the deictic value of la as proximate
- The plural marker *bann* surfaces much later in the 19th century. To be precise, its first occurrence as a functional item is dated 1885. *Bann* is unspecified for [±definiteness].

² French determiners also serve to mark the contrast masculine vs. feminine, but this is not relevant to my analysis as gender is not grammaticalized in MC.

³ The process of grammaticalization of *la* is a slow and gradual one. It seems that it was initially used to derive a singular interpretation of the noun that it modified. I suggest that its grammaticalization is not complete until it is able to mark both singular and plural NPs. The first occurrence of the plural marker + the specificity marker occurs in the late 1880's:

⁽¹⁾ Namcouticouti qui té faire vous tout ça bande malices là (Baissac, 1888: 107)
Namcouticouti who PST make you all DEM PLU mischief DEM
It is Namcouticouti who has played all these tricks on you
C'est Namcouticouti qui vous a fait tous ces tours-là (Baissac 1888: 106)

Despite these new determiners, bare nouns in modern MC still occur in various syntactic configurations, yielding either a [+definite] singular or a [-definite] plural interpretation, as shown:

(1) Ena fler lor latab (Modern MC) have flower on table

There are flowers on the table

In the above existential construction, *fler* is [-definite] plural, while *latab*, which is the object of a preposition, is [+definite] singular. This is evidence for a phonologically null definite determiner which marks NPs in some argument positions. For expository purposes, I will represent it as δ .

Table 2 shows how the contrasting features of [±definiteness] and [±plurality] are now marked on count nouns in MC. Table 3 shows how the combination of definiteness, specificity and deixis are marked on singular and plural count nouns⁴.

	[–definite] singular	[+definite] singular	[-definite] plural	[+definite] plural
French	un/une + singular N	le/la + singular N	des + plural N	les + plural N
MC			N OR	_
	enn + N	$\delta + N$	bann + N	δ + bann + N
English	a/an + singular N	the + singular N	plural N	the + plural N

Table 2: Marking of [±definiteness], singular and plural in MC

	[+definite] [+specific] singular	[+definite] [+specific] [+deictic] singular	[+definite] [+specific] plural	[+definite] [+specific] [+deictic] plural
French	ce/cette +	ce/cette + singular		ces + plural N +
	singular N	N + ci/là	ces + plural N	ci/là
MC	N + la	sa + N + la	bann + N + la	sa + bann + N + la
English	that + singular N	this + singular N	those + plural N	these + plural N

Table 3: Marking of definiteness, specificity and deixis on singular and plural NPs in modern MC

In the next section, I look at the occurrence and distribution of li in the early creole, where I argue that it is gradually bleached of its pronominal features, namely, Number and Definiteness, as la emerges as a definiteness and specificity marker.

3

⁴ In this paper, I will be concerned only with count nouns because *li* very rarely occurs with mass nouns, thereby supporting my claim that it is initially associated with the feature Number.

2. Li in early MC

2.1. Where 'li' occurs in early MC

From the first instantiations of the creole, the morpheme *li*, which is homophonous with the 3sg pronoun (meaning 'he', 'she', 'it', 'him', 'her'), occurred frequently between the subject and the predicate in present tense clauses, as shown in (2) a. and b. Modern MC translations are given in line 4:

- (2) a. *ça li nègre blanc* (Milbert 1812) this *li* negro white This is a white negro *Sa enn neg blan (sa)* (Modern MC)
 - b. bibass' li goût! (Chrestien 1831) loquat li tasty
 The/that loquat is tasty!
 Bibass la bon! (Modern MC)

In the modern MC equivalents, where the nominal predicate is modified by the indefinite singular determiner enn in (2a), and the subject is marked by the specificity marker la in (2b), li is not required. These determiners were lacking in the early creole, and bare nouns were ambiguous between a [±definite], and a singular vs. plural interpretation. The presence of li forces a singular interpretation of the bare subject. When a common count noun in subject position is modified by la in modern MC, it is also interpreted as singular and definite⁵.

Furthermore, given the lack of a copula, the absence of li in these early examples would have yielded two noun phrases, as shown:

(3) nègre blanc h. bibass' goût (Early MC) a. çа this negro loquat tasty white This white negro Tasty loquat(s) Sa neg blan la Bon bibass (Modern MC)

Thus the occurrence of li may well have been a consequence of the loss of the copula, as suggested by Corne (1974), for it serves both to mark the preceding NP as the subject, and what followed as the predicate. It serves to indicate in (2a) that can be calculated as the predicate of the subject <math>can be calculated as the predicate of the subject <math>can be calculated as the predicate of the subject <math>can be calculated as the predicate of the subject <math>can be calculated as the predicate of the subject <math>can be calculated as the predicate of the subject <math>can be calculated as the predicate of the subject <math>can be calculated as the predicate of the subject <math>can be calculated as the predicate of the subject <math>can be calculated as the predicate of the subject <math>can be calculated as the predicate of the subject <math>can be calculated as the predicate of the subject <math>can be calculated as the predicate of the subject <math>can be calculated as the predicate of the subject <math>can be calculated as the predicate of the subject <math>can be calculated as the predicate of the subject <math>can be calculated as the predicate of the subject <math>can be calculated as the predicate of the subject <math>can be calculated as the predicated as the predic

⁵ Although la forces a singular interpretation of a bare noun in argument position (i.e. a noun not modified by the plural marker bann or the demonstrative sa), la is not associated with the feature Number, as I claim is the case with li in the early creole. La marks both count and mass nouns. The fact that a singular interpretation is derived when a count noun is marked by la is a consequence of other elements that are present in the projection, such as the null [+definite] determiner and the Number Phrase. The discussion of these elements is beyond the scope of this paper.

At one stage in the development of MC, the morphemes *li* and *la* seemed interchangeable, as shown in (4) and (5), where both subject NPs are singular, and have a discourse antecedent, i.e. they are both referential NPs:

- (4) Et torti **là** touzours marcé. (Chrestien 1831) and tortoise la still walk

 And the tortoise keeps walking

 E torti la tuzur marse
- (5) Satte **li** alle dan son la-sambre pour li dourmi. (Aristide 1850) cat li go in 3.SG.POSS bedroom for 3.SG sleep
 The/that cat goes in his bedroom to sleep
 Sat **la** al dan so lasam pu li dormi (Modern MC)

The source of *li* was most likely the 3sg pronoun, used as a resumptive pronoun with the discourse pragmatic function of marking the preceding NP as the subject, or topic of the discourse. As a co-referential pronoun with the feature [+singular], it also served to indicate that the subject NP shared this feature. This claim is supported by the fact that *li* was originally only used with count nouns, suggesting that it was indeed associated with a Number feature.

However, its occurrence with plural subjects, following the first occurrences of *la*, suggests that it gradually loses this number marking feature. If it was functioning as a resumptive pronoun in (6) and (7), the well established plural form *zaut*, *zaute*, *zautes* (*zot* in modern MC) would have been used instead of the singular form *li*:

- (6) Pass'qué mon lé-dents li grands (Chrestien 1831) because 1.SG.POSS teeth li big
 Because my teeth are big
 Akoz mo (bann) ledan gro (Modern MC)
- (7) Maçons li n'a pas bon (Descroizilles 1867) stonemason li NEG good
 The stonemasons are no good
 Bann mason napa bon (Modern MC)

In modern MC, a plural noun in subject position must be marked by *bann*, which yields a [+definite] interpretation. The grammaticalization of this morpheme was not complete until the late 1880's. An example follows:

(8) Bane blancs qui vine promener vié Grand Port, (Soulsobontemps 1925)
PLU white comp come walk old Grand Port
The white men who come for a walk in old Grand Port
Bann blan ki vinn promne dan vye Grand Port

The reanalysis of both la and li was a gradual one. As la grammaticalized into a definiteness and specificity marker, li was gradually bleached of its Number and Definiteness features. In (9) and

- (10) it occurs with possessive NPs, which are inherently referential, suggesting that it is no longer serving to mark the subject as [+definite]:
 - (9) son nom **li** Emanuel, voulé dire Bon Dieû. (Lambert 1828) 3.SG.POSS name li Emanuel God this mean His name is Emanuel, this means God So nom **se** Emanuel, sa vule dir Bondye⁶
 - (10) *Son* li-ziés, moi dir' vous, **li** clairs comment *la-line*; (Chrestien 1831) 3.SG.POSS eves 1.SG tell 2.PL *li* clear as moon Her eyes, I tell you, are as clear as the moon So lizye, mo dir u, kler kuma lalin (Modern MC)

The environments in which a morpheme occurs gives an insight into its function. Similarly, the absence of this morpheme in certain environments can also shed light on what its function. Interestingly, *li* never occurs in tensed clauses, as shown in the following examples:

- (11) *sa* Bon Dieû té dire moi faire (Lambert 1828) qui that COMP God PST tell 1.SG do That which God told me to do Seki Bondye ti dir mwa fer (Modern MC)
- (12) *grand* malhèr arrivé (Chrestien 1831) fini great misfortune CMPL arrive A great misfortune has happened Enn gran maler finn arive (Modern MC)
- (13) *L'Amour* va fair' moi vini *bête!* (Chrestien 1831) MOD make 1.SG become stupid Love will make me become stupid Lamur pu fer mwa vinn bet (Modern MC)
- (14) enne gran bande **apré** casse maille (Aristide 1850) ASP pick corn big group A large group (of people who are) picking corn Enn kantite dimun ape kass may (Modern MC)

Prior to analyzing the function of li in modern MC, I will present my theoretical framework, and definitions of terms adopted for this analysis.

⁶ The morpheme se in modern MC is relatively recent. It occurs in equative constructions, which allow predicate inversion, e.g. in a sentence like Emanuel se so nom, the predicate can be fronted: So nom se Emanuel. Li is ungrammatical in such constructions in modern MC.

3. Theoretical framework

3.1. Propositions, predicates and arguments

My analysis is within the framework of Truth Conditional Semantics, which holds that a proposition is a type of sentence which has a truth value, which is either true or false. A proposition with a free variable is an 'open proposition', it is incomplete in that it cannot have a truth value. A formula with no free variable stands for a 'closed proposition', which is complete and has a truth value.

Traditionally sentences have been divided into two categories: <u>Activities</u>, which include 'events' and 'processes', and <u>States</u>. Davidson (1966), Higginbotham (1985), and Parsons, (1990), claim that an event variable is present in the argument structure of *all* predicates, whether verbal, adjectival or nominal, and irrespective of both the state vs. event distinction of sentences. I follow Kratzer (1989) and Adger and Ramchand (2003), in adopting the view that an event variable is present in the argument structure of 'activity' sentences only.

The variables which are introduced in a sentence thus includes the 'event' variable of activity sentences, as well as some types of noun phrases, such as indefinites. These variables must get their quantificational force from other elements in the sentence in order to yield a closed proposition with a truth value.

A proposition, or a clause consists of a subject and a predicate. Every predicate must have a subject, which is its external argument. Predicates can be of the category A, N, P or V. Nouns can be both arguments and predicates.

Furthermore, predicates fall into two categories, namely, 'stage' and 'individual' level⁷. The former describe temporary properties of the subject, while the latter describe enduring properties of the individual.

For the purposes of this analysis, I will be concerned only with nominal subjects. These can be bare nouns, both definite and indefinite singular NPs, or [+definite] plural NPs. The occurrence

b. Firemen are altruistic

The predicate 'available' in (1a) is a temporary property of the subject, while the predicate 'altruistic' in (1b) describes an enduring property of firemen. 'These two kinds of predicates combine with different quantificational readings of the bare plural subjects. Temporary situation predicates evoke an **existential reading** while enduring attribute predicates evoke a **generic reading'** (Kearns 2000: 134, bold in original). Paraphrases of (1) a. and b. are in (2) a. and b. respectively:

(Kearns 2000: 134)

⁷ 'Individual' and 'stage' level predicates are terms coined by Carlson (1977), who defines a 'stage' as being a spatially and temporally bounded manifestation of something, i.e. it is a 'temporary' property of an individual, as opposed to an 'individual' level predicate, which describes an enduring property of an individual. For example:

⁽¹⁾ a. Firemen are available

⁽²⁾ a. For at least 2 x such that x is a fireman, x is available

b. Generally for x such that x is a fireman, x is altruistic

of *li* is sensitive to both the semantic features of the subject NP and to the nature of the predicate. Prior to looking at its distribution in modern MC, I give some definitions of terms used for my analysis.

3.2. Familiarity and Quantificational theories of Definiteness

'There are broadly two functions associated with definite articles. One of these is an anaphoric function, to refer back to something mentioned in the preceding discourse. The other is a nonanaphoric function, to refer to something not mentioned in the preceding discourse but whose existence is something that the speaker assumes is known to the hearer. This assumed knowledge may be based on the general knowledge (as in *the sun*) or it may be based on inferences that the hearer can make in context (for example, inferring from mention of a house that the house has a door, thus making it possible to use a definite article in referring to the door of the house). (Haspelmath 2005:154)

A necessary and sufficient condition of the use of the definite article, thus, is for the hearer to be able to identify some set of elements in discourse, and to locate a referent in it. In MC, both the null [+definite] determiner and the specificity marker *la* serve to mark anaphoric definiteness. When the NP is the object of a preposition or verb, *la* is not required, but it is required when a singular common noun is in subject position⁸.

Definite noun phrases (NPs) include proper names, personal pronouns, possessive NPs, demonstrative pronouns and NPs with a demonstrative, or, in English, NPs with quantifiers like *all, each, every*, or with the definite determiner *the*.

Christophersen noted that when the definite article is used, 'the speaker must always be supposed to know which individual he is thinking of; the interesting thing is that the *the*-form supposes that the hearer knows it, too' (1939: 28). It is crucial that the referent be identifiable to both the hearer and speaker. Karttunen(1971) and Heim (1983), on the other hand, define the [±definiteness] contrast in terms of discourse referents. In their construct, a definite NP has to pick out an already familiar *discourse* referent, while an indefinite NP always introduces a new *discourse* referent:

While the 'familiarity' theories seem more pragmatic than semantic in their approach, the quantificational theories adopt the view that natural language is logical, and that grammatical form can be expressed by means of Logical Forms (LFs). Natural language sentences are analyzed using first order logic notation, where the universal quantifier \forall is used for definite NPs with each, every and $ext{all}$, and where the existential quantifier \exists is used to translate indefinite NPs with $ext{alg}$ or $ext{some}$ (in the singular).

3.3. The Universal quantifier \forall

The universal quantifier binds the variable, i.e., it fixes its value for everything, taken individually. An example of a phrase expressing universal quantification is:

 $^{^{8}}$ The use of la is ungrammatical with proper nouns, or unique nouns, unless a specific instance/aspect of the individual denoted by the noun is the intended reading.

(15) Sam ate everything

 $\forall x (EAT (Sam, x))$

For any value of x, Sam ate x

and

(16) Cats purr

 $\forall x (CAT(x) \rightarrow PURR(x))$

For every thing x, if x is a cat, then x purrs

However, the statement in this generic sentence could be falsified by the existence of a single non-purring cat.

3.4. The existential quantifier \exists

While the universal quantifier does not necessarily express existential commitment, the existential quantifier \exists explicitly does so. Unlike the universal quantifier, which is analyzed with the material implication connective, the existential quantifier is analyzed with conjunction. The sequence \exists x is interpreted as 'there is an x' or 'there is at least one thing x', as shown:

(17) A rabbit ran

 $\exists x (RABBIT(x) \& RUN(x))$

There is an x such that x is a rabbit and x ran

3.5. Singular and plural definite descriptions

In his analysis of the singular definite description, Russell (1905) had observed that the correct use of a definite description to denote an individual must have two requirements, namely, the <u>existential commitment</u> and <u>uniqueness requirement</u>. In other words, an individual so described must exist, and there must be only one.

A consequence of Russell's approach was that the definite article came to be analyzed as a quantifier. While singular definite descriptions combine familiarity and singularity, identifying a unique set of membership = 1, plural *the* is used to identify a subset a proportion of a given set of things or individuals, which must be identified in a discourse for clear interpretation.

The quantificational analysis of *the* thus predicts the 'Familiarity' effect in the sense that it expresses a proportion of a set, which the hearer must be able to identify, i.e. it must have discourse familiarity and presumption of existence.

The distinction between quantified and non-quantified NPs is relevant to my analysis, where I claim that the predicate marker li is a source of quantification when there are no other sentential operators to bind variables. Its occurrence is sensitive to the nature of both the subject and that of the predicate. I claim that its path to grammaticalization is linked to that of la.

3.6. Strong and weak determiners

Determiners have been recognized to fall into the categories weak and strong (Milsark 1979, Barwise and Cooper 1981). In English, the strong determiners are *all*, *every*, *each*, *most* and the

definite article *the*. Weak ones include *a, some, many, few*. In MC, the strong determiners include the null definite determiner (δ), and the specificity marker *la*. The weak determiners are the indefinite singular *enn* and the plural maker *bann*.

NPs with the strong determiners are definite descriptions, they are universally quantified NPs. Those with weak determiners, are indefinite NPs, which lack quantificational force, hence their ability to occur in existential sentences, where they are assigned quantificational force by the existential operator (Milsark 1979).

3.7. Specificity vs. non-specificity of indefinites

Specificity and non-specificity have standardly been defined as properties of indefinite NPs when they occur in sentences with operators such as tense, modals, adverbs of quantification ('always', 'seldom'), and propositional attitude verbs ('want', 'believe'), etc. This can lead to an ambiguous interpretation of some utterances, such as (18):

(18) Paul wants to buy a monkey.

However, the following utterances leave no room for ambiguity:

(19) Specific

a. Paul wants to buy [a monkey]_i. He saw it_i at the market yesterday.

 $(\exists x)$ (Monkey (x) & Want (Paul buy (x))

There is a specific monkey that Paul wants to buy

Non-specific

b. Paul wants to buy a monkey. He will look for one at the market.

Paul want $((\exists x) (Monkey (x) \& Paul buy (x)))$

Paul wants to buy a monkey, any monkey

While in (19a), Paul has a specific monkey in mind, this is not the case in (19b). (Note that identifiability relates to the speaker only, not the hearer.) In the case of indefinites, contextual information dispels the ambiguity with regard to their [±specificity] feature, which can also be disambiguated in a formal representation.

The crucial difference between the specific and non-specific NPs is that the former has the presupposition of existence. A specific NP is referential and can license inter-sentential anaphora, as shown in (19a), where the co-referential pronoun forces a specific reading. This is not the case with non-specific indefinites. In (19a) a monkey exists, while in (19b) there may not be a monkey at all.

A specific indefinite NP is like an anaphoric definite NP in that its referent represents a subset of a referent already present in the domain of discourse. Enç proposes that 'specificity involves linking objects to the domain of discourse in some manner or other, as with covert and overt partitives, which presuppose the existence of a set of individuals' (1991:21). This view is shared by Von Heusinger, who defines a specific NP as one which is 'referentially anchored to another discourse object. This means that the referent of the specific expression is linked by a contextually salient function to the referent of another expression' (2002: 245).

These observations are relevant to my analysis, where I equate referentiality and specificity. In modern MC, nouns that are both [+definite] and [+specific] are marked by la, but the contrast between specific and non-specific indefinites is not overtly marked in MC. Obviously, la cannot occur with indefinites because of its inherent [+definiteness] feature.

3.8. Indefinite subjects in modern MC

Following Heim (1983), Kamp (1984) and Kratzer (1989), I assume that indefinites have no quantificational force of their own. They introduce variables into the discourse get their quantificational force from other elements in the sentence. For example, the following word string with an indefinite subject of a non-tensed clause is an open proposition, which has no truth value:

(20) *enn zako kontan banann (Modern MC) a monkey like banana

There is no element to bind the indefinite NP, and the proposition does not make a statement about anything. In order to assert the existence of 'a monkey that likes bananas', an existential construction must be used, as shown in (21), where the indefinite is bound by the existential quantifier, as shown in the formal representation in line 4:

(21) Ena enn zako ki kontan banann (Modern MC) have a monkey COMP like banana
There is a monkey that likes bananas
∃(x) [MONKEY(x) & LIKE BANANA(x)]

However, when the clause is tensed, the indefinite NP receives a partitive interpretation, equivalent to 'one of the monkeys', belonging to a previously mentioned set of monkeys:

(22) Enn zako ti kontan banann a monkey PST like banana A monkey liked bananas (partitive reading)

The partitive reading is the only possible one. The indefinite *enn zako* is specific, and its source of quantification is the Tense operator. This sentence cannot have the existential interpretation: 'There was a monkey that liked bananas'. The ungrammaticality of (20), where there is no operator to bind the indefinite NP, suggests that MC does not admit non-specific indefinites in subject position.

4. 'Li' in modern MC

In modern MC, *li* only surfaces in very specific environments, namely, in affirmative, non-tensed clauses:

· When the subject is [-definite] and singular and the predicate is an individual level predicate as opposed to a stage level predicate.

· With DP predicates that denote professions It is ungrammatical otherwise.

4.1. Individual level predicates

In this section I look at different NPs in subject position of individual level predicates, namely: a bare noun in (23), a [+definite] singular NP in (24), a [+definite] plural NP in (25), and a [-definite] singular NP in (26). All the examples are from modern MC:

- (23) Zako kontan banann monkey like banana Monkeys like bananas (generally)
- (24) Zako la kontan banann monkey SP like banana The/that monkey likes bananas
- (25) Bann zako kontan banann
 PLU monkey like banana
 The monkeys like bananas
- (26) *Enn zako kontan banann a monkey like banana

In (23), the bare noun subject yields a generic interpretation, the only possible interpretation, where the bare noun *zako* is universally quantified, as shown:

(27) $\forall x \text{ [MONKEY } (x) \rightarrow \text{LIKE BANANAS } (x) \text{]}$ For any value of x such that x is a monkey, x likes bananas

Example (23) cannot be assigned an existential meaning. In order to assert the existence of monkeys that like bananas, an existential construction with *ena* must be used, as shown in (28), and a formal representation is the same as with the indefinite singular NP in (21):

(28) Ena zako ki kontan banann have monkey COMP like banana There are monkeys that like bananas

In (24), post-nominal *la* forces a singular and [+definite] interpretation of the NP, which, in this context, must have a discourse antecedent, or be present in the situational context. In (25), the NP marked by *bann* in subject position is [+definite]. It can only refer to a previously mentioned set of monkeys, or a set of monkeys known to all discourse participants. In (26) where the subject is singular and [-definite], the sentence is ungrammatical.

The only possible construction with an indefinite singular subject in an affirmative non-tensed clause is with *li*, as shown:

(29) Enn zako **li** kontan banann a monkey PM like banana A monkey likes bananas (generally)

And the only possible interpretation in this case is a generic one, where, presumably, the indefinite NP is assigned quantificational force by *li*. However, given that generic NPs are non-specific, or non-referential, *li* here can only be analyzed as a source of quantification, bleached of the referentiality and specificity features that were associated with this morpheme in the early creole.

4.2. Stage level predicates

The occurrence of li in (29) is able to derive a generic sentence because of the nature of the predicate, which is an individual level predicate, that describes an enduring property of its subject. Consider the following sentences, with the same subjects as in (23) to (26), but with a stage level predicate, which describes a temporary property of the subject:

- (30) *Zako lor pye monkey on tree
- (31) Zako la lor pye monkey SP on tree The/that monkey is on the tree
- (32) Bann zako lor pye
 PLU monkey on tree
 The monkeys are on the tree
- (33) *Enn zako lor pye a monkey on tree

It is not possible to derive a generic interpretation with a stage level predicate, hence the ungrammaticality of (30). Neither can this sentence have an existential interpretation, which would require a construction with *ena*:

(34) Ena zako lor pye have monkey on tree There are monkeys on the tree

In (31), the NP *zako la* is [+definite] and singular, and, in this context, must have a discourse antecedent or be present in the situational context, while *bann zako* in (32), can only refer to a previously set of monkeys. Sentences (33) is ungrammatical because of the subject is a nonspecific indefinite. Finally, while it is possible in (29) to derive a generic interpretation when *li* occurs between the subject and an individual level predicate, this is not the case with a stage level predicate, though the ungrammaticality seems to be more a case of pragmatic oddity:

- (35) *Enn zako li lor pye a monkey PM on tree
- 4.3. Adjectival, prepositional and nominal predicates

When the subject is a proper noun, li is not required if the predicate is an NP, an AdjP or a PP as in (36):

(36) Pol solda/ malad/ dan loto
Paul soldier/ sick/ in car
Paul is a soldier/is sick/is in the car

Bare nominal predicates are barred in MC, except for the category of nouns that denote professions⁹:

(37) a. *Pol zom
Paul man

The occurrence of li is ungrammatical with all categories of bare nouns:

(38) *Pol li zom/ solda Paul PM man/soldier

However, when the nominal predicate is modified by enn, i.e. when it is a DP as opposed to an NP, li is optional, but only when the noun denotes a profession:

(39) a. Pol (li) enn solda b. *Pol (li) enn zom¹⁰
Paul (PM) a soldier Paul (PM) a man
Paul is a soldier

There is a subtle difference between *Pol enn solda* and *Pol li enn solda*. When *li* is left out, the predicate *enn solda* functions like an attributive adjective, similar to 'tall', or 'clever'. The sentence has the meaning: 'Paul has the <u>property</u> of being a soldier'. When *li* is present, it introduces an activity element in the sentence, changing *enn solda* into a dynamic predicate. The sentence has the meaning: 'Paul works as a soldier', 'Being a soldier is what he does for a living'.

(1) Pol (li) enn zom byen semp/ ki travay dir Paul (PM) a man very simple/ COMP work hard Paul is a very simple man/ is a man who works very hard

A noun modifier is definitely required if the clause is tensed:

⁹ Interestingly, names of professions are the only nouns that can occur bare, i.e. without a determiner in predicative constructions in French.

¹⁰ This string of words is not ungrammatical as such, but this construction is acceptable only when the noun is modified by an adjective or a relative clause, e.g.:

This difference can be explained in terms of what Milsark terms 'properties' of individuals and 'states': 'Properties are those facts about entities which are assumed to be, even if they are not in fact, permanent, unalterable, and in some sense possessed by the entity, while states are conditions which are, in principle, transitory, not possessed by the entity of which they are predicated, and the removal of which causes no change in the essential qualities of the entity '(1979: 212). It is possible, for example, to say: 'Paul was a soldier', but to say that 'Paul was a man' is odd, unless the noun is modified by an adjective or relative clause.

Carlson, on the other hand, draws the distinction between predicates denoting HAPPENINGS and predicates denoting CHARACTERISTICS (1978:75, capitalization in original). Where 'happenings' refer to stages of individuals, and 'characteristics' refer to enduring properties of individuals. However, I disagree with Carlson's claims that all predicate nominals, as in *John is a linguist*, apply to 'individuals and never to stages of individuals.' (1978:77). I claim that nouns denoting professions encode a 'dynamic' feature, and this could well be the reason why they pattern differently from other nominal predicates in the grammar¹¹.

Thus, the occurrence of li in (39) binds the 'event' variable of the dynamic predicate. In this case, the function of li is not to license the subject as in (29), but it performs a similar function, namely that of binding a free variable, in order to yield a closed proposition, with a truth value.

4.4. Li and TMA markers

As in the early creole, the predicate marker li does not occur in tensed clauses, irrespective of the definiteness and specificity features of the subject NP, and the denotation of the predicate. Examples (40) a. and b. have an individual level predicate, examples (41) a. and b. have a stage level predicate. Examples (42) a. and b. have a DP predicate. The (b) examples, where li and a tense marker co-occur, are all ungrammatical:

(40) a. Enn zako **ti** kontan banann a monkey PST like bananas A monkey liked bananas (partitive reading)

¹¹ French, for example, which is very restrictive with regard to the occurrence of bare nominals, admits only bare nominal predicates that denote professions:

(1) a. Paul est un homme b. *Paul est homme Paul is a man *Paul is man

(2) a. Paul est soldat b. ?Paul est un soldat Paul is a soldier Paul is a soldier

While (2b) is grammatical, when a determiner is used, the NP is usually modified by an adjective or relative clause:

(2) Paul est un soldat courageux/ qui a beaucoup de courage Paul is a courageous soldier/ who has a lot of courage

- b. *Enn zako **li** ti kontan banann a monkey PM PST like banana
- (41) a. Enn zako ti lor pye
 a monkey PST on tree
 A monkey was on the tree (partitive reading)
 - b. *Enn zako li ti lor pye a monkey PM PST on tree
- (42) a. *Pol* **ti** enn solda
 Paul PST a soldier
 Paul was a soldier
 - b. *Pol li ti enn solda Paul PM PST a soldier

The above examples support my analysis of li as a source of quantification, which surfaces only when there are no other operators to bind variables. In the (a) examples, the indefinite subjects are bound by the tense operator.

5. A comparison of *i* in Seychellois Creole and *li* in Mauritian Creole

I claimed earlier that the path to the grammaticalization of li was linked to that of the specificity marker la. Motivation for my claim comes from a comparison with Seychellois Creole (SC), which is derived from MC, and where the morpheme i, a cognate of li, occurs in all non-tensed clauses, irrespective of the nature of the subject or that of the predicate. A significant difference between MC and SC is the lack of a specificity marker in SC. Drawing on socio-historical conditions that prevailed at the time of their genesis, I argue that substrate (Bantu) influence favoured the use of a predicate marker in SC, while in Mauritius, the influence of the superstrate (French) motivated the reanalysis of the locative adverb la to mark referentiality. ¹²

5.1. Differences between Mauritian Creole and Seychellois Creole

The most significant differences between the two creoles are:

- · In SC 'i' occurs between all subjects and predicates in affirmative, uninflected clauses
- · SC lacks of the specificity marker la which in MC is equivalent to the, this, that

-

¹² Following the abolition of slavery in 1835, a large contingent of creole speaking slaves were sent from Mauritius to the Seychelles, and the British continued to dump a large number of new, 'rescued slaves' there right up to the 1860s. This colony then remained in relative isolation, and the substrate languages were likely to have had a far greater influence in the development of SC than in that of MC.

The language situation was somewhat different in Mauritius, where there was a large, and increasing, French population administering the colony. Furthermore, given low life expectancy for slaves, the proportion of East African born slaves (as opposed to their descendants) must have declined very rapidly in Mauritius in the early decades of the 19th century (Baker, p.c. 2005).

- · In SC, sa is used on its own as definite determiner and demonstrative. It is equivalent to the, this, that
- · In MC, sa is a deictic marker, and is rarely used on its own without la

This is illustrated below, where δ represents the phonologically null definite determiner:

	MC	SC	English	French
[+definite]	δ latab (la)	δ/sa latab	the table	la table
[+definite] [+specific]	latab la	sa latab	that table	cette table
[+definite] [+specific] [+deictic]	sa latab la	sa latab	this table	cette table ci/là

Table 4: Marking definiteness, specificity and deixis in MC and SC

When the first batch of MC speaking slaves were sent to the Seychelles, the French locative adverb $l\dot{a}$ was only just starting to be used to mark referential NPs, while li was used extensively between the subject NP and the predicate, to mark the subject as singular and referential.

At that stage of the development of the creole, *la* had not yet fully grammaticalized into a specificity marker, and plural marker *bann* did not surface until the second half of the 19th century.

5.2. The mysterious 'i' in Seychellois Creole¹³

'There is in SC an element *i* which has been at the centre of an on-going debate ...It has so far resisted all attempts at an adequate explanation, although there is little doubt about the facts of its occurrence.' (Corne, 1974: 68)

In his description of SC, Papen also notes that 'the status of this element is somewhat controversial among those scholars who have attempted a description of Seychellois Creole' (1975: 27). He defines i as a 'subject clitic' which must be inserted whenever the subject is <u>nominal</u> (common noun or proper noun) and the verb is in the present tense. MC translations are given in line 4:

- (43) *Torti i koma ros* (Papen 1975: 27) **SC** tortoise *i* like rock
 Tortoises are like rocks *Torti kuma ros* **MC**
- (44) Ler dimun seselua i bat triang, zot dãse (Corne, 1974: 68) SC when people Seychellois i beat triangle 3.PL dance
 When Seychellois people play the triangle, they dance
 Kan dimun Sesel bat triang, zot dãse MC
- (45) ki en zanfan i bezwen avan e apre son nesans (1989) SC COMP a child i need before and after 3.SG birth that a child needs before and after his/her birth ki enn zāfā bizen avā e apre so nesās MC

¹³ Subtitle borrowed from Corne (1974)

(46) Sa prefas i osi reaffirm sa bezwen legal ... (1989) SC DEF preface i also reaffirm DEF need legal...

This preface also reaffirms the legal requirement ...

Sa prefas la osi reafirm bezwen legal ... MC

The above SC examples also suggest that, unlike with li in MC, the occurrence of i in SC does not depend on the interpretation of the subject NP with regard to the features [\pm definite] and [\pm plural]. The subject is:

- · generic in (43), thus it is [+definite]
- · [+definite] plural in (44)
- · [-definite] singular in (45)
- · [+definite] singular in (46)

Papen notes that this 'i insertion rule' holds even when there is no lexical verb, as in:

```
(47) Sa i bon (Papen 1975: 27) SC that i good That's good Sa bon (sa) MC
```

Corne suggests that this subject clitic 'has no extra-linguistic reference and its function is deictic, simply marking what follows as the predicate' (1974: 66).

Bollée (1977), on the other hand, identifies i as a resumptive pronoun, claiming that 'l'emploi du pronom personnel de la troisième personne, i, est obligatoire au présent' (the use of the 3^{rd} pronoun i is mandatory in the present tense), as shown:

```
(48) ler sõ ban servant i al sers delo (Bollée, 1977) SC when 3.SG.POSS PLU maid i go fetch water when her maids go to fetch water kan so bann servant al rod dilo MC
```

I refute Bollée's analysis on the grounds that if i was a resumptive pronoun, it would agree in number with the subject, and the well established form zot would be used, as in (49):

(49) nenen ek msje zot al dã lakaz Sũgula e Zako (Bollée, 1977: 62) maid and master 3.PL go in houseSoungoula and Monkey The maid and the master they go into the house of Soungoula and Monkey Nenenn ek missye, zot al dan lakaz Sougoula ek Zako MC

However, Bollée argues that 'i est nettement préféré à zot; quelques locuteurs semblent éviter zot complètement' (i is much preferred to zot; some speakers avoid the latter completely). She quotes one of her informers: 'I prefer i, it makes the sentence flow more easily' (1977: 62). This in fact suggests that there is a pause when a resumptive pronoun is used, but not when i is used. Corne (1974) also makes the point that when a resumptive pronoun is used, there is an 'intonation

contour'. Similarly in modern MC texts, where the use of a comma between the subject and *li* clearly indicates that this morpheme is pronominal, as in:

(50) *li ousi*, *li ti enn kreol* (Cheung 2002 : 21) **MC** 3.SG too 3.SG PST a creole he too, he was a creole

The pronoun is also often repeated for the sake of emphasis, as in:

(51) Kolo li li dir so bisiklett ki admirab (Maingard: 101) MC Kolo 3.SG 3.SG say 3.SG.POSSbicycle COMP wonderful As for Kolo, he says it's his bicycle which is wonderful

The fact that in SC i is in complementary distribution with past tense markers and modals (not Aspect markers) has also prompted Papen (1975) to analyze this morpheme as a 'non-future tense' marker. Interestingly, MC li is in complementary distribution with **all** TMA markers, not just tense markers and modals. In the SC sentences below, i is used with an Aspect marker and a modal, but, as indicated in the glosses, MC does not admit li when these inflectional elements are present, as shown:

- (52) tu dimun i ape dãse (Corne 1974 : 69) SC all person i ASP dance everyone is dancing tu dimun pe danse MC *tu dimun li ape danse
- (53) *i pa i pu maze tato?* (Corne 1974: 59) **SC**3.SG NEG *i* MOD eat this.afternoon
 will he not eat this afternoon?
 Li pa pu manze tanto? **MC*** Li li pa pu manze tanto¹⁴

In their analysis of SC *i*, both Corne and Papen clump this morpheme with TMA markers, suggesting that it is part of the verbal system. I hesitate to attribute a similar function to *li* on the grounds that, while all verbs and TMA markers in MC follow Negation, *li* precedes Negation, as shown in (54) and (55) respectively:

- (54) *Me personn* **pa ti** koir li (Virahsawmy, 2003) **MC** but no.one NEG PST believe 3.SG

 But no one believed him
- (55) *Me literesi li pa zis difisil pou aprann* (Virahsawmy, 2003) **MC** but literacy *li* NEG just difficult to learn But literacy is not just difficult to learn

-

 $^{^{14}}$ This sentence would be grammatical if the second li was a resumptive pronoun, but I am only concerned with its function as a predicate marker.

Baker (p.c. 2006) suggests that SC i is a predicate marker, derived from MC li and attributes it directly to substrate influence, namely, to the use of predicate markers in Bantu languages, which would favour the use of a morpheme between the subject and predicate in the new creole¹⁵. The morphemes li and la seemed to have equal status when the two creoles diverged in the mid 1830's. The presence of the French in Mauritius may have accelerated the reanalysis of the postnominal locative adverb la into a specificity marker, while the new Bantu speaking slaves in the Seychelles reinforced the need for a predicate marker in the creole.

The paths to grammaticalization of the predicate markers in those two creoles obviously diverged at some point. The differing functions of i and li may well be a consequence of the differences in the determiner systems of the two creoles. SC lacks a specificity marker, but this need not imply that i in SC serves to mark specificity. In fact, its occurrence with all types of NPs suggests that it is not sensitive to the semantic features of the subject (see examples (43) to (46)).

6. Conclusion

To my knowledge, unlike i in SC, the predicative function of li in MC has never been analyzed. Both MC dictionaries, by Ledikasyon pu Travayer (2004) and Baker and Hookoomsing (1987), define li as a pronoun. The former limiting its definition to 'he, she'; while Baker and Hookoomsing translate li as: 'he, she, it, him, her'. In his grammar of MC, Virahsawmy (2004) also defines li strictly as a pronoun. He suggested that though it may resemble a copula, he prefers to 'consider it as an emphatic pronoun' (p.c. Nov 2005).

Its function may be blurred by the fact that it is homophonous with the 3sg pronoun, and that constructions with a resumptive pronoun are common in modern MC. As previously suggested, this predicate marker may well have originated as a resumptive pronoun, with the discourse pragmatic function of marking the subject as singular and referential. However, with the gradual emergence of new determiners, which now serve to mark the contrasts of [±definiteness] and [±plural], *li* was gradually bleached of its singular and referential features. By the 1830's it started occurring with plural subjects, evidence that it was starting to lose its function of marking Number. Its use as a marker of definiteness and specificity subsided with the emergence of the null definite determiner and the specificity marker *la* which now perform these functions.

Li now functions purely as a source of quantification, surfacing when there are no other sentential operators to bind free variables. Its path to grammaticalization is linked to that of all determiner elements, but more closely with the specificity marker la. They both performed a similar function

_

Nouns in Bantu languages have noun prefixes indicating the class of the noun, and there is a morpheme occurring between the subject and the predicate which is phonetically similar to the noun prefixes. The agglutination of the French articles to the nouns may in fact have been partly motivated by the Bantu noun class system (Baker 1984, Strandquist 2005). Interestingly, in the early creole, the prefix *li* tended to be used with French masculine nouns (e.g. *liker* from Fr. *le coeur* 'heart', *likor* from Fr. *le corps* 'body', *lipye* from Fr. *le pied* 'foot'), and the prefix *la* with French feminine nouns (*latab* from Fr. *la table* 'table', *lakaz* from Fr. *la case* 'house', *lamone* from Fr. *la monnaie* 'money'). The emerging *li* and post nominal *la* occurred sequentially in the same position as the Bantu verb prefixes.

in the early creole, and what they now have in common is the fact that they are both sources of quantification.

With regard to 'mysterious' *i* in Seychellois Creole, an analysis of its function is beyond the scope of this paper. The above analysis of its cognate *li* may hopefully suggest new avenues of research to solve this mystery.

7. References

- Adger D & G Ramchand 2003 'Predication and equation' *Linguistic Inquiry* 34(3): 325-359.
- Anderson. 1885. L'Évangile selon S. Matthié (dan langaz créol Maurice). The Gospel according to St Matthew (in Mauritian creole). London: British and Foreign Bible Society.
- Anon. 1989 Konvansyon lo drwa zanfan: Adopte par Lasanble Zeneral Nasyon Ini le 20 Novanm 1989. http://www.seychelles.net/ncc/crc-cre.htm.
- Aristide 1850 'Zistoire Moucie Caraba' in R Chaudenson (ed.) *Textes créoles anciens: (La Réunion et Ile Maurice): comparaison et essai d'analyse* Helmut Hamburg: 121 124.
- Baker P & VY Hookoomsing 1987 *Diksyoner Kreol Morisyen; Dictionary of Mauritian Creole; Dictionnaire du Créole Mauritien* L'Harmattan Paris.
- Baker P 1984 'The significance of agglutinated French articles in the creole languages of the Indian Ocean and elsewhere' *York Papers in Linguistics* II: 18-29.
- Barwise J & R Cooper 1981 'Generalized quantifiers and natural language' *Linguistics and Philosophy* 4: 159-219.
- Bollée AA 1977 Le créole français des Seychelles : esquisse d'une grammaire textes vocabulaire Beihefte zur Zeitschrift fur romanische Philologie ; Bd. 159. Niemeyer Tubingen.
- Carlson GN 1978 *Reference to kinds in English* Indiana University Linguistics Club Bloomington, Indiana.
- Chaudenson R 1981 *Textes créoles anciens: la Réunion et Ile Maurice comparaison et essai d'analyse* H. Buske Hamburg.
- Chrestien F 1831 'Les essais d'un bobre africain, Ile Maurice, 1831' in R Chaudenson (ed.) *Textes créoles anciens; (La Réunion et Ile Maurice): comparaison et essai d'analyse* Buske Hamburg: 87-97.
- Christophersen P 1939 *The articles: A study of their theory and use in English* Einar Munksgaard Copenhagen.
- Corne C 1974 'Tense, Aspect and the Mysterious i in Seychelles and Reunion Creole' *Te Reo: Journal of the Linguistic Society of New Zealand Auckland, New Zealand* 17: 53-93.
- Davidson D 1966 'The logical form of action sentences' in N Rescher (ed.) *The logic of decision and action* University of Pittsburg press Pittsburg.
- Descroizilles HC 1867 'Navire fine engazé, or The Mauritius in danger' in R Chaudenson (ed.) Textes créoles anciens: (La Réunion et Ile Maurice): comparaison et essai d'analyse Helmut Hamburg: 125-131.
- Enç M 1991 'The semantics of specificity' Linguistic Inquiry 22: 1-25.
- Grant AP 1995 'Article agglutination a in Creole French: a wider perspective' in P Baker (ed.) *From contact to creole and beyond* University of Westminster Press London: 149-176.
- Haspelmath M, MS Dryer, D Gil & B Comrie (eds) 2005 *The world atlas of language structures* Oxford University Press Oxford.

Hawkins J 1978 Definiteness and indefiniteness: A study in reference and grammaticality prediction Croom Helm London.

Heim I 1983 'File change semantics and the familiarity theory of definiteness' in R Bauerle, C Schwarze & A von Stechow (eds) *Meaning, use and interpretation of language* Walter de Gruyter. Berlin.

Higginbotham J 1985 'On semantics' *Linguistic Inquiry* 16: 547-593.

Kamp H 1984 'A theory of truth and semantic representation' in J Groenendijk, TMV Janssen & M Stokhof (eds) *Truth, interpretation and information* Foris Publications Dordrecht.

Karttunen LJ 1971 Discourse referents Indiana University Linguistics Club Bloomington.

Karttunen, Lauri Juhani. 1971. *Discourse referents*. Bloomington: Indiana University Linguistics Club.

Kratzer A 1989 'Stage-level and individual-level predicates' in E Bach, E Kratzer & B Partee (eds) *Papers on quantification* Department of Linguistics, UMass, Amherst Massachusetts.

Lambert 1828 Catéchisme en créole de l'Île Maurice en 1828, Communiqué par M. le Capitaine Laray Port-Louis, Mauritius Archives.

Ledikasyon pu Travayer 2004 *Diksyoner kreol angle* 3rd reprint ed. Ledikasyon pu Travayer Grande Rivière Nord Ouest, Mauritius.

Milbert 1981 'Milbert 1812' in R Chaudenson (ed.) *Textes créoles anciens: La Réunion et Ile Maurice comparaison et essai d'analyse* H. Buske Hamburg: 85.

Milsark G 1979 Existential sentences in English Garland New York.

Papen RA 1975 A short grammar of Seychellois Creole Unpublished manuscript.

Parsons T 1990 Events in the semantics of English: a study in subatomic semantics MIT Press Cambridge, Mass.

Russell B 1905 'On denoting' Mind 14(56): 479-493.

Strandquist RE 2005 *Article incorporation in Mauritian Creole* Unpublished thesis, University of Victoria.

Virahsawmy D 2003 *Literesi an Morisien* http://pages.intnet.mu/develog/dev0802.htm (accessed 24 April 2003 2003).

Virahsawmy D 2004 Aprann lir ek ekrir Morisien Cygnature Publicatons Rose-Hill, Mauritius.

Von Heusinger K 2002 *Referentially anchored indefinites* Paper presented at Existence: Semantics and syntax, Nancy, France.

Abbreviations

N

- Noun

1.SG - 1st singular pronoun
3.SG - 3rd singular pronoun
A - Adjective
AP - Adjectival Phrase
PL/PLU - Plural

ASP - Aspect PM - Predicate Marker

Aspect TWI - Tredicate Walk

CMPL - Past tense, completive POSS - Possessive

COMP - Complementizer PP - Prepositional Phrase

D - Determiner PST - Past tense

DP - Determiner Phrase SC - Seychellois Creole

MC - Mauritian Creole V - Verb

MOD - Modal VP - Verb Phrase

22