Change in Noun Denotation Triggers a New Determiner System: The Case of Mauritian Creole

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Abstract. Early in the genesis of Mauritian Creole (MC), the French definite articles *le/la* incorporated into a large number of the nouns that they modified, resulting in the occurrence of bare nouns in argument positions, yielding (in)definite, singular, plural and generic interpretations. These changes triggered a parametric shift in noun denotation, from predicative in French to argumental in MC, and account for the fact that MC has a very different determiner system from that of French. I argue that MC nouns are Kind denoting terms, which share some of the distributional properties of English bare plurals, namely, their ability to function as arguments without a determiner. The new MC indefinite singular article *enn* and the plural marker *bann* are analyzed as operators that assign existential quantification over Kind denoting nouns. I provide evidence that MC has a null definite determiner equivalent to the French definite articles *le/la* and English *the*. The Specificity marker *la* in MC serves to license the null definite determiner in some syntactic environments.

Keywords: Creole, definiteness, determiner, semantics, specificity, syntax

Selected Papers from the 2009 Conference of the Australian Linguistic Society,
edited by Yvonne Treis & Rik De Busser. http://www.als.asn.au. 2010.

1. Introduction

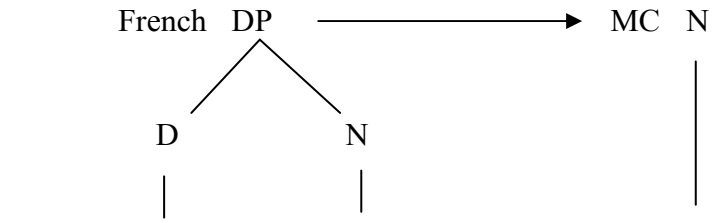
1.1. The process of article incorporation

Mauritian Creole (MC) is a French lexifier creole whose main substrates in the early stages of creolization included Gbe languages of West Africa, Bantu languages of East Africa, as well as Malagasy. Most of the MC lexicon is from French and the creole has retained the strict SVO word order of its lexifier, as well as the count mass distinction of its nouns. The determiner systems of the two languages, however, are quite different.

These differences are attributed to the process of article incorporation, whereby the French definite articles *le/la* ('the'), used with count nouns and feminine mass nouns, and the partitive determiner *du* ('some'), used with masculine mass nouns, incorporated into a large number of the nouns that they modified.

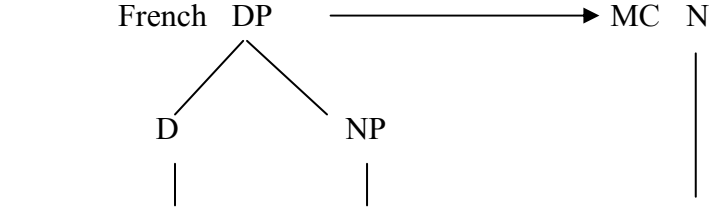
The process of article incorporation into count and mass nouns is represented in (1) and (2) respectively, where a French Determiner Phrase (DP) results in an MC bare noun (N):

(1)



masc sg	*le*	*rat*	'the rat' →	*lera*	'rat'
fem sg	*la*	*case*	'the house' →	*lakaz*	'house'

(2)



masc mass noun	*du*	*lait*	'(some) milk' →	*dile*	'milk'

In both cases, a French quantified noun phrase yields a bare MC common noun, unspecified for the features (in)Definiteness, and in the case of count nouns, unspecified for Number.

The definite articles and partitive determiners in French serve to mark the semantic features of (in)Definiteness, and they are also the locus of Number and Gender marking. It seems that these were not recognized as separate morphemes by the African slaves, but were taken to be an integral part of the nouns that they modified (Baissac 1880; Chaudenson 1981; Baker 1984; Grant 1995; Strandquist 2005). Unlike French, MC does not grammaticalize Gender and its nouns do not inflect for Number.

1.2. Ambiguous interpretations of bare nouns

The immediate consequence of the loss of the French determiners was that, in the early creole, all nouns were bare, with ambiguous interpretations between (in)definite and singular vs. plural in the case of count nouns, and between (in)definite in the case of mass nouns, as illustrated in Table 1:

	Features	French	MC	English
Count noun	sg [–definite]	une patte	lapat	a paw
	sg [+definite]	la patte		the paw
	pl [–definite]	des pattes		paws
	pl [+definite]	les pattes		the paws
Mass noun	[–definite]	du lait	dile	(some) milk
	[+definite]	le lait		the milk

Table 1. (in)Definiteness and Number marking are lost in very early MC

1.3. A new determiner system

The occurrence of bare nouns in argument positions represents a significant divergence from French, where, with few exceptions, nouns must occur with a determiner that marks semantic features like Definiteness, Deixis, and Number.[1] A new deter-

[1] Some of these exceptions include coordinated nouns, e.g. *Père et fils se ressemblent* 'Father and son look alike'. We also find bare nominal arguments in fused expressions, such as proverbs, e.g. *Pierre qui roule n'amasse pas mousse* 'A rolling stone gathers no moss'.

miner system, which is quite different from that of French, gradually emerged in the creole during the course of the 19th century. The core of the new MC determiner system comprises:

- An indefinite singular article *enn* (derived from the French *un/une* 'a/an').
- A plural marker *bann* (derived from French *bande* meaning 'group').
- A post nominal Specificity marker *la* (derived from the French distal deictic particle *là* or homophonous locative adverb meaning 'there').[2]
- A demonstrative *sa* (derived from the French demonstrative pronoun *ça* meaning 'this, that, these, those'). MC *sa*, which is prenominal, must generally be used with post-nominal *la*.

Despite the emergence of these new determiners, MC continues to admit bare nouns in argument positions, with varying interpretations between (in)definite, singular or plural, and generic. I argue that a phonologically null definite determiner, equivalent to English 'the' and French *le/la*, was present from very early in MC.

1.4. Differences between the French and MC determiner systems

The major differences between the French determiner system and that of MC are as follows:

- While French does not admit bare nouns in argument positions (bar a few exceptions), MC freely admits bare nouns as arguments.
- French overtly marks the (in)definiteness contrast of all nouns. MC marks singular indefinites with *enn*, but bare nouns can be (in)definite singular or indefinite plural (not definite plural).

[2] French demonstratives sg. *ce* 'this/that' and pl. *ces* 'these/those' are optionally used with post-nominal deictic particles, proximate *ci* and distal *là* when deictic contrast must be marked, as shown:

(i) a.	*cet*	*homme*	b.	*cet*	*homme*	***ci***	c.	*Cet*	*homme*	***là***
	DEM	man		DEM	man	PROX		DEM	man	DIST
	'this/that man'			'this man'				'that man'		

- French uses the definite article *le/la/les* ('the') for all types of definite NPs and does not distinguish between specific and non-specific definites. MC has bare nouns for non-specific definite NPs, and marks specific definite NPs with post nominal *la*. *La* is used to mark anaphoric definiteness, and it also serves the discourse pragmatic function of recalling a Topic from the previous discourse.
- While all determiners in French are pre-nominal, MC *la* is post nominal.[3]

On the points listed above, MC seems to pattern with its substrate languages. Givon observes that, in some Bantu languages (e.g. Bemba), "there is no provision for the definite/indefinite distinction, but only for that of referential vs. non-referential" (Givon 1978:300).[4] The Gbe languages, which were among the main substrate languages in early MC, manifest poor inflectional morphology. Specificity markers in Gungbe are post nominal. Their nouns do not inflect for Number, and are not specified for Gender. Bare nouns can be ambiguous between (in)definite and singular or plural, and their meaning is derived from the context. While "Gungbe nominal expressions are unmarked with respect to definiteness, they are always unambiguously specific or non specific" (Aboh 2004:77).[5]

1.5. Organisation of this paper

In the next section, I present the syntactic framework adopted for my analysis. Section 3 comprises brief semantic definitions of Kinds, Definiteness and Specificity, where I provide evidence of a phonologically null definite determiner in MC. In Section 4, I look at the distribution of MC bare nouns in various syntactic configurations, and how their various interpretations are derived. In Section 5, I show how Number is marked in MC. Section 6 concludes this paper.

[3] However, as seen in footnote 2, French has the post-nominal deictic markers, namely proximate *ci* and distal *là*, which are used with demonstratives.

[4] I equate Referentiality with Specificity. See semantic definitions in Section 3. For a detailed analysis of Definiteness and Specificity, see Guillemin (2009, Ch. 3).

[5] For an overview of the syntax of Gungbe noun phrases, see Aboh (1998).

2. Syntactic framework

2.1. The Minimalist Program (Chomsky 1995)

My syntactic analysis is within the framework of Chomsky's (1995) Minimalist Program (MP), which assumes that the human Language Faculty is an optimal system, comprising an initial state which is genetically determined, and is uniform for the species. The theory of this initial state is referred to as *Universal Grammar* (UG), which "provides a fixed system of principles and a finite array of finitely valued parameters" (Chomsky 1995:170). Thus, differences between languages are accounted for in terms of parametric variations.

The grammar of any particular language comprises a lexicon and a computational system, the syntax, which is strictly derivational. Linguistic expressions generated by a particular grammar must satisfy two interface conditions: those imposed by the articulatory-perceptual system and those imposed by the conceptual-intentional system. These represent the only two interface levels, also referred to as Phonetic Form (PF) and Logical Form (LF), and which account for the phenomena of sound and meaning respectively.

The MP assumes that items that are selected from the lexicon enter a derivation fully inflected with their phonological, semantic and formal features. The lexicon comprises **lexical** items, such as adjectives (A), nouns (N) and verbs (V), and **functional** items, such as complementizers (C), determiners (D) and tense (T). Functional items are referred to as Probes. They are the locus of formal semantic features, e.g. [+definite] or [+count], which are uninterpretable at the interface. Lexical items are defined as Goals, whose features are interpretable.

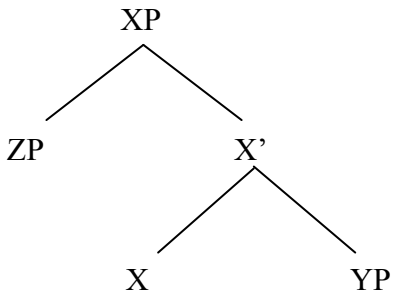
Linguistic expressions are formed by the recursive application of the operations *Merge* and *Move*. The syntactic operation Merge builds phrases out of words and sentences out of phrases, e.g. the noun *dodo* and the determiner *the* are merged to form the Determiner Phrase (DP) *the dodo* where the categorial feature of the D head is projected.

"The operation *Move* is driven by morphological considerations, namely, the requirement that some feature F must be checked" (Chomsky 1995:262). Probes seek and value matching features on Goals, thereby triggering syntactic derivations. If

conditions are satisfied, uninterpretable features delete. All features must be interpretable at both PF and LF, or a derivation will crash.

A fundamental assumption of the MP is that UG must provide the means to present this array of items from the lexicon in a form that is accessible to the computational system. Chomsky takes this to be X-bar theory. Thus, syntactic structures are built up using general rules such that each phrase consists of a head (X), a complement (YP) and specifier (ZP) as in the schema in (3). The two basic relations are the *Spec(ifier)-head* relation of ZP to X, and the *head-complement* relation of X to YP:

(3)



(Chomsky 1995:172)

Within the Minimalist framework, notions of economy and optimality apply to both the derivations and the occurrence of features. Operations are driven strictly by necessity; they are defined as "last resort", applied if they must, not otherwise. Movement can be overt (at PF) or covert (at LF). In the case of overt movement, there is morphological realization of a feature, and in the case of LF movement, which is more economical, there is no overt marking of the feature that drives the operation *Move*. These Minimalist principles also extend to the occurrence of features: optimally, a feature occurs on a head only to yield new scopal or discourse related properties.

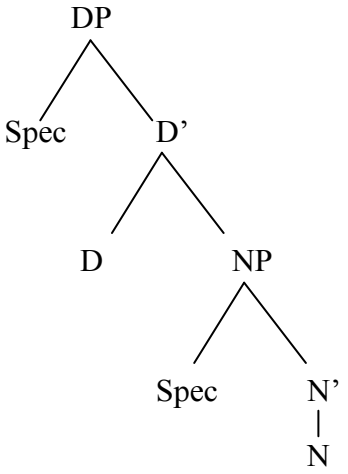
2.2. The noun phrase

Since the works of Abney (1987) and Szabolcsi (1987), the noun phrase has been shown to have an articulated structure parallel to that of the clause, where functional projections are instantiated in order to realize a semantic feature. In the case of the noun phrase, features include, amongst others, Definiteness, Specificity, Deixis and Number. The head of each projection is specified for one feature, e.g. [+definite] or [+specific], and not binary features, e.g. [±definite] or [±specific]. The head of a

projection can be a phonologically null element, but its features are nevertheless present and must be checked and eliminated for convergence at the interface.

The DP is assumed to be the maximal category projected by a determiner element that heads the noun phrase (Abney 1987; Longobardi 1994, 2001). The structure that Abney (1987) proposed for DPs is as shown in (4):

(4)



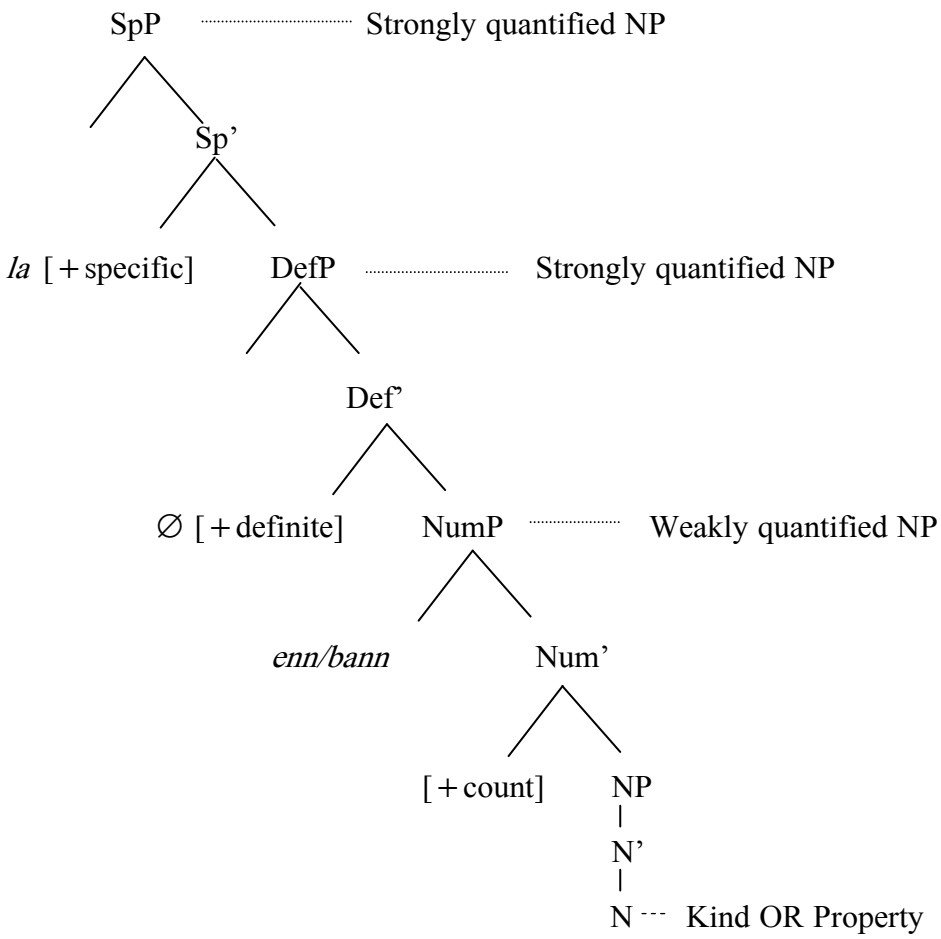
2.3. Weak and strong determiners

Determiners fall into two categories, weak and strong (Milsark 1979; Barwise & Cooper 1981). Strong determiners are quantificational devices, analyzed as operators that want a restriction, i.e. a predicate (Stowell 1989, Longobardi 1994). DPs with strong determiners, such as the definite article, are internally closed or quantified, and they can function as arguments of any predicate. NPs with weak determiners, such as the indefinite article, are cardinality predicates (Milsark 1979). Existential sentences admit only weakly quantified NPs, such as indefinites, while definite NPs are barred in existential contexts, e.g. *There's a hole in my sock* vs. **There's the hole in my sock*.

2.4. The Architecture of the noun phrase

My analysis complies with Zamparelli's (2000) "Multi-layer DP Hypothesis", whereby weakly quantified NPs, such as cardinality predicates, are interpreted in a lower position in the Determiner Phrase (DP), while strongly quantified NPs occupy a higher position in the DP. Strongly quantified noun phrases include specific and non-specific definites and specific indefinites, as shown in (5):

(5)



Where:

- The Specificity Phrase (SpP) is the topmost projection in the DP. Its head is specified for the feature [+specific], and is morphologically realized as *la* for definite NPs in MC.
- The head of the Definiteness Phrase (DefP) is specified for the feature [+definite] and the MC definite determiner is a phonologically null element (represented as ∅ for ease of exposition).
- The head of the Number Phrase (NumP) phrase, which projects only for common count nouns, is specified for the feature [+count]. The indefinite singular article *enn* and the plural marker *bann* (both of which are in complementary distribution with numerals) are merged in Spec,NumP.

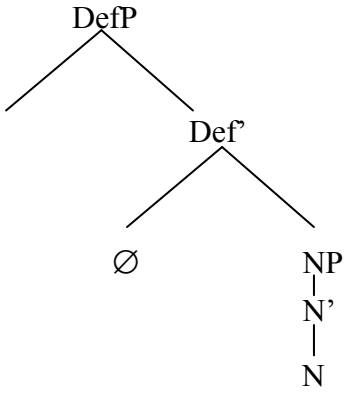
Stowell (1989), Longobardi (1994, 2001) and Zamparelli (2000) subscribe to the view that the base denotation for nouns in N is that of a Kind. I propose that N can denote either a Kind or a Property, and that noun denotation is subject to parametric variation.

2.5. Evidence for a phonologically null definite determiner in MC

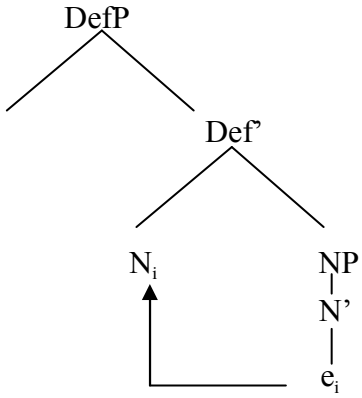
In his typological study of articles, Himmelmann comments that "count nouns cannot be used in core argument positions without a marker for definiteness or specificity" (2001:832). In a similar vein, Longobardi (1994, 2001) derives the principle that "DP can be an argument, NP cannot", though D can be a phonologically null element (1994:628).[6] If this is indeed the case, then the occurrence of bare nouns that yield a definite interpretation provides evidence for a phonologically null determiner in MC, equivalent to the English and French definite articles.

Longobardi (1994) proposes that in Romance languages, when proper nouns occur without a determiner in argument positions, they are DPs, not NPs. The fact that they are inherently referential nouns makes it possible for them to raise into D. Thus a DP can be either ∅ + N or N in D, as shown in (6a) and (6b) respectively:

(6) a.



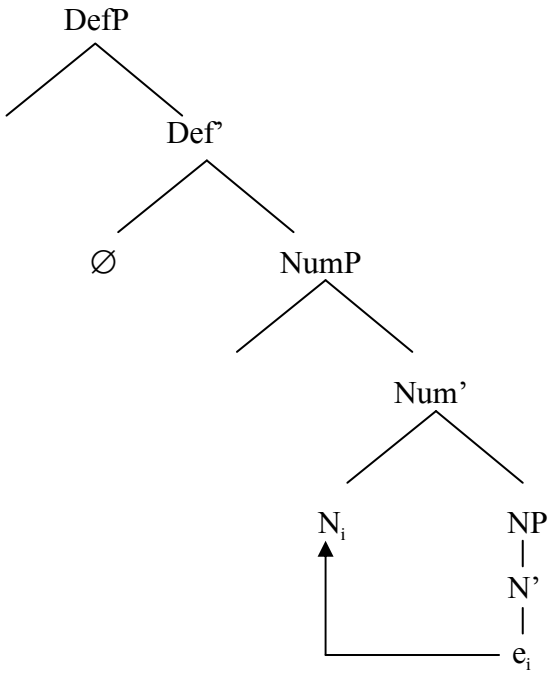
b.



[6] The main contrast between the two points of view is that Longobardi differentiates between singular vs. plural count nouns, and points out that only plural count nouns and mass nouns tolerate a null determiner in some languages. Himmelmann does not make this distinction. Note that Longobardi's use of NP here denotes a non-quantified noun phrase.

I argue that both configurations are attested in MC, where count and mass nouns are shown to pattern differently in the grammar. I account for the differential behaviour of count and mass nouns to the Number Phrase (NumP) which projects only for common count nouns. These must raise to Num° to check their [+count] or Number feature, as shown:

(7)



While N in its base position is an argumental Kind denoting term, NumP is a cardinality predicate which requires a determiner to function as an argument. A null definite determiner (∅) must project, and it selects a NumP.

Mass nouns, which do not check a [+count] feature can raise to Def° for a [+definite] interpretation. Proper nouns, which are inherently referential, and unique nouns, which belong to a singleton set, both pattern differently from common count nouns, in that they do not need to raise to Num° to check a [+count] feature. For a [+definite] interpretation, they can raise from N into Def°, like mass nouns.

2.6. Predicative and argumental nouns

The view that only DPs can occur in argument positions is challenged by Chierchia (1998), who argues that the denotation of nouns varies across languages, and that this variation may be responsible for the different distribution of bare nominal argu-

ments. In some languages, like Chinese, nominals are by default argumental, and they can occur in argument positions without a determiner. In other languages, like Romance, nominals are predicative, and since predicates by definition cannot occur in argumental positions, such a language should disallow bare nominal arguments altogether (1998:355). There are also languages, such as English, where nouns can freely be argumental or predicative – singular count nouns need a determiner, while mass nouns and bare plurals can occur without a determiner.

Building on Chierchia's (1998) Nominal Mapping Parameter, which assumes that the denotation of nouns varies across languages in terms of the parameters "argumental" and "predicative" [±arg, ±pred], I propose that, in languages whose nouns are [+arg, −pred], N can raise into D, and these languages thus admit bare nouns in argument positions. Languages whose nouns are predicative, i.e. [−arg, +pred], require a determiner with N in argument positions.

I argue that the occurrence of bare nouns in argument positions early in the genesis of MC triggered a parametric shift in noun denotation from predicative in French to argumental in MC. This shift in noun denotation accounts for the differences between the determiner systems of the lexifier and that of the creole.

3. Semantic Definitions

3.1. Noun denotation

Following Lyons (1995), I use the term "denotation" to mean both the intension of the noun and its extension, where both intension and extension fall within Frege's (1891) definition of "sense" as opposed to "reference". This complies with Strawson's (1950) and Donnellan's (1966) distinction between "denotation" (attributive use of definite descriptions) and "reference" (identifying use of definite descriptions). While [+definite] NPs serve to denote, [+specific] NPs serve to refer.

3.1.1. Kinds

Kinds are described as objects or individuals whose occurrence in nature is sufficiently regular that we can assign to them certain properties. For example, to any natural property, like that of being a dodo, there corresponds a Kind, namely, the dodo-Kind. The objects need not exist in the real world, but it is sufficient that

knowledge of the shared properties be recognized as common knowledge by a community of speakers.

Carlson (1978) proposed that the complex properties of English bare plurals can be explained by assuming that they refer to Kinds. Some of these complex properties include the fact that they are able to occur in argument positions without a determiner. Both Carlson (1978) and Chierchia (1998) claim that English bare plurals pattern more like proper nouns in the grammar, and not like quantified NPs (i.e. there is no evidence that they occur with a null definite determiner). On the grounds of the similarities between MC nouns and English bare plurals, I propose that MC bare nouns, like English bare plurals, are also argumental Kind denoting terms.[7]

3.2. Denoting vs. referring definite descriptions

Some determiners are quantificational devices that can convert NPs into DPs, as, for example, the definite determiner. Determiners also serve to assign to their NP complements the semantic features of (in)Definiteness and Specificity, as well as marking Deixis, Gender and Number. For definitions of Definiteness, I refer to both the Familiarity theories of Christophersen (1939), Jespersen (1933), Karttunen (1971) and Heim (1983, 1988), and to the quantificational theories of Russell (1905) and Hawkins (1978). Both approaches are shown to overlap in their definition of Definiteness in terms of "identifiability", i.e. a discourse referent that is "familiar" to all speech participants, or one that belongs to a set that the hearer must be able to identify for clear interpretation.

Both Jespersen (1933) and Christophersen (1939) identified several "Stages of Familiarity", ranging from complete unfamiliarity, which corresponds to indefiniteness, where an indefinite article is used, to complete familiarity, as with proper nouns, where the use of a definite article is made redundant. In between those two, there are

[7] Due to space limitations, it is not possible to undertake a detailed comparison of MC bare nouns and English bare plurals. They have been shown to share some distributional properties (Guillemin 2009: ch. 3). We will see in some of the examples in Section 4, that MC bare nouns translate into English bare plurals and bare mass nouns.

various stages of familiarity which are dependent on the discourse or the situation of utterance, and for which both English and French use the definite article.

Hawkins (1978) builds on these "Familiarity" theories, and identifies eight usage types of the definite article. He reduces these to two anaphoric uses, four situational uses, and some unidentifiable uses. They are:

(i) Direct anaphora
(ii) Associative anaphora
(iii) Visible situation use
(iv) Immediate situation use
(v) Larger situation use, relying on specific knowledge about the referent
(vi) Larger situation use, relying on general knowledge
(vii) Unidentifiable uses

In the sub-sections that follow, I will provide MC and French translations of some of Hawkins' examples, to illustrate how the different categories of definiteness are marked in MC, while offering a comparison with French.

3.2.1. Anaphoric Definiteness

In (8) a new referent is introduced in the discourse by an indefinite NP, and in (9) we have the second mention of the referent:

(8) *Fred was discussing **an** interesting book in his class.* (Hawkins 1978:86)
*Fred ti pe diskit **enn** liv interesan dan so klas.* MC
*Fred discutait d'**un** livre intéressant dans sa classe.* French

(9) *I went to discuss **the book** with him afterwards.* (Hawkins 1978:86)
*Mo'n al diskit **liv la** ek li apre.* MC
*J'ai été discuter **du livre** avec lui après.*[8] French

[8] Where *du* is the contraction of the preposition *de* 'of' and the masculine singular definite article *le* 'the' and not the homophonous indefinite partitive determiner, which is used with mass nouns.

In (9) *the book* is understood as referring to the same object as the preceding indefinite description, and is part of a singleton set. We have here a case of **direct anaphora**. While English and French use definite determiners, MC has the post-nominal Specificity marker *la*. MC *la* has been defined as a definite article (Baker & Hookoomsing 1987; Syea 1996; Rochecouste 1997; Déprez 2003; Virahsawmy 2004). I provide evidence in the rest of this section that the MC equivalent to the English and French definite articles is a null element, and that *la* serves to mark only anaphoric definiteness, i.e. Specificity.

3.2.2. Associative anaphora

Example (10) is a case of what Hawkins (1978) terms "associative anaphora", where the definite NP is a newly introduced referent which relies on the context for its interpretation, here provided in the form of an associative relationship with a discourse referent. When there is a discourse antecedent, the definite article has "direct anaphoric" use, e.g. *a book … the book*. When there is no discourse antecedent, there must be a "trigger" (Hawkins 1978:123) to license the use of the definite article, in which case, it has "associative anaphoric" use, as in *a house ... the roof*, where *house* is the "trigger" which licenses the use of the definite article with the *roof*, because it is common knowledge that every house has a roof. In (10), *house* is the trigger which licenses the use of a definite article with *door*.

(10) *Mary stopped to look at a house.* ***The door*** *was open.* (Hawkins 1978:101)
Mari ti arete pu get enn lakaz. ***Laport*** *ti uver.* MC
Marie s'est arrêtée pour visiter une maison. ***La porte*** *était ouverte.* French

3.2.3. Immediate situational uses

Situational uses of definite descriptions, like associative anaphoric uses, do not require a discourse antecedent. In the case of a visible situation use, Hawkins points out that the definite article may overlap with demonstratives. When an object is visible to discourse participants, the speaker may utter either (11a) or (11b):

(11) a. *Pass me* ***the bucket****, please* (Hawkins 1978:103)
Pas mwa ***seo****, do*[9] MC
Passe-moi ***le seau*** *s'il te plaît* French

b. *Pass me* ***this/that bucket****, please* (Hawkins 1978:103)
Pas mwa ***sa seo la****, do* MC
Passe-moi ***ce seau-(là)****, s'il te plaît* French

Note that the demonstratives *sa ... la* can be used with the first mention of a referent, but not *la* on its own, as it marks anaphoric definiteness.

When the object is not visible, a demonstrative is not appropriate. Both English and French use a definite article, and MC has a bare noun, as seen in (12):

(12) *Don't go in there, chum.* ***The dog*** *will bite you.* (Hawkins 1978:103)
Pa al laba, monwar. ***Lisyen*** *pu mord twa.* MC
Ne vas pas là-bas, mon vieux. ***Le chien*** *va te mordre.* French

The statement *The dog will bite you* seems to assert the existence of a unique dog that will bite you, but no dog need be visible, nor does the hearer need have prior knowledge of the referent.

3.2.4. Larger situational uses

Typical examples of larger situation uses of definite descriptions include, for example, reference to *the town hall* or *the cathedral* by residents of a particular town, or reference to *the prime minister* or *the queen* by residents of a country. With such definite descriptions, English and French use the definite article, and MC has a bare noun, as shown:

[9] I use the exclamation *do* which does not express anything except that it is a friendly, casual expression. There is no word for *please* for the singular, casual form of address in MC. For the formal form of address, *siuple* (from French *s'il vous plaît*) is used.

(13) ***Larenn*** *Langleter* MC
The Queen *of England* English
La reine *d'Angleterre* French

There are also unique nouns, such as *the earth* or *the moon*, when the speaker appeals to the hearer's general knowledge about entities which exist in his/her world. MC uses bare nouns with unique nouns, while English and French require a definite article:

(14) ***Lalinn*** *turn otur* ***later*** MC
The moon *revolves around* ***the earth*** English
La lune *tourne autour de* ***la terre*** French

In summary:

- For **direct anaphora**, MC uses the Specificity marker *la*, which picks out a Topic from the previous discourse. This type of definite description corresponds to what Jespersen (1933) and Christophersen (1939) identify as having an **explicit contextual basis**. They are the only definites that are also [+specific].
- For all other categories of definiteness, MC has bare nouns.

The above analysis provides evidence that Definiteness and Specificity are distinct phenomena. While a definite NP selects all individuals in a set of possible individuals, an NP that is both definite and specific relates to pre-established discourse referents. "Definiteness expresses the discourse pragmatic property of familiarity, while specificity mirrors a more finely grained referential structure of the items used in the discourse. A specific NP indicates that it is referentially anchored to another discourse object" (von Heusinger 2002:245). This view is shared by Pesetsky (1987) who coins the term *d-linking* (discourse linking) to define the phenomenon of Specificity.

3.2.5. Specific indefinites

In the case of definite NPs, the feature Specificity is discourse related. In the case of indefinite NPs, the precise nature of this feature is still the subject of much debate, For the purposes of this analysis, I will adopt the view shared by most that it relates to an assertion, or presupposition, of existence (Partee 1970; Milsark 1979; Prince

1981; Fodor & Sag 1982; Ionin 2006). While specific definites are known to both speaker and hearer, specific indefinites are known only to the speaker.

4. Distribution of bare nouns in MC

In this section, I look at how count nouns and mass nouns pattern in various syntactic configurations, namely, in existential sentences, in subject position of stage and individual level predicates, and in object position.[10] In their base denotation, MC bare count and mass nouns translate into English bare mass nouns and English bare plurals respectively, and they have a Kind denotation. Some seemingly "bare" MC count nouns, however, comprise a null D + N, in which case, they are definite and singular.

4.1. Existential sentences

In existential sentences, which admit only indefinites (Milsark 1979), both MC mass and count nouns do not require a determiner, as in English, while French needs the partitive determiner (*du*) with a mass noun, and the indefinite plural (*des*) with a count noun, as shown in (15) and (16) respectively:

(15) *Ena **diven** lor latab* MC
*There is **wine** on the table*
*Il y a **du vin** sur la table* French

(16) *Ena **dodo** dan mize* MC
*There are **dodos** in museums/the museum*
*Il y a **des dodos** dans des musées/le musée* French

[10] The terms "Stage level predicate" and "Individual level predicate" were coined by Carlson (1978). A stage level predicate serves to describe temporary properties of the subject, as opposed to an individual level predicate that defines enduring properties of the subject. For example, e.g. *Paul is drunk* vs. *Paul is tall* – where *drunk* describes a temporary characteristic of Paul, while *tall* is an enduring property of Paul.

In (15) and (16) the nouns *diven* and *dodo* have a Kind denotation. They can be replaced by **that kind of substance** and **that/those kind(s) of animal** respectively, and the MC noun *dodo* has a default plural interpretation.

For a singular interpretation in an existential context in MC, a count noun must be marked by the singular indefinite article *enn*, in which case, reference is being made to a specific instance of N:

(17) *Ena **enn dodo** dan mize* MC
*There is **a dodo** in the museum*
*Il y a **un dodo** dans le musée* French

When referring to a set of N whose membership is >1, the plural marker *bann* is used, as shown:

(18) *Ena **bann dodo** dan mize* MC
*There are **some dodos** in the museum*
*Il y a **des/quelques dodos** dans le musée* French

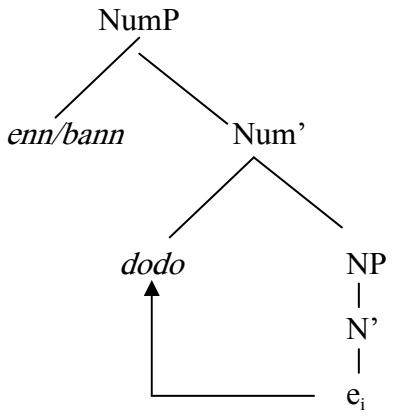
4.1.1. Syntactic representation

"In order to refer to a kind, [...] a noun must head the N projections at S-Structure" (Longobardi 1994:637).[11] Thus, *diven* in (15) and *dodo* in (16) are interpreted in N, and there is no movement.

When a count noun is marked for Number, by *enn* or *bann*, N must raise to Num°, where either the singular indefinite article or the plural marker are merged in Spec,NumP, as represented in (19):

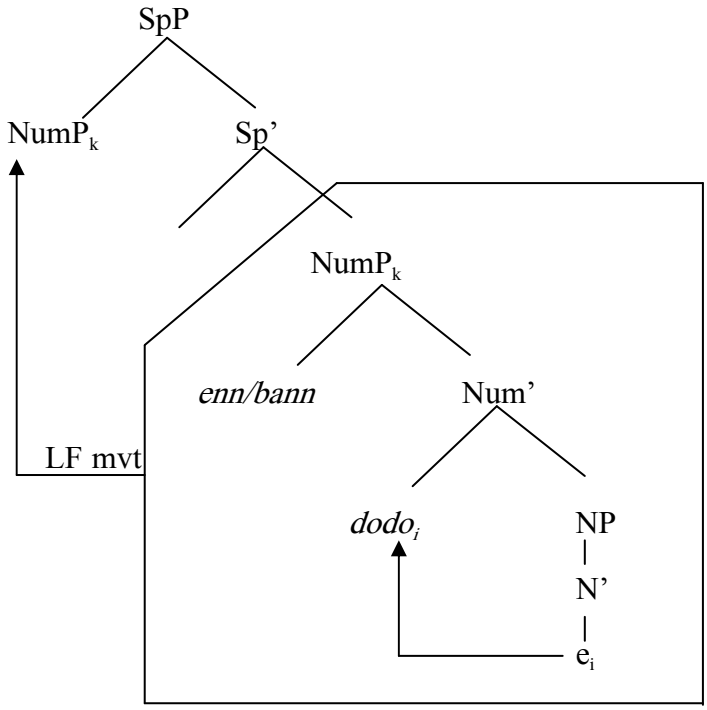
[11] S-Structure (surface structure) is the equivalent of Phonetic Form (PF).

(19)



When the indefinite NP is [+specific] (on account of being existentially quantified), we have movement of NumP to Spec,SpP. Movement is at LF, and there is no overt marking of the feature Specificity, as shown:

(20)



4.2. Subject of individual level predicate

In MC, both bare mass and bare count nouns can occur as subject of an individual level predicate, in which case we have a generic context, where N has a Kind denotation. Note that English also has bare nouns, while French requires a singular definite determiner with both count and mass nouns:

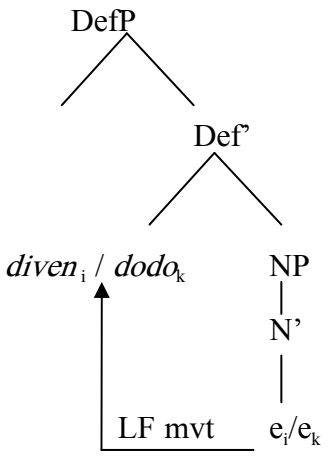
(21) ***Diven*** *bon pu lasante* MC
Wine *is good for health*
Le vin *est bon pour la santé* French

(22) ***Dodo*** *napli existe* MC
Dodos *are extinct*
Le dodo *n'existe plus* French

4.2.1. Syntactic representation

In a generic context, the subject is [+definite] on account of being universally quantified. Both the mass noun *diven* and the count noun *dodo* must raise into Def°. For a Kind denotation, N is interpreted in its base position at PF, and movement into Def° occurs at LF. In this case, the common count noun *dodo*, which denotes a Kind, and not instances of the Kind, need not check its Number, or [+count] feature.

(23)



4.3. Subject of stage level predicate

A bare MC mass, which is the subject of a stage level predicate, translates into a definite NP in both English and French. In (24), reference is being made to some wine which is known to both speaker and hearer:

(24) ***Diven*** *lor latab* MC
The wine *is on the table*
Le vin *est sur la table* French

Unlike mass nouns, bare common count nouns in MC (as opposed to proper nouns and unique nouns) are barred as subject of stage level predicates, as shown by the ungrammaticality of (25a) – it must be marked by the Specificity marker *la* as seen in (25b):

(25) a. ****Dodo*** *dan mize* MC
b. ***Dodo la*** *dan mize* MC
The dodo *is in the museum*
Le dodo *est dans le musée* French

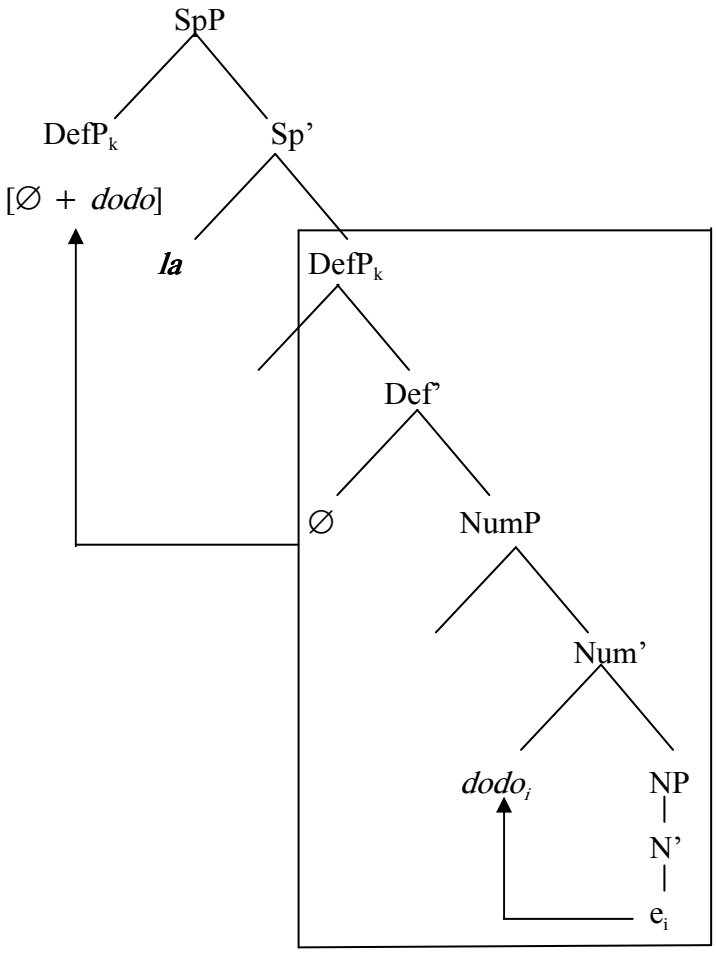
In (25b) *Dodo la* refers to a specific dodo, which has previously been mentioned in the discourse. It is a singular common count noun, one picked out of a set where membership is > 1.

4.3.1. Syntactic representation

The differential behaviour of count and mass nouns in subject position is attributed to the fact that common count nouns must check their [+count] feature. N raises to Num°, where the default interpretation is singular (for a plural reading, *bann* is merged in Spec,NumP). A NumP is a cardinality predicate, which requires D in an argument position. The null definite determiner projects and selects a NumP.

The null definite determiner D is subject to similar licensing conditions as other "empty categories", namely that they must be governed by an overt lexical head (Rizzi 1990; Longobardi 1994; Chierchia 1998). In subject position, however, there is no overt lexical head governing null D, and the Specificity marker *la* projects as a "last resort" to license this empty category. DefP raises to Spec,SpP, as shown in (26), deriving the DP final position of *la*:

(26)



The need for an overt Specificity marker in MC is thus directly attributed to the fact that its definite determiner is a phonologically null element. The specific vs. non-specific contrast is not marked in English and French, which have overt definite articles, and movement of DefP to Spec,SpP can be delayed to LF in those languages.

4.4. Bare nouns in object position

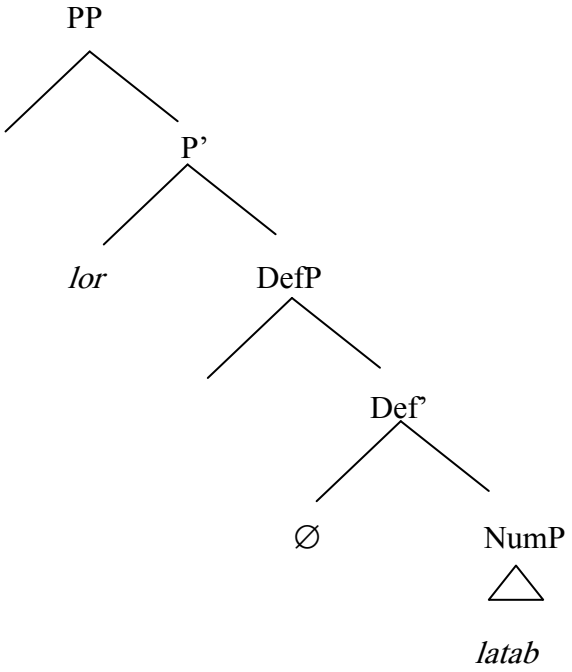
In MC, both bare count and mass nouns derive ambiguous interpretations when they are in object position, and their interpretation is derived from the context. In (27), both *diven*, the direct object of a verb, and *latab*, the object of a preposition, can be (in)definite. When indefinite, *latab* is plural, and when definite, it is singular:

(27) *Met* ***diven*** *lor* ***latab*** MC
Put ***wine/the wine*** *on* ***tables/the table***
Mets ***du vin/le vin*** *sur* ***des tables/la table*** French

4.4.1. Syntactic representation

A bare common count noun cannot derive a singular interpretation in subject position of a stage level predicate (see example (25a)). The subject/object asymmetry of count nouns provides further evidence for the occurrence of a null definite determiner in MC. When this empty category is in an internal argument position, it is governed by a V or P, and the Specificity marker *la* is not required to license null D:

(28)



4.5. The plural marker bann

Whilst a singular common count noun is ungrammatical in subject position without *la*, a plural marked noun can occur as subject of a stage level predicate without the Specificity marker:

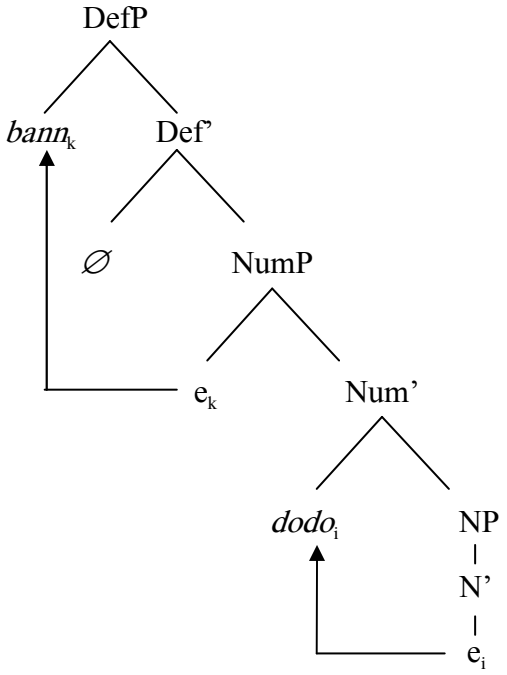
(29) ***Bann dodo*** *dan mize* MC
The dodos *are in the museum*
Les dodos *sont dans le musée* French

Bann dodo is [+definite] and refers to a previously mentioned set of dodos. The fact that *bann* + N in some argument positions yields a [+definite] interpretation may have prompted Ledikasyon pu Travayer (2004) to define this morpheme as a [+definite] plural determiner, equivalent to plural *the*. But this fails to account for the occurrence of *bann* + NP in existential sentences, which admit only indefinites as in (18).

4.5.1. Syntactic representation

Bann is not specified for the feature Definiteness. Its various interpretations result from where this morpheme is interpreted in the DP. When the plural marked NP is indefinite, *bann* is interpreted in its base position in Spec,NumP. When the NP is [+definite], *bann* raises to Spec,DefP, where it is able to license the null definite determiner, assuming, as proposed by Giusti, that "once Spec,DP is filled with an element that has enough features to license the whole projection, no article needs to be inserted" (1997:108). The syntactic representation of a plural definite is as follows:

(30)



A plural marked noun can occur as subject of a stage level predicate, as in (29), but it is ungrammatical with an individual level predicate, a shown in (31), where the

English sentence is equally ungrammatical. Note that French accepts both a plural and a singular definite determiner in generic contexts:

(31) ***Bann dodo** napli existe* MC
***The dodos** are extinct
***Les dodos** n'existent plus* French
(= *Le dodo n'existe plus*, i.e. the genus dodo)

Both the indefinite singular article *enn* and the plural marker *bann* are associated with the Number node, and serve to refer to instances of N, hence, their ungrammaticality in generic contexts, where N refers to the Kind, and not instances of the Kind.

4.6. Summary

The tables below illustrate how Definiteness and Specificity are marked in MC, English and French.[12] While MC bare nouns seem to pattern like English bare plurals, it must be noted that MC bare count and mass nouns can be (in)definite, whilst English bare plurals and bare mass nouns are always indefinite. Furthermore, while English bare plurals comprise N + plural morphology, MC bare nouns are strictly bare, and yet have a default plural denotation.

		Count nouns			
		[–def] [–spec]	**[–def] [+spec]**	**[+def] [–spec]**	**[+def] [+spec]**
Sg	**MC**	**N** *enn* N	*enn* N	**N** (generic) ∅ + N	**N** (unique/proper) ∅ + N + *la*
	French	masc: *un* N fem: *une* N	masc: *un* N fem: *une* N	masc: *le* N fem: *la* N	masc: *le* N fem: *la* N
	English	*a/an* + N	*a/an* N	*the* N	*the* N
Pl	**MC**	**N**	*bann* N	*bann* N	*bann* N (*la*)
	French	*des* pl N	*des* pl N	*les* pl N	*les* pl N
	English	**pl N**	**pl N**	*the* pl N	*the* N

Table 2. Marking Number, Definiteness and Specificity on count nouns

[12] Demonstratives, which have not been discussed in this paper, are not shown in Tables 2 and 3.

	Mass nouns			
	[–def] [–spec]	[–def] [+spec]	[+def] [–spec]	[+def] [+spec]
MC	**N**	**N**	**N**	N (*la*)
French	masc: *du* N fem: *de la* + N	masc: *du* N fem: *de la* N	masc: *le* N fem: *la* N	masc: *le* N fem: *la* N
English	**N**	**N**	*the* N	*the/that* N

Table 3. Marking Definiteness and Specificity on mass nouns

While the definiteness contrast is not marked in MC, it must be marked in both English and French. MC overtly marks the feature Specificity on singular definite NPs, but this feature is not marked on definite NPs in English and French.[13]

Note that plural marked count nouns (i.e. *bann* + N) and mass nouns which are [+definite] and [+specific] are optionally marked by *la.* In this case, the Specificity marker is not a morphological requirement, as with singular count nouns in subject position. When there is no *la*, movement of the DefP is at LF, and when *la* is present, movement occurs overtly. *La* marks anaphoric definiteness and serves to recall a Topic from the previous discourse.

5. Marking Number in MC

Despite the fact that MC has retained the count mass distinction of nouns as in French, the determiner system that subsequently emerged in the creole is quite different from that of its lexifier. If, as claimed by Chierchia (1998), languages vary with regard to the denotation of their nouns, the processes by which singularities and pluralities are derived must also differ.

MC count nouns are lexically stored as Kinds, and their plural feature is attributed to the fact that they denote all instances of objects, concepts, events or individuals denoted by the noun, i.e. the extension of the term. In this respect, they differ from

[13] English uses the proximate demonstrative *this* with some specific indefinites (Prince 1981; Ionin 2006). French uses the neutral demonstratives *ce/ces* etc. without the deictic markers *ci* and *là*, and MC uses the demonstratives *sa ... la* , never *la* on its own.

English and French nouns, which are lexically stored as singular terms, and where plurality is a marked option.

5.1. Deriving instances of Kinds

5.1.1. Singular enn

The function of the indefinite singular article *enn* is to assign existential quantification over a Kind. A bare common count noun can be (in)definite singular or indefinite plural, but never [+specific]. For an indefinite singular [+specific] reading, a noun must be marked by *enn*. The indefinite singular article maps the Kind denoting noun into a single instance of the Kind, and creates a bounded set of membership = 1, which can then serve either to denote or to refer. In the case of the former, we have a non-specific singular indefinite, and in the case of the latter, the NP is specific. (As in the case of definite NPs, the non-specific serve to denote, and the specific serve to refer).

5.1.2. Plural bann

Given the default plural denotation of nouns in MC, the question arises as to why the language needs a plural marker. A bare count noun in MC can be indefinite plural, but never definite plural. For such an interpretation, it must be marked by *bann*. However, as previously seen, this morpheme does not encode Definiteness. *Bann* is the lexical realization of the feature plural associated with the Number node – it is an operator which provides the means to quantify over an indefinite number of objects or individuals so that we may refer to them.

Assume that the circle below holds the totality of cats (MC *sat*) in the world – it is a conceptually unbounded entity, represented by the dotted line. The plural morpheme *bann* extracts a subset of *sat*, as shown in Figure 1:

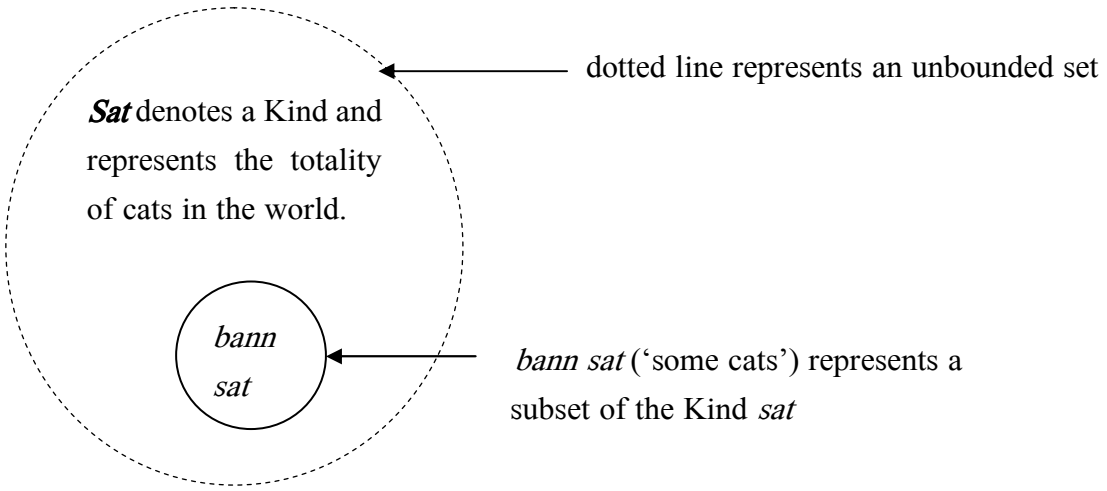


Figure 1. The plural morpheme *bann* extracts a set of count nouns

Both the singular indefinite article *enn* and the plural marker *bann* are quantifiers that introduce existential quantification over instances of the Kind, and create bounded sets. While *enn* creates a singleton set, the plural marker *bann* creates a set of membership >1. This is syntactically represented as N raising to Num° and merging with *enn* or *bann*, which are in Spec,NumP.

6. Conclusion

Chierchia (1998) proposed that the acquisition of a particular setting for a language is made on the basis of positive evidence alone, i.e. through its syntactic manifestations. "In particular, it seems plausible to maintain that the child assumes that the unmarked setting is [+arg, −pred], which is the most restrictive and entails, e.g., the absence of plural marking, the obligatory presence of classifiers with numerals and the absence of articles. Encountering plural morphology or articles, or the failure of classifiers to appear with numerals would constitute the evidence prompting the child to switch to ⟨e, t⟩" (i.e. a predicative type) (1998:94).

The process of article incorporation in the early stages of creolization resulted in the occurrence of bare nouns in argument positions. There were no manifestations of

plural morphology,[14] and also lacking in the case of count nouns, were classifier phrases with numerals (this is not part of the grammar of French). Assuming Chierchia's theory, this would have triggered a shift in the feature specification of nouns from [−arg, +pred] in French, to [+arg, −pred] in MC. In their base denotation, French nouns denote a Property, and must combine with D in all argument positions. Nouns in MC are argumental, Kind denoting nouns that can raise to D and function as arguments.

The process of article incorporation, whereby the French determiners + N were analyzed as one morpheme, resulted in the occurrence of bare nouns in argument positions. In argument positions, mass nouns, abstract nouns, proper nouns and unique nouns, were interpreted as N in D. In the case of count nouns which had to check their Number feature, a null definite determiner projected and selected a NumP. I propose that the MC null definite determiner was present from very early MC.

The determiner system which emerged in MC expresses, without redundancy, all the semantic features that are expressed by the very different determiner system of its lexifier. My analysis provides evidence for the universality of semantic features like Definiteness, Number and Specificity, which must find expression in natural language, despite the variation in their syntactic and phonetic exponents. Speakers of very early MC clearly lacked the means to express these contrasts, yet the emergence of new determiner elements suggests that they had access to the semantics associated with the new morphemes. My analysis also gives support to Chomsky's (1995) theory that language strives for economy of representation and derivation, in accordance with universal principles of grammar.

[14] The singular vs. plural contrast in French is marked both on the determiner and on nouns. Determiners have different singular and plural phonological forms, but the plural morpheme ***s*** on the noun is not phonologically realized in the case of consonant initial nouns, e.g. *la maison* ('the house') /lamezõ/, *les maisons* ("the houses") /lemezõ/.

Abbreviations

arg: argumental – D: Determiner – DEM: Demonstrative – Def: Definite – DefP: Definiteness Phrase – DIST: Distal – DP: Determiner Phrase – fem: feminine – masc: masculine – MC: Mauritian Creole – MP: Minimalist Program – N: Noun – NP: Noun Phrase – Num: Number – NumP: Number Phrase – P: Preposition – pl: Plural – PP: Preposition Phrase – PROX: Proximate – pred: predicative – sg: singular – Sp: Specific(ity) – Spec: Specifier – SpP: Specificity Phrase – SVO: Subject Verb Object

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