From Local Blocking to Cyclic Agree: The role of determiners in the history of French

1. Introduction

In this paper, I show that determiners were to a large extent optional in Old French and that a Blocking Principle of the type proposed by Chierchia (1998) appears, in view of this fact, problematic. I argue, however, that the Blocking Principle can be saved if we localize blocking, making it sensitive to the context (in the same spirit, see Krikfa 2003 for data pertaining to English and Grønn 2005 for data pertaining to Norwegian). My proposal is that the use of determiners in Old French was tied to discourse properties such as focus, on the one hand, and phonological requirements, on the other. The choice between the use of a bare noun and the use of a noun with a determiner was therefore not free, but created a one to one mapping between form and function (Williams 1997). However, if this hypothesis is on the right track (and it appears to be), then we have to conclude that determiners were not required for argumenthood in the language (i.e. not needed to turn a predicate into an argument). In turn, this implies that all nouns start out as <e> (as in Baker 2005, Borer 2005, Déprez 2005, Tonciulescu, this volume). Finally, I argue that determiners did not become obligatory in Modern French because of a putative semantic parameter switch à la Chierchia, but that the diachronic change is connected to an alternation in the morphology of nominals (cf. Delfitto and Schroten 1991). My original contribution to the diachronic issue is that the compulsory insertion of determiners in Modern French was driven by Cyclic Agree (see Rezac 2003 for the original conception of Cyclic Agree).

The paper is organised as follows. Section 2 introduces all the relevant distributional facts about Old French bare nouns needed for this paper. Section 3 concentrates on the use of determiners in Old French. Section 4 discusses the discourse and phonological properties associated with determiners in that language. Section 5 gives an analysis of the syntax and semantics of Old French bare nouns and determiners. Section 6 provides an account as to why determiners became obligatory in Modern French. Section 7 concludes the paper.

2. Bare nouns in Old French

Old French is interesting in the context of the discussion that was initiated by Chierchia's (1998) seminal work on bare nouns, since bare nouns were very common in the language. While many languages have recently been used to put Chierchia's (1998) very influential theory of bare nouns to the test (Brazilian Portuguese, Munn and Schmitt 2001; Edo and Mohawk, Baker 2003; Haitian Creole, Déprez 2005; Inuktitut, Compton 2004; Dëne Suliné, Wilhelm 2005), a careful assessment of how Old French fits in Chierchia's typology has not yet been attempted and the present paper aims to fill that gap.

Bare nouns were ubiquitous in Old French, especially in object positions, either on an existential (1) or a generic interpretation (2). These examples are bare plurals.

(1) Donez moi **armes** por le besoing qu'abonde. give._{IMP.2PL} me weapons for the need that increase._{PRES.3SG} 'Give me weapons because the need is pressing.' (*La Prise d'Orange*, end of 12th century, line 964) (2) **Dames** en canbres fuit et het. ladies in chambers flee._{PRES.3SG} and hate._{PRES.3SG} 'He hates ladies in their chambers and keeps away from them.' (*Lai de Narcisse*, year 1170, line 120)

Bare singulars are also possible in Old French as (3) illustrates. In this particular case, the bare singulars receive a mass interpretation.

(3) Jo vos durrai **or** e **argent** asez I you give._{FUT.1SG} gold and silver enough 'I will give much gold and silver.' (*La Chanson de Roland*, year 1080, line 75)

Bare singulars can also be interpreted as generics (4), definite existentials (5) or indefinite existentials (6).

(4) Quant hom est viex, vet a bastons; when man._{SG} be._{PRES.3SG} old carry._{3SG} to cane
'When [a] man is old, it carries a cane.'
(*Le Roman de Thèbes*, year 1150, line 2933)

- (5) or uolt que prenget movler a son vivant; however want._{PRES 3SG} that take.PRES.3SG wife living at his dunc li noble franc acatet filie d'un thus him.DAT daughter_{.SG} of-a noble man buy._{PRES3SG} 'he wants him to take [a] wife during his lifetime; so he buys him [the] daughter of a nobleman.' (La Vie de Saint-Alexis, year 1050, v. 39-40)
- (6) Ele 'Sire, mon respont : pere she reply.PRES.3SG Sir, my father Prist fenme aprés mort ma la mere ... take._{PAST.3SG} wife._{SG} after the death my mother 'She replies : Sir, my father took [a] wife [i.e. married] after the death of my mother.' (L'âtre périlleux, roman de la Table Ronde, year 1268, lines 1189-1190)

Finally, the following example shows that bare nouns in Old French are not restricted to argument positions; they can also appear in predicate positions.

(7) Bien i pert que vos estes **fame** well there appear._{PRES.3SG} that you be._{PRES.2PL} woman 'One can tell very well that you are a woman.' (*Yvain, Le Chevalier au Lion,* year 1179, line 1654, dans Joly 1998:257)

On Chierchia's (1998) well-known typological scale, Old French seems to be a [+pred, +arg] type of language (like Russian). Although, it might be have been tempting without further ado to group Old French with Romance, it is clear that this option would have been mistaken. In fact, Old French has properties that are no longer exhibited in Modern French and these properties are not always Romance, but Germanic (e.g. V2, Adams 1987, among many others; Stylistic Fronting, Cardinaletti and Roberts 2002, Dupuis 1989, Mathieu 2006a; Quirky

subjects, Mathieu 2006b; transitive expletive constructions and object shift, Mathieu 2006c). Therefore, the conclusion that Old French is [+pred, –arg] would be premature. For example, Old French differs from Modern Romance languages in that bare plurals can not only be objects, but also subjects. Although it appears that bare plurals in Old French are more frequent when they are objects rather than subjects, it is not entirely impossible, however, for bare plurals to be subjects. These can appear in post- or even pre-verbal positions.¹ The example in (8) and (9) illustrate the phenomenon. Note that in these cases the bare plurals are interpreted as definites.

- Ce (8) fu en mai. el novel tens d'esté : the of-summer it be._{PAST.3SG} in May new time Fueillissent reverdissent gaut. li pré. blossom._{PAST.3PL} wood._{PL} green._{PAST.3PL} the prairie.PL 'It was in May, at the beginning of summer: [The] woods were in bloom, the fields were becoming green.' (Charroi de Nîmes, 12th century, line 15)
- (9) Chevalier vienent dis et dis knights come.PAST.3PL ten and ten '[The] knights came in groups of ten.'
 (Le Chevalier à la Charrette, year c. 1180, line 5610)

In sum, Old French clearly differs from Modern Romance languages. In Spanish, it is possible for a bare plural to be a subject only on the condition that it surfaces post-verbally, as shown in (10) (see Dobrovie-Sorin, Bleam and Espinal 2005 for a summary of the facts). When a bare plural is a subject, it cannot appear in a pre-verbal position as (11)b illustrates. In object positions, however, bare nouns are free to occur as illustrated by (11)b.

- (10) Merodeaban **leones** en la selva. prowl._{PAST.3PL} lions in the jungle 'Lions were prowling in the jungle.'
- (11) a. *Niños llegaron. children arrive._{PAST.3PL} 'Children arrived.'
 b. Juan vió películas. Juan see._{PAST.3SG} movies 'Juan saw movies.'

Now, we have established that Old French was [+pred, +arg] language, let me turn to the details of Chierchia's (1998) analysis. Chierchia asserts that NPs do not systematically denote predicates cross-linguistically contrary to what has been suggested in the syntactic literature (Abney 1987, Higginbotham 1987, Longobardi 1994, Longobardi 2000, Stowell 1989, Szabolcsi 1987, among many others). Rather, depending on the language, NPs start out as either arguments or predicates. This means that in some languages determiners are not essential for an NP to be or become an argument. In other languages, however, determiners are required for argumenthood. This is the case of Modern French, a [+pred, –arg] language, since bare nouns are not possible in that language. This is illustrated in (12).

(12) a.	* Chien aime	chat.			singular
	dog _{.SG} like. _{PR}	es.3sg cat			
	'The dog like	s the cat.'			
b.	* Hommes	ont	vu	chiens.	plural
	men. _{PL}	be. _{PRES.3PL}	seen	dogs	-
	'Men saw dog	gs.'		-	

(13) gives a schematic definition of the parameter proposed by Chierchia while (14), (15) and (16) introduce the different instantiations of the parameter.²

(13) The Nominal Mapping Parameter: $N \Rightarrow [\pm pred, \pm arg]$

(14) [-pred, +arg] every (lexical) noun is mass \Rightarrow Chinese

Mass/count languages

(15) [+pred, +arg] bare arguments allowed
$$\begin{cases} no article \Rightarrow Slavic \\ articles \Rightarrow Germanic \end{cases}$$
(16) [+pred, -arg] bare arguments disallowed
$$\begin{cases} \partial \Rightarrow Italian \\ no \partial \Rightarrow (Modern) French \end{cases}$$

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The question that arises at this point is whether Old French was more like Slavic, where no determiners can be found, or more like Germanic, where on the other hand determiners are available. The problem, as we shall see, is that determiners are optional in Old French.

To summarize: in this section, we established the fact that nominals in Old French did not require a determiner to be an argument: bare nouns, whether plural or singular, could appear either in argument or predicate positions, and they received all sorts of interpretations depending on the context. Old French thus appears to be a [+pred, +arg].

3. The use of articles in Old French

It is generally claimed in the literature that determiners developed slowly in the history of French. Bare nouns were the norm/the default case (Latin did not have determiners, thus bare nouns were common), and determiners slowly emerged from the Latin demonstrative *ille* for the masculine and *illa* for the feminine. Because of their demonstrative status, these proto-determiners were said to have deictic force. The deictic force supposedly lasted until the end of the 13th century (Rickard 1989:55) and Fournier (2002) even argues that, although the definite article starts to lose its deictic force from the 14th century onwards and is thus used more and more generally, the definite article has difficulties imposing itself.

The problem with this view is that: first, the definite article surfaces much earlier than commonly believed and when it surfaces it does not necessarily have deictic force (in fact, it rarely does, at least in the texts I have consulted). This means that there is a mismatch between the prescriptive description of grammarians and actual use. To illustrate, in *La Vie de Saint Alexis*, a very early text dated 1050 which provides an extreme case, almost all nominals are accompagnied by a determiner, and many of them have no deictic properties. The traditional view according to which bare nouns in Old French are used with non-individuated

contexts while nominals with determiners introduce referents (whether concrete or abstract) that are uniquely identifiable is equally problematic. It is not difficult, indeed, to show that this generalization is not correct. The fact that bare singulars such as those illustrated in (5) are possible with a definite interpretation but without a determiner runs counter to the received wisdom. In (5) by the time *filie* 'daughter' is used, a rich context is available, one in which *moyler* 'wife' has been mentioned, therefore *filie* can be used without a determiner. The examples in (8) and (9) also involve definite base nouns. The definiteness in (8) is accommodated (no actual cross-reference is made in the text) while the defininite determiner in (9) refers to the knights that were mentioned previously in the discourse.

Two further examples will illustrate this phenomenon. In (17) it is clear from the context that the violin and the bow belong to Nicolette. Therefore, the article can be dropped.

(17) Es vous Nichole au peron, Nichole at-the steps and here trait vïele. trait arcon violin_{SG} take.out.PRES.3SG take.out._{PRES.3SG} bow.sG 'There is Nicolette on the steps, she takes out [her] violin, takes out [her] bow.' (Aucassin et Nicolette, early 13th century, XXXIX, 11-12)

(18) is another case of accommodation: the substantive is sufficiently identified by the receiver as unique for the determiner to be dropped. The enumeration also facilitates the drop of the article. Bare nouns are common in such contexts.

(18)	Deus, God	reis king	de of	glorie. glory						
	Cel	C	e	terre		fesis,		e	cele	mer,
	this.on	ie	and	earth.s	G	do. _{PAS}	Г.3SG	and	heaven.sG	sea. _{SG}
	Soleil	e	lune,		tut	ço	a		comandé	
	sun _{.SG}	and	moon.	SG	all	this	have.3	SG	ordered	
	'God, king of glory who has created the heavens, the earth, the sea, the sun and the									
	moon has ordered all this.' (Guillaume, 12 th century, 804-805)									

These examples have shown that bare nouns can be used in inviduated contexts, contrary to what has been claimed in the traditional literature. We now turn to cases where the determiner appears optionally.

In *La Cantilene de Sainte Eulalie*, a text said to have been written around 878 (a date that even antecedes *La Vie de Saint Alexis* that was aforementioned), presence and absence of the definite determiner alternate quite freely. To illustrate, in (19) a determiner is used because the young girl has been discussed at great length in the previous verses.

(19) Niule cose non la pouret omque pleier no thing not her never give.up.INF can.PAST.3SG menestier La polle sempre non amast 10 Deo love._{PAST.3SG} the the young. girl._{SG} always God service not 'Nothing could make the young girl not appreciate the service God.' (La Cantilene de Sainte Eulalie, year 878, lines 8-10)

However, in the same text (in fact the previous couple of verses), a bare noun can receive a definite interpretation despite the fact that a determiner is absent. This is illustrated in (20).

(20) Ne por or ned argent ne paramenz neither for gold neither silver neither jewels Por menace regiel preiement. ne for threat of.the.king neither prayers 'Neither for gold, silver, jewels, neither for the threat or the prayers of the king.' (La Cantilene de Sainte Eulalie, year 878, lines 7-8)

The optionality of determiners is not restricted to definite articles. Indefinite determiners are also optional in Old French. Either an indefinite article accompagnies a nominal as in (21) or it is absent as in (6). The case of (21) is particularly interesting, since *spear* is not used specifically in this context. Yet, it appears with a determiner.

li tolir 10 chieef. (21) Ad une spede roveret with her order.PAST.3SG cut.INF the head а spear SG 'He ordered for her head to be cut with a spear.' (La Cantilene de Sainte Eulalie, year 878, line 22)

Similarly, in (22) a determiner is used with the word *mort* 'death' when it is not necessary and thus not expected. It is not necessary because the nominal *mort* 'death' is not inviduated (it is an abtsract noun). Therefore, on the traditional view, it should be used without a determiner. Often, they are not, as (23) illustrates.

- (22) Qued auuisset de Christus nos mercit for Christ have._{SUBJ.3SG} of us mercy Post lui venir la mort et nos laist а after the death_{SG} and him let.pres.3SG to us come._{INF} Par souue clementia. bv his clemence 'In order for Christ to have mercy on us after death and for him to let us come to him thanks to his clemence.' (La Cantilene de Sainte Eulalie, year 878, lines 27-29)
- (23) **Envie** lor fait grant contraire envy them._{DAT} make._{PRES.3SG} big contrary 'Envy is not good for them.' (*Eracle*, year 1180, line 1061)

The relative freedom with which determiners are used in Old French has not escaped researchers or grammarians throughout the years. To quote just a few experts on the matter : *'L'expression de l'article dans ce vers prouve qu'il n'y a guère de 'règle' absolument rigoureuse dans la syntaxe de l'ancienne langue.'* (Raynaud de Lage, Guy 1983 p. 46).³ *'Il arrive que les poètes du moyen âge semblent employer indifféremment le nom sans article, le nom précédé de l'article et le nom précédé d'un démonstratif.'* (Brunot and Bruneau 1956 p. 218).⁴ The free variation between bare nouns and nominals with a determiner is also reported by Carlier and Goyens (1998).

The facts we have described for Old French may appear problematic for Chierchia's (1998) view that if a determiner is available in a given language, then the equivalent/corresponding covert type shifting operation(s) are blocked. His Blocking Principle is defined in (24). In a language such as Russian, no determiners are available,

therefore all kinds of covert operations are free to operate. Old French clearly shows that bare nouns can be arguments without the need of a determiner.

(24) Blocking Principle ('Type Shifting as last Resort') For any type shifting operation τ and any X: * $\tau(X)$ if there is a determiner D such that for any set X in its domain, D(X) = $\tau(X)$ (Chierchia 1998:360)

0 gives a list of the type shifters available cross-linguistically. Both \cap and \cup are automatic type shifters: they are not lexicalised (when \cap is lexicalized, it is lexicalized as the same element that t turns into, i.e. a definite determiner).⁵

The problem that Old French appears to create for Chierchia's classification is that it has lexicalized determiners. If Old French nominals can be arguments without the support of a determiner, the question that arises is thus: what is the need for determiners in Old French? In the next section, I argue that despite the initial problems that Old French poses for Chierchia's Blocking Principle, this principle can be saved if we localize blocking, making it sensitive to the context. However, if this hypothesis is on the right track (and it appears to be), then we have to abandon the idea according to which determiners are needed for argumenthood. This is because nominals can clearly be arguments in Old French without being accompagnied by a determiner.

4. Determiners and functions

First, I argue that the cases introduced in the previous section do not necessarily go against the Blocking Principle of Chierchia (1998). I show in this section that this is because the choice between the use of a bare noun and the use of a noun with a determiner is not free, but tied to discourse properties, namely focus, on the one hand, and to phonological requirements, on the other.

Although it is sometimes claimed in the literature (e.g. Boucher 2003) that definite determiners are used to express referentiality, it is clear from some of the examples that we introduced in section 2 and 3 that a bare noun can be interpreted as definite and refer back to an entity already introduced in the discourse without the support of a determiner (see (5), (8), (9), (17), (18) and (20)). This means that we cannot simply claim, following the logic of the Blocking Principle and in the spirit of what is proposed by Krifka (2003), that the definite determiner expresses more than ı. Krifka discusses the optionality in English between bare nouns and the use of some (Dogs are barking versus Some dogs are barking; I drank milk versus *I drank some milk*).⁶ On Krifka's view, the difference that the determiner *some* makes in the structure is that it introduces a choice function, thus allowing for wide scope interpretations (the added meaning is thus specificity). We saw from example (21) that an indefinite determiner in Old French can accompagny a noun without producing a specific reading. Therefore, although I believe that determiners are not necessary to turn a predicate into an argument and that they instead may be introduced to add meaning, the discourse functions of the determiners in Old French are clearly not related to referentiality or specificity.

In this section, I follow a series of work by Richard Epstein (1993, 1994, 1995) who argues that determiners in Old French can be used to express point of view. Epstein works within a cognitive approach, but his idea of point of view can easily be translated as what is known as 'focus' in other frameworks. When the speaker wants to insist on the importance of a particular referent, a determiner is added so that the nominal is no longer bare. Epstein

(1995:63) gives the following example from *Le Chevalier à la Charrette*. (25) shows that the abstract nominal *leauté* 'loyalty', which would otherwise typically appear bare (it is non-individuated), shows up not only with a determiner, but in a topicalized/focused position (we have here a V2 structure). The determiner is not used referentially, i.e. it does not refer back to an entity already introduced previously in the discouse.

cuens: 'Vos (25) Et dit li dites voir. beau niés : nephew and say._{PRES.3SG} the count you say._{PRES.2PL} true dear leauté doit l'en La toz jorz amers.' days love.pres.3sg the loyalty must._{PRES.3SG} it-one all 'The count replied: 'You speak the truth, dear nephew, one must always love loyalty.' (*Le Chevalier à la Charrette*, year c. 1180, lines 441-442)

Epstein takes the fact that the nominal also appears sentence initially as evidence that the addition of a determiner can focalize a nominal. The assumption here is that the first position of main clauses is used for topicalized/focalized elements (Old French was a V2 language). However, one expects that since the nominal is already in a topicalized/focalized position, the addition of the determiner is in fact not necessary, but if present, a simple extra. This is confirmed by the fact that examples of the kind illustrated in (23) where the abstract nominal is bare are aplenty in Old French texts.⁷

It appears that it is in post-verbal positions that the addition of a determiner is crucial if one wants to focalize a nominal. As the example in (26) shows, a bare singular can be used generically with or without a determiner in the *same* sentence. Suppose the speaker wants to insist on all nominals present in the sentence. A determiner is needed in subject and object positions, but need not accompagny the V2 related fronted nominal that appears in Spec-CP.

(26)	Fenme	ne	puet	tant	amer	<u>l'</u> oume	con	<u>li</u>	hom
	woman	not	can. _{PRES.3SG}	as.much	love. _{INF}	the-man	as	the	man
	fait	le	fenme						
	do. _{PRES.3SG}	the	woman						
	'Woman cannot love man as much as man loves woman.'								
	(Aucassin et Nicolette, early 13 th century, lines 21-22)								

Epstein is not the first to notice the expressive role of determiners in Old French. Brunot et Bruneau (1956) note that: '*l'article peut avoir une valeur expressive*' (p. 218)⁸. They give the following example where articles are used in an otherwise prototypical environment where articles would be dropped, i.e. an enumeration context. The addition of determiners creates a certain emphasis that would be absent if the nominals had been bare.

(27) Quoi?...nostre avoir avés vous parti, souffert dont nous avons stock have.3PL you shared of-which we have.1PL what our suffered grandes paines et les grans travaus, les fains et les sois et les les the big pains and the big works the hungers and the thirst and the les caus, si frois et l'avés parti sans nous? colds and the hots thus it-have._{2PL} shared without us 'What? you shared our goods, this stock for which we have suffered great pain, for which we have worked so much, for which we went through hunger and thirst, cold and heat, you shared it without us?' (La Conquête de Constantinople, c. 1212, p.100, lines 12-13), in Brunot and Bruneau 1956:218)

From these examples, I conclude that determiners in Old French can be used to focalize the noun that it accompagnies. The technical details of my analysis will be introduced in Section 5.

Before this section draws to a close, I would like to show that the use of optional determiners in Old French may be tied to functions other than discourse properties. For example, in Old French, phonological, i.e., metric, requirements can force the presence of a determiner in a particular verse. This explains the use of the article in the first, but not the second verse of the following portion of text. In this case the presence of a determiner is totally gratuitious from the point of view of syntax and semantics, but is used to keep the octosyllabic structure of the verse.

(28)	I1	fist		le	ciel	et	<u>le</u>	soleil
	he	do. _{PAS}	T.3SG	the	heaver	nand	the	sun
	Et	terre	et	mer	et	feu	verme	
	and	earth	and	sea	and	fire	red	
	'He cr	eated th	he heav	en and t	he sun,	and the	earth a	nd the sea and the fire all red.'
	(Le Ro	oman Pa	irtonop	eu de B	lois, c.	1182-85	5,1553-	1554)

In summary, I propose to save the Blocking Principle as envisaged by Chierchia and his followers by corrrelating the use of determiners to different functions, one of which being a discourse function (focus) while the other is a PF requirement. The idea is that determiners may not automatically apply if available in a given language. Rather, competition between various forms to match particular meanings or functions occurs at a local level, i.e. it may depend on the context/on the construction.

5. Analysis

My aim in the present section is to account for the distribution of Old French bare nouns (singulars and plurals) in a uniform and principled way and to give an account of the discourse properties with which determiners can be associated in languages like Old French. My analysis of the Old French facts builds on Déprez (2005) and integrates elements of Delfitto and Schroten (1991) and Bouchard (2002, 2003). The reason I do not adopt Chierchia's (1998) semantic analysis is that it appears to be the case that whether or not determiners are available in a language is irrelevant for argumenthood. Old French is a case in point: all bare nominals are arguments and determiners are added for reasons other than core semantic characteristics such as argumenthood.

The hypothesis that I defend is as follows. Instead of relying on the presence or the absence of determiners to determine whether a nominal is a predicate or an argument, I argue that *all* nouns denote <e>. Whereas the received wisdom in the literature on NP structure is that NPs are essentially predicative categories, and determiners are needed to make them into something that can function as an argument, a growing trend in the linguistic literature has proposed instead that bare nouns denote, not <e,t>, but <e> in all languages (Borer 2005, Tonciulescu, this volume). Treating all nouns with <e> as their default type allows us to do away completely with the idea according to which determiners are necessary for nominals to become full arguments.

This is in the spirit of what Baker (2003) has recently proposed for the interpretation of nominals cross-linguistically. Baker goes further than Chierchia in explaining the ability of bare nouns to act as arguments in many languages, proposing that all "nouns are always inherently argumental as a matter of Universal Grammar" (p.116). According to Baker, nouns

are special in that they bear a referential index: they are always realized as entities. On Baker's view, determiners are thus present only to convey discourse properties.

My proposal nevertheless differs from Baker's in that, although I follow his view according to which determiners are not necessary to encode argumenthood in any language, I assume that in order to act as predicates (i.e. of type <e,t>), nouns do not have to combine with Pred, the special functional projection introducing predicates that Baker postulates. Instead, following Déprez (and others), I propose that \bigcirc always translates in the projection of a Num Phrase. It does not apply freely as in Chierchia's theory ($^{\circ}$ is not needed, since <e> is the basic type: it corresponds to the NP level). Once NumP is projected, nominals are <e,t> and they can thus directly appear in predicate positions. The empirical evidence for predicate elements that turn entities into predicates is not overwhelming. Instead, number (a very visible and ubiquitous category) is responsible for the introduction of predicates.⁹

More precisely, I propose a compositional account based on the idea that syntactic structure builds almost all relevant architecture for the interpretation of bare nouns and nouns accompanied by a determiner. I say 'almost' because I will retain the covert ι operator, the covert Generalized Quantifier \exists and the covert choice function operation. The overall parameter that I will be put forward is closely related to the work of Déprez (2005), Delfitto and Schroten (1991) and Bouchard (2002, 2003) in that it states that if nouns have agreement morphology, determiners are not necessary and bare nouns denoting objects are possible (an insight which is already present in many traditional grammars since Port-Royal, see for example Brunot and Bruneau 1956).

I propose that in Old French, a bare noun, i.e. an NP (whether singular or plural) starts out as an element denoting <e> (a kind). I provide some examples of bare nouns interpreted as kinds in (29).

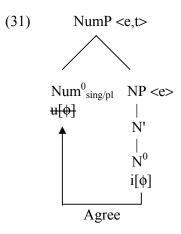
(29) a.	Et sachiez que	ostoui	sont	de	.iij.	manieres :				
	and know that	vultur	es be. _{PRES.3PL}	of	three	kinds				
	petit, grant, meier	1.								
	small big average	ge								
	'Bear in mind that vultures come in three kinds: small, big, average.'									
	(Li livres dou tresor, year 1260-1267, CXLVIII De toutes manieres de									
	Ostours. p. 197)									
b.	Taupe est	une	diverse best	e						
	mole be. _{PRES.3SG}	а	diverse anir	nal						
	'The mole is a diverse animal.'									
	(Li livres dou tresor, year 1260-1267, CC, De la Taupe, p. 252)									

Since this NP is interpreted as mass, it is under-specified for (morphological) number, which means that NumP does not project and that the nominal does not carry any ϕ -features, giving us the structure in (30).

$$(30) \qquad \begin{array}{c} NP < e > \\ | \\ N' \\ | \\ N^0 \end{array}$$

For all other cases, NumP projects spelling out the configuration in (31). Num is associated with uninterpretable ϕ -features and an Agree relation is established with the interpretable ϕ -

features of the nominal.¹⁰ As mentioned already, the role of NumP is to retrieve instantiations of a kind (objects or sub-kinds).



Evidence that nominals in Old French bear interpretable features comes from the fact that the morphology necessary to distinguish beween singularity and plurality appeared (and was actually heard) on the noun but not necessarily on the determiner. In the nominative paradigm, li could mean either 'the_{singular}' or 'the_{plural}' as exemplified by the examples in (32).

(32)	a.	li chevaliers	'the knight'
	b.	li chevalier	'the knights'

The only way to tell whether the noun was singular or plural in this case was through the morphology on the noun. Here the added 's' on *chevaliers* in (32)a denotes singularity; a fact that led to great confusion in fact, since that 's' was also used to mark the plural in the accusative paradigm. This might explain why final consonants on nouns disappeared in the first place and why *li* disappeared as a determiner, since it was (now totally) ambiguous (it bears no interpretable features). Crucially, the 's' of the singular was pronounced. This is how the distinction between singulars and plurals was made, since plurals has no 's'.

If the sentence is habitual as in (4) (see also (23) and (26)), the habitual aspect of the sentence is interpreted as the modal operator Gn together with the accommodation of a contextual variable C. This is as in Chierchia (1998). Here again the property quantified on is the property of being an instance of the kind which is number-neutral. When the nominal is interpreted existentially, as in (6), I assume existential quantification over the instantiations of the kind. This is basically the only source of existential quantification in bare nouns. This explains why bare nouns always reveive narrow scope and can never achieve wide scope over other operators. Existential closure over object-level properties is useful in interrogative (33), hypothetical (34) and comparative environments (35), since the bare nouns in these cases are automatically interpreted in the scope of the operator.

(33) Avés vous dont **borse** trovée ? have._{2PL} you thus purse found 'So have you found [any] purse?' (in Foulet 1928 :58)

(34) Se	VOS	volez	2	ne	chastel	ne	cité
if	you	want	•PRES.2PL	or	castle	or	city
Ne	tor	ne	vile,	donj	on ne	ferm	eté

town, donion fortress or tower or or otroié et Ja vos sera graé given and agreed this vou be._{FUT.3SG} 'If you want [a] castle or [a] city or [a] tower or [a] town, [a] dungeon or [a] fortress, this will be granted and given to you.' (Le Charroi de Nîmes, 12th century, lines 471-473)

(35) Plus est isnels que n'est **oisel** ki volet more be._{PRES.3SG} fast than NE-be._{PRES.3SG} bird that fly._{PRES.3SG} 'He is faster than [a] bird that flies.' (*La Chanson de Rolland*, year 1080, line 1616)

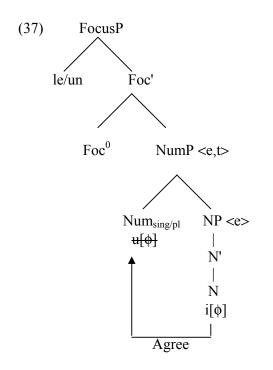
The example in (36) shows that bare nouns such as *palie* 'tapestry' and *ornement* 'ornament' cannot take wide scope over negation.

(36) n i remest palie neul ne ornement there remain.PAST.3SG not tapestry none ornament nor 'there remained no tapestry nor any ornament.' (La Vie de Saint Alexis, year 1050, line 24) It is not the case that there remained a tapestry and an ornament. *There is a tapestry and an ornament and it is not the case that there remained any.

Finally, when interpreted as a predicate as in (7), NumP is projected and the predicate takes a NumP directly. No PredP need be projected as in Baker (2003).

When the nominal is interpreted as definite (without a determiner), the ι covert operation can be performed shifting the property <e,t> back into an entity <e>. In case, a nominal is interpreted existentially, I assume that the covert Generalized Quantifier \exists is introduced. When an indefinite is interpreted specifically, I assume that a choice function is introduced (the choice function is not correlated with the presence of a determiner, as in Krifka 2003 for the case of English described above; in (21) the indefinite article does not introduce a choice function, since the nominal is not interpreted specifically).

Let us now turn to the cases where determiners are projected in Old French. The main discourse property that determiners embody in that language, as we have seen, is their capacity to encode focus. When the speaker wants to insist on a particular nominal, he/she adds an article. This is especially relevant in object positions, since it is not a focus position in Old French. When an NP is in an object position and the speaker wants to emphasize that NP, then a determiner is added to the noun which would otherwise be bare. For those cases, I assume that a Focus phrase is needed on top of NumP as represented in (37). The determiner sits in this case in the specifier of FocP. Since *le* is interpreted as definite and *un* is interpreted as indefinite, I assume that a covert ι operation is necessary to turn the property into an entity for the first case (cf. (5), (8), (9),(17), (18) and (20)) and into a Generalized Quantifier \exists in the second case (cf. (6)). These operations, but to focus instead.¹¹



In this section, I have argued that there is a partial correlation between semantic type and syntactic structure. All nouns start denoting $\langle e \rangle$, and when NumP is projected, nouns denote $\langle e,t \rangle$. The maximization operator ι is used when a nominal is interpreted as definite and refers back to an entity already introduced in the discourse, while the Generalized Quantifier \exists corresponds to indefinite interpretations of nominals. An Agree relation is instantiated between the noun, which carries uninterpretable features, and the Num head, which carries uninterpretable features, while determiners are added only if needed, i.e. when denoting discourse functions such as focus.

6. Cyclic Agree and the emergence of determiners

So far, the mechanics laid out above for Old French appear to translate quite naturally to Modern French. This is a problem since in contrast to Old French, Modern French does not tolerate bare nouns, as can be seen from the examples in (12). Therefore, we must account for why a language A, or a previous stage of a language A, can have bare nouns while a language B, or a previous version of language B, does not.

Thus, the question that remains to be addressed before the present article draws to a close is why bare nouns disappeared from the grammar of Old French and why determiners became obligatory in the modern variety of the language. I would like to argue that the diachronic change is not due to a semantic paramater switch à la Chierchia, but that the change is correlated to the fact that the use of definite determiners as expressors of focus collapsed once plural morphology disappeared from the morphological make-up of French nominals.¹² For object-level bare nouns to be possible at all in a given language that has a singular/plural contrast, number marking on the noun is necessary. This is the contention put forward in the remaining few pages of this article. This is a claim that has been made before (Delfitto and Schroten 1991, Boucher 2003 among others). The original claim that I will be making is that the disappearance of the focus projection of the nominal domain is tied to this change in morphology and that the obligatory insertion of determiners in Modern French is due to Cyclic Agree.

Whereas in Old French number could appear on the noun and sometimes on the determiner, in Modern French number appears only on the determiner ('le' [lə] versus 'les'

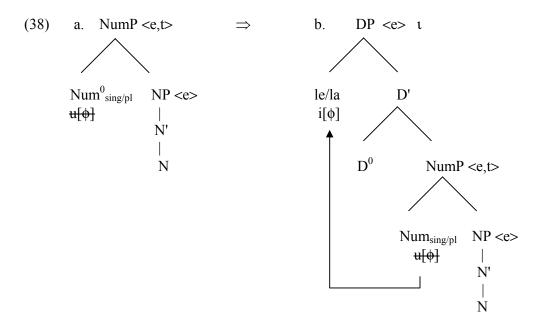
[le], 'un' $[\tilde{\epsilon}]$ versus 'des' [de]). In *les pommes* 'the apples', the 's' cannot be heard.¹³ The disappearance of this final 's' dates back from around 1300 (Fouché 1961, Joly 1995). Table 1 shows that in Old French the 's' can not only mark case, but also number. As Brunot and Bruneau (1956:193) point out, the 's' became the mark of the plural from the 13th century onwards. This is because of the disappearance of (nominative) case: the 's' has thus become the mark of the plural by accident. Importantly, the absence of form on the noun had meaning: either it signified plurality or obliqueness.

	Singular	Plural			
Nominative	murs	mur			
Oblique	mur	murs			
Table 1					

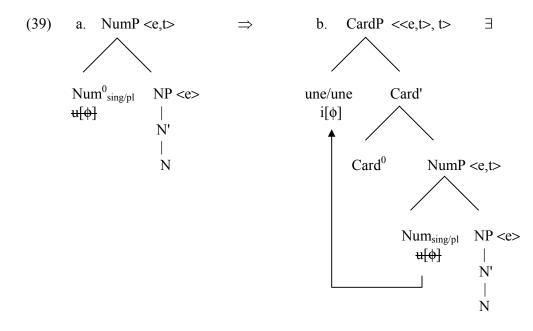
Table I		
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In sum, the obligatory presence of determiners with nominals in the French language is due to the collapse of singular/plural marking on the noun. Formally, I want to argue that this correlates with N no longer being associated with ϕ -features. However, on this assumption, the question that immediately arises is how the uninterpretable ϕ -features of Num are satisfied. Since they are uninterpretable, they cannot survive at LF. I propose that determiners become obligatory because these are the elements that are capable of satisfying the uninterpretable ϕ -features of Num. I further propose that this is made possible because Agree is cyclic. Cyclic Agree is an operation independently needed in the grammar: it has been used to explain Georgian and Basque recalcitrant agreement data (for the idea that Agree is cyclic and for the relevant data, see Rezac 2003). In the case at hand, the search space of the ϕ features on Num starts with the complement of Num, but because there is no match in the complement, it grows to include a higher specifier. Suppose then that the determiners are merged in Spec-DP, the interpretable features that they carry can satisfy the uninterpretable features of Num and the derivation converges.

Along with traditional wisdom, I assume that a speaker chooses a definite determiner only if he supposes that the hearer has the means to identify the referent in question among all the other referents of the same category in a given situation (the referent is unique, familiar or identifiable). Thus, on my view, D in (38)b encodes definiteness rather than 'determinerness'. In other words, determiners are not needed to turn a predicate into an argument, since nominals are inherently argumental. Following Lyons (1999), I assume Dets appear in the specifier of DP. There are languages where double determination is encoded: a determiner and an affix are possible (Danish and written Icelandic). It is thus reasonable to assume that the determiner sits in the specifier of DP while the affix is on the head D^0 . Since Old French does not have affixal determiners, however, the head D^0 remains empty. No covert operation is possible, since a definite determiner is present, and since that determiner is no longer tied to focus, but to referentiality.



As for indefinite determiners, I assume that they project CardP (see Lyons 1999). The indefinite articles un 'a' is the same word as the cardinal un 'one'. This takes care of examples such as (21). We may replace CardP with Borer's (2005) #P without, I think, any loss of content. No covert \exists operation is possible, since an indefinite determiner is present, and since that determiner is no longer tied to focus, but to cardinality.



This concludes Section 3. I argued in this section that the basic type that bare nouns in Old French receive is <e>. In order to become object-denoting, NumP needs to be projected, in which case nominals are interpreted as <e,t>. The existential reading of Old French bare nouns is derived via Chierchia's Derived Kind Predication rule which has the effect that bare nominals always take low scope. When bare nominals are interpreted as definites, a DP that correlates with definiteness is projected while an indefinite determiner projects a CardP. The model that I used to account for the distribution of bare nouns in Old French is partly based

on Déprez's (2000), and my analysis drew from Delfitto and Schroten (1991) as well as Bouchard (2002, 2003).

7. Conclusion

In this paper, I have argued that all nouns in Old French started out as <e>, but that certain covert operations such as ι and \exists could be performed such that nominals were either interpreted as definite or indefinite. I further argued that the use of determiners in Old French was peripheral to the core semantic make-up of the nominal architecture. It was argued that their use was related to either the encoding of focus or the satisfaction of a PF constraint. Blocking of determiners was therefore not global, but local. Finally, the parametric change that took place between Old French and Modern French, namely the disappearance of bare nouns in the modern version of the language, was made to follow from Cyclic Agree, an operation independently needed in the grammar. Once nominals lost the interpretable ϕ features they carried, a determiner with the relevant interpretable ϕ -features needed to be inserted in the structure so that the uninterpretable ϕ -features of Num⁰ could be satisfied.

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¹ This generalization is based on a systematic search in *Frantext* and *Base de français médiéval*.

² The logical combination [-pred, -arg] is not possible/attested, since a language with this alternative could not allow the insertion of NPs in a given derivation at all.

³ 'The use of the article in this verse shows that there is in the syntax of Old French no rigorous rule as to whether or not the article is present' (my translation)

⁴ 'There are cases where Middle Ages poets seem to use freely nouns without an article, nouns preceded by a determiner or nouns preceded by a demonstrative.' (my translation)

⁵ While ι and \exists are not mechanical (they are lexicalized, yet not necessarily). The down operator $^{\circ}$ shifts an NP from <e,t> to <e>. The up operator $^{\circ}$ shifts an NP from <e> to <e,t> giving us the property of being a specimen of the kind. ι is the maximization operator: when applied to a predicate P, it returns the greatest individual in P. \exists is the standard Generalized Quantifier.

⁽i) a. \cap <e,t> \rightarrow <e>

b. \lor <e>> \rightarrow <e,t>

c. ι <e,t> \rightarrow <e> d. \exists <e,t> \rightarrow <e>

⁶ In this tradition, Grønn (2005) argues that weak bidirectionality (cf. Blutner 1998, 2000) seems to be what is needed to explain certain facts in Norwegian.

⁷ Abstract nominals are often interpreted as names in Old French. Such nouns are often capitalized, as shown in (i), which means that like proper names, they are easily individuated.

(i)	Est	che	Amours	5	qui	me	dourdelle?			
	is	that	love		that	me	worry.38G			
	Amours	?	nenil,	ains	est	Haïne.				
	love		no	but	is	hate				
	'Is it love that worries me? –No, it's more hate.'									
	(Le Roman de Jehan et Blonde, year 1240, lines 519-520)									

⁸ 'The article can have an expressive value.' (my translation)

⁹ It may in fact be the case that number is simply a stuff divider as in Borer (2005). On this view, all nouns start out as <e> and need to be divided before they can be counted. If the role of number is simply to divide a mass term, then the role of # the category that is above NumP in Borer (2005) will be the category introducing object-level entities rather than NumP. In this paper, I assume NumP is the level where object-denoting elements are introduced, but nothing hinges on this matter.

¹⁰ I use the terms 'interpretable' and 'uninterpretable' instead of more recent (and perhaps more appropriate) terms such as 'valued' and 'unvalued', but nothing hinges on this matter.

¹¹ Note that there is no Agree relation between the article and the noun. For example, *li* is used for both singular and plural nominals.

¹² Once a structure or a lexical item is obligatory, the dual interpretation (one meaning available when the determiner is present, another when it is absent) is lost. This is in accordance with many other phenomena Williams (1997).

¹³ Several authors who have noticed this before have thus argued against Cinque's (1994) idea that the features of Num⁰ are strong (attracting the noun in Romance). See Lamarche (1991), Bouchard (1998), Laenzlinger (2005) and Knittel (2005).