Anne Carlier

***Du/des*-NPs in French**

A comparison with bare nouns in English and Spanish

Like English bare NPs, French *du/des*-NPs combine the features of indefiniteness and non-singularity (e.g. *de l'eau* ‘water’, *des pommes* ‘apples’). Because of this similarity, the hypotheses accounting for the fact that bare nouns do not establish a stable discourse referent (the kind-denoting, the property-denoting and the narrow-scope indefinite hypothesis) are assumed to be equally valid for *du/des*-NPs.

On the basis of systematic comparison between French *du/des*-NPs and Spanish bare NPs, the present paper refutes this assumption. A distinction is made between the ability to establish a referent and the ability to specify the referent’s spatial boundaries. With respect to the former feature, unlike Spanish bare NPs and like the indefinite singular *un*-NP, *du/des*-NPs can introduce a stable discourse referent. As a consequence, *du/des*-NPs can serve as an antecedent for an anaphoric pronoun or zero anaphor in the case of subject deletion, they can have wide-scope with respect to an intensional predicate or negation, and they are not restricted to internal argument positions and may be topical. However, contrary to the indefinite singular *un*-NP, which conceives its referent as spatially bounded, *du/des*-NPs do not specify the spatial limits of their referent, whether this referent is composed of individuals (*des*) or not (*du*). Therefore, like Spanish bare NPs, they do not induce telic aspect and they do not interact with quantifiers. The only quantitative indication they convey, by virtue of their partitive origin, is that their referent does not reach the limits of the category, but always represents a part of it.

1 Introduction

1.1 Bare plural nouns in English and in Romance: Kind-referring vs property-referring

In his influential paper on the bare plural in English, Carlson (1977) argues that, in comparison with the indefinite singular NP, bare plurals have atypical referential properties, pointing to the fact that they do not readily establish a stable discourse

Note: This text has benefited from the comments of the editors and an anonymous reviewer. Many thanks to them!

referent. His solution consists in analyzing the existential use of the bare plural (1a) by aligning it with the generic use (1b), arguing that bare NPs invariably are kind-referring and that the difference between the existential and the generic use is not due to the ambiguity of the NP itself but rather to the context: whereas a stage-level predicate selects the existential interpretation of the bare plural, an individual-level or property-denoting predicate selects its generic interpretation:

- (1) ENGLISH
 a. *Dogs* are barking.
 b. *Dogs* bark.

Dobrovie-Sorin & Laca (2003) convincingly show that bare nouns in several Romance languages, viz. Spanish, Italian and Romanian, do not have the same properties as bare plural nouns in English: they do not occur freely in preverbal subject position in their existential uses and they are strongly constrained in generic interpretation, as evidenced by the fact that the Spanish examples corresponding to the English examples in (1) are both ungrammatical:

- (2) SPANISH
 a. **Perros* están ladrando.
 b. **Perros* ladran.

Moreover, unlike English bare plural nouns, they are excluded with a predicate concerning the species as a whole (3).

- (3) a. ENGLISH: *Whales* are nearly extinct.
 b. SPANISH: **Ballenas* están casi extintas.

As pointed out by Dobrovie-Sorin & Laca (2003), Brazilian Portuguese does however allow the same patterns as English (cf. Ionin, Montrul & Santos 2011 for a detailed account).

- (4) BRAZILIAN PORTUGUESE
 a. *Cães* ladravam na montanha.
 ‘*Dogs* barked on the mountain.’
 b. *Baleias* são mamíferos.
 ‘*Whales* are mammals.’

Dobrovie-Sorin & Laca (2003) conclude that the kind-referring hypothesis is not tenable for bare plurals in Romance languages such as Spanish, Italian and Romanian. While maintaining a unitary analysis accounting for the atypical refer-

ential properties of bare plurals in these Romance languages, they put forward a hypothesis that consists in assigning them an even weaker referential force: they propose to align the existential use of the bare plural nouns with their predicative use, illustrated by (5), and argue on this basis that plural bare nouns are invariably property-referring. This hypothesis enables them to account, among other features, for the fact that certain argument positions (cf. ex. 2) are not accessible to them.

(5) SPANISH

Brutus y Rex son *perros*.

‘Brutus and Rex are *dogs*.’

More recently, Dobrovie-Sorin (2009) proposes a revised hypothesis for Romance bare plurals and returns to a more referential conception of bare plurals. Romance bare plurals are defined as weak indefinites, which are necessarily VP-internal and have invariably narrow scope and whose denotation consists of a sum of individuals.

The purpose of this study is not to assess the different hypotheses proposed for the analysis of bare nouns in English or in Romance languages, but rather to examine whether these hypotheses account for the referential properties of *du/des*-NPs in French.

1.2 French *du/des*-NPs and bare plurals

Over the course of its history, French has developed a specific article for indefinite non-singular reference, the so-called ‘partitive’ article. This article, which is a contraction of *de* ‘from/of’ and the definite article, expanded progressively to different contexts, at the expense of zero determination, to the extent that the use of bare common nouns has become very exceptional in Modern French. The development of the partitive article leads to the following article paradigm:

Table 1: The paradigm of articles in Modern French in historical perspective.

	+ Singular	- Singular (plural count & uncount nouns) ¹
+ Definite	Definite article <i>le</i> < Weakened demonstrative	Definite article <i>le</i> < Weakened demonstrative
- Definite	Indefinite article <i>un</i> < Weakened unity numeral	Indefinite article < <i>de</i> + DEF.ART

¹ The term “uncount noun” is to be understood as a hypernym regrouping mass and abstract nouns, as illustrated in example (6).

Given the structural position of the partitive article within the paradigm of articles, it seems plausible to assume that *du/des*-NPs have the same referential properties as bare plural nouns or bare uncount nouns, without an opposition between singular and plural. The following equivalences seem to confirm this hypothesis:

- (6) a. ENGLISH
 I bought **a** lamb / **Ø** lambs / **Ø** lamb.
 I feel **Ø** sympathy for him.
- b. SPANISH
 Compré **un** cordero / **Ø** corderos / **Ø** cordero.
 Siento **Ø** simpatía por él.
- c. FRENCH
 J'ai acheté **un** agneau / **des** agneaux / **de** l'agneau.
 J'éprouve **de la** sympathie pour lui.

Dobrovie-Sorin & Laca (2003: 258) argue indeed that the partitive article is the almost perfect counterpart of bare nouns in other Romance languages. However, following Galmiche (1986) and Bosveld-de Smet (1998) (cf. also Ihsane 2008), they highlight a marked use of *des*, which has a properly partitive meaning, presupposing a contextually defined partition set.

- (7) FRENCH
- a. **Des** élèves étaient malades.
 '(Some) students were sick.'
 - b. **Des** verres sont vides / ébréchés.
 '(Some) glasses are empty / chipped.'
 - c. **Des** tomates sont vertes.
 '(Some) tomatoes are green.'
 - d. **Des** basquetteurs sont petits.
 '(Some) basketball players are short.'
 - e. **Des** lettres ne sont pas arrivées.
 '(Some) letters did not arrive.'
 - f. **Des** enfants tambourinaient sur leurs tables, tandis que d'autres criaient à tue-tête.
 'Children were drumming on their tables, while others were shouting at the top of their lungs.'

Kleiber (1988) even mentions a case of *du* combined with a mass noun, with the same partitive meaning:

(8) FRENCH

Dans ce champ, **du** maïs était pollué.

'In this field, (some) corn was polluted.'

As pointed out by Bosveld-de Smet (1998: 16), the partitive reading relies on the availability of a contextually defined set, e.g. the students of my class for (7a) or the tomatoes in the basket for (7c), and the ability of the verbal predicate to isolate a subset of individuals or substance with respect to this set by associating the subset of individuals with an unexpected state of affairs, e.g. being sick for a subset of the students in my class, or being green rather than having the expected color of red for a subset of the tomatoes in the basket. This verbal predicate can be an individual-level property (e.g., *être petit* 'be short'), a temporary state (e.g. *être malade/ vide* 'be sick/empty') or a negated predicate (7e). The partitive reading of *des*, consisting in isolating a subset within a contextually defined set, can also be favored according to Dobrovie-Sorin & Laca (2003: 259) by the mention of a contrast set evoked by *d'autres* 'others', even if an indefinite reading of *des enfants* is not excluded in (7f).

Dobrovie-Sorin & Laca (2003: 258) establish a clear distinction between this partitive use of *du/des* and the indefinite use: because the partitive use of *du/des* presupposes a contextually defined set, it has wide scope with respect to negation (7e) and is not subject to the constraint with respect to subject position. The alleged parallelism between the French partitive article, on the one hand, and bare plural and uncount nouns in Romance, on the other hand, only concerns its indefinite use.

In this paper, this parallelism between indefinite *du/des* and bare plural and uncount nouns, viz. either mass or abstract nouns (6), will be called into question, on the basis of a comparative analysis. Section §2.1 will deal with the constraint specific to bare plurals and bare uncount nouns in Spanish, regarding the preverbal subject position, and examine whether this constraint applies to French *du/des*-NPs. With respect to bare plural and uncount nouns, I will leave for a future research whether the hypotheses are valid for other Romance languages. Sections §§2.2, 2.3 & 2.4 will be devoted to the features of bare nouns in English and in Spanish, related to scope, aspect and anaphora, and investigate whether these features are shared by French *du/des*-NPs. In order to avoid basing my argumentation on artificial examples, at the borderline of acceptability, I will use French authentic data as much as possible. Examples are extracted from the database *Frantext* (www.frantext.fr), which corresponds dominantly to a literary register.

2 Analysis

2.1 Prenominal subject position

As has been illustrated by the example (2), bare nouns in Spanish cannot freely be used as a preverbal subject.

(2) SPANISH

- a. **Perros* están ladrando.
- b. **Perros* ladran.
'Dogs are barking/bark.'

This constraint on the distribution of bare nouns in Spanish has been formulated more precisely by Suñer (1982: 209) under the name of “Naked Noun Constraint”:

An unmodified common noun in the preverbal position cannot be the surface subject of a sentence under conditions of normal stress and intonation.

The relevant examples, taken from Dobrovie-Sorin & Laca (2003: 271), are given in (9).

(9) SPANISH

- a. **Ratones* salieron del armario.
'*Mice* came out of the closet.'
- b. Salieron *ratones* del armario.
'There were *mice* coming out of the closet.'
- c. *Ratones asquerosos* salieron del armario.
'*Disgusting mice* came out of the closet.'
- d. *RATONES* salieron del armario.
'*MICE* came out of the closet.'
- e. *Ratones* salieron del armario, pero *arañas* no.
'*Mice* came out of the closet, but no *spiders*.'

The “Naked Noun Constraint” combines syntactic constraints (unmodified bare nouns are licensed in subject position of unaccusative verbs when the subject follows the verb (9a-b-c)) and constraints linked to information structure of the sentence (even in preverbal subject position, bare nouns are licensed when their referent is assigned narrow focus by prosodic prominence (9d) or contrastive focus (9e) but not when it is unmarked and tends to be associated with the status of topic (9a)). The question arises as to whether similar constraints, relating

to syntax and information structure, determine the distribution of the French partitive article.

As to the syntactic constraint, the empirical data show that French *du/des*-NPs in their existential reading are possible in preverbal subject position, not only with unaccusative verbs (10)-(11) or verb constructions (12), but also with transitive verbs (13)-(15). Syntactic constraints therefore appear to be less strong for *du/des*-NPs in French than for bare nouns in Spanish.

FRENCH

- (10) ***Des*** *paquets* arrivaient sans arrêt. (Ch. Akerman)
'Packets were arriving all the time.'
- (11) ***Du*** *carburant* manquait aux stations (Perec)
'Fuel was lacking at the stations.'
- (12) ***Des*** *chambres* furent mises à leur disposition (J. Verne)
'Rooms were made available to them.'
- (13) ***Des*** *enfants* sonnaient les cloches. (M. Déon)
'Children were ringing the bells.'
- (14) ***Du*** *sang* teignit le sac. (R. Char)
'Blood tinted the bag.'
- (15) ***Nous*** prenions conscience que l'exploitation familiale représentait, en fait, une formule par laquelle, dans des cas, ***des*** *enfants* n'accédaient même pas au certificat d'études, où ***des*** *femmes* et ***des*** *gosses* servaient de main-d'œuvre à tout faire, où ***des*** *couples*, écrasés de fatigue, ne s'adressaient plus la parole. En termes clairs, ***des*** *hommes* et ***des*** *femmes* gâchaient leur vie pour maintenir intacte une structure sociale considérée, a priori, comme une panacée. (M. Debatisse)
'We realized that family farming was, in fact, a formula whereby, in some cases, *children* were even not given the possibility to obtain the school completion certificate, *women and children* were used as handymen, *couples*, crushed by fatigue, no longer spoke to each other. In short, *men and women* were wasting their lives to keep intact a social structure considered, a priori, as a panacea.'

With respect to information structure, the same examples show that there is no requirement of narrow focus, or contrastive focus in order to license *du/des* in pre-

verbal subject position. The examples (10) to (15) all exemplify wide focus, which means that the whole sentence is presented as new information. It could be argued that this difference between *du/des*-NPs in French, on the one hand, and bare nouns in Spanish, on the other, is due to a difference in constituent order: while Spanish allows the subject to be postponed to the verb in the case of wide scope (Lahousse & Lamiroy 2012), this is not the case in French, where constituent order is determined more by the syntactic function than by the information structure (Dobrovie-Sorin & Laca 2003: 273). Consequently, French *du/des* preverbal subjects are more easily accepted than bare nouns as a preverbal subject in Spanish, since preverbal subject position is less readily associated with topic status in French than in Spanish.

However, in the following examples, the French *des*-NP is even used in sentences where the preverbal subject can be analyzed as a topic, in both specific (16)-(17) and generic reading (18)-(19).

FRENCH

- (16) Je suis revenu ce matin. Il était huit heures. On dansait encore. Des marchandes commençaient à apparaître en papillotes sur la porte de leur magasin. **Des boutiques** n'étaient pas ouvertes. Les étalages étaient encore couverts de serge verte. (Goncourt)
'I came back this morning. It was eight o'clock. They were still dancing. Merchants began to appear with hair curlers on the door of their store. Shops were not open. The displays were still covered with green serge.'
- (17) **Des peuples**, comme les romains, dont la vie nationale ne fut qu'une longue injustice féroce ment organisée, ont triomphé, des siècles durant. (P. Bourget)
'Nations, such as the Romans, whose national life was nothing more than a long and fiercely organized injustice, triumphed for centuries.'
- (18) **Des témoignages divergents** ne s'excluent pas. (Rudler)
'Divergent testimonies do not exclude each other.'
- (19) **Des jumeaux vrais** ne sont qu'un seul être dont la monstrosité est d'occuper deux places différentes dans l'espace. (M. Fournier)
'Identical twins are only one being whose monstrosity is to occupy two different places in space.'

Note that *du/des*, albeit a topic in (16) to (19), is used in its indefinite meaning. Hence, this configuration is not restricted to *du/des*-NPs with a partitive reading, illustrated by the examples (7) and (8). On the contrary, a targeted search to retrieve occurrences of properly partitive *du/des*-NPs in preverbal subject posi-

tion and with a topical referent gives barely results, confirming the native speaker's intuition that the examples given in (7) and (8), fabricated by linguists, are unnatural. An example of the partitive use of *des* in subject position is provided by the following example, where *des feuilles*, isolating a subset with respect to the entire chestnut trees' foliage, is a contrastive topic opposed to *d'autres* 'others'.

(20) FRENCH

Les marronniers se sont garnis de bourgeons achetés chez le confiseur.

Des feuilles sont fraîches comme de petites langues ; d'autres ont un air vieillot, ridées, comme des fronts de nouveau-nés ; mais les branches des plus hauts arbres sont encore fines comme des cheveux. (J. Renard)

'The chestnut trees have garnished themselves with buds bought from the confectioner. *Some leaves* are as fresh as little tongues; others look old-fashioned, wrinkled, like foreheads of newborns; but the branches of the tallest trees are still as thin as hair.'

These observations are at odds with the findings of Dobrovie-Sorin & Laca (2003) on two points:

- *Du/des* in their partitive meaning are barely attested in preverbal subject position.
- Conversely, *du/des* in their indefinite meaning occur in preverbal subject position with a variety of verbs, even when their referent has the status of sentence topic.

Nevertheless, it should be acknowledged that *du/des*-NPs are subject to constraints in preverbal subject position: on the one hand, they do not occur as a subject in canonical generic sentences, a point that will be discussed in §3.2;

(21) FRENCH

a. ***Des** baleines sont des mammifères.

b. ***Des** baleines sont presque éteintes.

'Whales are mammals. / Whales are almost extinct.'

c. ***Du** mercure est toxique.

'Mercury is toxic.'

on the other hand, they require specific types of predicates in their existential use. The latter constraint is at least in part related to their status as an indefinite article and is equally observed for indefinite singular *un*-NPs. Although the detailed analysis of these constraints is beyond the scope of this paper, it may be noted that the verbal predicate should provide a referential anchorage, which minimally consists of a spatial location:

FRENCH

- (22) a. ??**Un** *homme* est blond.
 ‘A man is blond.’
 b. ??**Du** *sucré* est en morceaux.
 ‘Sugar is in cubes.’
- (23) a. **Un** *homme* était là, sur le seuil.
 ‘A man was there, on the threshold.’
 b. **De l’herbe** était là, sous mes pieds.
 ‘There was grass under my feet.’

The fact that French indefinite *du/des*-NPs, unlike Spanish bare nouns, are not necessarily VP-internal, but can occur as a preverbal subject with a variety of verbs, even when this subject is topical, shows that an analysis in terms of property-denoting is not appropriate. In the following sections, it will be further examined whether French *du/des*-NPs exhibit the referential properties that have been ascribed to bare nouns in both English and Spanish. These properties concern their relative scope with respect to intensional predicates, negation and quantification (§2.2), their interactions with telicity (§2.3) and finally their ability to serve as an antecedent for a referential anaphoric expression (§2.4).

2.2 Wide vs narrow scope readings

In order to study the scope properties of bare plural nouns in English, Carlson (1977) takes as a starting point the well-known ambiguity of the singular indefinite NP induced by the intensional predicate ‘wish’.

- (24) a. Minnie wishes to talk to *a young psychiatrist*.

The first reading can be glossed as ‘there is a specific young psychiatrist that Minnie wants to talk to’, whereas according to the second reading Minnie will be satisfied if she can talk to any young psychiatrist. The specific reading is also called “wide-scope reading”, because it is formalized by an existential operator outside the scope of the intensional predicate ‘wish’ (‘there is a young psychiatrist and Minnie wishes to talk to her’), while the non-specific reading will be modeled by an existential operator with narrow scope, i.e., embedded within the scope of the verb ‘wish’. Carlson observes that this ambiguity does not appear in the same context with a bare plural: the bare plural has only the narrow-scope or non-specific reading.

- (24) b. Minnie wishes to talk to *young psychiatrists*.

Dobrovie-Sorin & Laca (2003: 240) confirm this analysis for bare plurals in Spanish by providing formal evidence: in (25a) the opposition between wide-scope or specific reading and narrow-scope or non-specific reading of *un libro* is marked by an alternation between indicative and subjunctive mood in the relative clause, whereas in (25b), the bare plural allows only the subjunctive mood in the relative clause, and hence a non-specific or narrow-scope reading.

(25) SPANISH

- a. María quiere *un libro* que describe_{INDIC}/describe_{SUBJ} la conquista de México.
- b. María quiere *libros* que *describen_{INDIC}/describan_{SUBJ} la conquista de México.
'Maria wants a book/books that describe(s) the conquest of Mexico.'

Contrary to the English and Spanish bare plurals, the French *des*-NP is compatible with a wide-scope or specific reading in intensional contexts. Witness the following example, where the context makes clear that President Giscard d'Estaing had some specific individuals in mind.²

(26) FRENCH

«Giscard veut parler à **des** *intellectuels de gauche*. Edgar et moi donnons un déjeuner à l'Hôtel de Lassay. Il a suggéré, entre autres noms, le vôtre.»

Je reste sans voix.

Pétrie de l'antagonisme pouvoir-opposition cher aux Français, je me vois mal trinquant à table avec le champion de la droite. La tradition républicaine, après les têtes coupées, exige la non-communication absolue entre les deux clans. (G. Halimi)

“Giscard wants to talk to *left-wing intellectuals*. Edgar and I are having lunch at the Hotel de Lassay. He suggested, among other names, yours.”

I am speechless.

Filled with the power-opposition antagonism dear to the French, I see myself as having a hard time toasting at the table with the champion of the right. The republican tradition, after the heads cut off, requires absolute non-communication between the two clans.'

² Note that this wide-scope reading of indefinite *des* is different from the properly partitive use of *des*, which presupposes a partition set defined in context and requires a verbal predication that isolates a subset of individuals within the partition set. With respect to example (26), the context provides no evidence of an available list of names of left-wing intellectuals, from which Giscard, right-wing president, makes his choice.

This possibility of a wide-scope reading suggests that the *des*-NP has a greater referential strength than bare plurals in Spanish as well as in English.

Carlson (1977: 418) next shows how the singular indefinite NP and the bare plural behave differently with respect to negation. Regarding the argument in (27), he considers that its conclusion can have either a contradictory reading or a non-contradictory reading

(27) ENGLISH

- a. *A cat* is in this room
A cat is in the next room

Therefore: *A cat* is in the room and *a cat* is not in the room

These two readings can be respectively glossed as follows:

- ‘there is a cat in this room and it is not the case that there is a cat in this room’
or put differently: ‘there is a cat in this room and there isn’t a cat in this room’;
- ‘there is cat in this room and there is a cat not in this room’.

In the former reading of *a cat* in the negative sentence, the existential quantifier is within the scope of negation and hence has narrow scope, which yields the non-specific interpretation ‘no cat’, whereas in the latter case it has wide scope. In contrast, the same example with a bare plural noun has only the contradictory reading of the conclusion ‘cats are in the room and there aren’t cats in the room’, which corresponds to the narrow-scope or non-specific reading of the bare plural:

(27) ENGLISH

- b. *Cats* are in this room
Cats are in the next room

Therefore: *Cats* are in the room and *cats* are not in the room

As noted by Dobrovie-Sorin & Laca (2003: 240–241), the Spanish data are similar: in contrast to (28a), (28b) is necessarily interpreted as contradictory.

(28) Spanish

- a. Llegó *una carta* y no llegó *una carta*.
‘A letter arrived and a letter didn’t arrive.’
- b. Llegaron *cartas* y no llegaron *cartas*.
‘Letters arrived and letters didn’t arrive.’

Here again, the French *des*-NP does not pattern with the English and Spanish bare plural (cf. Cardinaletti & Giusti 2016; Giusti 2021, this volume, for a similar observation on *dei* in Italian). The example (29) shows that a narrow-scope or non-specific reading of the *des*-NP in preverbal subject position with respect to negation is possible.

(29) FRENCH

Je ne suis pas le fils d'un mandarin, hélas! **Des perles** ne boutonnèrent point les devants de mes chemises.

'I am not the son of a Mandarin, alas! *Pearls* did not button the front of my shirts.' (R. Crevel)

However, a wide-scope or specific reading is more frequent:

FRENCH

(30) **Des Juifs** ne voulaient pas sortir de leurs maisons. Ils ont été tués sur place.
(F. Milewski)

'Some Jews did not want to leave their homes. They were killed on the spot.'

(30') **Des Juifs** ne voulaient pas sortir de leurs maisons et des Juifs acceptaient de quitter leurs maisons.

'Some Jews did not want to leave their homes and some Jews agreed to leave their homes.'

(31) L'inquiétude rampe et s'infiltré. **Des boutiques** n'ont pas ouvert. **D'autres**, qui avaient ouvert, ferment. (M. Déon)

'Worry crawls and infiltrates. *Some shops* have not opened. Others, which had opened, are closing.'

(31') **Des boutiques** n'ont pas ouvert et des boutiques ont ouvert.

'Some shops have not opened and some shops have opened.'

In (30), the *des*-NP is not in the scope of the negation, which means that (30') can be asserted without contradiction. (31) shows more explicitly that the *des*-NP refers to a set of individuals for which the predication is valid but is not incompatible with the existence of a complementary set for which the predication is not valid, which is confirmed by the fact that (31') is not contradictory.

A final case studied by Carlson in relation to the scope restrictions of bare plurals concerns quantifiers.

- (32) a. All workshop participants have read *a book on statistics*.
 b. All workshop participants have read *books of statistics*.
- (33) a. Tous les participants du workshop ont lu *un livre de statistique*.
 b. Tous les participants du workshop ont lu *des livres de statistique*.

In (32a) as well as in (33a), the indefinite singular NP is ambiguous between a wide-scope or specific reading ‘there is a book on statistics which has been read by all workshop participants’ and a narrow-scope or non-specific reading ‘every participant read a book but not necessarily the same particular book’ or put differently, there can be as many books as there are participants. In real discourse, this ambiguity is normally resolved, as shown by the following examples, with a narrow-scope or non-specific reading for the indefinite singular NP in (34) while a wide-scope or specific reading is plausible for the indefinite singular NPs at the beginning of the example (35), as evidenced by *C’était pourtant un homme charmant*. Crucial, however, is the fact that the indefinite singular NP as such allows the two readings.

- (34) Tous les matins on ramasse *un colibri mort* dans la cage. (A. Daudet)
 ‘Every morning we pick up *a dead hummingbird* from the cage.’
- (35) Pendant des mois, tous les soirs *une splendide Hispano* m’attend à la sortie du Jockey, dans laquelle *un chauffeur impassible* doit me conduire au Claridge. . . pour souper avec *un ministre plénipotentiaire d’Amérique du Sud*. . . immensément riche. Tous les soirs *un appartement* est rempli de fleurs, *un délicieux souper* se prépare, et. . . tous les soirs j’envoie *une amie* qui a moins de . . . scrupules que moi. **C’était pourtant un homme charmant**, et que j’aurais pu aimer, peut-être, s’il n’y avait pas eu tout ce fric ! Pouah ! Faire ça pour de l’argent ! (A. Prin)
 ‘For months, every evening *a splendid Hispano* awaits me at the Jockey’s exit, in which *an impassive driver* must drive me to the Claridge. . . for dinner with *a plenipotentiary minister from South America*. . . immensely rich. Every evening *an apartment* is filled with flowers, *a delicious dinner* is prepared, and. . . every night I send *a friend* who has less ... scruples than me. **He was a charming man**, and whom I could have loved, maybe, if there had not been all that money! Ugh! Doing this for money!’

This is not the case for the bare plural in the English example (32b): only the narrow-scope or non-specific reading is available. The sentence cannot be understood as ‘there is some set of books on statistics which has been read by

all workshop participants'. With respect to the French example (33b), contrary to what we have observed for intensional predicates and negation, the *des*-NP only allows the narrow-scope or non-specific reading: *des livres* cannot refer to one and the same set of books read by all participants.

In sum, *des*-NPs seem to have hybrid scope properties: whereas bare plurals in English and in Spanish do not have wide-scope readings with respect to intensional predicates such as 'want', negation and quantifiers, *des*-NPs can have a wide-scope reading in the first two contexts, but not in relation to quantifiers. This apparently contradictory result will be examined in a broader context in §3.

2.3 Telic vs atelic aspect

It is well known (Dowty 1991; Krifka 1992; Tenny 1994; Jackendoff 1996) that the referential properties of the NP in direct object position of certain transitive verbs (36) or in the subject position of certain unaccusative verbs (37) can have an impact on verbal aspect: an indefinite singular NP may have the effect of placing a boundary on the process expressed by the verb, while bare nouns – whether plural bare nouns or mass nouns – do not induce a boundary. This distinction between telic and atelic aspect according to the opposition between singular indefinite NP and bare noun is evidenced by the compatibility with aspectual adjuncts introduced by *in* combined to a noun denoting a time unit in the former case, and introduced by *for* in the latter case.

- (36) a. Mary ate ***an apple*** in one minute / *for one minute.
 b. Marie ate *apples* *in one minute / for five minutes.
 c. Marie drank *coffee* /*in one hour / for one hour.
- (37) a. ***An ambulance*** arrived in five minutes /*for five minutes.
 b. *Ambulances* arrived *in five minutes / for two hours.

Expectedly, the Spanish bare nouns exhibit the same interaction with aspect.

- (38) a. María se comió ***una manzana*** en un minuto / *por un minuto.
 b. Marie comió *manzanas* *en un minuto / durante cinco minutos.
 c. Marie bebió *café* *en una hora / durante una hora.
- (39) a. ***Una ambulancia*** llegó en cinco minutos /*durante cinco minutos.
 b. Llegaron *ambulancias* *en cinco minutos/ durante dos horas.

In contrast to what we have observed with regard to scope phenomena (§2.2), French *du/des*-NPs are similar to English and Spanish bare nouns with respect to aspect, insofar as they induce atelicity:³

- (40) a. Marie a mangé **une** pomme en une minute / *pendant une minute.
 b. Marie a mangé **des** pommes *en une minute / pendant cinq minutes.
 c. Marie a bu **du** café *en une heure / pendant une heure.
- (41) a. **Une** ambulance est arrivée dans cinq minutes / *pendant cinq minutes.
 b. **Des** ambulances sont arrivées *en cinq minutes / pendant deux heures.

Other aspectual tests (cf. Carlson 1977: 422) confirm this parallelism between bare nouns in English and Spanish, on the one hand, and *du/des*-NPs in French, on the other: unlike examples (42/43/44a), which reflect a strange situation, examples (42/43/44b) are natural because the process is carried out on an unbounded object.

- (42) a. John killed **a** fly repeatedly last night.
 b. John killed *flies* repeatedly last night.
- (43) a. Juan mató **a una** mosca repetidamente anoche.
 b. Juan mató *moscas* repetidamente anoche.
- (44) a. Jean a tué **une** mouche à plusieurs reprises hier soir.
 b. Jean a tué **des** mouches à plusieurs reprises hier soir.

2.4 Pronominal anaphora and referential identity

The examples (45) and (46), translated from Laca (2000: 901), illustrate two possible types of relationships between the 3rd person anaphoric pronoun and its antecedent:

- (45) *A man* fell in the river, he was drunk.
- (46) Peter has read *many political novels* but Mary finds them boring.

³ The French *du/des* article is in this respect different from the Italian partitive article, cf. Giusti & Sleeman 2021, this volume.

In the example (45), the pronoun *he* takes up the referent of its antecedent. In the example (46), Mary's appreciation does not relate exactly to the political novels that Peter read, but rather to political novels in general. Hence, the pronoun *them* does not establish a referential identity relationship with the antecedent, but relying on the nominal description conveyed by the antecedent, it refers to entities of the same type.⁴ In this section, I will focus on antecedents that correspond to a bare noun in English and Spanish or to a *du/des*-NP in French, and examine whether the anaphoric relationship between a pronoun and this antecedent involves referential identity, as in (45), or only sortal identity, *i.e.* refers to entities of the same type, like in (46).

As has been shown in § 2.2, a sentence such as (47a), containing a singular indefinite NP in an intensional context, presents a scope ambiguity between a wide-scope or specific reading and a narrow-scope or non-specific reading of the singular indefinite NP. Carlson (1977: 425) points out that this ambiguity can however be resolved by pronominalization.

(47) English

- a. Peter was looking for *a book on the mosques of Iran*.
- b. Peter was looking for *a book on the mosques of Iran* and finally found it.
- c. Peter was looking for *a book on the mosques of Iran* and finally found one.

Example (47b), containing the anaphoric pronoun *it* in a subsequent clause, corresponds to the wide-scope or specific reading: 'there is a specific book on the mosques of Iran that Peter was seeking', whereas (47c), containing the proform *one*, rather suggests a narrow-scope or non-specific meaning 'Peter was looking for a book on the mosques of Iran without having anyone specific title in mind', but it does not rule out a wide-scope or specific reading 'although initially looking for a specific book on the mosques of Iran, Peter eventually found another one'.

It would however be erroneous to suggest a correlation between a specific or wide scope reading of the antecedent and the presence of a 3rd person anaphoric pronoun in a subsequent clause. In particular, although bare plural antecedents can never take a wide-scope or specific reading in an intensional context, they can be anaphorized by a 3rd person pronoun, as illustrated by (47b).

- (47) d. Peter was looking for *books on the mosques of Iran* and finally found them.

⁴ The absence of a referential identity between the pronoun and the antecedent is corroborated by the fact that the plural pronoun *them* is perfectly compatible with a singular antecedent (Klaus von Heusinger, p.c.):

Peter has read *a political novel*, but Mary finds them boring.

(47d) does not suggest that the books on Iranian mosques Peter eventually found were identical to the ones he was originally looking for, which means that *them* associated to a bare plural antecedent does not correspond to an anaphora with referential identity.

More generally, even outside an intensional context, with a bare noun as an antecedent, the third personal pronouns *it*, *him* or *them* do not require a strict referential identity with the antecedent. Witness the following examples, quoted from Carlson (1977: 426): while the same referent is referred to by the antecedent and anaphoric pronoun in (48a), this need not be the case in (48b-c).

- (48) a. Harriet caught *a rabbit* yesterday, and Ozzie caught it today.
 b. Harriet caught *rabbits* yesterday, and Ozzie caught them today.
 c. Dad drank *beer* slowly, and I drank it fast.

The following example from Laca (2000: 902) shows that the Spanish bare plural has exactly the same characteristics with respect to the pronominal anaphor: the anaphoric pronoun *las* in (49a) does not suggest that the spoons seen by Mary are the same as those seen by Peter (an interpretation that would be obtained in the presence of a determiner like *tres* ‘three’ or *unos* ‘some’ (49b), cf. Laca 2000: 902)).

(49) SPANISH

- a. Pedro ha visto *cucharas* en la cocina, y María las ha visto también en la dispensa.
 b. Pedro ha visto ***tres/unas*** *cucharas* en la cocina, y María las ha visto también en la dispensa.
 ‘Peter has seen spoons (three/some spoons) in the kitchen, and Maria has also seen them in the pantry.’

The French *des*-NP does not function in the same way as the English or Spanish bare plural with respect to pronominal anaphor, but is on the contrary similar to the singular indefinite NP. In an intensional context, *des*-NP is subject to the same scope ambiguity as the singular indefinite NP (cf. §2.2). Likewise, this ambiguity can be resolved by pronominalization: *les* requires referential identity with the anaphoric expression and, hence, induces a specific or wide-scope reading (50), while the genitive pronoun *en* does not require and even excludes referential identity and therefore does not yield a specific or wide-scope reading (51) (cf. Ihsane 2013). This referential identity constraint associated with the anaphoric pronoun *le/les* is respected at least when the referent of the antecedent is a concrete rather than an abstract entity (52).

FRENCH

- (50) Est allé à plusieurs reprises sous le feu de l'ennemi chercher **des** blessés entre les tranchées françaises et allemandes et les a ramenés. (H. Bordeaux)
 'Went several times under enemy fire to seek some wounded persons between the French and German trenches and brought them back.'
- (51) Puis il chercha **des** timbres, mais il n'en trouva pas. (J.-P. Manchette)
 'Then he looked for *stamps*, but he didn't find any.'
- (52) Tu cherches **des** raisons qui te convaincraient que tu finiras un jour par être heureuse, mais tu ne les trouves point. (C. Juliet)
 'You are looking for *reasons* that would convince you that you will one day end up being happy, but you don't find them.'

Outside of an intensional context, the contrast between Spanish bare nouns and French *du/des*-NPs is even more salient: in contrast to *las* in the Spanish example (47a), the pronoun *les* in the French example (53) necessarily involves referential identity, viz. 'the spoons seen by Mary are the same as those seen by Peter'. This means that the French *des*-NP in (53) establishes a discourse referent, which is taken up by the pronoun *les*, whereas the Spanish bare plural in (49a) fails to do so.⁵

(53) FRENCH

Pierre a vu **des** cuillères dans la cuisine et Maria les a vues aussi dans le garde-manger.
 'Peter has seen spoons in the kitchen, and Maria has also seen them in the pantry.'

A related issue addressed by Carlson (1977: 426) concerns the difference between bare nouns and indefinite singular NPs in coordinate structures with subject deletion. In the case of an indefinite singular NP introduced by *a*, subject deletion

⁵ The impact of the availability of a genitive pronoun in certain Romance languages and language varieties (e.g. *ne* in Italian, *en* in French) but not in others (e.g. Spanish, Portuguese) on the referential properties of the 3rd person pronoun deserves further investigation. In this perspective, the case of Catalan, which has no partitive article, but does have a genitive pronoun, is particularly interesting. As is shown by the Catalan translation of example (49b) (thanks to Anna Pineda!), the genitive pronoun *en/n'* excludes referential identity with *culleres*, whereas the 3rd person pronoun *les* requires referential identity with the antecedent.

El Pere ha vist <i>culleres</i> a la cuina	i la Maria també <u>n'</u> ha vist al rebost. [–referential identity]
	i la Maria també <u>les</u> ha vist al rebost [+referential identity]

yields identity of reference. Witness (54b), where subject deletion results in the strange assertion that the same building will collapse tomorrow and perish in the flames the day after in two different places. The same sentence with a bare plural as a subject (54b) is not liable to this constraint of strict referential identity and does not evoke an unusual state of affairs.

ENGLISH

- (54) a. *A building* will collapse in Berlin tomorrow, and *a building* will burn down in Boston the day after.
 b. *A building* will collapse *in* Berlin tomorrow, and _ will burn down in Boston the day after.
- (55) a. *Buildings* will collapse in *Berlin* tomorrow, and *buildings* will burn in Boston the day after.
 b. *Buildings* will collapse in Berlin tomorrow, and _ will burn in Boston the day after.

Discussing subject deletion in coordinated constructions in Spanish, Laca (2000: 902) makes similar observations: she argues that, in contrast with (56/57a), (56/57b) do not require that the same individuals are concerned by the predication.

SPANISH

- (56) a. En esta ciudad nacieron y murieron ***tres*** *hombres célebres*.
 b. En esta ciudad nacieron y murieron *hombres célebres*.
 ‘(***Three***) *Famous men* were born and died in this city.’
- (57) a. Entran y salen ***varias*** *mujeres*.
 ‘***Several*** *women* come and go.’
 b. Entran y salen *mujeres* entre dos compras o entre dos embotellamientos de coches. (M. Vázquez Montalbán)
 ‘*Women* go in and out between two purchases or between two car jams.’

Moreover, she shows that this lack of referential identity constraint is equally verified with bare mass nouns: it is patently not the same portion of oil that is concerned by events that occur in different places and at different times.

(58) SPANISH

- En 1945 surgió *petróleo* en Chiapas y un año después volvió a surgir en Yucatán.
 ‘In 1945, *oil* emerged in Chiapas and a year later emerged again in Yucatan.’

Once again, French *du/des*-NPs do not pattern with the bare nouns in English and Spanish, as is shown by the following examples:

FRENCH

- (59) a. **Un** *voyageur* descendit et **un** *voyageur* monta.
 b. **Un** *voyageur* descendit et _ monta.
- (60) a. **Des** *voyageurs* descendirent et *des voyageurs* montèrent
 b. **Des** *voyageurs* descendirent et _ montèrent. (A. Lubin)
 ‘A traveler/Travelers came down and _ came up.’
- (61) Un peu plus loin, les rangs s’écartent d’eux-mêmes pour ne point bousculer un cheval blessé. [...] **Du** *sang* coule jusqu’au sabot et _ tache la poussière de la route. (M. Genevoix)
 ‘A little further on, the ranks move away from themselves so as not to overwhelm an injured horse. (Some) *blood* flows to the hoof and _ stains the dust of the road.’

As in the case of the NP introduced by the singular indefinite article *un* (59b), there is a referential identity constraint between the *des*-NP (58b) or *du*-NP (60), on the one hand, and the deleted subject, on the other. As a consequence, the French example (60b), which assumes that the same individuals are involved in the two events mentioned by the coordinated predicates, is not equivalent to the Spanish example (57b). Similarly, the French example (62), unlike the Spanish example in (56b), asserts that the same individuals are involved in the events of being born and dying at one and the same place specified in the context.

(62) FRENCH

Il y a des Péruviens qui vivent à Cerro de Pasco, 4 360 m d’altitude : plus de 4 km au-dessus de l’océan, au-dessus de toute vie normale. [. . .] **Des** *enfants* naissent là, et _ meurent vraisemblablement, à plus de 4 km au-dessus du niveau de la mer.
 ‘There are Peruvians living in Cerro de Pasco, 4,360 m above sea level: more than 4 km above the ocean, above all normal life. . . . *Children* are born there, and probably die, more than 4 km above sea level.’

3 Results and discussion

Table 2 gives an overview of the referential properties of the French *du/des*-NPs in the several examined contexts in Section 2, in comparison with bare plural and uncount nouns in English as well as in Spanish, on the one hand, and with the NP introduced by indefinite singular article, on the other hand.

Table 2: Comparison of *du/des*-NPs with bare nouns and indefinite singular NPs in English and Spanish.

	Indef. sg. NPs	<i>du/des</i> -NPs	Bare nouns	
			ENGL.	SPANISH
Preverbal subject	✓	✓	✓	✗
Wide Scope – Intensional Predicate	✓	✓		✗
Wide Scope – Negation	✓	✓		✗
Wide Scope – Quantifier	✓	✗		✗
Telic Aspect	✓	✗		✗
Anaphora and referential identity	✓	✓		✗

It is shown that French *du/des*-NPs are in several aspects distinct from English as well as from Spanish bare nouns, and share more properties with indefinite singular NPs. However, they resemble English and Spanish bare nouns in two ways: first, when used as a direct object of a transitive verb or as a subject of an unaccusative verb, they do not induce telic aspect, and, second, they do not interact with quantifiers.

3.1 The semantic features of *du/des* in synchrony

With respect to verbal aspect, the fact that determination has an impact on telicity has been analyzed in terms of a transfer of the spatial properties of the internal direct argument (i.e. the direct object of certain transitive verbs or the subject of certain unaccusative verbs) on the internal temporal structure of the verbal predicate (Krifka 1992): (63a) is telic because the boundaries of the object are specified by a quantifying expression *a glass of*, whereas (63b) is atelic because bare nouns do not convey any indication of quantitative boundaries.

- (63) a. Peter is drinking **a glass of** wine.
b. Peter is drinking wine.

As Jackendoff (1996: 307) points out, bare nouns do however not necessarily refer to an unbounded or limitless entity – *wine* in (63b) refers to a limited amount of wine that is consumed –, but the boundaries of their referent are left unspecified.

It has been shown in § 2.3 that *du/des*-NPs are similar to bare nouns in this respect: they do not convey any quantitative indication as to boundaries of their referent and hence *du/des* cannot be analyzed as quantifiers.⁶ As to *un*-NPs, although *un* as an indefinite article is not in itself a quantifier (cf. Heim 1982), it conceives its referent as quantitatively bounded. *Un* bears the grammatical feature of singular, and combines with count nouns, which convey intrinsically an individuation principle allowing to distinguish individual instances. When *un* combines with a count noun, it gives the instruction to delineate a single referent in accordance with the individuation principle, which amounts to a quantitative delimitation. The resulting contrast between *du/des*-NPs and the indefinite singular *un*-NP for telicity is illustrated in (40).

(40) FRENCH

- a. Marie a mangé **une** pomme en une minute / *pendant une minute.
- b. Marie a mangé **des** pommes *en une minute / pendant cinq minutes.
- c. Marie a bu **du** café *en une heure / pendant une heure.

Interestingly, the fact that French *du/des* are void of quantificational content accounts for another feature equally shared with bare nouns in English and Spanish: they do not interact with quantifiers, which explains why *des* cannot take wide scope with respect to *tous* in (33b). In contrast, although *un* is not intrinsically a quantifier, the indefinite singular *un*-NP presents its referent as quantitatively bounded and, hence, can have either wide or narrow scope with respect to a quantifier, i.e. ‘one and the same book’ or ‘one book for each participant, without these books being identical’ in (33a).

(33) FRENCH

- a. Tous les participants du workshop ont lu **un** livre de statistique.
- b. Tous les participants du workshop ont lu **des** livres de statistique.
‘All workshop participants have read **a** book/books on statistics’

The non-quantificational nature of *du/des*-NPs can be evidenced by the possibility of adverbial quantification. As has been shown by Laca (2000: 900), bare

⁶ For a more detailed argumentation, cf. Carlier (2007) on the French partitive article as well as Cardinaletti & Giusti (2016) on the Italian partitive article.

plurals in Spanish, equally void of quantificational context, are compatible with adverbial expressions such as *en masa* ‘in mass’, *en [gran/pequeña] cantidad* ‘in (big/small) quantity’, *por miles* ‘by millions’, *in exceso* ‘in excess’, quantifying the relationship between the predicate and its internal direct argument (64a), whereas quantified NPs do not allow these adverbials (64b) since this would result in a double quantification.

(64) SPANISH

- a. Emigraron *técnicos* por miles.
- b. *Emigraron ***muchos** técnicos* por miles.
‘Technicians / ***A lot of** technicians emigrated by thousands.’

Similarly, *du/des*-NPs used as a direct object of transitive verbs or as a subject of an unaccusative verbal predicate do allow adverbial quantification, showing that they are not quantifying expressions.

(65) FRENCH

- a. mon potager me donne ***des** légumes* en quantité (G. Sénac de Meillhan)
lit.: ‘my vegetable garden gives me *vegetables* in quantity’
- b. Tout le long du trottoir, ***des** tonneaux de bière* sont alignés par centaines. (B. Auroy)
lit.: ‘All along the sidewalk, *barrels of beer* are lined up by hundreds.’
- c. J’ai reçu ***des** lettres* en masse, aujourd’hui. (J.-P. Sartre)
lit.: ‘I received *letters* in mass today.’
- d. Vous aurez ***du** bois mort* en quantité. (J. Verne)
lit.: ‘You will have *dead wood* in quantity.’

With respect to the other properties examined in §2, *du* and *des* are similar to *un*: they are able to introduce a discourse referent that can be outside the scope of an intensional predicate or negation, and this discourse referent will serve as an antecedent for an anaphoric pronoun or for zero anaphor in the case of subject deletion. It is also this greater referential strength that explains why *du/des*-NPs, unlike bare plurals in Spanish, are not restricted to internal argument positions and can have the status of topic.

In a contrastive perspective, this hybrid profile with respect to its referential properties sets the French *du/des* article apart from the English indefinite determiner *some*. As pointed out by Reinhart (1997: 372), the indefinite determiner *some* can have wide or narrow scope with respect to any of the contexts mentioned in Table 2, including quantifiers, whereas *du/des* do not allow wide scope with respect to quantifiers: in contrast with (33b), (66) can mean either that there

is a specific book that all women have read (wide scope), or that all women have read a specific book, without these books being identical (narrow scope).

(66) ENGLISH

Every lady read **some** book.

3.2 The semantic features of *du/des* in diachrony

There is a long-lasting tradition dating back to J.-C. Scaliger (1540), which analyzes the partitive *de* as part of a quantifying expression: since French quantifiers such as *beaucoup* ‘a lot’, *peu* ‘a little’, *assez* ‘enough’, *trop* ‘too much’ require *de* in order to be used in nominal quantification,

(67) FRENCH

a. Il a assez travaillé. ‘He has worked enough.’

b. Il a assez **de** travail. ‘He has enough work.’

it is hypothesized that the presence of *de* in the partitive can be accounted for by a silent or deleted quantifier, associated to the semantic feature of quantitative unboundedness.

(68)	Q	<i>de</i>	Ø	N'	>	Ø	<i>de</i>	DEF.ART	N'
	<u>beaucoup</u>	de		<i>bière</i>	>		de	<i>la</i>	<i>bière</i>
	‘a lot	of		beer	>		of	the	beer

The deleted quantifier hypothesis is adopted for the Modern French partitive article by Milner (1978: 37) and for the Old French partitive construction by Foulet (1930).⁷ However, the phenomena studied in this paper do not support an analysis of the partitive article in terms of quantification.⁸

The historical data suggest another possible line of analysis that does not involve the notion of quantification. The sentence in (69) presents an example of the Old French partitive construction, which is the precursor of the partitive article.

⁷ Cf. also Zribi-Hertz (1996). For Italian, see Chierchia (1997) and Zamparelli (2008), cited by Giusti (2021, this volume).

⁸ For a more detailed argumentation against a unified account of *de/di* as part of the article, on the one hand, and *de/di* in quantifier constructions, on the other, see Carlier (2007) and Carlier & Melis (2007) for French, and Cardinaletti & Giusti (2016), Giusti (2021, this volume) for Italian.

(69) OLD FRENCH (Chrétien de Troyes, *Erec*, 3170)

Le gastel et le vin lor baille, .i. fromage lor pere et taille. Cil mangierent
qui fain avoient,

et **del** vin volantiers bevoient
and of.the-M.SG wine readily drink-PST.3PL

'He brings them the cake and the wine, he prepares and cuts a cheese. They
ate, since they were hungry, and they drank readily *some of the wine*.'

(70) OLD FRENCH (*Enéas*, v. 3549)

A son escorz menjot **lo** pain,
in his-M.SG lap eat-PST.3SG the-ACC.M.SG bread
a molt grant trait bevoit **le** vin.
by very big gulp drink-PST.3SG the-M.SG wine

'In his lap he ate the bread and he drank by enormous gulps *the wine*.'

Del vin in (69) illustrates the typical features of the medieval partitive construction:

- there is an existential presupposition of a referent which is defined in the context, i.e. the carafe of wine that was just brought to the table;
- in comparison with *le vin* in (70), *de* in *del vin* in example (69) indicates that this referent is not wholly but only in part affected by the verbal process, without quantitatively specifying the portion concerned.

De behaves at this stage as a genitive case-marker, albeit an atypical one: it does not establish a relationship with an external element – nominal or verbal –, but it conveys the feature of partition, whose conditions of use can be compared with those of the partitive case in Finnish, or the genitive case in Homeric Greek and in Lithuanian (Humbert 1960; Väänänen 1981; Karlsson 1983; Serbat 1996; Carlier 2007; Luraghi & Kittilä 2014; as well as Seržant 2021, this volume).

In Middle French, the partitive undergoes a sudden rise in frequency (cf. Carlier 2007 for statistical data), showing its grammaticalization into an article. From a syntagmatic viewpoint, it expands at the expense of zero marking in combination with plural count nouns and uncount nouns, initially only mass nouns and, later, also abstract nouns. On the paradigmatic level, it integrates into the paradigm of articles, represented in Table 1 (rementioned below for convenience), and, as a corollary, undergoes a readjustment of its semantic features (cf. Lehmann 2002: 120), which is represented in Table 3.

Table 1: The paradigm of articles in Modern French in a historical perspective.

	+ Singular	- Singular (plural count & uncount nouns)
+ Definite	Weakened demonstrative <i>le</i>	Weakened demonstrative <i>le</i>
- Definite	Weakened unity numeral <i>un</i>	<i>de</i> + DEF.ART

Table 3: The semantic shift from the Old French partitive construction to the partitive article.

PARTITIVE CONSTRUCTION	PARTITIVE ARTICLE	Binary parameters of the article paradigm
Existential presupposition of a contextually defined referent → --		
Extraction of quantitatively unspecified subset of this referent ↘	Quantitatively unspecified	- Singular
	Indefinite	- Definite

- The feature of partition or extraction and the associated feature of the existential presupposition of referent are backgrounded because they do not create a binary contrast with respect to other elements of the paradigm.
- The feature of quantitative underspecification is maintained, since it creates a binary opposition with the indefinite singular article *un*.
- The feature of indefiniteness, which allows the partitive article to enter into a binary opposition with the definite article, is acquired by pragmatic inference (Traugott & Dasher 2012): a referent corresponding to an unspecified quantity is necessarily not univocally identifiable by the addressee.

This diachronic analysis offers a straightforward account of the fact that the partitive article is void of quantificational content, since the feature of quantificational underspecification is inherited from the Old French partitive construction. *Du/des*-NPs are similar in this respect to plural and uncount bare NPs. However, in this process, where *du/des*-NPs replace bare NPs, the partitive article does not entirely lose the features coming from its partitive origin, a phenomenon termed ‘persistence’ (Hopper & Traugott 1993).

- On the one hand, because of its partitive origin, *du/des* convey the instruction that their referent does not encompass the category as a whole and therefore, they do not replace the generic Old French $\emptyset$ -NPs. Hence, they are not used in Modern French canonical generic sentences (Carlier 2000);

- (71) a. OLD FRENCH
Coral est une pierre ki creist en la mer altresi cum arbre. (*Lapidaire*, p. 103)
 ‘*Coral* is a stone that grows in the sea just like a tree.’
 b. MODERN FRENCH
Le/*Du *corail* est une pierre qui croît dans la mer de la même façon qu’un arbre.
- (72) a. OLD FRENCH
 Voir me dit ma mere, ma dame, / Qui me dit que *deiable* sont / Plus esfraee chose do mont.
 ‘She was right, my mother, my lady, when she told me that *devils* are the scariest thing in the world.’
 b. MODERN FRENCH
Les/*Des *diabls* sont la chose la plus effroyable du monde.
 ‘*Devils* are the scariest thing in the world.’
- On the other hand, similarly to the partitive construction, which owes its referential strength to the existential presupposition of the partition set, the partitive articles *du/des* are endowed with a referential strength that bare nouns are lacking. They are able to introduce a discourse referent, and therefore they can have a wide-scope interpretation with respect to an intensional predicate or in relation to negation, they have access to the external argument position of the verbal predicate and, in the case of an anaphoric relationship, this anaphoric relationship goes along with referential identity between the antecedent and the 3rd personal pronoun.

By the latter feature, *du/des*-NPs are similar to the indefinite singular *un*-NP. However, they differ from *un*-NPs as to how they conceive and delineate their referent: *un* combined with a count noun conceives its referent as a single individual, *des* in combination with a count noun builds its referent as a set of individuals whose size is not specified, and *du* does not provide any formatting to its referent. Witness the following example, where the absence of formatting motivates the quantitative precision in the apposition.

- (73) MODERN FRENCH
Du *sang* jaillit, *un jet mince*, de cette boule de plumes, et aspergea quelques assistants. (M. Van der Meersch)
 ‘*Blood* gushed out of this ball of feathers, a thin stream, and sprinkled some of the assistants.’

In order to account for the hybrid profile of *du/des*-NPs, displayed in Table 2 above, it is important to distinguish between the ability to introduce a discourse referent, which is a feature of indefinites, and characterizes *un* as well as *du* and *des*, on the one hand, and the spatial configuration and delimitation as indicated by the different articles, on the other. However, it is plausible that there is some interaction between these two features: because of the specific way according to which each of the three articles format the referent, either as a single individual, or as a quantitative unspecified set of individuals, or without any formatting, *un* confers a higher degree of referential autonomy to its referent than *des*, which in turn grants more referential autonomy to its referent than *du*. It would be interesting to investigate empirically whether this gradience as to referential autonomy is reflected for instance in the degree of propensity to take a wide-scope reading in relation to intensional predicates as well as in the ease of accessing the preverbal subject position with a variety of verbal predicates.

Beyond these differences, the fact remains that partitive articles are fundamentally indefinites, on a par with the indefinite article *un*. Noteworthy, this proximity accounts for the fact that *des* is compatible with a generic interpretation under the same conditions as the article *un*, provided that the predicate bares on a referent conceived as a set of individual entities (Carlier 2000).

(74) MODERN FRENCH

des langues parentes sont en réalité une seule et même langue modifiée de manières diverses au cours du temps. (A. Meillet)

'parent languages are in fact one and the same language modified in different ways over time.'

4 Conclusion

In order to account for the fact that bare plural nouns in their existential reading do not establish a stable referent in English as well as in several Romance languages, among which Spanish, three major hypotheses have been put forward, varying as to the degree of referentiality attributed to them: bare plurals have been analysed as property-denoting (Dobrovie-Sorin & Laca 2003; Dobrovie-Sorin & Beyssade 2004), as kind-denoting (Carlson 1977), and as weak indefinites having systematically narrow-scope (Dobrovie-Sorin 2009).

Given that French *du/des*-NPs occupy the same structural position in the paradigm of articles as bare plural count nouns and uncount nouns, it may seem plausible to assume that they have the same referential properties. This

assumption, supported by Dobrovie & Laca (2003), does however not stand up to a detailed examination and, therefore, none of the three hypotheses with respect to bare plurals is appropriate to account for the referential properties of *du/des*-NPs. The present study has shown that it is necessary to distinguish between the ability to establish a referent, on the one hand, and the ability to specify the referent's spatial boundaries, on the other. With respect to the former feature, it has been shown that *du/des*-NPs, unlike bare nouns and similarly to the indefinite singular *un*-NP, can introduce a stable discourse referent, which can serve as an antecedent for an anaphoric pronoun or for zero anaphor in the case of subject deletion. This ability to introduce a discourse referent also explains why they can have wide-scope interpretation with respect to an intensional predicate or negation. Finally, the referential strength of *du/des*-NPs explains why they are not – unlike bare plurals in Spanish – restricted to internal argument positions and can have the status of topic. In this regard, *du/des*-NPs are similar to the indefinite singular *un*-NP. However, contrary to the indefinite singular *un*-NP, which refers to one single individual and, hence, conceives its referent as spatially delineated, *du/des*-NPs do not specify the spatial limits of their referent, whether this referent presents an internal division into individual members (*des*) or not (*du*). Therefore, just like Spanish bare NPs, they do not induce telic aspect and they do not interact with quantifiers. The only quantitative indication they convey, by virtue of their partitive origin, is that their referent does not reach the limits of the category, but always represents a part of it.

It may be tempting to consider *du/des*-NPs as equivalent to indefinite NPs introduced by determiners such as *some* in English, because both show scope ambiguity with respect to intensional predicates and negation. However, the fact that *du/des*-NPs do not set quantitative boundaries to their referent entails that, unlike NPs introduced by *some*, they cannot take a wide scope with respect to quantifiers.

References

- Bosveld-de Smet, Leonie M. 1998. *On mass and plural quantification. The case of French des/du-NP's*. University of Groningen dissertation.
- Cardinaletti, Anna & Giuliana Giusti. 2016. The syntax of the Italian indefinite determiner *dei*. *Lingua* 181. 58–80.
- Carlier, Anne. 2000. Les articles *du* et *des* en synchronie et en diachronie: une analyse de leur résistance à l'interprétation générique. *Revue romane* 35. 177–206.
- Carlier, Anne. 2007. From preposition to article: The grammaticalization of the French partitive. *Studies in Language* 31. 1–49.

- Carlier Anne & Ludi Melis. 2006. L'article partitif et les expressions quantifiantes contiennent-ils le même *de*? In Georges Kleiber, Catherine Schnedecker, Anne Theissen (eds.), *La relation partie-tout*, 449–464, Leuven: Peeters.
- Carlson, Greg. 1977. A unified analysis of the English bare plural. *Linguistics and Philosophy* 1. 413–457.
- Chierchia, Gennaro. 1997. Partitives, referents to kinds and semantic variation. In Aaron Lawson (ed.), *SALT VII*, 73–98, Ithaca, NY: Cornell University.
- Dobrovie-Sorin, Carmen. 2009. Existential bare plurals: From properties back to entities. *Lingua* 119. 296–313.
- Dobrovie-Sorin, Carmen & Brenda Laca. 2003. Les noms sans déterminant dans les langues romanes. In Danièle Godard (ed.), *Les langues romanes. Problèmes de la phrase simple*, 235–281. Paris: Editions du CNRS.
- Dobrovie-Sorin, Carmen & Claire Beyssade. 2004. *Définir les indéfinis*. Paris: Editions du CNRS.
- Dowty, David R. 1991. Thematic proto-roles and argument. *Language* 67(3). 547–561.
- Foulet, Lucien. 1930³ [1919¹]. *Petite syntaxe de l'ancien français*. Paris: Champion.
- Galmiche, Michel. 1986. Note sur les noms de masse et le partitif. *Langue française* 72. 40–53.
- Giusti, Giuliana. 2021, this volume. Partitivity in Italian. A protocol approach to a multifaceted phenomenon. In Petra Sleeman & Giuliana Giusti (eds.), *Partitive determiners, partitive pronouns and partitive case* (Linguistische Arbeiten 580). Berlin: de Gruyter.
- Giusti, Giuliana & Petra Sleeman. 2021, this volume. Partitive elements in the languages of Europe. An advancement in the understanding of a multifaceted phenomenon. In Petra Sleeman & Giuliana Giusti (eds.), *Partitive determiners, partitive pronouns and partitive case* (Linguistische Arbeiten 580). Berlin: de Gruyter.
- Heim, Irene 1982. *The semantics of indefinite and definite noun phrases*. Amherst: University of Massachusetts dissertation.
- Hopper, Paul J. & Elizabeth C. Traugott. 1993. *Grammaticalization*. Cambridge: Cambridge University Press.
- Humbert, Jean. 1960³. *Syntaxe grecque*. Paris: Klincksieck.
- Ihsane, Tabea. 2008. *The layered DP. Form and meaning of French indefinites*. Amsterdam: John Benjamins.
- Ihsane, Tabea. 2013. *EN pronominalization in French and the structure of nominal expressions*. *Syntax* 16. 217–249.
- Ionin, Tania, Silvina Montrul & Hélade Santos. 2011. An experimental investigation of the expression of genericity in English, Spanish and Brazilian Portuguese. *Lingua* 121(5). 963–85.
- Jackendoff, Ray. 1996. The proper treatment of measuring out, telicity, and perhaps even quantification in English. *Natural Language and Linguistic Theory* 14(2). 305–354.
- Karlsson, Fred. 1983. *Finnish Grammar*. Porvoo, Helsinki, Juva: Werner Söderström Osakeyhtiö.
- Kleiber, Georges. 1988. L'opposition massif/comptable et les adjectifs. In Jean David & Georges Kleiber (eds.), *Termes massifs et termes comptables*, 267–292. Paris: Klincksieck.
- Krifka, Manfred. 1992. Thematic relations as links between nominal reference and temporal constitution. In Ivan Sag & Anna Szabolcsi (eds.), *Lexical matters*, 29–53. Chicago: Chicago University Press.
- Laca, Brenda. 1999. Presencia y ausencia de determinante. In Ignacio Bosque & Violeta Demonte (eds.), *Gramática descriptiva de la lengua española*. Madrid: Espasa Calpe.
- Lahousse, Karen & Béatrice Lamiroy. 2012. Word order in French, Spanish and Italian: A grammaticalization account. *Folia Linguistica* 46(2). 387–415.

- Lehmann Christian. 2002³ [1982³]. *Thoughts on grammaticalization*. München, Newcastle: Lincom.
- Luraghi, Silvia & Seppo Kittilä. 2014. Typology and diachrony of partitive case markers. In Silvia Luraghi & Tuomas Huomo (eds.), *Partitive cases and related categories*, 17–62. Berlin: De Gruyter.
- Milner, Jean-Claude. 1978. *De la syntaxe à l'interprétation: quantités, insultes, exclamations*. Paris: Seuil.
- Reinhart, Tanya. 1997. Quantifier scope: How labor is divided between QR and choice functions. *Linguistics and Philosophy* 20(4). 335–97.
- Scaliger, Julius-Caesar. 1540. *De causis linguae latinae*. Lyon: S. Gryphum.
- Serbat, Guy. 1996. *Grammaire fondamentale du latin*. Volume VI(1): *L'emploi des cas en latin: nominatif, vocatif, accusatif, génitif, datif*. Louvain: Peeters.
- Seržant, Ilja. 2021, this volume. Diachronic typology of partitives. In Petra Sleeman & Giuliana Giusti (eds.), *Partitive determiners, partitive pronouns and partitive case* (Linguistische Arbeiten 580). Berlin: de Gruyter.
- Suñer, Margarita. 1982. *Syntax and semantics of Spanish presentational sentence-types*. Washington: Georgetown University Press.
- Tenny, Carol T. 1994. *Aspectual roles and the syntax-semantics interface*. Dordrecht: Kluwer.
- Traugott, Elizabeth C. & Richard B. Dasher. 2002. *Regularity in semantic change*. Cambridge: Cambridge University Press.
- Väänänen, Veikko. 1981. La préposition latine *de* et le génitif. In Veikko Väänänen, *Recherches et créations latino-romanes*. Naples: Bibliopolis.
- Zamparelli, Roberto. 2008. *Dei ex-machina*: a note on plural/mass indefinite determiners. *Studia Linguistica* 63(3). 301–327.
- Zribi-Hertz, Anne. 2006. Pour une analyse unitaire de *DE partitif*. In Francis Corblin, Sylvie Ferrando & Lucien Kupferman (eds.), *Indéfini et prédication*, 141–154. Paris: PUPS.