

EXISTENTIALLY INTERPRETED DEFINITES*

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Abstract

This paper proposes a novel syntactic as well as semantic analysis of the Basque definite determiner [-a] and argues, in opposition to other scholars (cf. Artiagoitia 2002 and references therein), that the Basque definite determiner (despite its various interpretations) is just that, a definite determiner. Moreover, the interpretations that the Basque definite determiner forces are argued to follow from the Neocarlsonian analysis (Chierchia 1998b, Dayal 2004). Finally, this proposal allows us to derive some intriguing pattern of cross-linguistic variation with regard to the morphosyntactic make-up of nominals in existential interpretation (Basque definites, English bare nouns, and French partitives *des/du*).

1 Introduction

The present paper, observing the behaviour and possible interpretations of the Basque definite determiner (D), provides extra evidence in favour of the Neocarlsonian (NC) approach (cf. Chierchia 1998, Dayal 2004, Zamparelli 2002a) where the existential interpretation of bare nouns (BN) is shown to be dependent on the kind-level reading. This evidence must also be taken as proof against the so-called Ambiguity analysis (as proposed by Wilkinson 1991, Diesing 1992, Kratzer 1995) where BNs' existential interpretation is argued to be non-dependent on any other reading. Furthermore, observing the different interpretations -- referential, kind, and existential-- that the D can obtain in Basque, this language is shown to be typologically in between English and French (cf. Etxeberria 2005).

2 Properties and interpretations of the Basque D

A distinctive property of Basque is that BNs cannot appear as arguments (no matter whether the DP is singular or plural, fills the subject or object slot). Arguments necessarily require the overt presence of the Basque definite (or indefinite)¹ determiner for the sentences to be grammatical (cf. Laka 1993, Artiagoitia 1997, 1998, 2002).

Subject position:

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¹ The Basque indefinite article *bat* 'one' also makes the sentence grammatical as the examples in (i) shows. This paper will not treat the indefinite article and will only concentrate on the behaviour of the Basque definite determiner.

- (i) Ikasle bat berandu iritsi zen.
student one late arrive aux
'A student arrived late.'

- (1) a. Mutil*(-a) berandu etorri zen.
 boy-D.sg.abs late come aux.sg
 ‘The boy came late.’
 b. Mutil*(-ak) berandu etorri zen.
 boy-D.pl.abs late come aux.pl
 ‘The boys came late.’

Object position:

- (2) a. Jonek tren*(-a) ikusi du.
 Jon-erg train-D.sg.abs see aux.sg
 ‘Jon has seen the train.’
 b. Jonek tren*(-ak) ikusi ditu.
 Jon-erg train-D.pl.abs see aux.pl
 ‘Jon has seen (the) trains.’

Assuming that arguments in Basque always show up with a D (cf. fn.1), let us see the interpretations that it is possible to force. First, the Basque D can create (as usually does) referential interpretations in non-generic contexts and it behaves just like the D of languages such as English or Romance languages. In the examples in (1), where the DP appears in subject position, *mutila* in (1a) makes reference to a specific boy while *mutilak* in (1b) makes reference to a specific set of boys. The DPs *trena/trenak* in (2a-2b) fill the object slot, when the singular form of the D is used the sentence can only be interpreted as making reference to a single specific train, when the DP is plural on the other hand, two possible interpretations arise: referential or existential (see below).

Another interpretation is that when the Basque definites are combined with kind level predicates (cf. Krifka et al. 1995), in these cases, the usual referential interpretation disappears and they adopt a kind interpretation as exemplified in (3).²

- (3) a. Dinosauru-ak aspaldi desagertu ziren.
 dinosaur-D.pl.abs long time ago become extinct aux.
 ‘Dinosaurs became extinct a long time ago.’
 b. Nitrogeno-a ugaria da gure unibertsoan.
 nitrogen-D.sg.abs abundant is our universe
 ‘Nitrogen is abundant in our universe.’

In the examples in (3), the DPs *dinosauruak* and *nitrogenoa* do not refer to an ordinary object, that is, they do not denote some particular group of dinosaurs or some particular quantity of nitrogen, but rather they make reference to the kind *dinosaur* and to the kind *nitrogen*.

Finally, when the Basque definite DPs (plurals and masses) fill the object slot, the definite DP can but need not (as shown by the glosses in 4) make reference to a specific set and can obtain an existential interpretation.

- (4) a. Amaiak goxoki-ak jan ditu.
 Amaia.erg candy-D.pl.abs eat aux
 ‘Amaia has eaten (the) candies.’
 b. Aritzek ardo-a edan du.
 Aritz.erg wine-D.sg.abs drink aux
 ‘Aritz has drunk (the) wine.’

² For ease of exposition, here and elsewhere, ‘D.sg’ is used in the glosses with mass terms. However, as will be made explicit in §5.3, mass terms are argued to be number neutral (cf. also Delfitto & Schrotten 1991, Doetjes 1997, Dayal 2001, Krifka 2004 among others).

In the examples in (4), the object DPs seem to be interpreted by means of an existential quantifier having the meaning of *some*. Thus, *goxokiak* in (4a) and *ardoa* in (4b) roughly correspond to *some candies* and *some wine*.

Thus, in addition to the definite/referential interpretation usually associated with Ds in general, the Basque D must also appear in contexts where other languages typically typically BNs. For example, English and other Germanic languages can use determinerless plural count terms as well as determinerless mass terms in order to communicate kind interpretations, as exemplified by the following examples.

- (5) a. Dinosaurs are extinct.
b. Gold has the atomic number 79.

However, as is well known, the kind interpretation in (5) is not the only possible reading that English BNs can get and they can also obtain an existential interpretation.

- (6) a. Amaia has eaten candies.
b. Aritz has drunk wine.

As was the case for Basque definite objects in (4), the direct objects *candies* and *wine* of the examples in (6a) and (6b) respectively, seem to be interpreted by means of an existential quantifier.

There are two main approaches that have tried to give account for the different readings that English BNs can obtain: the Ambiguity Approach and the Neocarlsonian Approach. These two approaches will be presented in the next section to later see whether both approaches are able to explain Basque data properly.

3 Different approaches to BN's interpretations

3.1 The Ambiguity Approach

In the Ambiguity Approach to BNs, kinds do not play a big role and BNs are defended to be systematically ambiguous (cf. Wilkinson 1991, Diesing 1992, Gerstner & Krifka 1993). In some contexts they refer to a kind, in others they behave as weak indefinites.

The kind denotation will be the one used in sentences where the predicates are kind-level, as that in (7a) which would have the logical form in (7b).

- (7) a. Dinosaurs are extinct.
b. extinct (dinosaur_k)

For characterizing sentences such as the one in (8a) on the other hand, BNs behave like indefinites and their free variable is bound by an unselective generic operator (Gn). Assuming a tripartite structure for quantification (Q [Restrictor] [Nuclear Scope]) (cf. Lewis 1975, Kamp 1981, Heim 1982), the generically interpreted *potatoes* in (8a) will appear in the restrictive clause as shown in (8b).

- (8) a. Potatoes contain vitamin C.
b. Gn_x [potatoes(x)] [contain vitamin C(x)]

In this approach, the existential interpretation also comes from the indefinite interpretation of the BN. In this case, BNs will appear in the nuclear scope of the quantifier and the free variable the indefinite introduces is bound by an existential quantifier introduced by the existential closure as shown in (8b) (cf. Diesing 1992, Kratzer 1995).

- (8) a. Birds are ruining my parents' vegetable garden.
b. $\exists x$ [birds(x) & ruining my parents' vegetable garden(x)]

3.2 The Neocarlsonian Approach

According to this approach, BNs are non-quantificational and should be considered proper names of kinds of things in kind-level contexts (cf. Chierchia 1998b, Dayal 2004). Mass terms are described as kind denoting elements of type e and combine directly with the predicate as expressed in (9).

- (9) a. Nitrogen is abundant in our universe.
 b. abundant in our universe (nitrogen)

Bare Plurals (BP) on the other hand, start life as type $\langle e, t \rangle$ and in order to become arguments of kind predicates need to be turned into type e , a shift that is obtained via a nominalization operation as described in (11) (expressed as ‘ \cap ’ in 10b). Hence, the logical form of a sentence such as (10a) will be the one in (10b).

- (10) a. Dinosaurs are extinct.
 b. extinct (\cap dinosaurs)

$$(11) \text{ Nom } (\cap): \langle e, t \rangle \rightarrow e: \lambda P_{\langle e, t \rangle} \lambda s \iota x [P_s(x)]$$

Now, in object level contexts such as those in (12), predicates do not apply to kinds, but rather to non-kind objects.

- (12) Cats are rummaging in our garbage.

As a consequence, further operations are needed to repair the type mismatch. This repair involves the introduction of a (local) existential quantification over the instantiations of the kind. Thus, the bare nouns are turned into indefinites (by means of *Pred*, the inverse of *nom*)³ providing a free variable by a type shifting operation that applies anytime the predicate requires an object-level argument. At the same time, this type shifting operation inserts the existential quantifier. This general mechanism is called ‘Derived Kind Predication’ (DKP).

- (13) *Derived Kind Predication* (Chierchia 1998b: 364):

If P applies to objects and k denotes a kind, then

$$P(k) \Leftrightarrow \exists x [\cup k(x) \wedge P(x)]$$

where ‘ \cup ’ is a type shifter operator from kinds to the corresponding properties (Pred).

- (12’) Cats are rummaging in our garbage.

Rummaging in our garbage (\cap cats)

$$\Leftrightarrow \exists x [\cup \cap \text{cats}(x) \wedge \text{rummaging in our garbage}(x)] \text{ (via DKP)}$$

In characterizing sentences, there is again a type mismatch since the predicate does not accept kinds and the BN denotes one. Again, the application of ‘ \cup ’ is needed in order to create an indefinite with a free variable that will be bound by the Gn operator introduced in sentences such as (14a).

- (14) a. Cats meow.
 b. GENx [$\cup \cap$ cats(x)] [meow(x)]

As was noted in the introduction, the aim of this paper is to argue that Basque is typologically in between English and French. The following section is dedicated to present some cross-linguistics data to later concentrate on Basque in order to see the behaviour of the Basque D in a comparative light.

³ Pred: e (kind) $\rightarrow \langle e, t \rangle: \lambda k_{\langle e \rangle} \lambda x [x \leq k]$: It is a function that applies to those entities (kinds) which are entity correlates of properties, and returns the corresponding property.

4 Some cross-linguistic data

Spanish, Italian, and French standardly use noun phrases with a D in order to express the kind readings, in (15).

- (15) a. [Los dinosaurios] se extinguieron hace mucho tiempo. Spanish
b. [Gli dinosauri] sono estinti. Italian
c. [Les dinosaures] ont disparu. French
'Dinosaurs are extinct'

Now, things are not that similar when it comes to existential object-level contexts. The data show that Romance languages make use of different strategies to obtain the existential interpretation. Both Spanish and Italian are able to use BNs in existential constructions.⁴

- (16) a. Juan ha bebido [café] Spanish
Juan has drunk coffee
b. Juan ha visto [leones]
Juan has seen lions
- (17) a. Non ho visto [ragazzi] Italian
not I-have seen boys
b. Leo ha mangiato [patate]
Leo has eaten potatoes

French on the other hand, does not accept BNs and makes use of the so called partitive determiner *des* (for plurals) or *du* and its variants *de la / de l'* (for masses) to create existential readings, (18). This partitive determiner is composed of the partitive preposition plus the D.⁵

- (18) a. Pierre a mange [des sucreries] French
Pierre has eaten of-the sweets
b. Elle a goûté [du vin]
She has drunk of-the beer

Italian can also make use the partitive construction to create existential readings. The usage of this partitive determiner is parallel to the French one.

- (19) a. Ho incontrato [degli studenti] Italian
I-have met of-the students
b. Ho bevuto [della birra]
I-have drunk of-the beer

In the next section we return to Basque; first, we will shortly remember the properties of the Basque D; then, a previous analysis of the Basque D will be presented which will be shown to face some problems; and finally, Basque D's behaviour is argued to be analysable in NC terms, and Basque shown to be the missing link between English and French.

5 Deriving the interpretations of the Basque D and its typological nature

5.1 Semantic interpretation of the Basque D

As mentioned in §1, a characteristic property of Basque is that BNs cannot appear as arguments and the overt presence of the definite (or indefinite) determiner is required for the sentences to be grammatical (cf. fn.1).

⁴ Cf. Bosque (1996a) for an extensive presentation and possible analysis of the various uses of Spanish BNs.

⁵ Cf. Storto (2000, 2003), Roy (2001), Chierchia (1998), and Zamparelli (2002b) for discussion.

A consequence that follows is that apart from the expected definite/referential interpretation usually associated with Ds (cf. examples 1-2), Basque D will also be needed to express meanings that in other languages are expressed by means of BNs, i.e. (i) kind meanings when nominals are combined with kind-level predicates as in (20); (ii) existential reading when definites (plurals and masses) appear in direct object position as shown in (21).

- (20) a. Dinosauru-ak aspaldi desagertu ziren. (=3)
 dinosaur-D.pl.abs long time ago become extinct aux.
 ‘Dinosaurs became extinct a long time ago.’
 b. Nitrogeno-a ugaria da gure unibertsoan.
 nitrogen-D.sg.abs abundant is our universe
 ‘Nitrogen is abundant in our universe.’
- (21) a. Amaiak goxoki-ak jan ditu. (=4)
 Amaia.erg candy-D.pl.abs eat aux
 ‘Amaia has eaten (the) candies.’
 b. Aritzek ardo-a edan du.
 Aritz.erg wine-D.sg.abs drink aux
 ‘Aritz has drunk (the) wine.’

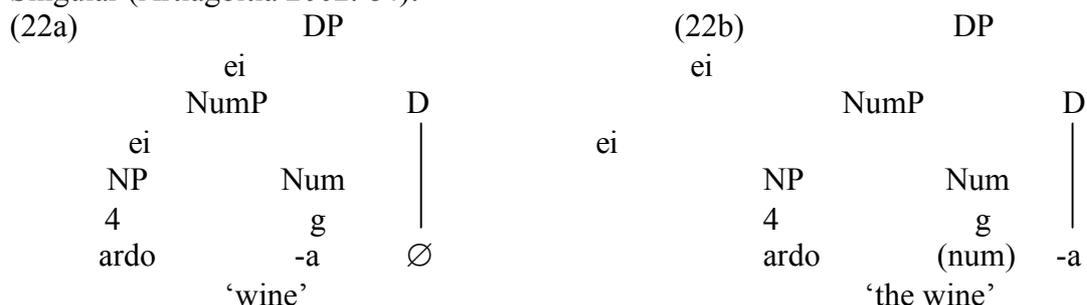
Before we move on to expose the details of the proposal that this paper is going to put forward, I will present the analysis by Artiagoitia (2002) together with some of its problems.

5.2 A previous analysis on the Basque D (Artiagoitia 2002)

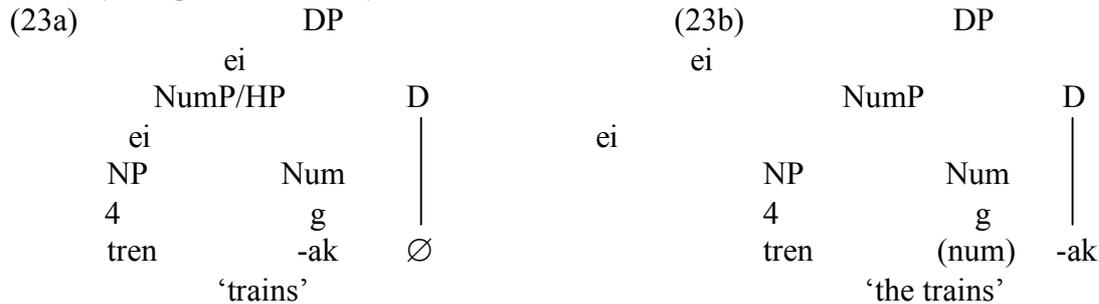
Artiagoitia’s (2002) analysis is based on Longobardi (1994) where BNs in argument position are argued to be true DPs with an empty D head (despite their determinerless appearance), and as a consequence, (i) are assigned a default existential interpretation and (ii) must be lexically governed at LF. In other words, an empty D is only possible in internal argument position and disallowed in external subject position.

Artiagoitia (2002) applies this proposal to Basque since despite the overt presence of the D, the readings are parallel to determinerless DPs in English and Romance languages. Taking this observation seriously, together with the fact that Basque does not mark number on nouns, he concludes that Basque existentially interpreted DPs are structurally similar to determinerless DPs of English and Romance; and the empty D makes the “definite” DP be interpreted existentially by default. Therefore, Basque DPs will have two possible structures depending on the interpretation that they will be getting. When the DP is interpreted existentially (indefinite-like), the article will just be filling number specification of DPs; with that aim, [-a/-ak] will fill a functional projection between the D head and the N head, “some kind of Number-Phrase, i.e. the noun plus number inflection or the head that Longobardi (2000) simply calls ‘H’” (Artiagoitia 2002: 84), as in the examples (22a) and (23a). When the DP is interpreted specifically on the other hand, [-a/-ak] must appear in D position as shown by the examples (22b) and (23b).

Singular (Artiagoitia 2002: 84):



Plural (Artiagoitia 2002: 84):



However, this analysis is problematic: Let us build an example with a mass term like *ardoa* ‘wine+D’ in object position of an object level predicate, as in (24). In this situation, the DP *ardoa* can obtain two interpretations, one definite, the other existential.

- (24) Izarok ardoa edan du.
 Iزارو.erg wine-D.sg drink has
 ➔ Specific: ‘Izarok has drunk the wine’
 ➔ Existential: ‘Izarok has drunk wine’

In the existential interpretation, Artiagoitia does not treat [-a] as a determiner, rather, the article is placed in [Head, NumP] position and functions as a number marker, a singular number marker. But, do we really want to claim that mass terms denote singulars? Clearly, the answer to this question is negative.

As evidence against Artiagoitia’s claim, note that in some contexts (only in so-called stereotypical context: buying a car, having a wife/husband, having a baby, wearing a hat, etc.),^{6,7} Basque singular count terms can get an existential-like interpretation. A sentence like (25) is ambiguous between a specific and an existential interpretation.

- (25) Julenek kotxea erosi du.
 Julen.erg car-D.sg buy has
 ➔ Specific: ‘Julen has bought the car’
 ➔ Existential: ‘Julen has bought (a) car’

Then, *kotxea* can have an existential-like interpretation in (25); but even in the existential interpretation, there is a clear difference between this sentence and the one in (24). Although both DP objects are claimed to get existential interpretation and the Basque [-a] should accordingly be in NumP in both DPs, there is no way in which the sentence in (25) can be interpreted as Jon having bought more than one car, that is, the number of cars is strictly

⁶ Except for these stereotypical contexts, singular count nouns in object position of object-level predicates are interpreted specifically: *liburua erosi* always means ‘to buy the book’, *aldizkaria irakurri* always means ‘to read the magazine’, etc.

⁷ In Spanish, all the Basque examples (stereotypical contexts) that allow the singular count noun to obtain an existential-like interpretation are expressed by means of a bare singular, *coche* ‘car’ in (i).

- (i) Juan se ha comprado coche
 Juan se has buy car
 ‘Juan has bought a car.’

Bosque (1996b) explains the behaviour of Spanish object bare singulars by means of a process of incorporation to the verb (head to head movement) and the creation of a complex predicate.

Rodriguez (2003) assumes Bosque’s incorporation analysis and tries to apply it to Basque facts in (25). The only difference is that in Basque the incorporation process would have to take place at LF since the presence of the D blocks the (needed head to head) movement at SS. However, I do not see the way to avoid the SS blockage at LF, since at LF the D will still be present; unless the Basque article is taken to be an expletive.

specified to ‘one’; this is not the case in (24), where as we said, we don’t care about the quantity of wine Izaro has drunk. Thus, the questions to answer are: Why should there be such a difference among the behaviour of the singular (if singular) object DPs in the examples in (24) and (25)? And what makes them different?

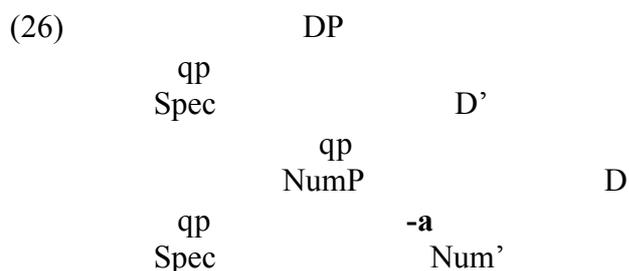
The next section provides an answer to these two questions by proposing a novel syntactic as well as semantic analysis for the Basque D where it is argued that mass terms, in opposition to count terms, are unmarked for number. Furthermore, Basque D is argued to always be a definite determiner, but very flexible in its ability to type-shift, which makes it possible to account for the different interpretations that it forces.

5.3 Towards a new analysis of the Basque D

5.3.1 A new syntactic analysis for Basque [-a] / [-ak]

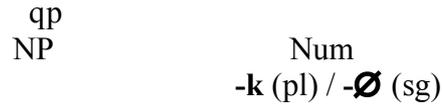
The proposal that this paper puts forward is that mass terms are not number marked, and although they share the property of triggering singular verb agreement with singular count terms, they differ in being number neutral (cf. Delfitto & Schrotten 1991, Doetjes 1997, Dayal 2004, Krifka 2004, among many others). Singular agreement with the verb will be just agreement by default. Furthermore, from what we have seen so far masses pattern together with plurals in the interpretations they obtain, in other words, semantically, mass terms share more properties with plurals than with real singulars. So despite agreement facts with verbs, masses are closer in behaviour to plurals than to singulars (cf. Link 1983, Pelletier & Schubert 2002, Gillon 1992, Higginbotham 1994, Chierchia 1998a, 1998b, Bosveld-de Smet 1998).

Thus, count terms will be referred as (morphologically) singular or plural while mass terms will be argued not to bear number morphology at all. In order to explain this difference between count and mass terms, this paper proposes that the definite determiner [-a] and number markers [-Ø] and [-k] are base generated in different syntactic position (cf. Etxeberria 2005, pace standard assumption). As expressed in the example in (26) the number markers will be assumed to be base generated in NumP while the definite determiner [-a] will be defended to always be base generated in head of DP, and be always a definite determiner. Note that the singularity of singular count terms is not marked in the overt syntax, but I assume there is an empty number marker (Ø) (cf. Azkarate & Altuna 2001: ch.2, and references therein),⁸ hence the difference with mass terms.



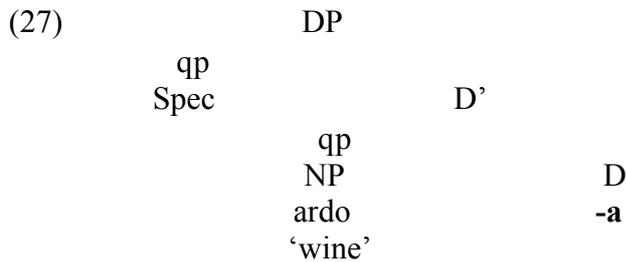
⁸ This is actually the case in verbal inflectional agreement in Basque. Plural number is marked by suffixation while singular number is unmarked, cf. Hualde (2003).

	Singular		Plural
<i>doa</i>	‘it/she/he is going’		<i>doa-z</i> ‘they are going’
<i>noa</i>	‘I am going’		<i>goa-z</i> ‘we are going’
<i>daukagu</i>	‘we have it’		<i>dau-z-kagu</i> ‘we have them’
<i>dakigu</i>	‘we know it’		<i>daki-zki-gu</i> ‘we know them’
<i>dabil</i>	‘it/she/he is walking’		<i>dabil-tzu</i> ‘they are walking’
<i>nau</i>	‘it/she/he has me’		<i>ga-it-u</i> ‘it/she/he has us’



The syntactic structure in (26) does not give us the final surface order of the constituents. In order to get the final constituent order, the plural marker [-k] (and the empty singular marker [-∅]) will be considered suffixes, and as such dependent phonologically as well as categorically on another category (in opposition to clitics which are only phonologically dependent, cf. Zwicky 1985), and this category is the D° head.⁹ Therefore, it is possible to postulate that the final movement of the number markers to the final position of the DP will be due to morphology (cf. Ettxeberria 2005 for evidence in favour of this proposal).

Mass terms on the other hand, being number neutral will need no NumP and will have the structure in (27).



With this proposal in mind, it is possible to answer the questions raised at the end of the previous section: The difference between the sentences in (24) and (25) comes from the fact that Number does in fact play a role; when singular, the interpretation is just singular and this is what the example in (25) shows, which can not be interpreted as Jon having bought more than one car. However, with mass terms, the Basque D does not appear to be imposing any kind of number on the nominal (mass) expression.

A nice consequence of this proposal is that the structures in (26-27) make it possible to differentiate count and mass terms avoiding at the same time Artiagoitia's problem, since mass terms are number neutral in my analysis, hence non-singular.

Note also that for Artiagoitia (2002), existentially interpreted plural [-ak] appears in NumP (cf. 23a). This plurality correctly eliminates the mass interpretation of a nominal expression like *ardo* 'wine' in (28). The same facts can also be easily accounted for in my analysis, where the plural marker [-k] appears in NumP correctly eliminating the mass denotation of *ardo*.

(28) Jonek ardo-ak edan ditu.
 Jon.erg wine-D.pl drink aux
 'Jon has drunk different types/sizes of wine.'

However, if following Artiagoitia we would assume that [-a] appears in NumP when existentially interpreted, this should also eliminate mass interpretations, but it does not. For obvious reasons, these facts are problematic for Artiagoitia; in my analysis on the other hand, [-a] does not fill number specifications of the mass noun and this problem does not even arise.

Now that we've set the syntactic structure of Basque definite DPs, the next section is presents a novel semantic analysis for the Basque D.

⁹ Dependent morphosyntactic features are a very common thing across languages. For instance, in Amharic, Case morphology is dependent on the presence of the article (cf. Anderson 1985).

5.3.2 On how the different interpretations of the Basque DPs are explained

In this section I show that the NC approach, where the existential interpretation is argued to be dependent on the kind-level interpretation (cf. §3.2), can be applied to Basque data. One of the advantages of this analysis is that [-a] is treated as a D everywhere; in other words, the Basque D is given a unified analysis despite its various interpretation that have led other authors to propose that [-a] is ambiguous (sometimes definite, sometimes indefinite).

The proposal is that the Basque D allows both the referential and the kind reading (cf. e.g. Kleiber 1990, Zamparelli 2002a for Romance).¹⁰ Thus, the Basque D always takes an $\langle e, t \rangle$ element and returns an individual of type e ; it will play the role of the type-shifter *iota* when a referential reading is needed, as in the example in (29).

- (29) a. Mutil-ak berandu etorri ziren. (= 1a)
 boy-D.pl.abs late come aux.pl
 ‘The boys came late.’
 b. $iota(t): \langle e, t \rangle \rightarrow e: \lambda P_{\langle e, t \rangle} \iota x [P(x)]$

On the other hand, the role of [-a] will be that of the type-shifter *nom* (the intensional version of *iota*) when the kind reading is needed, that is, when the DP is combined with kind-level predicates, as in (30).

- (30) a. Dinosauru-ak aspaldi desagertu ziren. (= 3a)
 dinosaur-D.pl.abs long time ago become extinct aux.
 ‘Dinosaurs became extinct a long time ago.’
 b. $nom(\wedge): \langle e, t \rangle \rightarrow e: \lambda P_{\langle e, t \rangle} \lambda s \iota x [P_s(x)]$

Assuming the NC approach as correct, in order to obtain the existential reading the definite NP must also be able to have a kind-level meaning. That is, a necessary step in the way to the existential interpretation will have to be the kind denotation. Thus, as we’ve shown before, in contexts where the predicate can not apply to kinds, the DKP is assumed to be needed to repair the type mismatch.

The hypothesis that I develop in this paper is that the DKP allows us to derive some intriguing patterns of cross-linguistic variation with regard to the morphosyntactic make-up of nominals in existential interpretation. So, Basque is argued to be typologically in between English and French, the difference is that in languages like Basque or French some parts of the derivation of the DKP are overt while some others are kept covert; in English on the other hand, the whole derivation of the DKP is covert. An extra assumption that I need to make is that French *des* (de les) / *du* (de le) and Basque existentially interpreted [-a(k)] are built on a kind-denoting definite (cf. Zamparelli 2002b for Italian and French).

Thus, as just mentioned, in English the whole derivation of the object *books* in (31) will be covert. First, the type-shifter *nom* creates an individual denoting kind, then the type-shifter *pred* gives the predicative type back; and finally the existential quantifier quantifies over instantiations of the kind.

- (31) John has read [books].
 Existential interpretation:
 $read(j, \wedge \text{books}) \Leftrightarrow \exists x [\wedge \text{book}(x) \wedge read(x)]$ (via DKP)

Considering that French *des* / *du* are composed of the partitive preposition plus the definite determiner; in French, part of the derivation of *des livres* in (32) will be overt. That is, the

¹⁰ The term *definite* includes both the referential specific interpretation as well as the kind interpretation.

nom operation as well as the *pred* operation will be overt; the part of the derivation that is covert is the existential quantifier that gives the final existential interpretation.

- (32) Jean a lu [des livres].
 Jean has read of-the books
 ‘Jean has read books.’

Existential Interpretation:

lire (j, les livres_k) $\Leftrightarrow \exists x[\text{de les livres}_k(x) \wedge \text{lire}(x)]$ (via DKP)

Finally in Basque, part of the derivation of *liburuak* in (33) will also be overt (as in French) while part of the derivation will be left covert. First, the D creates an individual kind of type *e*; and although in Basque we only see the D, I assume that there is a covert version of the partitive postposition (similar to French *de*) that gives us the predicative $\langle e, t \rangle$ type back. The role of this covert partitive postposition will be halfway the DKP, that is to say, it yields an $\langle e, t \rangle$ type element but no existential quantifier. This local existential quantifier will be provided by the DKP which introduces an existential quantification over instantiations of the kind in episodic sentences (an adjustment triggered by the type mismatch).

- (33) Jonek [liburu-ak] irakurri ditu.
 Jon.erg book-D.pl.abs read aux
 ‘Jon has read books.’

Existential interpretation:

irakurri (j, liburuak_k) $\Leftrightarrow \exists x[^U\text{liburuak}_k(x) \wedge \text{irakurri}(x)]$ (via DKP)

Note in fact that the behaviour of French *des / du* is quite similar to the existentially interpreted Basque D.¹¹ The difference between the two is that the referential or kind readings available for Basque D can not be obtained by the French partitive determiners. Thus, in the existential interpretation, they are (i) rejected as objects of generic sentences (34)-(35); (ii) perfectly acceptable as objects of stage-level predicates (36)-(37); (iii) grammatical also when combined with atelic (*pendant* ‘during/for’) adverbials (38-39).

- (34) a. * Max adores des sucreries (French)
 Max adores of-the sweets
 b. * Cet enfant déteste du lait
 this child hates of-the milk
- (35) a. Nik goxokiak maite ditut. (Basque)
 I.erg candy-D.pl love aux.
 * **Existential interpretation**
 ✓ Generic interpretation
 b. Ume honek esnea gorroto du
 child this.erg milk-D.sg hate aux
 * **Existential interpretation**
 ✓ Generic interpretation
- (36) a. J’ai rencontré des amis ce matin. (French)
 I have met of-the friends this morning
 b. Elle a goûté [de la bière]
 She has drunk of-the beer
- (37) a. Italiar lagunak topatu ditut gaur goizean. (Basque)

¹¹ All of the French examples are taken from Bosveld-de Smet (1998).

Italian friend-D.pl(abs) meet aux today morning-in
 ‘I met (the) Italian friends this morning.’

√ **Existential interpretation**

√ Definite interpretation

- b. Mirenek garagardo-a edan du
 Miren.erg beer-D.sg.abs drink aux
 ‘Miren has drunk (the) beer.’

√ **Existential interpretation**

√ Definite interpretation

- (38) a. Marie a cueilli des fraises pendant des heures. (French)
 Marie has picked of-the strawberries for of-the hours

- b. * Marie a cueilli des fraises en une heure.
 Marie has picked of-the strawberries in one hour

- (39) a. Mirenek marrubiak jaso ditu ordubetez. (Basque)
 Miren.erg strawberry-D.pl(abs) pick aux hour-for
 ‘Miren has picked (the) strawberries for an hour.’

√ **Existential interpretation**

√ Definite interpretation

- b. Mirenek marrubiak jaso ditu ordubete batean.
 Miren.erg strawberry-D.pl(abs) pick aux hour one-in
 ‘Miren has picked the strawberries in an hour.’

* **Existential interpretation**

√ Definite interpretation

Let us provide some extra evidence supporting the proposal put forward in this section. In all of the examples in (40), the Basque definite object DP is ambiguous between the definite/referential and the existential interpretations.

- (40) a. Kepak satorrak hil ditu.
 Kepa.erg mole-D.pl kill aux
 ‘Kepa has killed (the) moles.’
 b. Idoiak oilaskoa jan du.
 Idoia.erg chicken-D.sg eat aux
 ‘Idoia has eaten (the) chicken.’
 c. Angel zurbil-zurbil dago mamu-ak ikusi dituelako.
 Angel pale-pale is ghost-D.pl see aux.
 ‘Angel is so pale because he has seen (the) ghosts.’

Remember that the NC approach crucially assumes that the existential interpretation exemplified in the previous examples derives from the kind reading. Then, the prediction is that whenever the kind reading is blocked, no existential interpretation will be available anymore. Kinds are assumed to have an intensional component that relates the kind with the intension of that same noun; it is possible to block this intensional component by means of a rigid designator in the definite DP as shown in (41) (cf. Chierchia 1998b for the same phenomenon with BNs in English).

- (41) a. Kepak [nere aitaren baratzako satorr-ak] hil ditu.
 Kepa.erg [my father.gen vegetable garden mole-D.pl] kill aux
 ‘Kepa has killed the moles from my father’s vegetable garden.’
 b. Idoiak [bere amak azokan erositako oilasko-a] jan du
 Idoia.erg [her mother market-in buy chicken-D.sg] eat aux
 ‘Idoia has eaten the chicken her mother bought at the market.’

- c. Angel zurbil-zurbil dago [kanposantuko mamu-ak] ikusi dituelako.
 Angel pale-pale is [graveyard-from ghost-D.pl] see aux.
 ‘Angel is so pale because he has seen the ghosts from the graveyard.’

All the definite expressions above must refer to some contextually unique group of moles, chicken, and ghosts in (41a-b-c) respectively; that is, the only way in which these definite DPs can be interpreted is referentially, and the existential interpretation is clearly unavailable as the glosses show. Furthermore, note that since the DPs in (41) cannot get the kind reading, the prediction is that when combined with kind-level predicates the result is ungrammatical. As the examples in (42) show, the prediction is borne out.

- (42) a. # [Bizilagunaren etxeko saguak] ohikoak dira ingurune hauetan.
 [neighbour.gen house.from mouse-D.pl] typical are region this-in
 ‘The mice from our neighbours’ house are common in this region.’
 b. # [Amak azokan erositako oilaskoa] munduan zehar zabalduta dago.
 [mum.erg market-in buy chicken-D.sg] world-in around spread is
 ‘The chicken that my mum bought in the market is widespread.’
 c. # [Kanposantuan dauden mamu-ak] aspaldi desagertu ziren
 [graveyard-in are ghost-D.pl] long time ago become extinct aux
 ‘The ghosts that are in the graveyard became extinct a long time ago.’

This impossibility to obtain kind readings offers clear evidence in favour of the NC approach and against the Ambiguity approach since according to the latter, blocking the kind reading should not block the existential interpretation, but it clearly does as shown in the examples from (40) to (42).¹² From here, it is possible to conclude that the existential reading is derived from the kind reading and that the NC approach gets cross-linguistic facts correctly.

Thus, the generalization that follows is that Basque definite DPs can only get an existential (indefinite-like) interpretation if they can first have a kind-level meaning.

6 Conclusions

(i) Basque [-a] is a D and as such is always base-generated in [Head, DP] (as standardly assumed for the D cross-linguistically). Furthermore, [-a] is a D in all contexts (*pace* Artiagoitia 2002), but very flexible in its ability to type-shift; the latter properly accounts for its range of different interpretations.

(ii) Although mass terms share the property of triggering singular verb agreement with singular count terms this paper postulates that they are number neutral (cf. Delfitto & Schrotten 1991, Doetjes 1997, Dayal 2004, Krifka 2004). Thus, count terms are

¹² Furthermore, note that when existentially interpreted, the Basque definites DPs do not behave like usual indefinites and must always take narrow scope (*pace* the Ambiguity approach), just like BNs in English..

- (i) a. # Nere aitak bi sator hil ditu ordubetez.
 my father.erg two mole kill aux hour-for
 ‘My father has killed two moles for an hour.’
 b. Nere aitak satorrak hil ditu ordubetez.
 my father.erg mole-D.pl kill aux hour-for
 ‘My father has killed moles for an hour.’

The sentence in (ia) can only be interpreted with the indefinite *bi sator* ‘two moles’ having wide scope over the atelic adverbial element [*bi sator* > adv.] and asserts that the same two moles have been killed again and again; a rather strange state of affairs, hence the hash marking. In (ib) on the other hand, we find no such strange assertion and the sentence is completely grammatical. The reading we get is one where my father has killed different moles and the definite DP must necessarily take narrow scope below the adverbial [adv. > *satorrak*].

(morphologically) singular or plural while mass terms bear no number morphology at all and as a consequence they need no NumP.

(iii) The existential interpretation of Basque definites (in object position) depends on the kind-level reading. This provides further evidence for the Neocarlsonians (*cf.* Chierchia 1998b, Dayal 2004, Zamparelli 2002a).

(iv) Basque is typologically in between English and French: the former makes use of BNs to get existential interpretation while the latter needs the definite plus the partitive preposition *de* (*du* for mass terms, *des* for plural count terms) to express the same meaning; in Basque, the determiner is there while the preposition is not.

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