

# Plural Definites and Domain Restriction in Romance and Germanic

## A new generalization regarding genericity, kind predication, and maximal reference<sup>1</sup>

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**Abstract.** Across Romance and Germanic languages, plural definites either have the three following uses, or none of them. **(a)** They can refer to the maximal plural individual satisfying the description, without being anaphoric or contextually restricted; **(b)** They can serve as arguments of kind predicates; **(c)** they can be generic and enter the restrictor of a modal adverb of quantification like ‘usually’ (and its counterpart in other languages). We use compatibility with ‘usually’ as a test for genericity, because even non-generic referential plural definites (say [The NPs] in English) can restrict some adverbs of quantification, including ‘generally’, an often overlooked fact. The relationship between (b) and (c) has been observed, but their connection with (a) has gone unnoticed, and our generalization, to our knowledge, has never been formulated as such. Our goal is to substantiate it and to show that it sheds a new light on the cross-linguistic comparison of Romance and Germanic languages regarding genericity, bare plurals, and plural definites. We conclude the paper by fitting existential readings of Italian and English Bare Plurals into the picture.

### 1. A puzzle

Consider (1b) and (2b). Why is (2b) bad? Why can a definite plural not be used to pick out the maximal sum of all unicorns? As noticed by Heim (2011), nothing obvious in the semantics of the definite determiner explains this.

- (1) There are unicorns in my garden.
  - a. They have blue eyes.
  - b. The unicorns have blue eyes.
  
- (2) Contrary to what I thought, the animal called ‘unicorn’ is not imaginary, but is in fact a real species. There are unicorns.
  - a. They have blue eyes.
  - b. \*The unicorns have blue eyes.
  - c. Unicorns have blue eyes.

One might speculate that plural definites must be anaphoric and that this requires them to refer to a previously introduced salient group of objects, which might explain why (2b) is deviant. But this is implausible given that a pronoun can be used in the very same context ((2a)).

Most of the literature focuses (i) on why in English Bare Plurals can be generic and denote kinds while Plural Definites cannot, and (ii) on why in Romance Plural Definites can be generic and

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denote kinds.

- (3) Generic Sentences
  - a. Fr: \*(Les) lions ont une crinière.
  - b. Eng: (\*The) lions have a mane.
- (4) Kind Predication
  - a. Fr: \*(Les) lions sont en voie d'extinction.
  - b. Eng: (\*The) lions are going extinct.

However, the same pattern seems to arise even in the case of predicates that are neither generic nor kind-specific. This is the case of collective predicates, as shown in (5).

- (5) a. (Adapted from Heim, 2011)  
{\*The} Cats number over 14 billion.
- b. (*Cats are felines.*) They number over 14 billion.

In the words of Heim (2011), “even if we choose predicates that elsewhere have no difficulty applying to pluralities of ordinary individuals [*rather than kind predicates like ‘extinct’*], we still don’t get good sentences when the definite plural is not contextually restricted and is intended to pick out the sum of all existing instances of the noun”. In other words, since Carlson (1977), the infelicity of English definite plurals with predicates like ‘extinct’ has been attributed to their inability to denote a kind; but (5), as Heim notes, does not contain kind predicates in any relevant way.

Similarly, non-generic episodic sentences also display the same pattern, as shown in (7).

- (6) Contrary to what I thought, the animal called ‘unicorn’ is not imaginary, but is in fact a real species. There are unicorns.
  - a. (\*The) unicorns are currently migrating to Canada, with Mexico as their point of departure.
  - b. They are currently migrating to Canada, with Mexico as their point of departure.

Heim made a suggestion which we think is on the right track: plural definites in English obey the special constraint that they must come with a non-trivial domain restriction.

We argue for the following generalization, across Germanic and Romance languages:

- (7) Across at least Romance and Germanic languages, plural definites either have the three following uses, or none of them.
  - a. **Maximal Reference**  
They can refer to the maximal plural individual satisfying the description, without being contextually restricted;
  - b. **Kind predication**  
They can serve as arguments of kind predicates;

c. **Genericity**

They can be generic and enter the restrictor of a modal adverb of quantification like ‘usually’ (and its counterpart in other languages).

**2. Illustrating the generalization for Romance**

Consider (8) and (9), which show that French and Italian obey the generalization we have just proposed.

(8) **French:**

a. **Maximal Reference:**

Présentement, les ours sont (\*habituellement) en train d’hiberner.

Currently, the bears are (\*usually) PROG hibernate.

*‘The plurality of all existing bears is such that (most of) its members are currently hibernating.’*

b. **Kind Predication:**

Les ours sont en voie de disparition.

The bears are in way of disappearance.

*‘Bears are threatened with extinction.’*

a. **Genericity and restriction of ‘usually’:**

Les ours sont (habituellement) bruns.

The bears are (usually) brown.

*‘Bears are (usually) brown.’*

(9) **Italian:**

a. **Maximal Reference:**

Attualmente, gli orsi stanno (\*solitamente) ibernando.

Currently, the bears are (\*usually) hibernating.

*‘The plurality of all existing bears is such that (most of) its members are currently hibernating.’*

b. **Kind Predication:**

Gli orsi sono in via di estinzione.

The bears are in way of extinction.

*‘Bears are threatened with extinction.’*

a. **Genericity and restriction of ‘usually’:**

Gli orsi sono (solitamente) bruni.

The bears are (usually) brown.

*‘Bears are (usually) brown.’*

**3. Maximal Reference is distinct from both kind predication and genericity**

3.1. Distinguishing Maximal Reference from Genericity

Genericity in characterizing sentences is standardly seen as arising from a silent quantificational adverb, GEN, akin in meaning to ‘usually’ (cf. Krifka *et al.*, 1995). For this reason, Quantificational Variability Effects (cf. Berman, 1991) are standardly used to test for whether a DP can be interpreted generically. In sentences like (10b-d) the adverb used on the left of ‘≈’ determines which quantifier restricted by ‘birds’ is used on the right of ‘≈’. This shows that in (10a), GEN

is present, and ‘a bird’ restricts it.

- (10) a. A bird flies. (generic)  
 b. A bird usually flies.  $\approx$  all typical birds fly  
 c. A bird rarely flies.  $\approx$  few birds fly  
 d. A bird always flies.  $\approx$  all birds fly

Of course, the QVE reading is not the only one, as witnessed by (11):

- (11) Opera singers {often, usually, generally}/rarely live in Paris  
 a. Low-Scope Reading:  
 Opera singers typically have the following property: living most of the time/rarely in Paris  
 b. QVE Reading (Lewis 1986):  
 Most/Few opera singers are Paris residents.

A strong argument for QVE readings to stem from separate LFs is that they arise even in cases of incompatibility of the predicate with a low scope reading, as happens with individual level predicates:

- (12) Individual Level Predicates.  
 a. \*John is {often, usually, generally, rarely} intelligent.  
 b. Opera singers are {often, usually, generally, rarely} intelligent.  
 $\rightsquigarrow$  Only QVE reading: Most/Few opera singers are intelligent. (Carlson 1977)

Then, in line with the standard view of genericity, we use QVE-compatibility with *usually* and its equivalent in other languages as a test for genericity, which is why we do not view (12a) as a generic sentence. This motivates taking Maximal Reference to be distinct from genericity.

- (7) a. **Maximal Reference**:  
 Présentement, les ours sont (\*habituellement) en train d’hiberner.  
 ‘The plurality of all existing bears is such that currently its members are (\*usually) hibernating.’

We think it is crucial to use ‘usually’ as opposed to other adverbs, because, even though it has rarely been noted, some quantificational adverbs give rise to QVEs with standard definite DPs which refer to a contextually salient set of entities, in sentences which without an overt adverb are not generic (see Ebert & Hinterwimmer 2010).<sup>2</sup> Consider for instance (13) and its French equivalent (14), where the DP ‘the bears’, which cannot restrict GEN, can be restricted by ‘often’, but not ‘usually’. This contrast is, to our knowledge, a new observation:

<sup>2</sup>As discussed in Ebert & Hinterwimmer 2010, even *usually* can give rise to QVEs with referential, non-generic definites, provided the described events can be decomposed into subevents that involve distinct members of the relevant plurality, as in “The people who lectured at the conference last summer were usually Japanese” (example from Ebert & Hinterwimmer 2010).

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- (13) English:  
Yesterday, 13470 bears gathered in Central Park.  
The bears that gathered yesterday in C. Park were {often/\*usually} brown.
- (14) French:  
Hier, 13470 ours se sont réunis à Central Park.  
Les ours qui étaient réunis hier à Central Park étaient {souvent/\*habituellement} bruns.  
The bears that were gathered yesterday in Central Park were {often, \*usually} brown.

### 3.2. Distinguishing MaxRef from Kind Predication

“Maximal Reference” readings are also distinct from Kind predication, as witnessed by (15), which has two distinct readings, (15a) and (15b).

- (15) Actuellement, les êtres humains sont en train de se suicider.  
Currently, the being humans are PROG. REFL. commit-suicide.  
*‘Currently, humans are committing suicide.’*
- a. **Kind:** humankind is committing suicide: true in a scenario where no humans are killing themselves, but the cumulative action of humans (e.g. emitting carbon), while not killing any currently existing human, threatens the existence of humans as a species in the future.
- b. **Max. Reference:** Individual humans are for the most part killing themselves right now.

That the two readings are distinct is confirmed by the fact that (16) and (17) are not perceived to be contradictory.

- (16) L’humanité est en train de de suicider, mais les humains ne le sont pas.  
*Humanity is committing suicide, but humans are not.*
- (17) Les humains sont en train de se suicider, mais pas l’humanité.  
*Humans are is committing suicide, but not humanity*

In these cases, the use of a (singular) kind noun (*Humanité*) forces the Maximal Reference reading for the plural definite, to avoid contradiction, showing unequivocally that the two readings are distinct:

- (16) is true in a scenario where no human is killing themselves, not even indirectly, but human actions (e.g. linked to climate change) endanger the species, while (17) is false in this scenario.
- The reverse is true in a dystopian scenario where the huge majority of humans are currently killing themselves in such a way that the few remaining humans are guaranteed to strive and perpetuate the species.

## 4. Germanic

### 4.1. English Full Definite Noun Phrases

English Plural Definites (except with nominalized adjectives, as we will see shortly) have none of the three uses we are examining. For all of those, English uses Bare Plurals:

- (18)
- a. **Maximal Reference:**  
Currently, (\*The) bears are hibernating.
  - b. **Kind Predication:**  
(\*The) Bears are going extinct.
  - c. **Genericity:**  
(\*The) Bears are (usually) brown

As well-known, (18a) also has an existential reading, an issue that we will address in section 6. For the time being, because of the availability of existential readings for Bare Plurals in certain configurations, English sentences with Bare Plurals are even more ambiguous than their Romance counterparts.

- (19) Humans are currently committing suicide
- a. **Maximal Reference:**  
The members of the human species are currently committing suicide in huge numbers [the referential plural can of course be non-maximal, like any definite]
  - b. **Kind:**  
Humanity is killing itself
  - c. **Existential:**  
some humans are currently killing themselves

Just like in French, sentences like those in (20) are not contradictory.

- (20)
- a. Humans are committing suicide, but humanity is not.
  - b. Humanity is committing suicide, but humans are not.

### 4.2. Some English plural definite phrases behave just like in Romance

The generalization we propose holds cross-linguistically, but also within a single a language: we can reproduce the behavior of Romance within English, by considering nominalized adjectives and pronouns.

- (21) **Nominalized Adjectives**
- a. **Maximal Reference:** Currently, the rich happen to be asleep.
  - b. **Kind Predication:** The rich are going extinct.
  - c. **Genericity:** The rich are (usually) in good health.

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### (22) Pronouns

- a. **Maximal Reference:** As to bears, they are currently hibernating.
- b. **Kind Predication:** As to bears, they are going extinct.
- c. **Genericity:** As to bears, they are (usually) brown.

Furthermore, although nominalized adjectives and pronouns have the properties in (21a,b,c) and (22a,b,c), they lack the existential readings characteristic of Germanic bare plurals.<sup>3</sup>

### 4.3. Dutch

According to our informant and most of the literature, Dutch is like English, but there are variations in the judgments reported in the literature (see e.g. Oosterhof, 2008).

- (23) a. **No Maximal Reference:** (Sharon Pepperkamp, p.c.)  
Momenteel houden (\*de) beren een winterslaap.  
Currently are holding (\*the) bears a hibernation.  
'(\*The) bears are hibernating.'  
(*can only refer to a contextually salient set of bears*)
- b. **No Kind Predication:** (Farkas & De Swart, 2007)
- c. (\*De) beren sterven uit.  
(\*The) bears are dying out.  
'(\*The) bears are going extinct.'
- d. **No Genericity and restriction of Q-adverbs:** (Farkas & De Swart, 2007)

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<sup>3</sup>Consider (i) and (ii).

- (i) Bears are currently migrating
- (ii) Condoravdi sentences (Condoravdi 1994)  
There is a ghost on campus . . .
  - a. Students (\*usually) are afraid
  - b. The students are (\*usually) afraid

We think that (iia) constitutes a Maximal Reference reading, just like (i). More precisely, we think that the restriction to students on campus in the case of (iia) is due to a global mechanism whereby the sentence is evaluated with respect to a certain subpart of the world, which is different from restrictions that are due to a domain restriction variable attached to the determiner (von Stechow 1994). That two mechanisms are at play is suggested by the fact that in the very same context plural definites can be further restricted in a way that bare plurals cannot (Condoravdi 1994):

- (iii) There is a ghost on campus. There are 5000 students in this dorm.
  - a. The students are scared  
✓The students in the dorm are scared  
✓The students on campus are scared
  - b. Students are scared  
\* The students in the dorm are scared  
✓The students on campus are scared

- (\*De) beren zijn meestal bruin.  
 (\*The) bears are usually brown  
 ‘(\*The) bears are usually brown.’

In Dutch, pronouns and nominalized adjectives are similar to English in that they allow for all three uses.

#### 4.4. German

German presents an interesting case: Bare Plurals have all of the uses of English Bare Plurals, but overt Plural Definites have all the uses of Romance Plural Definites (although they are clearly marked in these uses with respect to Bare Plurals).

- (24) a. **Maximal Reference:**  
 (Die) Bären halten gerade Winterschlaf.  
 The bears hold currently wintersleep.  
 ‘Bears are hibernating.’
- b. **Kind Predication:**  
 (Die) Bären sind vom Aussterben bedroht.  
 The bears are of-the extinction threatened.  
 ‘Bears are threatened with extinction.’
- c. **Genericity and restriction of ‘usually’**  
 (Die) Bären jagen (gewöhnlich).  
 The bears hunt (usually).  
 ‘Bears usually hunt.’

German pronouns and nominalized adjectives are similar to English in that they allow for all three uses.<sup>4</sup>

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<sup>4</sup>An additional novel data point is worth mentioning here, concerning weak and strong definites in German. In German, with mass nouns, in the presence of a preposition, two singular definite articles are possible, the ‘strong’ definite article in the fully articulated form (‘in dem’) and the ‘weak’ definite article in the contracted form (‘im’) (see e.g. Schwarz, 2013).

Weak definites behave like Romance plural definites, and strong definites like English ones with respect to the three uses. This is in line with Schwarz’s observation that across languages, only weak definites can denote kinds (Schwarz, 2013, p.553).

- (i) **Context:** I didn’t know that Greek elixir existed. But it turns out that yes, Greek elixir does exist.
- a. **Maximal Reference:**  
 { \*In dem, Im } Griechischen Elixir schwimmen heute Fische.  
 { \*In the<sub>strong</sub>, In the<sub>weak</sub> } Greek elixir swim today fish.  
 ‘Today, fish are swimming { \*in the/ in } Greek elixir.’ (in the Greek elixir of the whole world)
- b. **Kind Predication**  
 { \*Von dem, Vom } Griechischen Elixir gibt es Drei Sorten.  
 { \*Of the<sub>strong</sub>, Of the<sub>weak</sub> } Greek elixir exist it three kinds.  
 ‘There are three kinds { \*of the/ of } Greek elixir.’
- c. **Genericity/Restriction of ‘usually’**  
 { \*In dem, Im } Griechischen Elixir sind (gewöhnlich) wundersame Wirkstoffe.  
 { \*In the<sub>strong</sub>, In the<sub>weak</sub> } Greek elixir are (usually) miraculous active ingredients.  
 ‘{ \*In the/ In } Greek elixir there (usually) are miraculous active ingredients.’



## 5. Provisional and Crosslinguistic Picture

Let us summarize the overall picture that these data leave us with. In general, plural definites can denote kinds and enter in the restricton of GEN (and *usually*) only when they have no domain restriction.

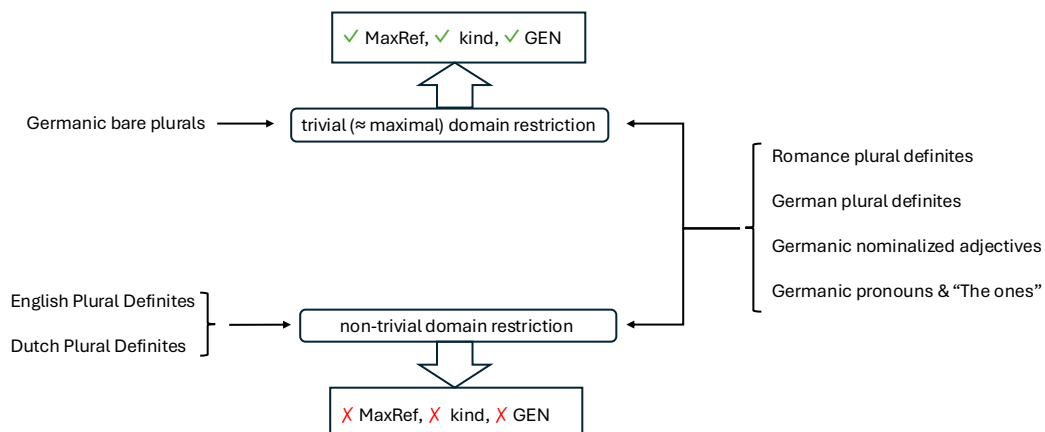
- **English plural definites** of the form *The NP* come with the following constraint: they always have a non-trivial Domain Restriction.
- **Germanic bare plurals**, in their MaxRef, kind, and generic uses are simply Plural Definite Descriptions that have no domain restriction.
- **Romance and German plural definites** headed by *The*, as well as **English, Dutch, and German pronouns** and **plural definites based on nominalized adjectives** can but need not include a non-trivial domain restriction, and have all the uses of English Definite Bare plurals (but also all the other uses)

A hard question which we leave open concerns the relationship between kind readings and Domain Restriction: why are maximal domain restriction and kind formation intimately linked? In other words, why can't we create a kind from 'The<sub>D</sub> unicorns' if *D* is a non-trivial Domain Restriction? Presumably not every maximal plurality corresponds to a kind. Domain-restricted pluralities do not make good kinds, for reasons that at this point we can only speculate about.

The Maximal Reference-kind ambiguity itself is easier to explain. Following much previous work (a.o. Chierchia 1998), we view kinds as individual concepts (intensional pluralies) corresponding to maximal pluralities. With this in mind, Kind-MaxRef ambiguities can be accounted for by the optional insertion of a distributive operator, much like distributive vs collective ambiguities with referential plurals (see Guerrini, 2024a,b).

- (25) Humans are committing suicide.
- Kind reading:  
 $committing-suicide(\lambda w. MAX(humans(w)))$
  - MaxRef reading:  
 $DIST[\lambda x. committing-suicide(x)](MAX(humans(w_0)))$

The following diagram summarizes the situation.



## 6. Existential bare plurals

Let us at this point complete the picture by addressing the question of why bare, but not definite plurals can receive existential readings.

- (26) **Schematic Romance**  
 The humans are committing suicide  
 a. Kind  
 b. MaxRef

- (27) **English**  
 Humans are committing suicide.  
 a. Kind  
 b. MaxRef  
 c. Existential

There are in principle two options. The first is that existential readings derive from the same LF as Maximal Reference and kind readings. We call this option the ‘kinds first’ view (Chierchia, 1998, 2022). The second is that they derive from a different source. We call these ‘ambiguity views’ (Longobardi 2001, Cohen 2021). We consider them in turn.

### 6.1. Theories of English bare plurals: ‘kinds-first’ views

#### 6.1.1. Chierchia (1998)

Chierchia (1998), with roots in Carlson (1977), takes English BPs to uniformly denote kinds, and to acquire their various construals through various type-shifting and compositional mechanisms. Sentence (28) is an instance of the last resort type-shifter Derived Kind Predication, which derives existential readings:

- (28) a. Bears are ruining my garden.  
 b.  $ruining-my-garden(\overset{\cap}{bears})(john)$   
 $\xrightarrow{DKP}$   
 $\exists x.x \leq \overset{\cap}{bears} \wedge ruining-my-garden(x)$

In Chierchia’s (1998) system, Derived Kind Predication saves (28) from type clash, since ‘ruining my garden’ is a predicate of individuals, while ‘bears’ denotes a kind. As a consequence, we expect that there should never be ambiguity: if Derived Kind Predication kicked in, this is because some other compositional mechanism failed. This fails to account for ambiguities such as (29) and (30):

- (29) Human beings are killing themselves.  
 a. Some human beings are killing themselves.  
 b. All human beings are killing themselves.
- (30) In an anger outburst, the tax inspector insulted taxpayers.

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- a. ...insulted some taxpayers.
- b. ...insulted taxpayers as a category.

Importantly, each reading in English corresponds to an unambiguous sentence in Italian (see Longobardi 2001), a fact that we will come back to when discussing Longobardi's account. Consider (31):

- (31) a. **Italian bare plural**  
 L'ispettore ha insultato contribuenti.  
 The'inspector has insulted taxpayers.  
 'The tax inspector insulted some taxpayers'
- b. **Italian definite plural**  
 L'ispettore ha insultato i contribuenti.  
 The'inspector has insulted the taxpayers.  
 'The tax inspector insulted taxpayers (as a category)'

### 6.1.2. Chierchia (2022)

Chierchia (2022) puts forward a slightly different theory, based on Bar-Lev's (2021) account of homogeneity with standard plural definites. The idea is that when bare plurals occur with episodic predicates, a basic existential meaning gets strengthened to a universal meaning via innocent inclusion of sub-domain alternatives. This accounts for (32a). Existential construals of episodic bare plurals are speculated to be instances of non-maximality, as in (32b).

- (32) Bears are hibernating.
- a. (All) bears are hibernating.  
 $exh[\exists x \in D. x \leq \cap bears \wedge hibernating] =$   
 $\forall D'. D' \subseteq D \wedge D' \in \mathbf{A}. [\exists x \in D'. x \leq \cap bears \wedge hibernating]] = 1$
  - b. (Some) bears are hibernating.  
 Non-maximality.  
 $exh[\exists x \in D. x \leq \cap bears \wedge hibernating] =$   
 $\forall D'. D' \subseteq D \wedge D' \in \mathbf{A}. [\exists x \in D'. x \leq \cap bears \wedge hibernating]] = 1$   
 ... where  $\mathbf{A}$  is lacking many  $D$ 's

In other words, in Chierchia (2022), in both universal and existential readings, the bare plural is kind denoting. This makes the prediction that if an expression can have existential readings in some episodic contexts, **then** it should also allow for universal readings in some (typically different) contexts.

- (33) A prediction resulting from Chierchia (2022):  
 possibility of  $\exists$  readings  $\Rightarrow$  possibility of  $\sim \forall$  readings

## 6.2. Theories of English Bare Plurals: ‘ambiguity’ views

A number of other approaches, instead, view English BPs as being themselves ambiguous between a narrow-scope existential construal and a maximal construal (which they call ‘generic’). (Longobardi 2001, Cohen 2021). On Longobardi’s view, English bare plurals are ambiguous between a ‘kind’ interpretation, and a ‘weak indefinite’ interpretation (e.g. maximally narrow scope existential quantifier). We believe that this is essentially right, although we think that ‘weak indefinite’ might not be the best name for the second reading.

Regardless of the exact way to achieve this, on these views in universal and existential readings, the bare plural itself receives different interpretations. As a consequence, there is a clear prediction that if for some reason a Bare Plural cannot receive a kind-level interpretation, it should still be able to receive maximally narrow-scope existential construals.

- (34) A prediction resulting from Longobardi (2001):  
 $\exists$  readings without  $\sim \forall$  readings

## 6.3. Comparing the two classes of theories

We compare these two views on three diverging predictions they make.

### 6.3.1. $\exists$ readings without $\sim \forall$ readings in English bare plurals

To compare (34) and (33), consider the contrast between (35) and (36).

- (35) There was a party after the press conference...
- a. Investigative journalists danced with sports journalists.  
(adapted from Dayal, 2013)
    - (i) Some investigative journalists did.
    - (ii) All investigative journalists (*possibly, with exceptions*) did.
  - b. Unknown journalists danced with sports journalists.
    - (i) Some unknown journalists present at the conference did.
    - (ii) # All unknown journalists (*possibly, with exceptions*) present at the conference did.

To unequivocally show the unavailability of reading (35b-ii) for sentence (35b), consider the following contrast.<sup>5</sup>

- (36) a. - Investigative journalists danced with sports journalists.  
b. - That’s not true, only a couple of them did.
- (37) a. - Unknown journalists danced with sports journalists.  
b. #- That’s not true, only a couple of them did.

In a nutshell, ‘unknown journalists’ cannot receive a universal reading, but it does allow for an

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<sup>5</sup>We thank Jad Wehbe for help with these judgments.

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existential reading, suggesting that the interpretive source for the two readings is different.

### 6.3.2. $\sim \forall$ readings without $\sim \exists$ readings in Romance and in Germanic nominalized adjectives

A second argument comes from the impossibility of  $\exists$  readings with kind-denoting definite plurals, e.g. in Romance and with English nominalized adjectives.

- (38) I giornalisti investigativi hanno posto domande.  
The journalists investigative have asked questions.
- #Some investigative journalists present at the conference asked questions.
  - All investigative journalists (*possibly, with exceptions*) present at the conference asked questions.
- (39) The rich asked questions.
- #Some of the rich asked questions.
  - All of the rich asked questions.

To accommodate this, ‘kinds-first’ views need to make additional assumptions either on type-shifting rankings (Chierchia, 1998) or on the extent to which alternatives can be pruned (Chierchia, 2022). On ‘ambiguity’ views, this simply comes from the absence of an existential construal for these expressions.

Additionally, as we mentioned in section 6.1, Italian bare plurals lack a universal reading in episodic sentences like those we have just considered, a third argument against kinds-first views to which we now turn.

### 6.3.3. Episodic bare plurals in English vs in Italian

On ‘kinds-first’ views (Carlson 1977, Chierchia 1998), English BPs uniformly denote kinds, and acquire their various construals through various type-shifting and compositional mechanisms. Italian Bare Plurals work in exactly the same way but come with additional syntactic restrictions. In a nutshell, they are headed by a silent determiner that must be syntactically licensed, and has as its semantics  $\sqcap$ , the kind formation operation. When syntactically licensed, Italian bare plurals should have the exact same range of readings as English bare plurals.

On ‘ambiguity’ views, instead, English BPs are ambiguous between a ‘generic’ reading (for our terminology, a kind reading) and a maximally narrow-scope existential reading, while Italian BPs are restricted to narrow-scope existential readings.

Let us then again consider the predictions of these two classes of theories in turn. On ‘kinds-first’ views, Italian bare plurals should receive the same range of interpretations as English bare plurals in episodic sentences. On ‘ambiguity’ views, instead, in episodic sentences, Italian bare plurals should be able to receive, *like* English bare plurals, existential readings, but *unlike* English bare plurals, **no** universal interpretations.

To test this prediction, we propose an example that is a variation on an example from Longobardi (2001).

- (40) L'ispettore ha insultato contribuenti.  
The'inspector has insulted taxpayers.  
✓ 'The tax inspector insulted some taxpayers'  
\* 'The tax inspector insulted taxpayers as a category'

In stark contrast to (30), its English equivalent, (40) does not have a kind reading.

The same goes for sentences in which, in English, there is an additional Maximal Reference reading. Sentence (41), as mentioned, is three-way ambiguous; (42), instead, is completely unambiguous.

- (41) **English:**  
Humans are killing themselves.  
a. Kind  
b. MaxRef  
c. Existential
- (42) **Italian:**  
Esseri umani si stanno uccidendo.  
Being human REF. are killing.  
'(Some) humans are killing themselves'  
a. #Kind  
b. #MaxRef  
c. Existential

Incidentally, it should be noted that Italian bare plurals are fine in generic sentences.

- (43) Candidati impreparati (solitamente) non vengono assunti.  
Candidates incompetent (usually) not are hired.  
'Incompetent candidates (usually) don't get hired'.

This is not evidence that they denote kinds, since we know that there are other routes to genericity. For instance, the English singular indefinite cannot denote a kind, as witnessed by (44c), but can participate in generic readings, as witnessed by (44a) and the presence of QVE effects in (44b).

- (44) a. An eagle flies.  
b. An eagle rarely flies. *≈few eagles fly*  
c. #An eagle is almost extinct.

In other words, on the one hand, it is true that if an expression can denote a kind, necessarily it can participate in generic interpretations (kind denotation  $\Rightarrow$  genericity). However, if an expression can participate in generic interpretations, it may or may not be able to denote a kind (genericity  $\nRightarrow$  kind denotation).

## 7. Differentiated scope

At this point, let us address, before concluding, a widely discussed piece of data concerning English bare plurals.

- (45) a. Peter destroyed tables for an hour.  
 b. \*Peter destroyed some tables for an hour.

The special behavior of bare plurals in these configurations (maximally narrow-scope existential quantification) has been attributed to the fact that they are kind-denoting (Chierchia, 1998; 2022).

However, in French, which does not license bare plurals, narrow scope sentences use plural DPs headed by "des", as in (46).

- (46) Il a détruit des tables pendant une heure.  
 He has destroyed *des* tables for an hour.  
 'He destroyed tables for an hour.'

Yet "des"-DPs are not kind denoting. For instance, they are licensed in subject position (unlike unmodified Italian bare plurals), but are incompatible with kind predicates (putting aside a marginally accessible taxonomic reading equivalent to 'Some types of lions are about to go extinct', a reading which is available in English with plural indefinites, as in "Some lions are about to go extinct", but not with bare plurals).

- (47) \*Des lions sont en voie de disparition.  
*des* lions are in way of extinction.  
 (*deviant*)

There is thus no evidence that 'des'-DPs can ever be an argument of a kind predicate (under the intended reading where it would refer to a whole kind, for instance the whole lion kind). This shows that there needs to be a way to extend the treatment of differentiated scope to something other than kinds, e.g. properties.

## 8. Taking stock

To summarize, the distribution of possible interpretation of English and Italian bare plurals in episodic sentences is as follows:

- (48) a. English bare plurals:  $\sim\forall, \exists$   
 b. Italian definite plurals:  $\sim\forall, *\exists$   
 c. Italian bare plurals:  $*\sim\forall, \exists$

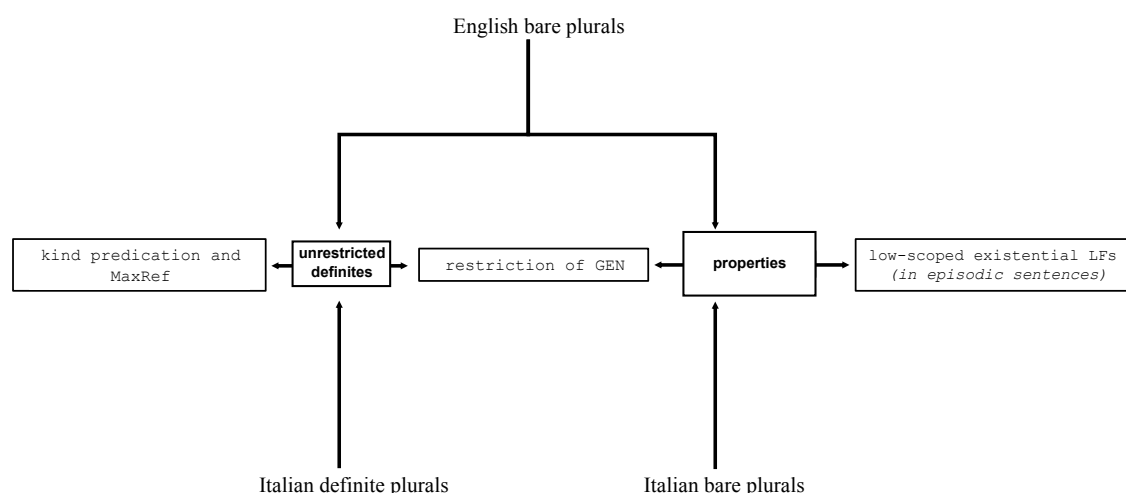
This can be made sense of as follows.

- **Italian bare plurals** unambiguously denote **properties**, which can restrict GEN (like singular indefinites) and can give rise to existential readings via an operation that allows

them to take maximally narrow scope existential force (this can be an operation akin to DKP, but defined for properties).

- **Italian plural definites** can restrict GEN, can be arguments of kind predicates, and can give rise to MaxRef via distributivity.
- **English bare plurals** can act as (unrestricted) plural definites non-restricted Plural Definites and can be **property-denoting**, so have all the characteristics above.<sup>6</sup>

This is summarized in the diagram below, adapted from Guerrini (2024b):



## 9. Conclusion: revisiting the nominal mapping parameter?

Chierchia's theory of cross-linguistic variation in the interpretation of nominals rests on the Nominal Mapping Parameter, which regiments which interpretations a bare nominal may have in a given language.

(49) Chierchia's (1998) Nominal Mapping Parameter:

$N \mapsto [\pm arg, \pm pred]$

a. English:  $N \mapsto [+arg, +pred]$

b. Italian:  $N \mapsto [-arg, +pred]$

We would like to tentatively suggest that the data we discussed can be made sense of if we reinterpret this parameter as stating that:

- English bare plurals can *systematically* act as non-restricted plural definites (+arg) or as property-denoting (+pred);
- Italian bare plurals are unambiguously property-denoting (simplifying somewhat).
- Italian definite plurals are either referential or kind-denoting.

<sup>6</sup>See Cohen 2022 for a similar view.



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