Proper Names and the Theory of N-movement
in Syntax and Logical Form

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O. Introduction

In recent years, formal syntactic theory has broadened its scope and has come to interact more and more closely with parallel domains of study, in particular with such well established traditions of inquiry as comparative dialectology, language typology and analytic philosophy, fruitfully exchanging insights and research techniques. As a result, it became possible to raise and solve new meaningful problems, which would have been hardly conceivable as early as twenty years ago, and also to sharpen the formulation of more traditional questions so as to provide them with adequate empirical answers.

Within such an enlarged framework of interests and methods, the present paper will consider evidence from Romance and Germanic suggesting the following theoretical conclusions:

a) there exist instances of N movement to D in the syntax of Western Romance, implying the correctness for such languages of the so called DP analysis;

b) the same type of movement is likely to take place only in LF in English and German;

c) head-to-head relationships fall into essentially the same categories as those between maximal projections: they define chains or CHAINS (in Chomsky's 1986a

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terms), and chains are created either by substitution or by adjunction, with distinct properties;

d) various semantic types of articleless nominals (proper names, existentials, definite and indefinite generics, non-argument nominal phrases) are distinguishable by their syntactic behavior at S-structure and LF and a plausible theory of the semantic licensing of NPs and DPs can be envisaged: proper names and generics are so distinguished also from definite descriptions, suggesting a possible syntactic answer (in the spirit of Kripke 1980 or Neale 1990) to long standing philosophical questions;

e) the definite article of many European languages can be shown to cover two different functions, a substantive and an expletive one, a distinction morphologically manifested in some varieties ¹.

1. DPs and NPs

Consider, to begin with, that in the light of the generalization of X'-theory to all lexical and non-lexical categories, two positions have recently emerged about the structure to be assigned to projections of determiners: one view locates Determiner Phrases inside Noun Phrases, precisely in their Spec position, the other, originally stemming from an intuition of Szabolcsi (1983/4 and subsequent work), conceives of the whole nominal construction as coinciding with DP and of NP as a complement of the head D (cf. in particular Abney 1986, 1987). Schematically, the two hypotheses can be best summarized as in (1) and (2) respectively:

(1) \[ [NP \text{ DP} [N' \text{ N}]] \]
(2) \[ [DP [D' \text{ D NP}]] \]

Although the problem of the choice between the two views proved not to be easy to solve on empirical grounds, one line of argument in favor of the structure advocated by Szabolcsi and Abney appears to be especially promising and has been explored in order to try to decide the issue conclusively in certain languages: consider, in fact, that, if movement can be argued to apply in some language from inside NP to a position inside DP, e.g. from Spec to Spec or from the position of N° to that of DP, then the structure in (1) will be immediately discarded, under any current theoretical

¹ This notion of expletive article appears to be the syntactic and morphological parallel of the analogous concept elaborated on semantic grounds by Vergnaud and Zubizarreta (1990, 1991).
approach, by the ban against movement to a non-c-commanding position. Movement from the Spec of NP to the Spec of DP might be instantiated in English, if the pair in (3) is to be related transformationally 2:

(3) a. A very strange man
   b. How strange a man

Head-to-head movement from N₀ to D₀ has been tentatively argued to apply in Semitic (cf. Ritter 1986, 1988, Ouhalla 1988, Fassi Fehri 1988, Siloni 1989, 1990 and references cited there) and Scandinavian. Taraldsen (1990), for instance, analyzed the following Norwegian paradigm in terms of N-raising:

(4) a. Hans bøker om syntaks
     His books about syntax
   b. Bøkene hans om syntaks
     Book-s-the his about syntax

(4a) shows the normal SNO structure of Germanic NPs (cf. Giorgi and Longobardi 1991), where the subject can be independently argued to asymmetrically c-command the object; (4b) instantiates an alternative N-initial order in which the subject can still be shown to asymmetrically c-command the object: thus Taraldsen rejects the possibility of its base-generation and proposes to derive it from the one in (4a) by means of N-raising to D, thus supporting a DP analysis for Norwegian nominals 3. In fact, the head N appears in (4b) to be morphologically adjoined to the article.

It is also possible perhaps to extend Taraldsen’s analysis to all cases of suffixed articles in Scandinavian, accounting for such common alternations as the following:

(5) a. En bok
     A book
   b. Boken
     Book-the

A similar approach was also successfully taken in the study of suffixed definite articles in Rumanian (Grosu 1988, Dobrovie-Sorin 1987).

2 On this construction see also Hendrick (1989).

3 It remains still undetermined within this analysis whether the typical Germanic prenominal genitive, like hans of (4) a., occurs in the Spec of NP or in that of DP. For some discussion of this point, however, cf. fn. 26 below.
However, evidence of this sort, as well as of the other types discussed particularly in Abney (1987), can hardly be reproduced in the Western Romance languages (cf., now, however, Bernstein 1991a), for which the choice between (1) and (2) has so far remained more undetermined (although the DP analysis has been occasionally employed to treat aspects of Romance nominal syntax: cf. e.g. Torrego 1988, Battye 1989, Brito 1990). In what follows we will examine evidence of a completely different nature, even more directly suggesting that instances of N-to-D movement must be postulated in Western Romance as well, and thus providing, in turn, further support to the structure in (2) and to the theory of head movement. In order to do so, we must first analyze the referential properties of Ns and Ds.

2. Bare nouns

Let us begin, first of all, by noticing that a singular countable head noun may not occur in Italian in any of the major positions suitable for arguments (e.g. subject, direct object, prepositional object, inverted subject of either ergative or unergative predicates) without being introduced by an overt determiner, most usually a definite or indefinite article, a quantifier or a demonstrative 4:

(6) a. *(Un/Il) grande amico di Maria mi ha telefonato
    (A/The) great friend of Maria called me up
    b. Ho incontrato *(un/il) grande amico di Maria ieri
       I met (a/the) great friend of Maria yesterday
    c. Ho parlato con *(un/il) grande amico di Maria ieri
       I spoke with (a/the) great friend of Maria yesterday
    d. Ha telefonato/E’ venuto *(un/il) grande amico di Maria
       Called up/Came (a/the) great friend of Maria

The constraint in question is not at work with nominals in typical non-argument function, as in vocative, predicative or exclamatory contexts:

(7) a. Caro amico, vieni a trovarmi
    Dear friend, come to visit me

4 For this purpose we will classify among determiners also cardinals and certain quantity expressions, such as molto ‘much’, poco ‘little’, or abbastanza ‘enough’. For some discussion of the issue and further distinctions see the approach taken in Giusti (forthcoming).
b. Tenente, esegua l'ordine!
Lieutenant, perform the command!

(8) a. Gianni è tenente
Gianni is lieutenant
b. Gianni è amico di Maria
Gianni is friend of Maria
c. L'ho promosso tenente
I promoted him lieutenant
d. Ti credevo amico di Maria
I believed you friend of Maria

(9) a. Diavolo!
Devil!
b. Maledetto tenente!
Damn' lieutenant!

There are also some kinds of PPs which admit of articleless singular nouns, but, pending further study, it is not implausible to assimilate them to predicative expressions on semantic grounds 5:

(10) a. In abito lungo
In long dress
b. Di buona famiglia
Of good family

On the grounds of these observations we may tentatively propose the following principle of Italian grammar:

(11) A 'nominal expression' is an argument only if it is introduced by a lexically filled D position

Although plausible and basically correct in spirit, (11) presents two shortcomings, one conceptual and one empirical: first, reference to the lexical, i.e. phonetic, content of the category D seems to be inappropriate and unparalleled in an essentially semantic licensing condition. Second, (11) appears to be simply too strong under this

5 However, the wide variety of determinerless nominals occurring within PPs can hardly be satisfactorily explained away by similar considerations and the whole problem deserves much more detailed analysis.
formulation; in fact, as noticed also in Benincà (1980), three types of bare nouns occur in Italian in argument function: singular mass nouns, plural count nouns (bare plurals), and even some rarer cases of singular count nouns in the scope of a sentential negation, although it is not clear whether the latter can be considered real arguments or rather quasi-idiomatic expressions. Cf. the following examples:

(12) a. Bevo sempre vino
    I always drink wine
b. Mangio patate
    I eat/am eating potatoes
c. Non c'era studente in giro (from Benincà 1980)
    There wasn't student around

In all these cases the interpretation of the nominal seems to be roughly similar to that of an indefinite, existentially quantified NP: in this sense bare nouns appear to bear some semantic similarity to the so called 'partitive' article (formed by di ‘of’ + a definite determiner) of Italian (and French): also the latter in fact is limited to mass head nouns and to plurals, for which it seems to represent the intuitive counterpart of the singular indefinite article.

In fact most structures of this type are found in idioms or fixed expressions:

(a) Non ha proferito verbo
    He didn’t utter word
    ‘He didn’t say anything’
(b) Non ha battuto ciglio
    He didn’t shake eyelash
    ‘He didn’t Finch at all’
(c) ??Non ha dipinto quadro
    She didn’t paint picture
(d) *Non ha danneggiato scrivania
    She didn’t damage desk

In addition, many lexical choices of verbs and objects turn out to be quite marginal or even impossible in such a construction:

In Kayne (1981).

Semantically, the partitive article distinguishes itself from ‘classical’ existential quantifiers like alcuni or qualche ‘some’, because in some positions and with certain predicates it may easily assume a strongly unspecific reading, which comes very close to a generic interpretation:

(a) Dei cani grossi creano sempre questi problemi
    Partit. art. large dogs always raise such problems
(b) Alcuni cani grossi creano sempre questi problemi
    Some large dogs always raise such problems

As the English gloss should clarify, the generic-like (henceforth, we will refer to it as ‘indefinite generic’ to distinguish it from the more typical generic structures expressed in Romance by means of the singular or plural definite article) reading is hardly acceptable in (b). Thus, in a sentence like (a) the partitive article appears once again to
There exist also some differences, however, which limit the analogy and force us to refrain from simply stating that bare nouns instantiate the phonetically 'null' version of the partitive article: an interesting peculiarity, for example, is that the number specification, i.e. the semantic distinction between singular and plural, may sometimes act as the plural (or mass) counterpart of the singular indefinite one, which does allow a similar generic interpretation:

(c) Un cane grosso crea sempre questi problemi
A large dog always raises such problems

The same is true of other indefinite determiners usually existentially interpreted, like cardinality expressions (numerals and *molti* 'many', *pochi* 'few', etc.):

(d) Tre/Molti cani grossi creano sempre questi problemi
Three/Many large dogs always create such problems

In this example the subject is easily understood as generic, in the sense of denoting every normal group of three/many large dogs. This observation may also help to clarify the semantic status of the indefinite generic reading displayed by (a) and (c): it is likely to denote every normal set of an indefinite number of dogs or of just one dog, respectively. It is thus plausible to postulate the logical relevance of a Gen operator, of the type proposed under various forms in much of the recent literature (cf. for instance Heim 1982, Kratzner 1988, Diesing 1988, 1989), quantifying here over sets. The indefinite generic reading has a slightly derivative flavor with respect to the more regular existential interpretation of indefinite nominals, as witnessed by its unavailability with stage level predicates (in the sense inaugurated by Carlson 1977a):

(e) Dei dinosauri furono uccisi da cause misteriose
Partit. art. dinosaurs were killed by mysterious causes

(f) Un dinosauro fu ucciso da cause misteriose
A dinosaur was killed by mysterious causes

Here the subjects can only be existentially interpreted, whereas the generic reading is available *ceteris paribus* with definite NPs:

(g) I dinosauri furono uccisi da cause misteriose
The dinosaurs were killed by mysterious causes

(h) II dinosauro fu ucciso da cause misteriose
The dinosaur was killed by mysterious causes

The availability of such a generic reading of indefinites also fails in certain environments, roughly non-subject positions and even subject positions of so-called kind level predicates (in the sense of Carlson 1977b, i.e. predicates requiring a collective interpretation of one of their arguments necessarily encompassing the whole kind defined by the noun):

(i) Studio dei dinosauri/un dinosauro
I study partit. art. dinosaurs/a dinosaur

(j) Dei dinosauri sono estinti
Partit. art. dinosaurs are extinct

(k) Un dinosauro è estinto
A dinosaur is extinct

Again, in such environments, indefinites can only be existentially understood and the generic reading may be achieved just by definite nominals:

(l) Studio i dinosauri/il dinosauro
I study the dinosaurs/the dinosaur

(m) I dinosauri sono estinti
The dinosaurs are extinct

(n) Il dinosauro è estinto
The dinosaur is extinct

This is not surprising if Gen is supposed to be, like e.g. every or each, an intrinsically distributive quantifier, thus inappropriate for usage with necessarily collective predicates.
be irrelevant. Number is obviously irrelevant in the case of mass nouns and of a negated existential, which has null reference, but for bare plurals, Benincà (1980) has convincingly argued that they are often neutral between the singular/plural distinction; consider e.g. the following paradigm:

(13) a. Ogni giorno mangia patate
   Every day he eats potatoes

b. Ogni giorno mangia alcune/delle patate
   Every day he eats some/partit. art. potatoes

while uttering the second example, which contains an overt existential quantifier or the partitive indefinite article (here formed by contraction of di ‘of’ + le ‘the’ fem. plur.), we commit ourselves to the claim that the person in question eats more than a single potato per day, whereas in the first one we are free from such a plurality commitment. Another peculiarity concerns scopal phenomena: unlike all overt existential determiners, including the singular indefinite article and the partitive one, determinerless nominals of either English or Italian are subject to an obligatory narrow scope constraint: this applies with respect to negation, quantifiers and intensional contexts (thus producing a necessarily opaque or de dicto reading), as discussed by Carlson (1977a and b) precisely in order to distinguish between the indefinite article and bare plurals.

A plausible observational generalization appears therefore to be that existential quantification becomes expressible through a bare noun under certain special conditions. Now, is this existential interpretation of Italian bare nouns the consequence of an absolute lack of the category ‘determiner’ in these constructions or is it assigned as the default semantic option to an empty category syntactically present in the D position? One fact appears to suggest the plausibility of the latter solution: the distribution of such bare nouns in Italian, as well as in other Romance languages, seems to be subject to a sort of lexical government requirement, similar to that constraining empty categories in general and empty functional heads in particular (e.g. empty Cs of finite clauses in English: cf. Stowell 1981). In other words, Romance bare nouns are usually excluded from preverbal subject position, but admitted in

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8 The choice of this numberless existential reading (essentially, ‘there exists at least one x’) as the default value for Ds deprived of lexical content is likely to be due to its semantically unmarked (least informative) character. Notice, in fact, that such a notion can be construed precisely enough for such an operator according to criteria of difficulty of falsification: for it is less easily falsifiable (given a finite set of objects as a model, it always requires observation of the totality of them) than operators like ‘there exist at least n x (for n >1)’, ‘there exist at most n x’, ‘there exist exactly n x’, or ‘for every x’. All of these may actually require a smaller number of observations than the totality in order to be falsified.
internal argument position and, to a certain extent, also as inverted subjects of unergative predicates.\(^9\)

\begin{align*}
(14) \text{ a.} & \quad *\text{Acqua viene giù dalle colline} \\
& \quad \text{Water comes down from the hills} \\
\text{b.} & \quad \text{Viene giù acqua dalle colline} \\
& \quad \text{Comes down water from the hills} \\
\text{c.} & \quad \text{Ho preso acqua dalla sorgente} \\
& \quad \text{I took water from the spring}
\end{align*}

\begin{align*}
(15) \text{ a.} & \quad *\text{In questo ufficio marocchini telefonano sempre} \\
& \quad \text{In this office Moroccans always call up} \\
\text{b.} & \quad \text{In questo ufficio telefonano sempre marocchini \textit{(from Brugger 1990)}} \\
& \quad \text{In this office always call up Moroccans} \\
\text{c.} & \quad \text{In questo ufficio incontro sempre marocchini} \\
& \quad \text{In this office I always meet Moroccans.} \(^{10}\)
\end{align*}

Similarly impossible is a determinerless noun in another arguably non lexically governed position, that of postcopular argument expressions analyzed at length in Longobardi (1980, forthcoming):

\(^9\) The latter case is considered less acceptable in the current literature on the closely corresponding structures of Spanish: cf. Contreras (1986), Lois (1986) and Torrego (1989). Modern French, instead, doesn't seem to accept bare nouns (in the sense here discussed) at all. An intriguing line of explanation, relating the phenomenon to the poverty of number inflectional morphology of French nouns, has been proposed by Delfitto and Schrotten (1991). Their proposal is apparently supported by a diachronic correlation between the loss of bare nouns and the impoverishment of the declension in the history of French.

\(^{10}\) Sentences such as (14)a. and (15)a. become more acceptable if the determinerless subject is phonologically and semantically focused. An obvious suggestion is that under this interpretation the subject may occur in a left peripheral position as the result of a topicalization transformation. Assuming that the lexical government requirement may be satisfied by the supposed empty head under 'reconstruction' of the whole topicalized constituent, the acceptability of the focused version of the two sentences in question would be due to the postverbal source of subject wh-movement in Italian (cf. Rizzi 1982): thus the 'reconstructed' analysis of such examples would be analogous to that of the grammatical (14)b. and (15)b. The hypothesis that a 'reconstructed' satisfaction of the lexical government requirement is possible is independently suggested by the acceptability of topicalization of a bare noun from object position:

\begin{align*}
\text{(a)} & \quad \text{ACQUA ho preso dalla sorgente!} \\
& \quad \text{WATER I took from the spring!} \\
\text{(b)} & \quad \text{MARCCHINI incontro sempre, in quest’ufficio!} \\
& \quad \text{MOROCCANS I always meet, in this office!}
\end{align*}
(16) *La causa delle rivolte sono spesso marocchini
The cause of the riots are often Moroccans

No violation arises, on the contrary, if a non argument expression such as a predicative NP, even with a singular count head, occurs in a non lexically governed position, as is shown by the acceptability of (17), whose relevance was originally pointed out by L. Burzio (p.c.):

(17) Amico di Maria sembra essere Gianni
Friend of Maria seems to be Gianni

These observations may be taken to suggest that an empty category in need of lexical government is necessarily present in (12) through (16) but not in (17) \(^{11}\); if

\(^{11}\) According to the analysis of Longobardi (1980, forthcoming), the postcopular predicative position is always lexically governed, so it could in principle contain a predicate nominal introduced by an empty determiner. In fact, even if determinerless predicative expressions are exempted from the need for a phonetically null D, there seems to be some evidence that they can be introduced by such an empty category at least with mass and plural heads:

(a) Gianni è medico
   Gianni is doctor
(b) Gianni è un medico
   Gianni is a doctor
(c) *Gianni è medico che si cura davvero dei suoi pazienti
   Gianni is doctor who really cares for his patients
(d) Gianni è un medico che si cura davvero dei suoi pazienti
   Gianni is a doctor who really cares for his patients
(e) Noi siamo medici che ci curiamo davvero dei nostri pazienti
   We are doctors who really care for our patients
(f) Noi siamo dei medici che ci curiamo davvero dei nostri pazienti
   We are partit. art. doctors who really care for our patients
(g) Questa è acqua
   This is water
(h) Questa è dell’acqua
   This is partit. art. water
(i) Questa è acqua che è stata presa dalla sorgente
   This is water which was taken from the spring
(j) Questa è dell’acqua che è stata presa dalla sorgente
   This is partit. art. water which was taken from the spring

the fact that relativization on a predicative head is only possible either with an overt determiner or with a plural/mass noun may suggest that the presence of a D position (subject to generalization (18)a. below in the text, if empty) is required in order to license a relative clause. If this line of reasoning is correct, the example (c) will be ruled out since an empty D with a non-mass singular would violate (18)a. of the text, examples (e) and (i) will certainly contain such a null determiner and (g) will contain it optionally. Similar conclusions about the possibility of empty Ds with predicates can be drawn from the following sentences:

(k) Ritengo Mario *(un) bravo medico
I believe Mario (a) good doctor
(l) Ritengo Gianni e Mario (dei) bravi medici
I believe Gianni and Mario (partit. art.) good doctors
such a category is actually a head $D$, its presence may also suffice to explain the otherwise unmotivated restrictions to plural/mass nouns and to the existential reading, which do not arise in the case of sentences like (17) or other non-argument (e.g. vocative) usages. In fact, the empty $D$ could instantiate some sort of existential operator and as such impose constraints as to the count/mass interpretation of the head nouns it quantifies over (cf. section 5 below for discussion): analogous is, after all, the behavior of certain overt existential determiners, like e.g. the mentioned partitive article.

On the grounds of all of this and abstracting away from the marginal and peculiar cases of the type of (12)c. we will make the assumptions in (18) and revise (11) into (19):

(18) Empty determiners may occur at S-structure in Italian only under the following conditions:

a) they are restricted to plural or mass head nouns like several other determiners

b) are subject to a lexical government requirement like other empty heads

c) receive the indefinite interpretation of an existential quantifier unspecified for number and taking the narrowest possible scope default existential)

with certain adjectivally modified predicates headed by count nouns, an overt determiner is sometimes obligatory in the singular, but not in the plural, suggesting that a $D$ category may always be required, remaining empty just in the plural, as expected given (18)a.

12 We assume, on the analogy of the mentioned conditions on the distribution of null Cs, that such a government requirement on the empty head $D$ is satisfied by lexically governing its whole maximal projection, provided that specifiers and heads of phrases are accessible to external governors (cf. Chomsky 1986b among others). It is possible that in addition to lexical head government, the licensing of such empty $D$s is subject, as for other categories, to an identification requirement which could only be satisfied under a local relation with a number agreement morpheme. Since, according to Delfitto and Schroten (1991), such a morpheme would not be available in Modern French, this hypothesis would be one possible way to build their insights about the lack of bare nouns in French into the present framework.

13 Even the generalizations stated in (18) are not immune from relevant exceptions, which essentially fall into two categories: first, there are determinerless nouns occurring with a modification (usually an AP, on either side of the N, a PP or a relative clause), which are able, at a particularly narrative stylistic level, to violate (18)b., i.e. to surface in preverbal subject position:
(a) Meravigliose foreste/Foreste meravigliose si aprivano davanti ai nostri occhi
Beautiful forests opened in front of our eyes

(b) Ragazze delle più varie origini affollavano i marciapiedi tra Rue St.Denis e
Boulevard Sébastopole
Girls of the most varied origins crowded the sidewalks between Rue St.Denis
and Boulevard Sébastopole

(c) Ragazze che Gianni non aveva mai visto affollavano i marciapiedi tra...
Girls that Gianni had never seen crowded the sidewalks between...

Similarly, modified bare plurals may become acceptable in postcopular argument
position:

(d) La causa delle rivolte sono spesso marocchini che non vogliono tornare a casa
The cause of the riots are often Moroccans who don’t want to go back home

It must be clearly noticed, however, that such expressions never violate
generalizations (18)a. and (18)c.: they cannot occur with a singular count head or
receive the equivalent of the definite generic interpretation, i.e. the one compatible with
a kind or stage level predicate and with the occurrence in object position (cf. fn. 7
above):

(e) *Meravigliosa foresta si apriva davanti ai nostri occhi
Beautiful forest opened in front of our eyes

(f) *Foreste tropicali sono estinte
Tropical forests are extinct

(g) Vaste foreste tropicali furono distrutte dal cataclisma
Large tropical forests were destroyed by the cataclysm

(h) Ho sempre studiato foreste tropicali
I have always studied tropical forests

(i) Le vaste foreste tropicali furono distrutte dal cataclisma
The large tropical forests were destroyed by the cataclysm

(j) Ho sempre studiato le foreste tropicali
I have always studied the tropical forests

Instead, like the other indefinite determiners discussed in fn.7 (e.g. the singular
indefinite article and the partitive one), in subject position of non-collective individual
level predicates, the empty D of such bare nouns may assume what we referred to as
the indefinite generic reading:

(k) Foreste di tali dimensioni sono ormai difficili da trovare
Forests of that size are now hard to find

There exists, on the other side, also a class of more radical exceptions to (18) as a
whole, thus violating all the generalizations stated in the text: such a class is
constituted by coordinate conjoined nouns, as in the following examples:

(l) Cane e gatto si erano già addormentati
Dog and cat had already fallen asleep

(m) Cane e gatto sono sempre nemici
Dog and cat are always enemies

Roughly similar is the judgment in cases of disjunctive coordination:

(n) O cane o gatto dovranno essere messi in isolamento
Either dog or cat will have to be put in isolation

In (l) and (n) a definite specific reading is readily available for the coordinated nouns,
in (m) the generic reading is perfectly acceptable. As for the first class of exceptions,
namely those only violating (18)b., one possibility is that the presence of a
modification of the head noun suffices to supply some abstract features into the empty
D position, which enable it to escape from the lexical government requirement,
roughly in the same sense as pronominal empty categories (PRO/pro) do, according to
Chomsky (1981,1982). This possibility appears to be independently necessary to
account for other structures, at least in English, which will be mentioned in fn. 26
below. Although several variants of this idea and other potential solutions are
conceivable and worth exploring, we cannot discuss them here (cf. also Delfitto and
Schroten 1991). The second type of exceptions is more mysterious and is likely to
(19) A ‘nominal expression’ is an argument only if it is introduced by a category D

It is obvious how (19) also overcomes the conceptual shortcoming of (11) pointed out on page 6 above, by eliminating reference to the content of the D position.

Since the capacity for reference or quantified interpretation is a typical ingredient of argumenthood, if something like (19) is correct, the conclusion in (20) will become quite plausible:

(20) Reference and quantification (therefore, among other things, the determination of properties like the semantic import of grammatical number) are properties of the D position

We have already observed that an empty (therefore, morphologically unspecified for number) D may yield semantic indeterminacy between singular and plural denotation despite of the plurality of the head noun. But stronger evidence in support of this point is provided by pairs like the following:

(21) a. La mia segretaria e tua collaboratrice sta/*stanno uscendo
    The my secretary and your collaborator is/are going out
b. La mia segretaria e la tua collaboratrice stanno/*sta uscendo
    The my secretary and the your collaborator are/is going out14

In (21)a, two morphologically singular nominal projections are coordinated excluding the determiner, which remains unique and is also morphologically singular: here the whole subject argument of the clause is understood as denoting a single individual, as is clarified by the verbal agreement. In (21)b., instead, the coordination includes the determiners, one for each conjunct, and the denotation of the argument is

presuppose a deeper structural analysis of coordinate constructions; however, a possible line of explanation might suggest that, if what is required in order to turn a nominal phrase into an argument is some functional head position triggering reference or quantification, such a position can be provided not only by a D but also by coordinating elements, understood essentially as quasi-operators giving rise to a quantificational structure.

14 It is still necessary to rule out structures with one plural determiner and several singular coordinated head nouns:
(a) *Le mia segretaria e tua collaboratrice
    The(plural) my secretary and your collaborator
Rather than through a theory of argumenthood, we may suggest that such examples can be excluded by means of a condition requiring morphological agreement between the features of the determiner and those of each of the head nouns. On certain properties of this condition and its crosslinguistic generality cf. also fn. 25 below.
obligatorily understood as plural. In other words, irrespectively of the cardinality of head nouns present, a single singular determiner is sufficient to impose singular denotation to the entire nominal expression, while the sum of two singular determiners automatically imposes plural denotation.

3. Proper names

If it is really the D position which turns a nominal expression into an argument, an obvious question arises concerning those proper names (in particular names of individuals, cities and certain ‘small’ islands, companies, days and months) which are allowed in Italian to occur freely in argument function without any determiner: it is rather clear that they cannot be introduced by an empty D, since the properties of the latter, as identified in (18), seem to be inapplicable in the case of proper names. For a proper name like Gianni in sentence (22a) below, for example, is neither understood as denoting a mass, nor is plural, it does not receive an indefinite interpretation and, in addition, may occur in a lexically ungoverned position.

15 That such ‘smallness’ is a cultural, rather than purely geographic, concept is argued in Longobardi (1987), where it is claimed that names of cities and ‘small’ islands, as opposed, say, to countries and ‘large’ islands, form a natural syntactic class also from another point of view. In fact, even though the need for the article which characterizes names of countries and ‘large’ islands in argument position disappears for unclear reasons in locative and motional PPs, the choice of the head P is different in such cases for cities and ‘small’ islands:

(a) Abbiamo visitato *(la) Francia/Sicilia
    We visited France/Sicily
(b) Siamo stati in/*a Francia/Sicilia
    We were in/*at France/Sicily
(c) Abbiamo visitato (*la) Parigi/Lampedusa
    We visited (*the) Paris/Lampedusa
(d) Siamo stati a/*in Parigi/Lampedusa
    We were at/*in Paris/Lampedusa

Thus, the alternation between a and in appears to single out essentially the same two classes of geographic names as the presence and the lack of the article. It is unclear, however, whether a direct syntactic link between the two phenomena may be established.

16 Another sharp semantic difference between bare (common) nouns and proper names arises in the domain of scope facts. We have briefly mentioned Carlson’s observation, reproducible in Italian, that bare nouns are forced to take the narrowest possible scope, in particular with respect to negation and intensional context (i.e. they are read de dicto):

(a) Non ho incontrato studenti
    I did not meet students
    ‘There are no students such that I met them’
    ‘*There are some students such that I did not meet them’
(b) Vorrei incontrare studenti
    I would like to meet students
    ‘I would like for there to be some students such that I could meet them’
The theoretical framework so far defined provides a restrictive and almost inescapable answer to this problem: a D position introducing the subject argument must be syntactically present in a sentence like (22)a. and cannot be empty, thus the only possible candidate to occupy such a D position is the proper name itself. To consider yet another way to formulate essentially the same problem, recall that several Romance varieties display free or stylistically conditioned alternations between the presence and the absence of the article with proper (first or last) names of human beings:

( 22) a. Gianni mi ha telefonato
     Gianni called me up
b. Il Gianni mi ha telefonato
     The Gianni called me up

In some cases the alternation is also semantically conditioned; for instance, with last names of female human beings the use of the article in standard Italian is virtually obligatory:

( 23)  La Callas/*Callas ha cantato
      The Callas/Callas sang

The natural question which arises here, although it has never been raised so far, is whether Gianni of (22)a. occupies the same S-structure position as Gianni in (22)b. or rather the position of il of (20)b. As we have noticed, the set of assumptions motivated in the previous section forces us to adopt the latter hypothesis and suggests the existence of a transformational relation between the pair of sentences in (22), established through movement of Gianni in (22)a. In fact, now it becomes necessary to assume that such Ns as those proper names which occur in argument function without any overt determiner have undergone raising from N₀ to D₀, in order for the structure to comply with (18)-(19). This is so because they must be base generated in

"There are some students such that I would like to meet them"
In the same contexts, however, proper names normally give up the narrow scope restriction: in fact, they even strongly favor the wide scope (de re) existential reading. The actual existence of Maria seems in fact to be implied by the utterance of either (c) or (d):
(c)  Non ho incontrato Maria
     I did not meet Maria
(d)  Vorrei incontrare Maria
     I would like to meet Maria
For further remarks on this crucial property of proper names, cf. section 5. below in the text.
the N⁰ position and optionally allowed to remain there, to account for those cases in which they occur introduced by an article. This hypothesis, put forth on theoretical grounds, turns out to receive straightforward empirical confirmation from a curious and subtle paradigm of certain Romance varieties, which it contributes to explaining.

In fact, to determine the exact location of a lexical item choosing one out of two possible structural positions in the tree, it is often useful to insert some visible material between them in order to visualize the abstract linear order; for example, Emonds (1978) and Pollock (1989) relied on interpolation of adverbs and negation to establish that the tensed lexical verb of (24)b. in French occupies the same position as the inflected auxiliary and not as the past participle in (24)a.:

(24) a. Il n’a pas parlé
   He did not speak
b. Il ne parle pas
   He does not speak

We will try to reproduce an argument in the same vein for the positions N and D. Notice, first, that Italian adjectives, both possessive and non-possessive ones, may occur in prenominal position between D and N, or in postnominal position, but never before D with either common or proper names¹⁷:

(25) a. *Mio il Gianni
   My the Gianni
b. *Vecchio il tavolo
   Old the table

Now, consider the following paradigm:

(26) a. Il mio Gianni ha finalmente telefonato
   The my Gianni finally called up
b. *Mio Gianni ha finalmente telefonato
   My Gianni finally called up
c. Gianni mio ha finalmente telefonato
   Gianni my finally called up
d. Il Gianni mio ha finalmente telefonato
   The Gianni my finally called up

¹⁷ In Italian, the distributional properties of possessives are essentially those of predicative adjectives. For a discussion cf. Cinque (1990 and forthcoming) and Giorgi and Longobardi (1991, ch.3).
the double possibility of surface ordering (AN or NA) is preserved when the proper name, here in a typical referential position, is introduced by the determiner, but an unexpected gap in the paradigm appears with articleless names: in fact, while many varieties, especially in the Center and the South of Italy, accept (26)c., none accepts the sentence in (26)b. which results into very severe ungrammaticality. The generalization appears to be that the lack of the article forces an N-initial order. This otherwise surprising idiosyncracy becomes immediately understandable assuming that the proper name needs to move from N⁰ in order to fill in the empty D⁰ position, thus crossing over the adjective presumably lying in its Spec. There is also an interesting piece of semantic evidence in favor of this hypothesis, in particular of the assumption that the possessive AP of (26)c. does not follow the N⁰ position and has become postnominal only as the result of an N-preposing process: notice that normal postnominal possessives tend to be strongly contrastive in Italian, as is the case e.g. for mio in (26)d., which can only be interpreted with contrative reference to the existence of another salient Gianni in the domain of discourse who is not ‘mine’, i.e. is related to someone else. This interpretation is not required, instead, by prenominal possessives, like the one in (26)a., which can be perfectly understood as an affective expression in an environment where no other Gianni’s existence is presupposed. Now, the interpretation of mio in (26)c. does not need to be contrastive, exactly like that in (26)a. and contrary to that in (26)d. This may be explained on the grounds of the general fact that contrastiveness is uniformly required of posthead possessives but not of those in SpecNP and of the crucial hypothesis that it is Gianni that moved in (26)c., crossing over mio.

The paradigm above can be exactly reproduced with certain non-possessive adjectives¹⁸; here are two examples with a family name and a city name as raising heads:

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¹⁸ Even in the ‘liberal’ varieties of Central and Southern Italy not all adjectives allow the raising of the head noun: indeed, modification by most types of adjectives blocks the movement and imposes the use of the article also with proper names. Actually, it seems that the adjectives which tolerate the raising of their head nouns at best are those few that are able to receive a restrictive interpretation even in prenominal position (a possibility usually barred for the majority of Italian adjectives): namely possessives, adjectives like vecchio ‘old’, giovane ‘young’, antico ‘ancient’, solo ‘only’ (which will be discussed in more detail in the next footnote), and numeral ordinal adjectives. For it is plausible that an idiomatized version of N-raising lies at the basis of the usage of names of monarchs and popes followed by an ordinal adjective: for ordinal adjectives obligatorily occur in prenominal position except with such nouns when articleless. Cf., for example, the alternation in the following pair:

(a) Napoleone terzo fu l’ultimo Imperatore dei Francesi
    Napoleon [the] third was the last Emperor of the French

(b) Il terzo Napoleone/*Il Napoleone terzo computato nella dinastia si chiamava in
    realtà Luigi Bonaparte
(27) a. E' venuto il vecchio Cameresi
    Came the older Cameresi
b. *E' venuto vecchio Cameresi
    Came older Cameresi
c. E' venuto Cameresi vecchio
    Came Cameresi older
d. E' venuto il Cameresi vecchio
    Came the Cameresi older

(28) a. L'antica Roma fu la città più importante del Mediterraneo
    The ancient Rome was the most important city of the Mediterranean
b. *Antica Roma fu la città più importante del Mediterraneo
    Ancient Rome was the most important city of the Mediterranean
c. Roma antica fu la città più importante del Mediterraneo
    Rome ancient was the most important city of the Mediterranean
d. La Roma antica fu la città più importante del Mediterraneo
    The Rome ancient was the most important city of the Mediterranean

Finally, also names of months and days repropose an analogous pattern of behavior:

(29) a. Lo scorso giovedi/Natale/maggio è stato un giorno/mese terribile
    The last thursday/Christmas/May was a terrible day/month
b. *Scorso giovedi/Natale/maggio è stato un giorno/mese terribile
    Last thursday/Christmas/May was a terrible day/month

The third Napoleon/ The Napoleon third numbered in the dynasty was actually named Luigi Bonaparte

More generally, it appears that with all other adjectives raising of the head noun is totally incompatible with any appositive reading and can only be marginally tolerated even with a restrictive and sharply contrastive interpretation of the adjective itself: e.g. *Gianni simpatico ‘Gianni nice’ can be very marginally accepted only if the speaker and hearer agreed in advance to define the individual referred to that way in contrast to another, less nice, Gianni.

19 The adjective solo (masc. sing., but regularly inflected for gender and number: sola, -i, -e, and not to be confused with the homophonous but uninflected adverb meaning ‘only, just’: cf. Longobardi 1986 for some remarks), in one of its readings (i.e. when equivalent to ‘only, unique’; in the other reading it means ‘alone’), provides a further strong argument for N-raising. In fact, when used with a proper name introduced by an article, an inflected form of solo can only occur prenominally, since a postnominal occurrence necessarily displays the ‘alone’ meaning:

(a) La sola Maria si è presentata
    The only Maria showed up
    ‘Only Maria....’
c. Giovedì/Natale/maggio scorso è stato un giorno/mese terribile
Thursday/Christmas/May last was a terrible day/month

d. Il giovedì/Natale/maggio scorso è stato un giorno/mese terribile
The Thursday/Christmas/May last was a terrible day/month

(b) La Maria sola si è presentata
The Maria alone showed up
' The Maria who is (notoriously) alone....'

Correspondingly, this behavior is displayed also in some constructions with common nouns:

(c) La sola ragazza presente era antipatica
The only girl present was dislikeable

(d) La ragazza sola presente era antipatica
The girl alone present was dislikeable

Now, if the article is removed from the proper name, the order A+N becomes totally impossible and the N+A one comes to display the same meaning as (a) and not as (b):

(e) *Sola Maria si è presentata
Only (inflected for fem. gender) Maria showed up

(f) Maria sola si è presentata
Maria only (inflected for fem. gender) showed up

Thus, this can be taken as a typical manifestation of the raising paradigm discussed in the text. Notice, finally, that, were sola not inflected for feminine gender in (e), the structure would be irrelevantly grammatical, since, as we noticed, the masculine singular form solo is homophonous with the adverbial form which can always be prefixed (or suffixed) to any DP.

20 The paradigms in (28)-(29) are particularly important since the judgments on them are shared by speakers of all varieties of Italian, not just of the Central and Southern ones, and some can be reproduced also in other Romance languages such as French, Catalan and Spanish. This confirms the plausibility of a raising analysis of determinerless proper names throughout Western Romania. It seems, anyway, that the phenomenon of raising to D, in addition to a large portion of proper names, concerns also a few special common nouns. In Italian they fall into two classes: first, there is a subset of kinship names, essentially the same as can be most commonly used in the vocative:

\[
\text{Papà/Mamma} \quad \text{(a) } \{ \text{Nonno/-a} \quad \text{(mio/-a) verrà a trovarmi} \\
\text{Zio/-a} \\
\text{Dad/Mom} \\
\{ \text{Grandpa/Grandma} \} \ (\text{my}) \ \text{will visit me} \\
\text{Uncle/Aunt} \\
\text{Padre} \\
\text{Madre} \\
\text{Fratello} \\
\text{Sorella} \}
\]

\[
\text{(b)* } \{ \text{Cugino/a} \quad \text{(mio/-a) verrà a trovarmi} \\
\text{Figlio/-a} \\
\text{Moglie} \\
\text{Marito} \\
\text{Cognato/-a} \\
\text{Suocero/-a} \\
\text{Father} \}
\]
Mother
Brother
Sister
{ Cousin         } (my) will visit me
Son/Daughter
Wife
Husband
Brother/Sister in law
Father/Mother in law

In this case, however, it is not possible to rely on the impossibility of the prenominal occurrence of the possessive, as in (26)b of the text, to prove the application of N-raising, since all kinship names in Italian display the well known peculiarity of dropping the definite article in front of a prenominal possessive:
(c)  Mio padre/nonno/cugino etc. ...
   My father/grandfather/cousin etc. ...

therefore the non-obligatoriness of the N-initial order in such articleless examples is probably due to a marked process which assimilates the Italian possessive to the French or English one just with kinship names. There exist, however, two subtler ways to test the prediction ensuing from an N-raising analysis for the structures in (a); in some varieties it is in fact possible to modify the nouns of (a) with a non-possessive adjective, and the latter may only follow the noun when there is no article:
(d)  Nonna vecchia verrà a trovarci
Grandma old will visit you
(e)  *Vecchia nonna verrà a trovarci
Old grandma will visit you

Furthermore, it is well known that kinship names lose the mentioned peculiarity of replacing the definite article by a possessive, but not that of occurring articleless, if they are in a diminutive form:
(f)  *Mia nonnina è arrivata
   My grandma(+dimin. suffix) has arrived
(g)  La mia nonnina è arrivata
   The my grandma(+dimin. suffix) has arrived
(h)  Nonnina è arrivata
   Grandma(+dimin. suffix) has arrived

This fact enables us to provide the desired usual evidence for N-raising through the grammaticalness of (i):
(i)  Nonnina mia è arrivata
    Grandma(+dimin. suffix) my has arrived

As for the semantics of such raised kinship names, they seem to be interpreted as definite nominal, like real proper names, and when they are not followed by an overt possessive as if they contained an implicit genitive of first or second person, i.e. referring to the speaker(s) or the addressee(s). Understanding a possessive of third person or arbitrary reference is thus impossible.

The other common nouns which appear to undergo the raising rule are casa ‘home’ and, to a lesser extent, camera ‘room’:
(j)  Casa di Gianni è qui vicino
    Home of Gianni is nearby
(k)  Casa/Camera mia è più grande della tua
    Home/Room my is larger than yours
(l)  *Mia casa/camera è più grande della tua
    My home/room is larger than yours

However, if not modified by an overt genitive specification, raised camera becomes ungrammatical and casa is again marginally understood as containing an implicit possessive specification, in this case with an arbitrary interpretation:
(m)  *Camera è sempre il posto migliore per riposare
    Room is always the best place to rest
(n)  *Casa è sempre il posto migliore per riposare
    Home is always the best place to rest
Notice further that the fact that the same paradigms appear in both lexically governed and non-lexically governed positions (cf. egs. (27) and (28)) confirms that filling the empty D by means of the raised proper name is necessary not just for syntactic reasons but also and primarily for semantic ones, i.e. to avoid an inappropriate quantified interpretation of the latter position (i.e. with the consequence of a mass and indefinite reading of the whole nominal).

Thus, if our explanation for the paradigms discussed above is correct, the obligatoriness of the N-initial order in the articleless examples is a consequence of the fact that argument nominals need to be introduced by a D position and that such a position cannot be left empty at S-structure, if we do not want to derive the existential interpretation mentioned above which would be incorrect here and anyway should not concern a singular non-mass noun like Gianni. As a result, the framework we have developed makes another prediction about the behavior of adjectives and proper names, namely that the obligatoriness of the N-initial order may disappear with nominals in non-argument function, e.g. vocative or predicative, which were shown to be realizable through a bare NP and not necessarily through a DP:

(30) a. Mio caro Gianni, vieni qui!
   My dear Gianni, come here
b. Gianni mio caro, vieni qui!
   Gianni my dear, come here! 21

The basic descriptive generalization appears thus to be that raising of such common nouns to D is possible only if they discharge a Θ-role to be realized on an implicit or overt genitive argument.

21 While (30)a. is likely to contain just a bare NP, the structure of (30)b. is potentially ambiguous between an NP with postnominal APs and a DP with prenominal APs and raising of Gianni. If DPs are really allowed to occur as vocatives, the question arises of how to exclude the use of the definite article in vocative DPs, even in dialects accepting il Gianni in argument function:
(a) *Il Gianni, vieni qui!
   The Gianni, come here!
(b) *Il ragazzo, vieni qui!
   The boy, come here!
Given that at least the Tuscan variety, and from this, literary Italian accept vocatives introduced by a demonstrative determiner or by the special particle o (cf. also a in the dialect of Rome), it is conceivable that the latter are realizations of the vocative Case in the D position:
(c) Quei ragazzi, venite qui!
   Those kids, come here!
(d) O Gianni, vieni qui!
   Vocative particle Gianni, come here!
Accordingly, other determiners (il, un, etc.) would not be endowed with any form realizing vocative Case. Of course, such an idiosyncratic account of the
as suggested by these data, the prediction turns out to be correct, supporting the entire framework and explaining phenomena which would be hard to capture in an equally principled way by means of alternative approaches.

The evidence of this section, thus, argues for the existence of N-movement to D, and consequently in favor of the structure (2), in Italian and probably in other Western Romance languages as well. Once we adopt (2), the natural way of reformulating the content of principle (19) above becomes the following (cf. also Stowell 1989):

ungrammaticality of (a)-(b) leaves open the theoretical possibility that similar structures may turn out to be more acceptable in some other Romance variety.

22 As was the case for (30), also (31)a. can only contain an NP, whereas in (31)b. the predicate may either be a DP or an NP. Correspondingly, a difference in interpretation arises: (31)a. may only have a de dicto or opaque reading of the predicate: it cannot imply the existence of any specific old Camerisi, but just expresses the concept of how a member whosoever of such a family might look like as an old man. Instead, (31)b., in addition to the previous reading, may be used to convey the meaning that there exists a specific old man of the Camerisi family and that the subject was trying to disguise himself precisely as such a man: this is a de re or transparent reading. In fact, it appears more generally that the possibility of displaying a transparent reading in intensional contexts is normal for DP predicates and excluded for bare NPs:

(a) Gianni vorrebbe essere il figlio di Maria
   Gianni would like to be the son of Maria
(b) Gianni vorrebbe essere figlio di Maria
   Gianni would like to be son of Maria

Sentence (a) may imply that there does exist one (and only one, in the relevant domain of discourse) son of Maria’s, with his specific other properties which Gianni would like to enjoy, whereas (b) seems just to convey the meaning that Gianni would like to have Maria as his own mother. For instance, if Paolo is the name of Maria’s actual son, then, in one reading, (a), but not (b), could be synonymous with (c):

(c) Gianni vorrebbe essere Paolo
   Gianni would like to be Paolo.

23 For the sake of simplicity, we are presenting a structure where D takes NP as its direct complement. However, the analysis here proposed is perfectly compatible with (and, in a sense, can be viewed as an abstraction from) more complex structures such as those proposed by Cinque (1990 and forthcoming) and Picallo (1990), and advocated then by Valois (1991), Bernstein (1991b) and Crisma (1991), in which intermediate functional heads with their projections occur between D and N (see also Battye 1989 for an analogous structure in Italian). In this case it is likely that raising of N to D must take place in obligatory successive cyclic steps, observing ‘Travis’ (1984) Head Movement Constraint, and, as a consequence, that languages lacking evidence for visible movement of N to such intermediate heads should also be expected to lack evidence of visible raising to D. For instance, this will appear to be the case in English
(19') DP can be an argument, NP cannot

Consider in this light the question of the syntactic licensing of NPs; having distinguished between NPs and DPs and having argued for the structure in (2) above, we must now provide for the licensing of such categories under Chomsky's (1986a) Full Interpretation Principle. According to Chomsky, who follows Rothstein (1983) (cf. also Rothstein 1990), maximal projections, apart from operators, can either be licensed as arguments or as predicates. DP can certainly be licensed as an argument in most cases, as we have seen, or as a predicate in others, e.g. many copular or small clause constructions. 24 Instead NP was shown not to be able to assume argument function if not introduced by an overt or empty determiner, i.e. if not the complement of a D position. This fact suggests that in a structured utterance (i.e. except from use in isolation, as in vocative and exclamatory expressions) NP can only be licensed through a predicative interpretation. We propose, then, that NP can be predicated of the head selecting it, namely of a D.

With these conclusions in mind, let us now consider certain properties of the corresponding structures of English.

4. Italian and English

The surprising patterns of the preceding section and some of its semantic properties can thus be shown to follow with no additional stipulation just from the

and the other Germanic languages, according to the analysis proposed in section 6. below.

24 In Italian there are also some environments in which predicates cannot be realized as DPs, but just as bare NPs. In apposition to an argument and in primary predication both options are often available:
(a) Maria è (la) figlia di un generale
   Maria is (the) daughter of a general
(b) Gianni, (il) nostro ex professore di linguistica, è diventato (il) preside della
   Gianni, (the) our former professor of linguistics, became (the) dean of the
   facoltà
   faculty
   but in secondary predication and in a dislocated position only NP is possible:
(c) Gianni è tornato a casa (*il) preside della facoltà
   Gianni went back home (the) dean of the faculty
(d) (*La) figlia di un generale, Maria riusciva solo a innamorarsi di uomini in (The) daughter of a general, Maria could only fall in love with men in a
   divisa
   uniform
The rationale of such distribution and the differences with English which arise numerous in these paradigms are in special need of future investigation.
head raising hypothesis. The latter, however, cannot be immediately extended to proper names in English, since they, even occurring without an article, may be modified by a prenominal adjective and cannot by a postnominal one:

(32)a. Old John came in
   b. *John old came in

Is it conceivable that structures like English (32)a. do not contain any D or DP? In other words, is it possible that English lacks (19') at all? This conclusion appears to be rather odd, since it would suggest a deep interpretative difference between Italian and English nominal constructions, despite of their wide range of syntactic and semantic similarities. Furthermore, Stowell (1989) arrived at a formulation similar to (19'), as we have said, precisely from the study of English. Finally, it seems that (20), which we took as a consequence of (19), is supported in English by arguments in part analogous to those which supported it in Italian. In fact, Carlson (1977a) had already made, for English, remarks similar to the ones provided by Benincà about the neutrality of bare plurals with respect to singular/plural reference; also the facts presented in (21) can be reproduced in English, although their analysis presents some independent complications:

(33)a. The secretary and friend of John Smith is/*are coming
   b. That secretary and friend of John Smith is/*are coming

For some speakers of English both versions of (33)a. are in fact acceptable, although the second seems to be more marginal: we may propose that such extended acceptance on the part of many speakers, i.e. such referential ambiguity of the subject phrase, is to be attributed precisely to the fact that, unlike the Italian one, the English definite article is a determiner morphologically neutral between singular and plural 25: when an unambiguously singular determiner is used, in fact, as in (33)b., the expected 'Italian' pattern tends to emerge more clearly. Thus, the examples of (33) seem to provide a certain support for some version of (20) and in turn for (19), suggesting their validity in English as well 26.

25 This account of the marked acceptability of the plural reading of (33)a. supposes that the agreement requirement between D and each head N, mentioned in fn. 14 above, is satisfied by just formal non-distinctness of the morphological features of the article and the nouns, always leaving the the possibility of being assigned a plural semantic content.

26 A wide class of apparently determinerless nominal arguments is represented in English and other Germanic languages by nouns introduced by a genitive phrase with 's (for whose nature in the different Germanic languages cf. Giorgi and Longobardi
Given such results, it appears more promising to assume that, as a consequence of (19), an empty determiner is present in English (32)a. and that it is then principle (18), namely the licensing condition for null Ds, which is apparently relaxed in English 27. Before starting to consider why this should be the case, let us notice that a number of other constructions in English involve superficially determinerless nominals which are unacceptable in the closely corresponding Romance examples.

First of all, in English many proper names requiring the article in Romance occur with no surface determiner, yet the position of adjectives indicates that no head raising has taken place:

(34) a. Amo *(la) dolce Francia
    I love (the) sweet France
b. I love sweet France

second, in English, bare plurals and bare mass nouns occur syntactically and semantically rather unrestricted, while we have noticed that in Romance, when possible at all (French essentially does not allow them), they may survive just in

1991). The fact that these genitive phrases are always absolutely initial in the nominal construction (in particular, they precede all adjectives) and mutually exclusive with essentially every determiner leads to the hypothesis that they surface in the Spec of DP and impose their own features to D via Spec-Head agreement. Such features on D should suffice to license a definite interpretation preventing lexical insertion of a real determiner and freeing the empty position from the effect of any government requirement. Perhaps the same structure and similar effects can be attributed to possessive pronouns of the determiner-like type discussed in Giorgi and Longobardi (1991), such as we find not only in Germanic but also in French or Spanish. In fact, all these genitives phrases are essentially maximal projections Θ-related to the head noun: therefore, they must originate within the NP and cannot raise to an X0 position like D but just to an XP position such as the Spec of DP.

The important correlation between raising of the genitive phrase to an initial position (Spec of DP, we have argued) and its ability to play a definite determiner function is suggested also by some diachronic data, studied in Marzolla (1991); she shows that, unlike modern Germanic languages, Old High German had AP modifiers precede genitive phrases in pre-N position and that correspondingly the latter could never assume determiner function.

27 A sophisticated but convincing argument for the existence of more empty Ds in English than are possible in Italian comes from the semantic analysis of the gloss of example (31)a. above, repeated here:
(a) He disguised himself as old Camerési
not only is this sentence grammatical in English, but it also displays a transparent reading of the predicate. Provided that the following pair of English
(b) John would like to be professor of mathematics at Yale
(c) John would like to be the professor of mathematics at Yale
reproduces the same contrast as found in the Italian corresponding structures of fn. 22, we may conclude that in English as well the transparent reading is limited to DP predicates: therefore old Camerési in (a) must be a DP and, since the head D cannot be occupied by Camerési raised, it must be empty.
lexically governed contexts and only have the existential reading (and not the generic one); as for the first point, consider the following contrasts:

(35) a. *Castori costruiscono dighe  
Beavers build dams  
b. *Cani stavano seduti sul mio prato  
Dogs were sitting on my lawn

as an illustration of the second point, notice that the following English sentence ambiguously corresponds to two distinct translations in Italian:

(36) I only excluded old ladies  
A) Ho escluso solo vecchie signore  
B) Ho escluso solo le vecchie signore

the A) translation, which is literal, i.e. with no article, only has an existential reading (some old ladies have been excluded, but some can have been admitted), whereas B), with the definite article, is specialized for the generic one (in principle, all old ladies have been excluded). Of course, (36)B) also displays the definite specific reading, not relevant here. Such examples as English (36) are important since they appear to undermine the widespread belief that the existential and generic readings of bare nouns always occur in complementary distribution (cf. also Diesing 1989). However in some cases they actually do. Accordingly, the following contrast in Italian (and the lack of a corresponding contrast in English) appears to descend from the same distinction:

(37) Ho trovato / Amo buon vino e arance fresche  
I found / I love good wine and fresh oranges

the single event verb found (essentially a stage level predicate in the sense of Carlson 1977a, Kratzer 1988, Diesing 1988, 1989) favors an existential reading of the object, while the permanent state verb love (an individual level predicate) forces the generic one, incompatible with bare nouns in Italian. Restoration of the article, in fact, also restores grammaticality, along with the generic reading, in the second Italian example 28.

28 Given the discussion of fn. 13 above, it follows that, in subject position of an individual level non-collective (i.e. non-kind level) predicate, the bare noun of a language such as English neutralizes two generic interpretations, the definite and indefinite one, which are overtly distinct in Romance (and in principle it might be so also in other Germanic varieties: cf fn. 51 below):  
(a) Beavers of this type never build dams  

As a further difference, recall that not only is it the case that English may drop the article in constructions where the Romance languages cannot (generics and certain proper names), but also that it has to:

(38) a. *I love the France 29
    b. *The beavers are mammals
    c. *The wine is made out of grape

Finally, it must be noticed that, strikingly enough, English turns out to be exactly like Romance, i.e. to require the article, in the case of generic ‘substantivized adjectives’, that is arguments consisting of an adjective without an overt nominal head:

(39) a. The rich are becoming even richer

(b) Water of that color can rarely be drunk
One interpretation should result from the conversion of the normally existential reading of certain indefinite structures into generic quantification over sets, as in Italian (cf. fn. 7 above):
(c) (Dei) castori di questo tipo non costruiscono mai dighe
(Parit.art.) beavers of this sort never build dams
(d) (Dell’)acqua di quel colore raramente può essere bevuta
(Parit.art.) water of that color can rarely be drunk
the other interpretation, hardly distinguishable from the former one, should correspond to the Italian form with the definite article:
(e) I castori di questo tipo non costruiscono mai dighe
The beavers of this sort never build dams
(f) L’acqua di quel colore raramente può essere bevuta
The water of that color can rarely be drunk
The structure of English corresponding to the latter Italian forms is the one which is likely to underlie the generic usage of bare nouns in object position and in subject position of kind level and stage level predicates, i.e. in the environments where the generic conversion of indefinite structures such as those of (c)-(d) is not acceptable in Italian.

29 Although an independent, lexico-semantic definition of proper name is difficult, it would be desirable to be able to claim that all proper names of English, apart from the plural ones, which will be dealt with in the next section, drop the article; this is especially true in the light of the consideration that no proper name of individuals ever takes the article: in other words, no dialect of English appears to admit of anything like il Gianni. However, some exceptions arise at least in the case of geographical names; they concern e.g. names of rivers and lakes:
(a) The Potomac
(b) The Ontario
In such cases the use of the article is both possible and required. A possible speculation about the contrast of such names with those of cities and countries, like Paris or France, may rely on the fact that to the former it is always possible to add the corresponding common noun, which would be unacceptable with the latter:
(c) The Potomac river
(d) The lake Ontario
Thus, perhaps, the cases of (a) and (b) could be thought of as containing a sort of understood common noun licensing the article.
b. *Rich are becoming even richer
   (cf. instead ‘Rich people are becoming even richer’)

On the basis of these paradigms we must conclude that English both allows and
requires the occurrence at S-structure of empty determiners with properties radically
different from those of the Italian one. Although correct, this stipulation is, as such,
highly unsatisfactory: the parametric variation is stated in a rather idiosyncratic way, it
forces us to give up any possible claim to the generality of the default existential
interpretation for null Ds, and it leaves with no explanation the lack of lexical
government effects in English and the apparently exceptional behavior of generic
substantivized adjectives. In the next sections we are going to develop a more
principled parametric account of these phenomena. Before doing so, we must first
provide a theoretical answer to some questions which are equally raised by the pattern
of nouns and determiners in all the Romance and Germanic languages.

5. Some crosslinguistic generalizations

The first question to be raised stems naturally from recognizing the following
generalization, which appears to hold very extensively, perhaps generally, across
Romance and Germanic: the only nouns in argument function which are allowed to
appear in S-structure without any overt determiner are proper names, pronouns,
plurals, and singular mass nouns. In other words, singular count nouns are always
excluded:

(40)a. Ho trovato Gianni
     I found Gianni
b. Ho trovato lui
     I found him

(41)a. Ho trovato amici
     I found friends
b. Ho trovato acqua
     I found water
c. *Ho trovato amico
     I found friend

Why should it be so? Actually, it must be pointed out that it is not the case that all
singular nouns which allow a count interpretation are literally excluded from the
articleless construction: they are acceptable if their intrinsic meaning and the lexical environment tolerate a mass interpretation. Thus, the difference in interpretation between the following sentences

(42) a. I ate beaver  
b. I ate a beaver  
c. I ate beavers

is that in (42)a. the object nominal quantifies over the potentially infinite set of subparts of the mass ‘beaver meat’, singling out an indefinite number of them, in b. and c. it quantifies over the set of individuals who are ‘beavers’, singling out just one or again an indefinite number of them, respectively. In other words, unlike articles, demonstratives, and such determiners as every or each, the empty determiner of the Romance and Germanic languages seems to impose quantification over subparts and exclude the one over individuals whenever the head noun following it is in the singular. As we have anticipated, this property of the empty determiner is not isolated in the class of determiners, but is shared by many of the overt ones, most importantly by its closest correspondent, namely the partitive article ‘di + definite determiner’ of Italian; but consider also for example the behavior of Italian moltol-al/i-i-e ‘a lot of’ (inflected for gender and number in agreement with the head noun):

(43) a. Ho trovato molti amici  
   I found a lot of friends  
b. Ho trovato molta acqua  
   I found a lot of water  
c.*Ho trovato molto amico  
   I found a lot of friend

Therefore, the situation can be described as follows: determiners are semantically understood as operators binding a variable, whose range is always a potentially infinite set, i.e. the linguistically natural kind defined by the meaning of the head noun: in the plural form all common nouns define a potentially infinite set of individual entities (say, the kind of all friends or beavers etc.); in the singular it is the choice of the determiner which decides whether the kind defined by the head noun is a single entity, i.e. a mass, still conceived of as a set, now consisting of potentially infinite subparts (in such a case quantification ranges over this set of subparts), or again a set
of individual entities. The empty determiner in the Romance and Germanic languages always selects the former option, which results in the mass interpretation 30.

The pattern of common nouns occurring with empty Ds can thus be accounted for by the suggestion just made, which crucially relies on a quantificational interpretation of the DP structure, namely takes the D position to be an operator and the common noun to define a range, i.e. a restrictive clause, for its variable. Therefore, along lines suggested in Abney (1987), we assume that the logical translation of a syntactic formula like

(44)   [ D [ N ] ]

where D is a lexical or empty determiner and N a common noun, will be similar to

(45)   D_x, such that x belongs to the class of Ns

so that (46) is to be understood as (47):

(46)   The/every table

(47)   The/∀x, such that x belongs to the class of tables 31

30  If head nouns in the N position always define kinds, understood as potentially infinite sets, it is not unreasonable to view their plural form or mass interpretation (where a mass is considered as a potentially infinite set of subparts) as the unmarked realization. A singular non mass-interpreted common noun as in a girl would then be morphologically ‘disguised’ as singular just as a consequence of syntactic agreement with its determiner, which is singular because it denotes a single entity. This property of agreement which ‘singularizes’ head nouns should be regarded as a marked lexical peculiarity of certain determiners. In this light it is not surprising that the empty determiner, being deprived of lexical content, fails to display such a peculiarity and resorts in all the Romance and Germanic languages to the unmarked option.

31  As for the question of which type of operator the definite article exactly represents in its specific usages, we will follow Russell (1905,1919) and Neale (1990), among others, in taking an utterance of ‘the F is G’ as meaning the same as the conjunction of

(a)   ∃ exactly one x  & Fx

and

(b)   ∀x, Fx ⊃ Gx
correspondingly, an utterance of ‘the Fs are Gs’ will mean

(c)   ∃ at least two x  & Fx

and

(d)   ∀x, Fx ⊃ Gx

In the spirit of the suggestion made in Chomsky (1975), we may suppose that the particular meaning expressed by the definite article is essentially the second conjunct of the preceding formulae. The first part could be the consequence of a more general existential interpretation assigned by default to determiners and manifested most clearly in the case of the empty one.
The restriction of bare common nouns to a plural or mass interpretation appears, therefore, to be a reflex of their having to provide the input for a quantificational interpretation. This is made possible by defining a potentially infinite set, which may be used as the range of a variable bound by an operator. In this respect, we may say that all common nouns describe, that is intensionally define, a kind (a ‘universal’ in Russell’s 1912 sense) and acquire particular denotation only through the D position which quantifies over such a kind. Thus, this approach espouses and substantiates an essentially Russellian view of definite and indefinite descriptions (cf. Russell 1905, 1919 and the accurate discussion in Neale 1990).

Now, the fact that the other two types of nouns mentioned before, proper names and pronouns, occur without an overt determiner but are not constrained by such plural/mass restriction suggests on semantic grounds that they are likely to undergo a radically different interpretive process: they seem to be able to dispense completely with an interpretation in terms of quantificational structure and descriptive content, i.e., unlike common nouns, they need not provide a range to an operator. That no empty determiner plays any semantic role in the interpretation of pronouns and proper names is suggested also by another consideration: recall, in fact, that they surface articleless with a specific definite reading, i.e. without having to display either the indefinite (existential) or the generic one, a restriction which we have seen to necessarily constrain the interpretation of argument common nouns without an overt determiner.

In other words, a noun like John or he will not be normally understood as

\[ \text{(48) } D_x, \text{ such that } x \text{ belongs to the class of John’s/ he’s} \]

Rather, such expressions can be thought of as being directly assigned a reference, i.e. as non quantificationally interpreted. This semantic property of pronouns and proper names is likely to be responsible in turn for a syntactic generalization which singles out exactly the same two classes of elements. The relevant observation can be first formulated as a question internal to Romance syntax and then translated into a wider crosslinguistic generalization. In fact we have not yet raised the question of why it is only proper names and not also the common ones, in any possible reading, that may undergo movement to D, giving rise to alternations of the sort exemplified in (22) and (27)-(29) of section 3. But this problem, as we said, has a broader typological scope; in fact, of all kinds of head nouns throughout the Romance and Germanic languages only two can apparently be argued to occupy the D position at S-structure: certain proper names in Romance, as demonstrated above, and pronouns more generally, as
we are going to show directly. In fact, the lack of contrast between Italian and English with respect to the following structure

(49) Noi ricchi stiamo diventando ancora più ricchi
We rich are becoming even richer

suggests that personal pronouns, unlike proper names, do not differ in surface distribution in the two languages and that they are likely to uniformly occur at S-structure in the D position, hence always preadjectivally 32. The fact that no alternation ever appears between forms like (49) and determined ones like the following

(50) *I ricchi noi....
*The rich we...

induces us to further believe that pronouns may directly occupy the D position already in D-structure, thus resurrecting Postal’s (1969) original theory and confirming that no N raising process applies in the syntax of English 33. Another similar reason to suppose that pronouns, unlike proper names, are base generated in D and not in N comes from the well known fact that proper names can (and actually must) be treated as common nouns under restrictive relative modification and stay in N also at S-structure, while this option is normally excluded with pronouns:

(51) a. II (simpatico) Gianni che conoscevo non esiste più

32 Although the test provided in the text is of limited scope, because normal adjectives can so modify just first and second person plural pronouns, its result can be reinforced and extended to the whole paradigm by means of the other test, based on the inflected forms of solo ‘only’, introduced in fn. 19 above:
(a) Io/tu/lei sola
   I/you/she only(fem.sing.)
(b) *Sola io/tu/lei
   Only(fem.sing.) I/you/she
(c) Noi/voi/loro soli
   We/you/they only(masc.plur.)
(d) *Soli noi/voi/loro
   Only(masc.plur.) we/you/they.

33 Postal’s analysis, in fact, also allows a natural treatment of phrases like
(a) Noi medici
   We doctors
(b) Voi avvocati
   You lawyers
as regular D+N structures, with the pronoun base generated in D and the N position occupied by the lexical head noun at all levels of representation.
The (nice) Gianni that I used to know no longer exists

b. *Gianni (simpatico) che conoscevo non esiste più

Gianni (nice) that I used to know no longer exists

c. *Il (simpatico) lui che conoscevo non esiste più

The (nice) he that I used to know no longer exists

More generally, it seems that proper names differ from pronouns in that they may, under a relatively marked interpretation, provide a range satisfying essentially all kinds of overt or empty determiners which end up quantifying over different individuals (or stages of the same individual as in (51)); cf. some examples:

(52) a. I met a (certain) Mary

b. I visited the (two) Mary’s yesterday

c. Every Mary I met in my life

d. Mary’s are usually nice girls, according to my experience

(generic reading)

e. During my visit to the U.S. I met Mary’s everywhere

(existential reading)

It is easy to check that replacing Mary by she in (52) yields ungrammaticality in all the examples. The same results are reproducible in Italian, with only the predictable difference that the definite article is required in the generic example (52)a. The basic crosslinguistic generalization appears then to be the following: common nouns must always be used to provide a range to a (lexical or overt) determiner understood as an operator, pronouns can never undergo this interpretation, proper names can, at least in marked cases, but need not. When proper names do undergo the interpretation in question they obviously resort to their (impoverished) descriptive content, namely they define as a range for the variable the kind of all possible individuals named that way (or the kind of all possible stages of the relevant individual named that way.

It is plausible that such a postulated semantic tripartition of nominals is related to the independently attested differences among the positions that the items in question may occupy at S-structure. We have recognized, in fact, that pronouns, being base generated in D, never appear in the N position, that proper names occur in D at S-structure at least in some languages, and instead that common nouns never raise to D at S-structure, even in languages like Italian. Why should pronouns and proper names be crosslinguistically peculiar and different from other nouns with respect to their S-structure distribution? In this framework the natural hypothesis is that a noun, in order to provide a range to an operator, i.e. to be understood to define a potentially infinite set of entities of a certain kind (in the sense specified above), must crucially
head the N projections at S-structure. If common nouns are the ones which must always be so understood, it will follow that they will not be allowed to raise to D at S-structure in any Romance or Germanic language, including those where proper names instead do. It is again the suggested irrelevance of the quantified interpretation for pronouns and proper names, then, which determines their peculiar distributional possibilities. Of course, the noted syntactic and semantic differences between the two latter categories must follow from the additional assumption that pronouns are not lexical nouns at all, in the sense that they are generated as the spelling out of certain person (and other) features of the head D, while proper names, forming a potentially open class, seem to instantiate a lexical category naturally generated under the N position.

Such a theory explains, then, why, in Italian, raising to D is essentially confined to proper names and does not involve e.g. bare plurals, as is made clear both by their distribution, which we have noticed was apparently constrained by the lexical government condition on their empty determiner, and by the possibility of the A-N order:

(53)  Ci sono belle ragazze
   There are pretty girls

Thus, our general framework of hypotheses draws a major line of separation between definite descriptions on one side and proper names on the other, practically supporting the semantic distinction between these two categories made by Kripke (1971,1972,1980) and assumed in Neale (1990); accordingly, such a framework is much less compatible with the view Russell eventually ended up holding, namely that classical proper names are just ‘disguised’ descriptions.

As a matter of fact, the distinction which we postulate between quantificational (descriptions) and referential (names) interpretation correlates precisely with the results of at least two independent semantic contrasts opposing definite descriptions and proper names: first of all, we have already noticed in fn.16 above that the existential import of proper names seems never to be affected by (has scope wider than) negation or intensional predicates (i.e. names always have a transparent, or de re reading); whereas descriptions, instead, give rise to frequent ambiguities. Cf., for instance, the unambiguous (54)a. with the fully ambiguous (de re/de dicto) (54)b.:

(54)a.  Gianni vorrebbe sposare Maria
         Gianni would like to marry Maria

b.  Gianni vorrebbe sposare la sua vicina di casa
         Gianni would like to marry his neighbour

34
Correspondingly, (55)a. sounds as a straight contradiction, while (55)b. can be non-contradictory if *la sua vicina di casa* 'his neighbour' is read with different existential scopes in the two clauses:

(55)a. Gianni vorrebbe sposare Maria, ma non vorrebbe sposare Maria  
Gianni would like to marry Maria, but would not like to marry Maria
b. Gianni vorrebbe sposare la sua vicina di casa, ma non vorrebbe sposare la sua  
vicina di casa  
Gianni would like to marry his neighbour (in principle), but would not like to  
mARRY his neighbour (the actual one)

Such implication of unconditioned existence of the *denotatum* borne by proper names might follow from their directly referential interpretation in conjunction with one natural assumption, apparently shared also by Russell's theory of reference and descriptions (cf. Neale 1990, p.19): namely, that an utterance of a sentence containing a genuine referring expression expresses a meaningful proposition only if that expression has a referent 34.

34 A potential problem for the generalization in question might be represented by the classical examples of fictional names, the apparently most plausible candidates for Russell's analysis of names as 'disguised' or 'abbreviated' descriptions. It might look, in fact, that such names are not read *de re* in intensional contexts, although they display exactly the same syntax as non-fictional proper names:

(a) Mary would like to marry Hamlet  
However, it is doubtful that in sentences like these the fictional name is really understood *de dicto*. Consider, for instance, the following situation: John is a pagan, who strongly believes in the existence of the classical Olympic gods and further believes that sometimes they marry mortals. In such a situation, we might truly say of him  
(b) John wants to marry Aphrodite  
Now, since John is a sincere and persuaded believer, it seems that the *de dicto* informal representation in (c)  
(c) John wants there to exist x, such that x= Aphrodite and he may marry x  
does not capture our semantic intuitions about (b), which are better approximated instead by (d):  
(d) There exists x, such that x= Aphrodite and John wants to marry x  
Of course, in order to adopt this *de re* representation, making it compatible with our being non-pagans, it is necessary to relativize existence, in such cases, to particular worlds which are fictional, but whose essential structure is well known among the speakers involved: such could be the world of the classical *pantheon* or of the Shakespearean tragedies and so on (cf. also on this point a parallel remark in Bonomi 1975,pp.51-52).
Another counterargument to a *de dicto* representation of fictional names may come from the behavior of analogous definite descriptions. Let us imagine a domain of discourse involving a particular literary (say, dramatic) genre, where one of the fixed fictional characters is normally termed 'the next door's woman'. Suppose now that within such a context the following sentence is uttered:  
(e) John would like to marry the next door's woman
Another peculiarity of proper names has been pointed out by Kripke (1971, 1972, 1980) under the label of 'rigid designation'. What Kripke remarked is that proper names, unlike allegedly equivalent descriptions, appear to designate the same object throughout all possible worlds, i.e. also in counterfactual situations. Compare the following two sentences:

(56)a. Anselm was born in Aosta and became archbishop of Canterbury

b. The discoverer of the ontological proof was born in Aosta and became archbishop of Canterbury

In the actual world these two propositions are both true and their truth can be ascertained by inspecting the biography of one and the same person. But let us imagine a counterfactual world in which the ontological proof was discovered by Albert of Saxony: in such a world the truth of (56)a. would still depend on the biography of the same character as before, namely Saint Anselm, but the truth of (56)b. would now be contingent on the biography of a totally different person. As Kripke noticed, it seems impossible to imagine any world where the truth of examples such as (56)a. depends on something other than the biography of Anselm himself. It is in this sense that proper names can be said to refer to the same object rigidly, i.e. in all possible worlds.

The cruciality of the articleless usage of proper names in order for them to display both the properties in question (transparency and rigidity) is suggested by examples like

(57)a. John would like to marry a Mary

b. The/An Anselm I met yesterday was born in Aosta

It is clear that such a sentence would be at least three-way ambiguous: in addition to the classical de re/de dicto ambiguity with reference to the normal world of everyday life, a reading in which the definite description refers in the aforementioned fictional world must be considered. The latter reading, which would be the exact analogous of that of (a) above, must thus be distinguished from both readings concerning the normal world. Once such a move is taken, one way or the other, it becomes clear that the de re/de dicto distinction is incapable of capturing the semantic contrast between fictional and non-fictional readings of (e) and, by analogy, of sentences like (a). It is then plausible that fictional nominals must be interpreted with reference to a fictional, e.g. literary, world of their own and that in such a world they may assume the de re reading. If this approach is correct, we will be naturally led to the prediction that the latter reading will be obligatory in the case of a proper name like Hamlet, but will potentially alternate with the de dicto interpretation in the case of a description. Although subtle, it seems that the prediction is correct: in fact, Hamlet is likely to make no sense unless used in a well defined literary context where such a character has already been invented, while the next door's woman might be employed just to propose the invention of a new character, say, on the analogy of similar, already established ones (for instance, the old man upstairs, the janitor, etc.).
In the first sentence a Mary can easily be read de dicto (opaquely), and in the second it is possible to imagine different designations in different conceivable worlds, according to which particular Anselm I met in each of them (on these problems, however, cf. also the end of section 7. below).

In addition to rejoining Kripke’s semantic arguments against the assimilation of proper names to descriptions, the syntactic evidence provided in this work appears, then, to support in a crucial manner Higginbotham’s (1988) rejection of Burge’s (1973) proposal: namely that proper names like John are essentially quantified expressions introduced by an invisible but semantically relevant determiner displaying a demonstrative interpretation. At a close look at the question, as we tried to provide, such a suggestion turns out to be already highly implausible for English and straightforwardly falsified by the Romance evidence, which suggests that the name itself occupies the D position and that this property crucially distinguishes it from common nouns. Rather, the empirical evidence uncovered by our syntactic analysis appears to provide the strongest support for what Burge criticizes as the traditional theory, namely that proper names are expressions of generality in sentences like (52), but assume direct reference, being interpreted as individual constants, in their most common, i.e. singular articleless, uses.

Of course, the present proposal is crucially presupposing that substitution of N into the D position does not allow any ‘reconstructed’ analysis at S-structure, at least for what concerns the principles of interpretation above: the noun itself and not its trace must head the NP at S-structure to satisfy the requirement for a set-denoting interpretation and provide a quantificational range. Intuitively speaking, it seems that the D position (the operator) and the N position (the range) must count as two separate entities and not as members of the same chain in order to trigger the quantified interpretation. This way of formulating the problem leads us, in turn, to capture another crosslinguistic subgeneralization: among the Romance and Germanic languages we have mentioned cases where raising to D can be argued to apply quite widely, affecting also common nouns, namely in Rumanian and Scandinavian (cf. e.g. the Norwegian examples in (4)-(5)). At first sight, this should not be tolerated according to the principles formulated; but notice that if the relevant requirement is understood in the sense just explained, the Rumanian and Scandinavian cases fail to violate it, because in the latter languages raising to D does not obliterate the determiner, as in Italian, but rather incorporates it into the noun. We believe that this is not due to chance but reflects a significant typological generalization holding throughout Romance and Germanic, which would be a correct consequence of the interpretive strategy of (48):
(58) N-Raising Generalization:
in languages and constructions where raising of the head noun to the
D position obliterates the article, only proper names are allowed to
raise; in languages and constructions where raising adjoins (prefixes)
the noun to the article, also common nouns may be allowed to raise
to D.

It appears thus that for head movement two subcases with distinct properties must be
defined, exactly as for movement of maximal projections: substitution, which
exhaustively occupies the landing head position, and adjunction, which preserves the
independent content of the landing position and, in our specific case, allows the trace
of the raised N to provide the required quantificational range to the now surviving D
position 35.

In this section we have therefore tried to provide a preliminary explanation for a
number of striking and so far poorly studied generalizations which characterize
determiners and nouns throughout most Western European languages. Although still
refinable in various ways, this proposal will also serve as a basis to attempt a non-
stipulative approach to the cluster of Italian/English contrasts of the previous section.

6. The parametric proposal

In this section we try to hypothesize the existence of a parameter distinguishing
Italian from English (and more generally Romance from Germanic) with respect to the
differences listed in section 4. and displaying the following theoretically desirable
properties: it will have a form similar to that of other well established syntactic
parameters, the ability to explain the unexpected failure of contrast between the two
languages concerning examples (39) (substantivized adjectives), and will be
compatible with the plausible assumption that both the lexical government requirement
and the default existential interpretation are universal constraints on empty determiners
and not marked idiosyncracies of Italian syntax.

Let us assume, therefore, that both (59) and (60) are universal principles 36:

35 For the idea that substitution and adjunction must be crucially distinguished in the

36 It would probably be surprising for (59) and (60) not to be part also of English
grammar and UG, for independent reasons: (59), because of the unmarked nature of the
interpretation it imposes, as discussed in fn. 8 above, and (60) as a consequence of
some version of the head government condition on empty categories, which is visibly
active in English to similarly constrain the distribution of such a head as empty C.
(59) \[ \text{default existential interpretation} \]

(60) An empty head must be lexically governed

Imagining, especially on the grounds of the discussion in the previous section, that \[ \text{Dx: NP}(x) \] is a rough logical translation for D-NP structures, (59) amounts to saying that a D devoid of overt lexical content is always translated into the formula above as a pure existential operator, perhaps the semantically unmarked option, as giving rise in many cases to the least easily falsifiable statements. (60), in turn, is likely to be just one consequence of the general proper government condition requiring a lexical or coindexed head governor for every non-pronominal empty category.

We may now propose (61):

(61) Parameter: N raises to D (by substitution) in the Syntax in Italian but not in English

This parameter appears to be a plausible instantiation of the well known parameter schema first proposed in Huang (1982): some languages perform only in Logical Form the same movement operations that other languages already perform in the Syntax. If this is the general pattern we may expect English to be able to substitute N for D as Italian docs, but only as an instance of LF movement.

Let us consider now how this parametric hypothesis may account for the basic properties of English determiners and nouns noted in section 4. In its essentials, our solution will consist of transposing the well motivated raising analysis of Italian proper names first to English proper names and then of applying it to the problem of English bare nouns more generally.\(^{37}\)

\(^{37}\) Now that substitution into D can be assumed to apply also to English proper names, we may raise the important question whether the crosslinguistic semantic properties of names discussed in section 5. (transparency and rigidity) are a consequence precisely of this process. In other words, is the fact that proper names are grammatically interpreted in the D position and not in the N position sufficient to determine their transparency and rigidity? We have already seen in section 5. that the mere lexical property of being 'proper' is by itself not sufficient to make transparent and rigid most names introduced by overt determiners, whereas, descriptively speaking, this effect is certainly induced by the absence of the article with a singular proper name. However, the most suggestive evidence that transparency and rigidity are one of the necessary consequences of interpreting a nominal head in the D position comes from the observation that the few common nouns which may undergo movement to D (cf. fn. 20 above about Italian; notice now that a similar pattern seems to concern also some of the corresponding English nouns, although the latter must be assumed to raise only in LF) display an obligatory de re and rigid reading precisely when raised. Consider, for instance, a fictitious world where half of the inhabitants was regularly born from two parents and the other half was cloned just from their
Suppose, thus, that the principles in (59)-(60) are checked at the level of LF: the status of (32) of section 4. repeated below becomes now unproblematic. In fact (32)b. is immediately ruled out by the formulation of (61) (lack of visible N raising in English), while (32)a. is not excluded by a head government violation or ruled semantically inappropriate by the existential reading imposed to the empty D if LF raising to fill in the latter has taken place before the application of (59)-(60):

(32) a. Old John came in
    b. *John old came in

The logical form of (32)a., then, unlike its S-structure, will not contain an empty D but rather a trace of N and will look like (62), mirroring the S-structure of an Italian corresponding sentence:

(62) [John [old e]] came in

fathers’ cells. Suppose further that, as an adult, not everyone knows how he or she was actually born. Now, in such a world, (a) may be uttered by someone still doubtful about his birth, while (b) could only be used by someone already knowing he was regularly given birth to by a woman:

(a) Ora vorrei ritrovare la mamma
    Now I would like to find the mom
(b) Ora vorrei ritrovare mamma
    Now I would like to find mom

Thus, *mamma* is obligatorily *de re* in (b), while it can be *de dicto* in (a). A similar case can be made also for *casa* ‘home’ or *camera* ‘room’:

(c) L’ufficiale sperava che gli fosse assegnata la sua camera
    The officer hoped that he could be assigned the his room
(d) L’ufficiale sperava che gli fosse assegnata camera sua
    The officer hoped that he could be assigned room his

the first sentence does not imply that the officer already occupied one particular room which he wishes he can obtain again, while the second one does. This seems to be the manifestation of an obligatory *de re* reading of raised *camera* in (d).

As far as the rigidity facts are concerned, it appears that raised kinship nouns are definitely as rigid as pronouns and proper names, and that a similar tendency exists for *casa* and *camera*, although the judgments are much less sharp in the latter cases.

38 The same LF raising analysis would be assigned to the geographic names of English whose correspondents require the article in Italian (egs.(34) above). If the Italian side of the parameter is representative of the whole *Romania*, as we believe, it is then necessary to analyze the articleless occurrences of names of countries found in Spanish or Catalan (and Old Italian) as cases of syntactic N-raising to D. The apparently correct prediction of this analysis is that the formal resemblance of such structures to the English ones should break down when an adjective precedes the head noun: in fact in this latter case Spanish and Catalan country names cannot remain articleless. In Italian such names, as well as last names referring to women (egs.(23)) and others, like those of firms, associations, sport teams should be lexically marked as non-raising on the basis precisely of their belonging into these semantic classes.
Recall now that we had some evidence in section 5. that the predicative licensing of NPs has to be satisfied at S-structure, universally preventing bare common nouns from substituting into D before such a level. This leaves open the possibility that by LF movement not only proper names but also determinerless common nouns may undergo raising to D, once they satisfied the predicative licensing in the N position at S-structure. In this sense we can expect LF movement to raise to D even more types of head nouns than the syntactic movement visible in Italian. Hence it comes as no surprise that English bare plurals and mass nouns may occur in non-lexically governed positions and are not necessarily confined to the existential interpretation imposed by principle (59). In fact, in

(63) a. Big beavers build dams
    b. Fresh water is often drinkable

the nouns *beavers* and *water* can be assumed to substitute in LF for the empty D to prevent a proper government violation, and the mentioned ambiguity of

(36) I only excluded old ladies

will be due to the fact that *ladies* is allowed to LF-raise to fill in the empty D position before the application of principle (59) assigns it the existential interpretation. If the noun actually raises, the structure may receive the generic reading.

Why does now Italian differ from the English pattern in the way outlined throughout the article? Recall that we have pretheoretically acknowledged, in our formulation of generalization (18) of section 2., that it is the visible, S-structure distribution of the empty determiner which is constrained by the lexical government requirement and by the default existential interpretation in Italian. The fact that Italian cannot apparently escape the strictures of principles (59)-(60) exploiting N-raising in LF in the same way as English does seems thus to follow from one of these two possibilities: either Italian lacks LF-raising of nouns completely or (59)-(60) apply at S-structure and cannot be delayed until LF, in Italian, so that any application of LF movement would be irrelevant.

The first solution appears less plausible from a theoretical and typological point of view: it is often claimed that the canonical situation is that core movement rules are the same for all languages in LF and that some parametrization applies to their availability before S-structure; this view is supported by the fact that in the well studied case of the *wh*-movement parameter (Huang 1982 and subsequent work) languages which display movement in the Syntax, like e.g. English and French, can all be claimed to allow instances of the same movement in LF.
The second solution looks more promising, especially if we can show that it need not be stated as a separate parameter independent of the one in (61). Consider in fact that, in the spirit of Pesetsky’s (1989) ‘Earliness Principle’, we might formulate a general crosslinguistic condition on the level of application of (59) and (60) in the following way:

(64) The default existential interpretation is assigned to DPs as early as possible (S-structure or LF, depending on the movement parameter) and cannot be changed in the course of the derivation

(65) Condition (60) on empty Ds is also checked as early as possible

The plausibility of a similar approach is suggested by its similarity to that which seems required by certain contrasts between a language with both syntactic and LF wh-movement, like French, and Oriental languages without syntactic wh-movement (cf. Pesetsky 1989). In French, question wh-phrases can be left in situ but, when embedded in a subordinate clause, they are unambiguously construed as having ‘root’ scope, i.e. the matrix sentence is always a direct question and the embedded one a declarative; the reverse interpretation, which should be produced by the wh-phrase taking narrow scope over the subordinate and turning it into an embedded question, is impossible even when the matrix predicate could select a +WH complement, i.e. an indirect question, as in (66):

(66) Tu sais que Marie est allée où ?
You know Mary went where ?

Now, it seems to be a fact that analogous sentences are ambiguous in Chinese-Japanese, allowing both ‘root’ and embedded scope of the wh-phrase (cf. again Huang 1982, Lasnik and Saito 1984 and subsequent work). An immediate interpretation of this contrast is that in languages with the syntactic movement option the declarative or interrogative status of a complement CP must be decided already at S-structure, depending on whether a wh-phrase has been moved into its Spec or not, whereas if no such movement is allowed before the LF component the same decision (or checking) may be delayed until the LF level. The idea is summarized in (67), whose formal resemblance to (64) is apparent:

(67) +WH status is assigned to embedded CPs as early as possible (S-structure or LF, depending on the movement parameter) and cannot be changed in the course of the derivation
It is clear now that our assumption that the application of (59)-(60) already takes place at S-structure in Italian but may be delayed until LF in English can be plausibly considered as an indirect consequence of parameter (61), which explains then all the major differences between the two languages in the distribution and interpretation of empty determiners.

There remain, however, two more questions to be addressed concerning the application of the proposed account to the patterns noticed in section 4. We must, first of all, explain the surprising convergence between English and Romance in the case of generic substantivized adjectives. The fact that English requires the definite article even in the plural interpretation, here, as exemplified in (39)a., repeated below

(39) a. The rich are becoming even richer
b. *Rich are becoming even richer

is so striking and pretheoretically unexpected, in the light of the rest of the paradigm, that being able to account for this property can be regarded as a very strong test for a successful parametric theory of English and Romance generics. In our framework this peculiarity of the English pattern appears to be theoretically predictable on the basis of independent assumptions. In fact we have claimed that articleless generics in English are made possible by raising of the lexical head noun to fill the D position in LF. But, if no overt noun is present, as in the case of substantivized adjectives, this strategy cannot be resorted to. There remains, a priori, another option, namely raising the adjectival head: however a visible movement of A to D seems not to be attested in the syntax of any Romance or Germanic language. Supposing that substantivized adjectives are actually regular NPs with a null head and the AP occurring in their Spec, then raising from A to D is likely to be ruled out in principle as a violation of Travis’ (1984) Head Movement Constraint, essentially since A is not the head of the direct complement of D 39. If LF movement obeys at least those conditions which constrain visible movement, as appears to be true in many cases (cf. Longobardi’s (1986) ‘Correspondence Hypothesis’), it follows that no movement of A to D will be possible in English LF, reproducing for substantivized adjectives a situation essentially analogous to that typical of Romance. Thus, the pattern of English substantivized adjectives is correctly predicted by this framework of hypotheses to reproduce that of Italian: for the generic reading an article must be inserted just in order to prevent the D

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39 The same reasoning remains true if APs are taken to occur in the Spec of some intermediate functional phrase appearing between D and NP, as proposed by Cinque (1990 and forthcoming) and in some of the other references cited in fn. 23 above.
position from being empty at LF and falling under the strictures of (59)-(60); the bare form is only marginally possible, heavily depending on the lexical choice of the adjective, but what is most relevant is that, whenever it occurs, it is subject to the existential interpretation and to the lexical government constraint, exactly like bare nouns in Romance:

(68) a. There were homeless everywhere
    b. *Homeless were everywhere

The second problem to be addressed concerns, instead, how a bare noun is sometimes allowed to achieve an existential interpretation in a non lexically governed position in English:

(69) a. Dogs were sitting on my lawn
    b. Dogs were everywhere

In principle, the present analysis leads to the expectation that this sort of sentences should be ungrammatical or only markedly acceptable: For we have proposed to address the problem of English bare nouns along the same lines of the solution provided for proper names: the latter were taken, by means of one and the same resort, namely raising to D (visible in Italian, abstract in English), to escape both the existential interpretation and the strictures of the lexical government requirement; thus we are induced to predict the existential reading of bare nouns to be ruled out in non-lexically governed positions. Actually, it appears, according to the recent literature (Diesing 1988, 1989, Kratzer 1988, Brugger 1990), that this prediction is essentially correct in such a closely related language as German. Furthermore, similar data arise also in Scandinavian, according to T.Taraldsen (p.c.). Thus, the basic typological generalization is likely to be not just that the possibility for a language to license bare nouns surfacing outside VP correlates with that of having generically interpreted bare nouns but also that, in the unmarked case, bare nouns outside VP can only be generically interpreted. At least, this appears to be the situation in all the Continental Germanic languages 40. Therefore, it seems correct for our framework to regard the

40 Since such languages are all V-2 languages in matrix clause, the relevant position external to VP is that of subjects of subordinate clauses introduced by an overt complementizer. In these latter sentences it is clear that the subject position outside VP is the Spec of IP, as in English, and that it is not lexically governed (cf. Diesing 1989). The position of Spec of CP, often moved into by subjects in main clauses as a consequence of the V-2 constraint, is likely to be irrelevant to the present discussion, since it seems to allow reconstruction of the interpretive properties of the landed item into its base position (like topocalization in Italian: cf. fn. 10 above), which is likely to coincide with a VP-internal extraction site.
acceptability of (69) in English as a marked phenomenon. Such predicted markedness also appears to be empirically reflected by the relative variability in the acceptance of these constructions among speakers and by the influence on it of different lexical choices. Let us consider now which particular mechanisms could account for (69) in the system presented here. A possible proposal might crucially exploit the derivational properties of grammar in order to derive (69) and to try to express its marked character. Consider, in fact, that nothing so far prevents the default existential rule (59) from optionally applying already at S-structure in English as well, while the proper government requirement (60) may continue to be checked at LF. Suppose that this is actually the case in (69): default existential closure may determine the interpretation of the empty D introducing *dogs* as early as at S-structure, but later LF-raising of the head noun itself would fill this position preventing a violation of (60) at LF. The critical role played by N-raising to D in avoiding a proper government violation also in this case is strongly suggested by the unacceptability of the same construction with substantivized adjectives (cf. (68)), i.e. precisely in the one structure where movement to D was argued to be inapplicable. The marked flavor of the construction may be a natural consequence of the fact that in the presence of the obvious mismatch between the appearance of S-structure and that of LF it is the former which determines the quantificational interpretation of this structure. As noticed, other languages seem not to accept this peculiar strategy, limiting the existential interpretation to LF formulae or ‘freezing’ already interpreted S-structures. However an appealing alternative approach is also conceivable. Actually, Kratzer (1988) and Diesing (1988 and especially 1989) have already independently proposed that in English the subjects of stage level predicates, i.e. exactly those allowing the existential interpretation as found in e.g. (69), can be reconstructed into a VP internal position at LF, even though occurring in Spec IP at S-structure. This position, probably identifiable with Spec VP, is likely to satisfy the lexical government conditions for empty categories either by virtue of the head V, a lexical governor, or of the head I: the latter could probably govern under coindexing a subject phrase lying in the Spec of its complement VP. In fact, it is suggestive that in German, where a comparable VP internal position can be occupied by subjects at S-structure as well, extraction of proper subparts of such subjects is grammatical, though remaining excluded for subparts of subject phrases lying in Spec IP (cf. Diesing 1989). This could be attributed to a difference in L-marking (in Chomsky’s 1986b terms) between the two positions, obviously correlated with a difference in ‘proper’ or ‘lexical’ government of the kind relevant for the licensing of empty heads. Therefore, the independent assumptions made by Kratzer and by Diesing seem to leave us, in interaction with our framework, with exactly the correct prediction we were aiming at: namely that the empty D of (69) will be in a properly governed position at the relevant
level of representation (LF) in English; it will not need to be filled by N-raising and will receive a default existential interpretation. Such possibility of lowering the subject into VP at LF being restricted to English, as claimed in the references cited, it is also correctly predicted that in other Germanic languages no existential bare noun will ever arise in Spec IP.

This very interesting solution to the problem raised by (69) faces a potential difficulty, however, in front of data like (68). If the contrast between (68)b. and (69)b. is solid and relevant (which is not completely beyond dispute), it seems to point out that raising of a lexical head noun to D plays a crucial role also in the grammaticalness of (69). Thus, in the present framework, appeal can be made to the Kratzer-Diesing proposal only by additionally assuming that the head government requirement must be satisfied at LF both in the actual (Spec IP) and the reconstructed (Spec VP) position, while only the latter would be used for interpretation. Of course, the concept of reconstruction presupposed by this assumption implies that the trace position contains an abstract structured copy of of the moved phrase. Under this conception, in Spec IP, i.e. the position inert for the interpretation of the determiner, the government constraint would be overcome by eliminating the empty D through raising, whereas in the copy of the phrase left in Spec VP for reconstruction the D would remain empty to be existentially interpreted and would be properly governed by a relevant head along the lines suggested above.

7. The concept of expletive article

Consider now the question of the interpretation of generic DPs in English. We have seen that such constructions are likely to exemplify a case of raising of N to D in LF. Thus, the LF of sentences (63) above, for example, should look like (70)

(70) a. [ beavers [ big e ]] build dams
   b. [ water [ fresh e ]] is often drinkable

whose resemblance to the assumed LF of singular proper names, as was exemplified in (62), repeated below, is obvious:

(62) [ John [ old e ]] came in

Since LF was shown to be the interpretively most relevant level for Ds and Ns at least in English, it is plausible that this formal similarity between the LFs of generics and
proper names corresponds to a similarity of interpretation. The hypothesis is quite appealing but it faces some difficulties which have to be removed: for we have seen that, while the syntax of these two types of expressions is virtually identical in English (they both stay in N at S-structure and raise to D in LF), it differs in Italian: generics must remain in N at S-structure, many proper names instead can raise (and actually have to if no determiner is inserted).

This appears to suggest that generics have some properties of proper names and some others of the normal specific usages of common nouns. In fact, like proper names, generics in English leave no place in D for an overt or empty operator (a lexical determiner or a default existential), making necessary some sort of referential interpretation. On the other side, given the interpretation that we have advocated in section 5, for the N position, namely that a head noun in such a position at S-structure defines a potentially infinite set which constitutes a natural kind, it is obvious that generically interpreted nouns, being expressions for kinds, must occur in N at that level. Hence, combining these two insights, we may conclude that the syntactic evidence provided by our analysis supports, for generics, a definition originally proposed by Carlson (1977b) for all English bare plurals, i.e. that they are proper names for kinds: thus, they are assigned as their reference the whole set of potentially infinite members (kind) defined by the head noun 41. In other terms, they can be regarded as universal concepts which acquire particular denotation 42.

The difference with real proper names is that the latter, in their specific articleless usage, seem instead to always refer to an entity intrinsically conceptualized as unique in the domain of discourse. This interpretive property of proper names is independently suggested by the fact that whenever they occur in the plural they lose

41 This analysis, however, does not exclude that so conceived generic DPs can provide the quantificational range to the special operator Gen or to Lewis’ (1975) adverbs of quantification, as often proposed in the literature (cf. Diesing 1989 among others). Such abstract operators could quantify over DP in a way similar to all, which in fact introduces generic DPs as well as more specific ones and proper names:
(a) All men
(b) All the men of this class
(c) All of John, Mary, and Bill
The presence of such operators might perhaps explain the relevant part of the scopal effects noticed for bare nouns by Delfitto and Schroten (1991) and apparently overlooked in Carlson (1977a and b).

42 It is not empirically clear whether generic phrases display the transparency and rigidity properties typical of raised proper names. However, it is not implausible that in sentences like
(a) A friend of mine would like to study dinosaurs
dinosaurs is necessarily de re and rigid. For proposals that simple generic nominals denoting natural kinds are actually rigid designators, cf. Putnam (1970) and Kripke (1972,1980).
their peculiarities and behave like common nouns: in particular in a paradigm such as (52), reproduced below,

(52) a. I met a (certain) Mary
    b. I visited the (two) Mary’s yesterday
    c. Every Mary I met in my life
    d. Mary’s are usually nice girls, according to my experience
       (generic reading)
    e. During my visit to the U.S. I met Mary’s everywhere
       (existential reading)

the bare occurrences of plural proper names (examples d. and e.) can only have the generic or existential reading and the only way for them to acquire a definite specific denotation is inserting the article as in (52)b. Such a characteristic is not particular of English but also of the Romance languages, with the predictable difference that the generic reading requires the definite article, bare nouns only being existentially interpreted:

(71) a. Ho telefonato alle (due) Marie
       I called up the (two) Maria’s
    b. Le Marie di solito sono brave ragazze
       Maria’s are usually good girls
    c. Ho incontrato Marie dappertutto
       I met Maria’s everywhere

In fact, English and Romance notoriously cease to contrast also with respect to plural family or geographic names, as e.g. in the following case:

(72)  I visited *(the) United States
       Ho visitato *(gli) Stati Uniti

This domain of facts is likely to suggest that a crucial empirical property of the ontology supposed by the semantics of natural language is that, abstracting away from events and states, it only contains two types of entities: single individuals (sometimes conceived of as consisting of stages or material subparts) and whole kinds, but no subsets of such kinds. Therefore, the only objects which may be designated by nominals are exactly these, issuing the two basic cases of directly referential
expressions: singular proper names and generics. All plural specific readings of DPs must thus be attained through quantification.

Thus, let us reformulate and clarify the semantic assumptions that our syntactic analysis of nominals seems to lead to: we can affirm that the N position is interpreted (at S-structure, if at all) as defining universal concepts, i.e. potentially infinite sets (kinds), which might be viewed as the necessary basis to construct the traditional Fregean notion of the ‘sense’ or descriptive content of a nominal expression; the D position, instead, determines the particular denotation of the argument, directly, by being assigned a reference, or indirectly, that is by creating a quantificational structure. The specific readings of common nouns are all obtained by letting the operator lexically present or understood in the D position quantify over the set defined by the N position. The specific definite reading of articleless proper names is obtained by raising the head noun to D at some level of representation and leaving the foot of the chain (i.e. the N position) uninterpreted. In this technical respect, proper names can be correctly claimed not to resort to their ‘sense’ (descriptive content) to be interpreted, but just to assume direct reference to the entity they designate. The ontology hypothesized before restricts this possibility to singular names.

Now, the interpretation of generics can be clarified in a much better way, particularly on the basis of the assumed syntactic behavior of the English ones: in fact, they also create a chain at LF between D and N, but both positions are interpreted: therefore reference is assigned through D to the complete set defined by N, that is the whole kind. In our adaptation of Fregean terms, sense and reference may coincide.

Thus, with English generics a chain relates two equally relevant interpretive positions. Since the meaning and distribution of Italian generics appears to be the same as in English, it would be implausible for Italian to resort to a radically different mechanism of interpretation. However, as we know, in Italian the D position cannot remain empty at S-structure unless the existential interpretation is required and, thus, some

43 Pronouns appear to differ from proper names in that they exhibit plural forms occurring in D (cf. section 5. above). Although we will not be concerned with that problem here, it is anyway interesting to remark that at least in the first and second person the so-called plural pronouns do not seem to exactly represent the plural of the supposed corresponding singular: e.g. we does not mean several I's but rather I and someone else. This is also reflected in the lack of morphological correlation between singular and plural forms of first and second person pronouns in many languages. Therefore the very notion of plurality might be inappropriate for such expressions. A similar line of reasoning cannot, however, be easily applied to the problem of third person pronouns (cf. also Benveniste 1966). It is also possible that pronouns and indexicals more generally are outside of the core ontology system sketched in the text.

44 This means that collective readings of plural DPs will have to be regarded as derivative effects, i.e. formed by constructing the set of the values assigned to the variable in the relevant quantificational interpretation.
morpheme must anyway be inserted as a determiner, namely the definite article. The same link between D and N established in English through an LF chain must then hold in Italian generics by means of a relationship between the head noun and the overt article. In analogy with the terminology used for the closely corresponding relationships established between maximal projections, we can say that the two relevant positions are related by a CHAIN (cf. Chomsky 1986a) in Italian and that the overt definite article used with generic DPs is an *expletive* one. Consider also that it is not the case that expletive articles in this sense are exclusive of Romance generics: in fact, we have seen that if a head noun is in the singular the non-mass interpretation can never be expressed through the empty determiner; therefore there are independent reasons to expect singular generics to be necessarily introduced by an article also in English whenever they express the count reading 45. The prediction is obviously correct:

(73) a. The lion has four legs
    b.*Lion has four legs
    c. Lion is not good to eat

The notion of expletive article just introduced significantly converges, apart from minor differences, with the analogous one independently arrived at, as the result of an articulated semantic analysis, in Vergnaud and Zubizarreta (1990, 1991) and can be constructed also from a slightly different perspective 46. Recall in fact that proper names have been shown to be universally able to achieve their specific definite reading without resorting to the quantificational structure which requires the D position to have substantive semantic content. Thus, those instances of the definite article sometimes employed to introduce certain unmodified proper names, as in Italian, need not be considered as having substantive semantic content but can rather be regarded as other instances of expletive articles, heading a CHAIN which alternates in some cases with

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45 In this sense, imposing the mass reading to singular head nouns must be a property of determiners empty at S-structure which becomes operative whenever the N itself is semantically interpreted, i.e. whenever such a position is used to describe a kind and to provide a potential quantificational range. In other words, the restriction is active also with generic expressions, where the D does not function as an operator and, therefore the range is not *actually* used. Only proper names, leaving the N position, uninterpreted may escape the constraint.

46 The intuition that the article employed in sentences like (73)a. actually has no real semantic content is anticipated in Ramat (1985, ch. 3 section 4).
the corresponding chain 47. Therefore, the alternations displayed in (22) above and reproduced below

(22) a. Gianni mi ha telefonato
    Gianni called me up
 b. Il Gianni mi ha telefonato
    The Gianni called me up

can be viewed as analogous to the well known ones exemplified in English structures like the following:

(74) a. Many people were killed
    b. There were killed many people 48

There is even a piece of evidence suggesting that the article introducing simple, unmodified proper names not only can but actually must be always understood as expletive: such evidence can be constructed in Italian, on the basis of an original observation by G.Cinque (p.c.). He pointed out that coordination of two NPs, one headed by an unmodified proper name and the other by a common noun, excluding the definite article, turns out to be sharply impossible in all dialects, thus contrasting with the results of (21)a. above:

(75) *La Maria e (mia) segretaria è arrivata in ritardo
    The Maria and (my) secretary arrived late

The otherwise surprising ungrammaticality of this coordination can be immediately explained by the assumption that the two NPs do not meet the requirement of identity in interpretation which seems to be necessary for coordination: in fact, according to

47 Correspondingly, the interpretation of such DPs does not differ from that of bare proper names: for instance, the semantic properties noted in section 5. as opposing names to real descriptions (obligatory transparency and rigidity) can be exactly reproduced for such proper names introduced by the article in Romance. It is not obvious, however, that this constitutes a genuine additional argument for the expletive nature of that article, since the same properties seem to hold for plural proper names, such as those of (72) above, where the article will be argued in the next section to be non-expletive.

48 It is highly theory-dependent and not empirically clear whether (22)b. and similar sentences can be taken to display the same logical form as (22)a. through an LF rule of 'expletive replacement' substituting Gianni for il. The rule would be analogous to that sometimes proposed (cf. e.g. Chomsky 1986a) to unify the logical forms of pairs like (74).
our proposal, *segretaria* must be a predicate instantiating a quantificational range for the article understood as an operator, whereas *Maria* does not need to do so. The data in (75) suggest an even stronger conclusion, namely that it is never allowed to do so. To put it otherwise, proper names resort to their descriptive content as least as they can, namely just in case they need a quantified interpretation in order to convey a meaning different from the one expressible through direct reference. Therefore, we are led to the hypothesis that in *all* structures like (22)*b*, the article fails to function as an operator, but is rather an expletive. Some comparative evidence corroborating the introduction of such a notion of 'expletive article', both on syntactic and morphological grounds, will constitute the main subject of the next section.

8. Typological evidence

There is one property of the English cluster discussed in section 5, which has not yet been explained and cannot apparently be reduced to parameter (61): it is the fact that English never tolerates the use of the definite article with plural and mass generics and singular proper names, exemplified in (38) above. Notice that such cases are exactly those which, in languages like Italian, were taken to display expletive occurrences of the article. The residual difference between the two languages could then be dealt with by the claim that English does not allow expletive occurrences of the article. However, as we have noticed before, there is at least one case in which an article can be regarded as expletive in English as well, namely with singular non-mass generics, such as that of (73)*a* above. To this we may add the case of generic substantivized adjectives, discussed in section 6. Therefore, the previous proposal appears too strong, but can be adequately weakened in the following way:

49 It should be easier to coordinate a common noun with a proper name clearly used as a predicative expression providing the quantificational range to a non expletive article. Though somewhat marginal and emphatic in style, some sentences appear to fulfill the prediction, as they sharply contrast anyway with the completely ungrammatical example (75) of the text:

(a)  ?A quell’epoca la Roma dei Cesari e urbe dell’orbe già non esisteva più
    By that period the Rome of the Caesars and capital city of the world already no longer existed

(b)  ?A quell’epoca la Parigi di Saussure, di Bréal e di Meillet e città guida della
    comparatistica europea era ormai solo un ricordo del passato.
    By that time the Paris of Saussure, Bréal, Meillet and leading city of European
    comparative philology was nothing but a memory of the past.

(c)  ?Il Dante della *Commedia* e massimo poeta italiano non è sempre facilmente
    riconoscibile nei versi della *Vita nova*
    The Dante of the *Commedia* and greatest Italian poet is not always easily
    recognizable in the poems of the *Vita Nova*

(d)  Questo Cicerone o Tullio, che dir si voglia, fu il più famoso avvocato romano
    This Cicero or Tully, as you prefer, was the best known Roman attorney.
(76) Expletive articles are licensed only as a last resort

where ‘as a last resort’ essentially means ‘if no synonymous raising derivation is available’.
Even rephrased in this weaker form, which seems to be correct for English, such a principle can hardly be regarded as universal and thus extended to Romance, at least to the varieties which accept structures like (22)b. In order to do so it should be assumed that pairs like (22) do not represent real language-internal alternations but rather sentences from distinct and complementary dialects, idiolects or styles, i.e., briefly, from two different competences. Whatever solution is eventually chosen, mainly on metatheoretical grounds, it must be recalled that it is anyway unavoidable to postulate some independent parametrization or complications of (76) in order to account for the distribution of expletive articles in various Germanic languages and dialects.
In the versions of Standard German spoken in Austria and Southern Germany, for instance, it is normally possible to use both plural and mass generics and proper personal names with or without the definite article, so that either variant of (77)-(78) appears to be acceptable, with essentially the same generic interpretation, and the same is true of pairs like (79):

(77) a. Biber bauen Dämme
    Beavers build dams
    b. Die Biber bauen Dämme
    The beavers build dams

(78) a. Milch ist weiß
    Milk is white
    b. Die Milch ist weiß
    The milk is white

(79) a. Hans ist angekommen
    Hans has arrived
    b. Der Hans ist angekommen
    The Hans has arrived

50 All varieties of German also seem to differ from English in that any type of adjectival modification prevents proper names from occurring articleless, i.e. from raising to D in LF. Cf. for instance:
(a) *Alter Hans ist angekommen
    Old Hans arrived
(b) Der alte Hans ist angekommen
    The old Hans arrived.
What is remarkable, from the viewpoint of our suggestion that a concept of expletive article be introduced in UG, is that the optionality of the definite article arises precisely in the two cases, generics and proper names, where such an article was predicted to be expletive. In addition, it seems that the same cluster of properties (the article is possible with generics and there are at least some dialects using it before proper names) can be found also in Scandinavian, e.g. in Norwegian, as pointed out by T. Taraldsen (p.c.). Therefore, the behavior of these other Germanic languages can be easily captured by parametrizing (76) in such a way as to allow optional licensing of expletive articles even in some languages and constructions which might dispense with them. In fact, no Germanic variety, as far as we know, accepts any of the data which motivate an N-raising analysis already in the Syntax, namely they all choose the 'English' value of parameter (61). This fact witnesses the independence of the two parameters from each other: English and German are both opposed to Italian with respect to raising of N in the Syntax, but differ with respect to the option of using expletive articles, which are allowed in some varieties of the latter language. In the framework of this analysis, the fact that no variety of English seems to ever admit a singular unmodified proper name introduced by the article turns out to be significantly related to the fact that no variety of English allows the article with plural or mass generics either.

G. Brugger (p.c.) observes that, typologically, such peculiarity of English of limiting the use of expletive articles in the manner described might significantly correlate with the lack of morphological expression of gender and number on the article. Actually, the rest of Germanic, Romance and Greek appear both to have some inflection for gender and number on the definite article and to display freer use of its expletive occurrences, in particular with proper names. If this generalization is indeed correct, it must follow from some more general principle: let us suppose e.g. that when not required as a 'last resort' in the sense specified above, an expletive article is

51 Cf. Brugger (forthcoming) for an analysis attempting to characterize exactly the distribution of the two types in German, mainly on the basis of the distinctions alluded to in fn. 28 above.

52 German, instead, in addition to having varieties which employ the article with generics and proper names, uses the definite article to introduce some names of countries (die Schweiz 'Switzerland', die Türkei 'Turkey') also in the Standard language. Again, a similar situation with respect to this cluster of properties seems to hold also in Norwegian. It is still unclear and makes an important objective of investigation whether this new difference between English and Continental Germanic can be typologically and theoretically related to the other one discussed at the end of section 6, and concerning the marked acceptability of an existential reading of bare nouns in Spec IP.
always ungrammatical (i.e. (76), the supposed English value of the parameter is universal) unless licensed by the need to spell out some abstract morphological content: e.g. gender or number features present in D as a result of (optional) agreement with the head noun. In more accurate terms, (76) should be replaced by a principle of UG like the following:

(80) The phonetic realization of the D position is licensed only if it expresses semantic content or grammatical features, or as a last resort.

The last two cases are those instantiated by the expletive occurrences of the article. By means of this hypothesis the distributional restrictions on the use of the article found in English but not in other Germanic languages (or in Romance) could be made to follow from independent morphological properties of the language. In any event, what is clear is that crucial reference to this special expletive status of the definite article is needed to account for the typology of its distribution in the languages so far examined; this fact already reinforces the proposal of introducing such a notion. However, some of the most interesting evidence supporting our introduction of the concept of expletive article comes from the morphology of determiners in certain Romance and Germanic varieties. Consider, in fact, that we have implicitly assumed so far that the traditional definite article of English and Italian is actually a morphological neutralization of two distinct syntactic entities: an expletive and a substantive, really definite, determiner, the latter functioning as an operator. This analysis naturally leads to the expectation that there may exist languages in which the real definite article may cease to be homophonous with expletive articles. This prediction appears to be borne out by the typological evidence. Notice, first of all, that in principle we have introduced two, slightly different, sorts of expletive article: one occurs with proper names and the other with generic expressions. While both are expletive in the sense of not having any substantive interpretation as semantic operators, they are likely to be contextually distinguishable on the basis of the semantic correlates of the theory of predication, along lines suggested by S. Rothstein (p.c.): the former type saturates its NP predicate only syntactically, since a proper name seems to lack any kind-denoting interpretation in the N position, i.e. any sense; therefore the expletive article of proper names relates an interpretively relevant position (the D one, for assignment of reference) to an interpretively irrelevant one (the N position). The type occurring with generics saturates a semantically relevant NP predicate, which denotes a kind, and relates two interpretively active positions (N and D), thus identifying sense and actual reference. The distinction can perhaps bear some analogy to that between $X^{\text{max}}$ expletives occurring in $\Theta$-marked and non $\Theta$-marked positions.
In fact also in the case of the saturation of a VP predicate by a subject phrase, two subcases can perhaps be distinguished: the syntactic saturation of a VP may or may not have a semantic correlate, namely Θ-marking of the subject, according to whether the predicate discharges a so called external Θ-role or not (cf. Rothstein 1983, 1990). In the latter case, the subject is said to be an expletive. However, another case of expletive subject is also found, when the predicate does assign an external role but such an interpretation must be transmitted to a phrase not occupying the canonical subject position (whether this is identified with Spec IP or even with Spec VP). The two expletive cases are likely to be instantiated by the following English examples, where they also happen to be lexically distinguished:

(81) a. *There* arrived few girls
   b. *It* struck me that he came

Articles can be classified like subjects, with respect to the theory of predication: they may semantically saturate an NP contributing their own meaning (as operators) in the specific usages of common nouns, may be pure expletives, only syntactically saturating the NP, in the most normal reading of proper names, and finally can instantiate an intermediate case with generics, semantically saturating the NP but without contributing any content of their own.

It is then plausible to expect that in addition to cases of total neutralization between the three types, as in all the relevant Italian varieties here considered, there may be languages where the types are all distinct or languages where the so-called intermediate (i.e. generic) article neutralizes with either of the two extreme forms. It is obviously of high significance for the present theory that at least the latter two cases are actually attested among the Romance and Germanic languages. The evidence that we want to propose, which is certainly very far from being dialectologically exhaustive, concerns Catalan and the variety of Frisian described in Ebert (1970). Many varieties of Catalan distinguish between two types of definite article, one which is exclusively used with personal proper names, masc. *en* / (more rarely) fem. *na*, and another one employed in all other circumstances, i.e. with common nouns in the specific and generic readings and with non-personal proper names. This fact gives rise to patterns like the following:

(82) a. El gos
    The dog
   b. En Pere
    The Peter
In our framework this suggests that at least one subcase of what we identified as the expletive article introducing proper names surfaces as morphologically distinct from the other expletive type (the one introducing generic expressions) and from the regular, specific definite article (as well as from further, non personal subcases of the expletive article of proper names, e.g. in the case of the names of rivers or mountains). Given what we said in section 7. about the intrinsic singularity which is required for the directly referential interpretation of proper names, another important prediction ensues from our analysis of the Catalan article, namely that the same proper names that take the expletive article en in the singular will have to resort to the regular article els if used in the plural. For we have seen that if a name presupposes the possibility of non-singular reference it must always be interpreted quantificationally, i.e. like a common noun, and its article cannot be expletive any longer but rather must have semantic content as an operator. This crucial prediction is also correct, as was pointed out by V. Escandell (p.c.):

(83) a. *Ens (dos) Peres
     The(expl.) (two) Peters
 b. Els (dos) Peres
     The (two) Peters

This fact suggests that the article en of Catalan should not even be described as simply being 'the article of proper (personal) names’ but rather of 'proper (personal) names in the singular': such an apparently complex and idiosyncratic restriction follows naturally instead from the analysis presented here which relates the ungrammaticality of (83)a. to that e.g. of (72), repeated below:

(72) I visited *(the) United States
    Ho visitato *(gli) Stati Uniti

An analogous prediction arises and is correctly borne out in the case of restrictive relative modification of proper names; as exemplified in the contrast of (84), which exactly parallels that of (51)a.-b. of section 5. above, such structures must in fact resume the regular definite article:

(84) a. El Joan que coneixia ja no existeix
     The Joan that I used to know no longer exists
 b. *En Joan que coneixia ja no existeix
     The(expl.) that I used to know no longer exists
(51) a. Il (simpatico) Gianni che conoscevo non esiste più  
    The (nice) Gianni that I used to know no longer exists  

b. *Gianni (simpatico) che conoscevo non esiste più  
    Gianni (nice) that I used to know no longer exists  

Although such facts already provide interesting morphological support for the notion of expletive article, it turns out that the strongest evidence of this type comes from the analysis of a Germanic language, namely Frisian, at least the dialect spoken in the island of Föhr. In fact, Ebert’s (1970) description of such a dialect, although not cast in the same terminological and theoretical framework as our analysis, provides sufficient data and discussion to allow us to summarize her generalizations in the following manner: the Föhr dialect displays two different types of non-indefinite article, one occurring only with definite specific nominals in both numbers (call it the D-article, given its morphological form, namely di, det, det for the three genders in the singular, plural dön for all genders), the other systematically found with proper names and with all types of generic phrases, i.e. plurals, mass singulars, count singulars and apparently substantivized adjectives (call it the A-article, after its morphological form, a, at, at in the singular, a in the plural). Here is a list of examples, all found in Ebert’s work:

(85) a. A Türkäi  
    The Turkey  

b. At weeder  
    The weather  

c. Me a deensken san we lewen frinjer weesen  
    With Danes we have always been friends  

53 The word for ‘weather’ is apparently understood as a mass term in Frisian, probably owing to the fact that it is not used in the plural. It must be recalled, however, that the use of the expletive article is extended in the dialect of Föhr to certain common nouns, whose uniqueness in the domain of discourse is contextually achieved through previous unambiguous mention or is especially salient due to their semantics. Among the latter expressions, termed by Ebert (1970) ‘situative Unika’, are e.g. the words for ‘sun’, as unique in the solar system, and those for charges occupied by only one person in a relevant domain, such as the terms for ‘parishioner’ or ‘mayor’ in a village. The extension of the syntactic and logical behavior of proper names to such situative Unika might be an area of idiosyncratic variation potentially available to every language, perhaps manifested in Romance by the raising to D of those common nouns mentioned in fn. 20 above.
These cases exemplify the (obligatory) use of the A-article with proper names, generic mass singulars and generic plurals respectively. (81)c. is also likely to instantiate at the same time a case of a generic plural substantivized adjective, given the use of the adjectival word *deensken* lit. ‘Danish’. Interestingly enough, certain restricted proper names return to behave like common nouns, i.e. require the D-article and thus may be taken to suggest another overt parallel to examples like (51)a. of section 5.: 

(86) Det Moskau faan di tidj  
The Moscow of that time

Finally, other examples provided by Ebert show that the A-article must be used also with singular count nouns in their generic readings:

(87) a. A aapel fäält äi widj faan a buum  
The apple does not fall far away from the tree (a well known proverbial expression)
b. Me a tsuch  
With the train

although a few other complications intervene in the Frisian article system here in question, this set of data is sufficiently clear to allow us to attempt an interpretation in the theoretical terms that we have provided. In fact, the Föhr situation can be exactly described as one in which the two types of expletive articles, that of proper names and that of generic expressions, are morphologically neutralized in the A-form, while the substantive definite article takes the distinct D-form, with only its specific reading remaining available.

Thus, Frisian is likely to fulfill in the most straightforward way the second neutralization expectation sketched above. What is even more remarkable, anyway, is the fact that the use of the A-article in this Frisian dialect could not be trivially described as corresponding to the English use of the empty determiner, since the latter

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54 Also such obligatoriness of the use of the expletive article with proper names in the Föhr dialect confirms the conclusion, arrived at in the previous section, that singular (unmodified) proper names are *never* understood as quantified expressions of generality but *always* as directly referential expressions.

55 Ebert (1970) also mentions the existence of other Frisian dialects where roughly the A-article is just used with proper names and singular generics and the D-one for specific and plural generic common nouns. Perhaps these varieties reflect an intermediate situation in which the expletive article only has a singular morphological expression and in the plural is neutralized with the regular definite one.
in English fails to replace the in two cases where Frisian appears still to employ its a: the cases of generic adjectives and that of singular count generics. However, we have provided independent evidence that the definite article of English is an expletive in precisely these two cases and that its occurrence is due to the fact that such two structural configurations would disallow the count reading, were it not for the non-emptiness of the D position. Now, since the Frisian A-article is an expletive with phonetic content, no trouble is predicted by our analysis to arise when it is employed even with substantivized adjectives and with singular count nouns. Therefore, Ebert's Frisian data here presented seem to provide one of the subtlest and most relevant sources of evidence in favor of the whole approach proposed in this paper.
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