

Bare Predicates.  
Between Syntax and Semantics

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To my granfather Vittorio.

**Some teacher** *So, how about (4)?*

**Some student** *It's 'ill-formed'.*

**Same teacher** *Oh, finally! I was waiting for a wrong answer!*  
*Can you explain this better?*

**Same student** *No.*

**Same teacher** *Of course not. What you probably wanted to say is that "it's 'false'".*  
*(4) is a 'perfectly well-formed lie'*



### 1.1 Introduction

Many Western European languages allow bare singular nouns to appear in predicative position with or without a determiner. An example is given in (1.1 a - 1.1 b), below.

- (1.1) (a) *Gianni è avvocato* (ita)  
Gianni is lawyer  
"Gianni is a lawyer"
- (b) *Gianni è un avvocato*  
Gianni is a lawyer  
"Gianni is a lawyer"

This phenomenon is about a meaning difference that in English surfaces slightly differently. The English counterpart emerges with predicates that refer to unique roles (1.2 a), but not with the other predicates. This is captured by the contrast shown in the examples below.

- (1.2) (a) *Obama is president*  
(b) ?? *Obama is politician*

- (1.3) *Obama is a president / a politician*

There are at least two main reasons why we are interested in this phenomenon. First of all, there is an issue of meaning, and the spontaneous question of the semantic difference between (1.1 a) and (1.1 b). Second, optionality, especially when not register-dependent, is an indicator of an interaction between syntax and semantics. Essentially, what we are interested in is the syntax and the semantics of bare predicates. In other words, where and how does language encode what can be described as the “ability of some nouns to occur bare in predicative position”? This question can be restated as “Is the phenomenon of bare predicates a consequence of the inner architecture of some nouns?”

Answering this latter question has, first of all, major consequences on the assumptions that have to be made with respect to the language ontology. Secondly, answering this question equals understanding if the nouns that usually occur as bare predicates have some particular property that permits them this behavior. If this is the case, then one needs to postulate the existence of a lexically defined sub-class of nouns that are different from the other nouns. This is not a trivial assumption. In the literature (discussed in the next chapter), there is a very pervasive type of approaches which propose that the fundamental distinction needed to explain the distribution of bare predicates is between classes of predicates with have different lexical properties. In other words, predicates differ in terms of some internal property that allows or disallow their occurrence as bare predicates. This is the kind of approach that, in this thesis, we want to reject. Adopting such lexicalist view of the bare predicate phenomenon has four main consequences. First of all, these predicates have to be defined in some way that ultimately predicts their syntactic behavior (i.e. their bareness). Secondly, the way these nouns are different must capture the semantic difference that sets them apart from the other nouns, or else, the lexical distinction would not have a reason to exist. Thirdly, this difference should predict the different interpretation of the same predicate when it appears bare and with a determiner. Finally, any analysis that successfully accounts for this first three points should also explain why, if certain contextual requirements are met, every noun can appear in predicative position, without a determiner. This last point relies on an observation which is often glossed over in the discussions about bare predicates. The traditional way in which bare predicates are discussed is by beginning with the descriptive generalization that the nouns that refer to professions, roles, social positions, etc. can appear in predicative position without a determiner. These are nouns that generally ascribe properties to humans, e.g. *professore* ‘professor’, *avvocato* ‘lawyer’, *studente* ‘student’, *presidente* ‘president’, *dentista* ‘dentist’, and so on. These nouns contrast with the other nouns, those that do not refer to professions

and roles, such as *uomo* 'man', *bambino* 'child', *eroe* 'hero', *profeta* 'prophet', etc. because the latter group occurs bare with more difficulties. In the picture obtained this way, there is a first divide between human and non-human properties, in that non-human nouns are, in most of the languages that we consider, never allowed as bare predicates. Then there is a second divide that sets apart those nouns that refer to professions and roles, and those that refer to other (human) properties. Having said this, it would seem intuitive to group the profession-like nouns in one sub-class and try to capture their similarities in some way.

Many accounts vary with respect to how this lexical class is defined. The summary and discussion of these accounts is the object of Chapter [2]'s [II] Part.

The most immediate problem with the picture we have sketched above arises when sentences like (1.4) need to be accounted for.

- (1.4) *Gianni è gatto (nel film / nel gioco / nello spettacolo)*  
 Gianni is cat (in the movie / in the game / in the play)  
 "Gianni is a cat (in the move / in the game / in the play)"

Given a lexical approach, cases like (1.4) are accounted for in terms of coercion of the noun, or of a reanalysis of some sort. However, there is a different way to approach the problem. Earlier we said that the issue of meaning could be expressed as accounting for the semantic difference between (1.1 a) and (1.1 b). When the meaning differences between bare and determined predicates have become clear, we will understand what kind of properties are expressed by the same noun, when it occurs as a bare or a determined predicate.

The main reason for choosing a non-lexical approach is grounded on reasons of interpretability. We already said that interpreting a bare noun in predicative position is always possible, but it is absolutely crucial to understand what is the meaning alternation between the bare and the determined predicate. The difficulty here lies in the fact that often, in spontaneous speech, there is no relevant difference in the way the bare and the determined predicate are used. This depends on the fact that there is no difference truth-value difference between a sentence containing *P* and one containing *aP*. Clearly, cases in which no contrast is registered are not particularly useful. We will show cases in which, given the right context, the bare predicate is the only acceptable way to express a given concept. Interestingly, this holds not only with the predicates that are already expected to occur bare, but also with predicates that, according to the lexicalist view, should be not included in the lexical class, e.g. *uomo* 'man' and *donna* 'woman'.

A remark worth stressing concerns grammaticality judgments. We disagree with assigning straightforward ungrammaticality to sentences like (1.5).

- (1.5) ?? *Gianni è bambino / spia / eroe*  
 Gianni is child / spy / hero  
 "Gianni is a child / spy / hero"

We will argue at length why it is crucial to understand that sentences like (1.5) are not ungrammatical. The problem is not a problem of grammaticality but one of interpretability. For simplicity's sake, we will mark sentences like (1.5) with a double question mark. Note, however, that the problematic aspect of (1.5) is again different from the one of (1.6).<sup>1</sup>

- (1.6) ??/\* *Ciò su cui sto scrivendo è quaderno*  
 That on that am writing is notebook  
 "[intended] What I am writing on is a notebook"

The contrast between (1.5) and (1.6) is clearly related to what we mentioned above, namely the fact that bare predication is more pervasive when the predicates ascribe properties to humans, rather than inanimate objects. To elaborate on this issue, Norwegian is crucial because, in this language, bare predicates are more pervasive in than in the other languages; also, because Norwegian allows some non-human bare predicates, such as the one in (1.7).

- (1.7) *Dette teltet er sykehus* (nor)  
 this tent<sub>def</sub> is hospital  
 "This tent is a hospital"

What this Norwegian phenomenon shows is that some non-human bare predicates are allowed. Not only, it also shows that when they are allowed, the meaning variation between bare and determined predicates can be described in the same way in which we describe the variation that, in the other languages, we observe for human predicates.

The direction that we will pursue is one in which the phenomenon of bare predicates reveals the interaction between the syntactic component and the semantic

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<sup>1</sup>To be precise, the sentence in (1.6) is still interpretable, but only with a massified reading of *quaderno*, i.e. applying Pelletier's Universal Grinder. The mechanisms that allow the interpretation of (1.6), as opposed to the one allowing the interpretation (1.5), yield two different semantic effects. The possible correlation between the two mechanisms is a line we did not pursue in this thesis, but is definitely worth investigating.

component of grammar. Once the contrast in meaning is clearly defined, two different semantic representations will be shown to correspond to two different syntactic structures so, resorting to a lexical class of nouns with some specific properties will not be necessary.

## 1.2 Bare Arguments and Bare Predicates

We see the phenomenon of bare arguments and the phenomenon of bare predicates as two distinct phenomena that should not be combined, since they have a distinct comparative and interpretative dimension. However, treating argumental determinerless nouns as a distinct phenomenon from the predicative ones is not the only approach (cf. Munn and Schmitt for a unified approach), but it is the stand taken in this thesis. The reason is essentially that, even within one language, predicative and argumental determinerlessness are not parallel phenomena. Italian is a language that shows subject-object asymmetry, and determinerless nominals in argument position must be governed (e.g. appear in post-verbal position). However, Italian determinerless predicates are extremely more frequent than English ones, which undergo the uniqueness restriction we mentioned earlier. In English, in turn, argumental determinerless nouns can occur also in subject position. We agree with Zamparelli (2005) who treats bare arguments and bare predicates as, substantially different phenomena. He points out that argumental nouns increase their acceptability when modified and are register-sensitive while predicative nouns have restrictions on the way they can be modified, and they are not register-sensitive. Clearly, this is not a definitive argument for claiming that these two are indeed two entirely distinct phenomena, so it is important not to overlook possible connections and to start off from a general background of the much better known universe of determinerless arguments.

**Terminological distinctions** The terminology changes from account to account. This is what the reader should keep in mind: “bare nouns” (BNs), “bare arguments” (BAs) and, originally, “bare plurals” (bare predicates) are terms that are standardly used to refer to the same phenomenon, i.e. the occurrence of bare nouns (singular or plural) in argumental position. “Bare predicates” is the way we usually refer to the bare nouns in predicative position. However, some accounts (e.g. Munn and Schmitt, 2005) are worked-out under the assumption that the same analysis should encompass both the phenomenon of bare arguments and the one of bare predicates;

for this reason, everyone who adopts the same view does not mark a terminological distinction.

In this thesis we tried to respect the original terminology of the accounts that we discuss. Everywhere else, we distinguish between “bare arguments” and “bare predicates” (which are both “bare nouns”). We distinguish between “bare singular” and “bare plural” only when it is important to highlight a contrast.

The grammaticality judgement used in this thesis are the following:

?	hard to interpret
??	harder/impossible to interpret
*	ungrammatical
#	interpretable but odd
%	register or dialect

All the languages in the examples are coded according to the Ethnologue system.

## CHAPTER 2

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### Background on Bare Nouns

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This chapter is devoted to the discussion of the background literature on the topic of bare predicates. However, before discussing bare predicates, we will provide some background information on bare arguments. The reason is that, since in this thesis, bare arguments and bare predicates are seen as two distinct phenomena, in what follows will be provided a summary of the information necessary to distinguish the two planes. Part [I] of this chapter begins with a brief overview of the seminal work of Carlson (1977), followed by two prominent analyses of bare arguments (or simply bare nouns, BNs), also from a cross-linguistic perspective. The first is a so-called *neo-Carlsonian* account, namely the system presented in Chierchia (1998). Then, we will discuss the account presented in Longobardi (2001). This chapter's Part [II] is dedicated to the discussion of the literature on bare predicates.

### Part overview

Part [I] of this chapter, is devoted to the discussion of bare nouns is argument position. We start by introducing the work of Carlson (1977). Then, we will review two of the two important studies on bare arguments. In Section [2.3], we introduce Chierchia's (especially 1998) idea, which is based on the concept of semantic variation. According to Chierchia, such variation is to be encoded by means of a system of semantic parameters. In a nutshell, all the differences depend on differences in the denotation of nouns. In this account, the view of the syntax-semantics interface

is rather flexible, in that the category D is not projected. All the variation happens in the semantics. This way of approaching the issue stands opposite to the one put forth by Longobardi, and that we discuss in Section [2.4]. Longobardi (especially 2001) presents a system where the variation is seen as a syntactic phenomenon and claims that yet another locus of variation is not needed.

## Part I

### Bare Nouns in argument position



## 2.1 Bare Arguments

In many languages that have articles, nouns can appear in argument position without overt determiners, with various degrees of pervasion. Consider, for instance *dogs* or *boys* in the examples below.

(2.1) *Dogs bark*

(2.2) *Dogs are in the garden*

(2.3) *Mary likes boys*

(2.4) *Mary talked to boys from that school*

Most of the constraints that seem to regulate their distribution, as well as their semantic properties, have been observed and studied thoroughly in the latest decades and several things are well known about these nominals. Languages vary in the amount of nouns they allow in such positions (e.g. in French, they are essentially banned; Spanish and Italian allow them less than English, and Norwegian seems to allow them more than English, French, and Italian).

These nominals are more easily allowed in object position than in subject position. Italian is a typical language that shows this so-called “subject-object asymmetry”, and it is shown in the contrasting examples (2.5 a) and (2.5 b).

(2.5) (a) *Ho mangiato carote* (ita)  
 have eaten carrots  
 "I ate carrots"

(b) \**Carote erano nel piatto*  
 carrots were in the plate  
 "[intended] There were carrots on the plate"

When in argument position, nouns with a mass reading (2.6 a and 2.7 a) and plurals (2.6 b and 2.7 b) occur determinerless more easily than singular count nouns (2.6 c and 2.7 c), as shown by the examples below.

(2.6) (a) *I ate bread*

(b) *I ate carrots*

(c) \**I ate carrot*

- (2.7) (a) *Water damaged the carpet*  
 (b) *Cats damaged the carpet*  
 (c) \**Cat damaged the carpet*

## 2.2 Carlson's Analysis

The first analysis, and the necessary background to this topic is Carlson (1977). Carlson shows that the semantics of English determinerless plural nouns (bare plurals) is crucially different from the semantics of other quantified expressions. Carlson shows that it cannot be argued that bare plurals contain an implicit quantifier that is ambiguous between the existential quantification (e.g. quantified with *some*) and the universal quantification (e.g. with *all*), whose interpretation is decided contextually. The reason is that the range of the possible readings of the bare plural, in a sentence like (2.8)<sup>1</sup>, is not a subset of the readings obtainable via the use of quantified expressions.

(2.8) *Dogs are common*

(2.8) does not mean that “some dogs are common”, nor does it mean that “all dogs are common”. We can observe the same phenomenon happening in (2.9).

(2.9) *John didn't watch movies this week*

(2.9) can only mean that “John hasn't seen any movie at all, this week” but not that “this week, there are some movies that John saw (and some others that he missed)”. On the other hand, this latter reading is available when *movie* is existentially quantified.

At a deeper level of analysis, the connection between bare plurals and the important distinction between a “generic reading” and an “episodic reading” becomes crucial. This can be shown in (2.10).

(2.10) *Firemen are brave*

Carlson uses (2.10) to point out that, pragmatically, the sentence should be interpreted existentially (i.e. “Some firemen are brave”), but it is, in fact, interpreted universally (i.e. “All firemen are brave”). The ambiguity between the universal and

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<sup>1</sup>(2.8) and the following examples are from Carlson (1977).

the existential reading is allowed or ruled out by properties of the predicate (e.g. meaning, verbal aspect, etc.).<sup>2</sup>

Finally, Carlson establishes that (most) bare plurals refer to “kinds”. The reason why it was impossible to translate (2.8), repeated below, with any quantified expression lies in the fact that the denotation of the bare plural is not the same as the denotation of any quantified expression.

(2.11) *Dogs are common*

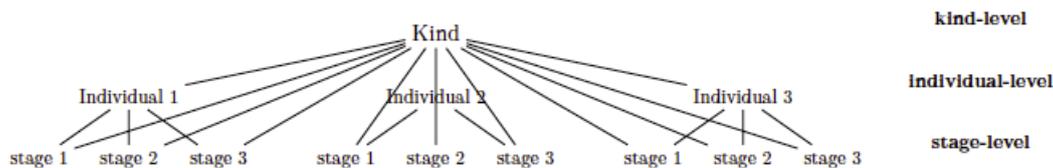
“Kinds” are inherently plural objects constituted by a particular sort of individuals that are parallel to the type of objects that normally embody the references of pronouns and names. The ontological nature of the “kinds” that Carlson discusses, is not made particularly explicit but, roughly, they correspond to “regularities occurring in the world”. They can be “natural” (e.g. rocks, plants, animals, etc.), “artificial” (e.g. bottles, houses, lipsticks, etc.), or expressed by modified nominals (thus corresponding to some sort of complex object, like *three-headed dogs*); also, kind-referring nouns are shown to display regularities in the way they behave syntactically.

As we mentioned already, the alternation between the universal and the existential reading depends on which predicate the bare noun combines with. Predicates can denote properties that are “stable” (“Individual level”, or “I-level”) or “transient” (“Stage level”, or “S-level”). A way of understanding the “slicing” of a property is to visualize a “kind” such as an umbrella under which lie all those “stable” properties that are normally associated with it. Examples of an I-level property could be, for instance, the property of *having wings*, for airplanes. Underneath each I-level property, as spatial-temporal fragments, we encounter those properties that hold true of an entity, at a specific time or space, but not necessarily throughout its entire existence. An example of an S-level property could be, for instance, the property of *being delayed because of a snowstorm*.

This is represented in the classic scheme, reported below, where a “kind” is linked to each I-level property and to each S-level property. Each S-level property is also independently linked to the S-level properties below them, in a cascade-like fashion.

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<sup>2</sup>There are several other reasons for which Carlson argues that the interpretative properties of bare plurals cannot be subsumed under those of the indefinites (e.g. bare plurals and indefinites show different behaviors in the contexts of “deletion”, “pronominalization”, etc.), which we will not discuss here.



To see how this works, we need to imagine a “kind” (*musician*, for instance) and three entities that are contained in such “kind”, say 1, 2 and 3. Now 1, 2 and 3 are all linked to the kind-*musician* but each of the three can have different “stages” (pertinent to their belonging to the kind): they can all *perform*, *compose music* and *sign autographs*. These activities can be proper of the above-mentioned individuals and of the kind-*musician*, hence the double connection in the scheme.

For Carlson it is possible to produce an interpretable sentence where a bare plural is interpreted as a “kind”, at the same time generically and existentially, as shown in (2.12).

(2.12) *Musicians are everywhere, are poor, and have been performing last night*

Even though sentence (2.12) is slightly marked, *musicians* in (2.12) receives the “kind” interpretation (the class of musicians), a “generic” reading (most musicians are poor) and the stage-level reading (some musicians performed last night).

There is one direct consequence to the introduction of kinds: the ontology of our semantics is enriched with another type variables and constants ranging over them. So, formally, this indicates a shift towards a two-sorted logical language.

## 2.3 A semantic account of Bare Nouns

Chierchia’s (1998) goal is to create a system able to capture the ways in which languages refer to kinds, proceeding from Carlson’s proposal that kinds are denoted by bare plurals. Creating such a system thus essentially amounts to defining a theory of the cross-linguistic variation of bare nouns. This influential account has a very specific (and not uncontroversial) ontology since its grounding assumptions are rooted in the concept of, and a mechanism of, *semantic parametrization*.

This overview will proceed as follows: first, we will present the preliminary bases of the system, such as the assumptions about mass and count nouns and how these relate to the concept of a semantic parameter in Chierchia’s analysis. Next, we

address the kind-property distinction together with the technical machinery to turn a kind into a property and the other way around. Subsequently, we will discuss in detail some of aspects of the model presented by Chierchia. The reader who is familiar with this account can continue reading from Section [2.4].

### 2.3.1 Basics

**Mass and Count** Plural forms of count nouns denote *pluralities*. The difference between a plural noun and a mass noun is that the latter has a built-in plurality. Mass nouns denote all the individuals of a set and all the pluralities, but their atomic components are uncountable.

**The definite article** The definite article is treated as the Frege-Russell iota operator  $\iota$ , which is a maximality operator. Chierchia outlines the functioning of  $\iota$  with the use of a lattice-theoretic approach where the set of individuals is a complete free-join semilattice<sup>3</sup> generated by its atoms. When applied to a set,  $\iota$  returns the largest member of that set (i.e.  $\iota TABLES$  = the largest plurality of tables, and  $\iota TABLE$  = the only table). Such semantics can apply to masses in the same way.

**Properties and Kinds** Kinds are seen as spatiotemporally discontinuous regularities that occur in nature. Yet, it needs to be noticed that being a 'natural kind' does not necessarily mean to be 'biologically' defined: kinds can be also human artifacts (e.g. *chair*) and other types of 'well established' properties (e.g. *associate professor*) as long as they consistently show regular behavior. Type-theoretically, kinds are analyzed as being elements of type  $e$ , derived from properties of type  $\langle e, \langle s, t \rangle \rangle$ . Being entities, kinds can be used as syntactic arguments in the same way that proper names can. NPs can denote either properties or kinds, and it is a semantic parameter that defines whether a language's NPs denote one, the other, or both. For Chierchia, if a language allows NPs to denote kinds, then these NPs can be used directly as arguments of verbs, without the projection of a full DP.

The correspondence between kinds and properties is dealt with by the "up" operator ( $\cup$ ) and the "down" operator ( $\cap$ ).  $\cup$  maps kinds onto predicates (predicativization), and  $\cap$  maps properties onto kinds (nominalization); these operators apply before kinds or properties apply to their arguments.

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<sup>3</sup>A semilattice is a partially ordered set of elements and an ordering  $A, \preceq$ . Given that the supremum of any elements  $\{a, b\}$  exists, the properties of a join semilattice are reflexivity, antisymmetry and transitivity.

**$\cup$ , or the predicativization of kinds** When  $\cup$  is applied to a kind, it yields the set of all singular and plural individuals satisfying that property. If  $\cup$  is applied to a kind which is not instantiated in the world of evaluation, its application will yield falsehood/undefinedness.

**$\cap$ , or the nominalization of properties**  $\cap$  is a partial function that applies to properties: a kind can be created from a property by taking the largest member of the extension of the property. If  $\cap$  is applied to a property that fails to identify a class with a sufficiently regular behavior,  $\cap P$  is undefined.

### 2.3.2 The Nominal Mapping Parameter

The *Nominal Mapping Parameter* (NPI) is the essential characteristic of Chierchia's account: the way of capturing the way languages refer to kinds. The basis is a flexible parametrization in order to account for the way the interpretations of nominals are mapped onto the syntactic category N, and N's phrasal projection. The parametrization involves two binary features:  $[\pm arg]$  and  $[\pm pred]$ . Iff, in a language, elements of category N are  $[+arg, -pred]$ , they can function as arguments, i.e. they are elements of type e (objects or kinds). Iff elements of category N are  $[-arg, +pred]$  they can function as predicates, thus elements of type  $\langle e, t \rangle$  (sets). If elements of category N are  $[+arg, +pred]$  they can be either one or the other. In no language can elements of category N be  $[-arg, -pred]$ , because they would not be able to realize either as arguments nor as predicates.

**$[+arg, -pred]$  languages** These are languages in which N/NPs are  $[+arg, -pred]$ , bare NPs can be arguments of verbs; when D (e.g. a quantifier) combines with a NP, it must resort to a silent  $\cup$  to be able to apply to a kind. The application of  $\cup$  will give a 'mass' denotation: a direct consequence is that all nouns will be mass, hence no makers of plurality are predicted, nor will such nouns be countable, unless quantized by means of some classifier-like element. This does not entail that in such languages there is no mass/count distinction, indeed sometimes this emerges in the choice of the classifier. Examples of languages belonging to this group are Chinese and Japanese.

**$[-arg, +pred]$  languages** These are languages in which N/NPs are  $[-arg, +pred]$ , every noun is a predicate, hence bare NPs can never be arguments of verbs but determiners can combine with NPs directly. A morphological distinction for singulars and

plurals is predicted to exist, as well as a mass/count distinction; count nouns in such languages can be counted without resorting to classifiers. Examples of languages of this sort are French and Italian. However, the two diverge because in French, bare plural nouns are strictly prohibited, whereas in Italian bare plurals can occur in object position. Assuming that in  $[-arg, +pred]$  languages an NP cannot be used as an argument without projecting D, Chierchia postulates that languages like Italian can project a phonologically null D ( $\delta$ ) that needs to be licensed by a close, suitable head.

**$[+arg, +pred]$  languages** These are languages in which N/NPs are  $[+arg, +pred]$ , nouns can freely be arguments or predicates, that is to say that they can either denote kinds or predicates. As kinds, nouns can freely occur bare. However, two scenarios are to be distinguished: when a noun is a kind, it must be predicativized by  $\cup$  (i.e. it will have a mass denotation); when a noun is predicative, D can directly combine with it; and if it is a mass or a plural, it can be turned into a kind via  $\cap$  application. Languages of this sort are English (as most Germanic languages) and Slavic languages. However, English and Slavic languages diverge in that Slavic languages lack articles. For this latter family, the predictions are that, unlike what happens in English, there is no article which could block the available type-shifting operations.

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

$[-pred, +arg]$	<i>every (lexical) noun is mass</i>	$\Rightarrow$	<i>e.g. Chinese</i>
$[+pred, +arg]$	<i>bare arguments allowed</i>	{	<i>no articles</i> $\Rightarrow$ <i>e.g. Slavic</i>
			<i>articles</i> $\Rightarrow$ <i>e.g. Germanic</i>
$[+pred, -arg]$	<i>bare arguments disallowed</i>	{	$\delta$ $\Rightarrow$ <i>e.g. Italian</i>
			<i>no <math>\delta</math></i> $\Rightarrow$ <i>e.g. French</i>

At this point, a natural question to ask is “What are the type-shifting operations and how do articles block each of them?”

### 2.3.3 Type Shifting and Blocking Principle

Chierchia adds some extra operations (i.e.  $\cup$  and  $\cap$ ) to the basic set of type-shifting operations designed by Partee (1987). The operations shifting to and from the two argumental elements types  $e$  and Generalized Quantifiers (GQs) are:

Lift:  $e \rightarrow GQ$  and Lower:  $GQ \rightarrow e$ .

The operations shifting GQs to and from predicates (types  $e, t$  and  $e, e, t$ ) are:

BE:  $GQ \rightarrow \langle e, t \rangle$  and  $\exists: \langle e, t \rangle \rightarrow GQ$

Finally there are four types of operations shifting elements of type  $e$  to and from predicates:

ID:  $e \rightarrow \langle e, t \rangle$  (the identity function)

$\cup: e \rightarrow e, t$  (from kinds to predicates)

$\cap: \langle e, t \rangle \rightarrow e$  (from predicates to kinds)

$\iota: \langle e, t \rangle \rightarrow e$  (from a set to one of its elements)

Chierchia introduces the Blocking Principle in order to account for the cross-linguistically attested fact that some language-specific device takes precedence over more general devices. Essentially, a language that has overt (in)definite articles cannot use covert operators that mean  $\iota$  and  $\exists$ . English, for example, can only resort to  $\cup$  and  $\cap$  because there is no corresponding overt element. Slavic languages can resort to the full set of covert operations, because they do not have articles blocking them. The Blocking Principle is replicated in (2.13):

(2.13) *Blocking Principle (“Type shifting as last resort”)*

For any type-shifting operation  $\tau$  and any  $X$ :

$*\tau(X)$

if there is a determiner  $D$  such that for any set  $X$  in its domain,

$D(X) = \tau(X)$

### 2.3.4 Kind derivation or ambiguity

Let us first see the mechanisms through which Chierchia derives kinds from properties; then, in the second part, we will present the discussion of some scopal effects, and see how some additional data coming from Romance languages can be accounted for.

**How to derive a Kind** Chierchia assumes the existence of an operator that turns an object-denoting expression from kind-denoting one, if an object-taking predicate requires it. This is stated in (2.14):

(2.14) *Derived Kind Predication (DKP)*

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

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

There are two components to the DKP: the introduction of the  $\cup$ -operator, and the introduction of  $\exists$ , which can be substituted by alternative means of quantification over the property, if elsewhere available. This mechanism applies to kinds as well, giving (2.15 b) as the interpretation of (2.15 a):

(2.15) (a) *Lions are ruining my garden*

(b) ruining my garden ( $\cap lions$ )  $\Leftrightarrow$  (via DKP)

$$\exists x [\cup \cap lions(x) \wedge ruining\ my\ garden(x)]$$

Note that the crucially 'lions' is initially introduced as a property and then converted into a kind ( $\cap lions$ ) to fit the argumental position. This point is particularly important. Subsequently it is turned back into a property via the application of  $\cup$  (i.e.  $\cup \cap lions$ ).

**DKP or ambiguity** In *Characterizing Sentences* (CS) Chierchia adopts Chierchia (1995) and Krifka et al. (1995)'s analysis of the generic operator  $Gn$ .<sup>4</sup>

(2.16) (a) *That kind suckles its young*

(b)  $Gn\ x, s [\cup \cap that\ kind(x) \wedge C(x, s)] [suckles\ its\ young(x, s)]$

$C$  is a context-dependent variable that essentially restricts the domain of  $Gn$  to appropriate individuals and situations.

One argument in favor of the DKP is that assuming such mechanism makes unnecessary the assumption that BNs are ambiguous between a kind reading and an indefinite object-level reading. The indefinite object-level reading is the reading of certain types of constructions (episodic, or characterizing) and the kind reading is the one that is restricted to kind-selecting predicates.

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<sup>4</sup>This is one of the cases where the insertion of  $\exists$  is unnecessary since  $Gn$  is a binder, and only  $\cup$  is needed to yield a property.

**Scope effects** Kind referring BNs have different scopal properties from non-kind-referring ones in that the BN always takes the narrowest scope under intensional verbs, negation, differentiated scope and anaphora.

(2.17) *Miles wants to meet policemen* (only opaque)

*Miles doesn't want to meet policemen* (only opaque)

*Miles killed rabbits repeatedly* (wide scope for *repeatedly*)

(2.18) (a) *John is trying to find some policemen and Mary is trying to find them too* (*them* scopes over *try* since it is interpreted as “some men”)

(b) *John is trying to find policemen and Mary is trying to find them too*  
(*them* cannot scope over *try* because of its bare referent)

Moreover, as already pointed out by Carlson, if a BN contains a specific reference to objects, time or space, they cannot be kind-referring, and they are not restricted to the narrowest scope reading (i.e. they behave like overt indefinites). Indeed the NP *people in the next room* in (2.19) scopes out of the intensionality of *believe*.

(2.19) *John believes that [people in the next room] are stupid*

Essentially, Chierchia tries to obtain the “narrowest scope” indefinite reading via DKP, in order to block the kind meaning and escape the narrow-scope requirement. The assumption behind this is that, if BNs were to be ambiguous between the indefinite and the kind reading, blocking the kind reading would not mean blocking the indefinite reading. The DKP can thus derive the scopelessness of the BN.

**Romance** Chierchia’s working hypothesis is that elements of category N in Romance languages are  $[-arg, +pred]$ . These languages show the mass/count distinction and morphologically realized plurals. Italian and French are the cases put under scrutiny in more detail. Essentially, French fits *ad literam* the parameter in that it disallows any type of bare arguments. Italian, on the other hand, allows post-verbal bare plural arguments. For Chierchia’s system, bare plurals occurring only in post-verbal position is a crucial element. He explains it by assuming that Italian object nouns can project a DP headed by a phonological null D ( $\delta$ ). Since, notably, null elements needs licensing, in this case  $\delta$  is allowed, since it is m-commanded by a head governor.<sup>5</sup>

<sup>5</sup>See also Rizzi (1990)’s Relativized Minimality.

Furthermore, another crucial observation in favor of Chierchia’s general account is that, when syntactically possible, BNs in Romance have an existential reading; according to his account, such reading is derived from a kind reading. These should be cases like (2.21):<sup>6</sup>

- (2.21) *Qui, [ragazze in minigonna] sono rare* (ita)  
 here, [girls in miniskirt] are rare  
 "Here, girls in a miniskirt are rare"

**LF** Although the authors has introduced parameters in the semantic system, he also suggests that the conception of LF does not necessarily need to change, since the interpretation depends on how speakers make certain linguistic distinctions.

## 2.4 A syntactic account of Bare Nouns

The analysis presented in Longobardi (2001) moves from Longobardi (1991, 1994), and its general goal is to show that the BNs in most Romance languages are a type of indefinites. The readings of these determinerless nouns are distributed between “generic” and “existential” just like the readings of the overt indefinites. However, BNs in English are different because they are always ambiguous between a quantificational and a referential interpretation. Longobardi tries to show a different way of looking at syntactic cross-linguistic variation, claiming that the interpretation of nominals does not depend on whether they are common nouns or proper names (henceforth PNs). Instead, he proposes an account in which the difference in behavior between PNs and BNs is connected to the different semantics of BNs. The two-fold question that he tries to answer is: “Can semantics be the locus of variation in a (parametrizable) way, formalizable similarly to syntax? and how dependent is such semantic variation from the variation in the morphosyntax?”

This overview proceeds as follows. First we will present some preliminaries, concerning the behavior of BNs in relation to their possible interpretation. Then we will zoom onto the various ways in which Romance BNs pattern with indefinites, and

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<sup>6</sup>Concerning example (2.21), Longobardi (2001) points out that examples containing frequency are not a satisfying test for kindhood; he bases his observation on the following type of examples

- (2.20) *Nelle bozze, tre errori per riga non sono infrequenti* (ita)  
 in the drafts, [three mistakes per line] not are infrequent  
 “In the drafts, three mistakes per line are not infrequent”

review how that is different from English BNs. Next, we will sum up some considerations about proper names, and show in which way this kind of data is relevant. Finally some remarks about the architecture of the syntax-semantics interface will be made. The reader who is familiar with this account can continue reading from this Chapter's Part [II].

### 2.4.1 Core Proposal

Building on the proposals put forth in Longobardi (1991, and subsequent work), Longobardi (2001) notices that in English neither proper names nor common nouns undergo N-to-D movement, while Italian displays a split: proper names undergo the movement, whereas common nouns do not. Rephrasing the generalization already presented in previous work (cf. Longobardi 1994, 1996), Longobardi observes that if, in a given language, common nouns have a semantics of the English type, then, in that language, the syntax of PNs must be of the English type as well. This is reported in (2.22).

(2.22) Object-referring nouns may occur without a phonetically filled D iff  
kind-referring nouns can.

The common feature of common nouns (BNs henceforth) and PNs is thus referentiality. Languages resort to one strategy to refer to nominal structures and the locus of cross-linguistic variation is precisely in the way such strategy is parametrized. The source of this variation is thus whether the referential properties of D are weak or strong, that is to say if the (constant or variable) status of D needs a PF encoding or not. So, if two languages differ in the possibility for their BNs to act (kind)-referentially, the language in which BNs can be referential (e.g. English) will have a similar syntax for PNs. The language in which a BNs cannot be referential (e.g. Italian) will not have this parallelism.

### 2.4.2 Bare nouns

Morphologically-singular nouns can have either a mass or a count interpretation. Together with proper names, in Germanic and Romance languages, these three types of nouns can occur bare or introduced by determiners. Bare non-mass singulars in argument position denote a unique and definite entity with the widest possible scope (and, following Longobardi (1996), they are analyzed as lexically defined and coextensive to the class of proper names). Following Carlson (1977), Longobardi suggests

that bare mass nouns and bare plurals cannot denote a specific entity and cannot take wide scope. Assuming Carlson’s division of entities into objects and kinds, Longobardi proposes that determinerless arguments with singular non-mass reading are object-naming items (i.e. they can refer to objects) whereas determinerless arguments with mass or plural reading are kind-naming items.<sup>7</sup>

A further distinction is assumed: all nominal arguments are either quantificational or referential: for instance, nouns with a determiner denote thanks to their quantificational structure (variable interpretation) while proper names, which have an object-naming nature, are object-referential expressions (constant interpretation). Unlike other previous accounts (particularly Chierchia, 1998<sup>8</sup>), Longobardi highlights a clear difference between Italian and English distribution of the two readings for BNs (existential, “Ex”, and generic, “Gen”), pointing out that the interpretation of Italian BN coincides with that of overt indefinites (be they English or Italian), but it differs from that of English BNs. The reason for this is that, in Italian, BNs are generic in independent quantificational environments only. On the other hand, the counterpart of generically interpreted English BNs are the Italian overt definites. In other words, English, BNs are kind-referring, whereas in Italian to achieve the same interpretation, overt indefinites are needed.

### **Bare Nouns and Stage-, Individual-, and Kind-level predicates**

Longobardi distinguishes three sub-cases of S(tage)-level predicates: when they occur in episodic sentences, when they occur in characterizing sentences, and when they occur in episodic sentences modified by a generalizing adverb. He shows that generic readings can arise even from sentences containing BNs and stage-level predicates. Such generic readings are however triggered by the presence of an habitual verb or an adverb, that provide an external operator of genericity. On the other hand, when it comes to I(individual)-Level predicates, a BN subject should always be characterizable by Gen and its genericity should be derivable as a direct consequence of a lexical property of I-level predicates (i.a. Chierchia, 1995). Nevertheless, Longobardi points out that it is possible to create counterexamples by changing the tense from a habitual to an episodic. Furthermore, Longobardi claims that examples like (2.23 a-2.23 b) show that I-level predicates need a split as well, this time into two sub-cases. The reason of this split is the different acceptability of (2.23 a) as

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<sup>7</sup>This view is extended to phrasal constituents, not just head nouns.

<sup>8</sup>In Longobardi (2001) the reference is to Chierchia (1996), but it is the same article we refer to as Chierchia (1998).

opposed to (2.23 b).<sup>9</sup>

- (2.23) (a) *Stati di grandi dimensioni sono pericolosi*  
 states of large sizes are dangerous  
 "Large states are dangerous."  
 (b) ??*Stati di grandi dimensioni sono prosperi*  
 states of large sizes are prosperous  
 "Large states are prosperous."

Finally, Longobardi highlights how neither Gen nor Ex are possible readings for Italian BNs, with Carlsons K(ind)-level predicates,.

- (2.24) \**Elefanti di colore bianco sono estinti*  
 elephants of color white are extinct  
 "White elephants are extinct"  
  
 \**Elefanti di colore bianco diventano sempre più grandi man mano*  
 elephants of color white become always more large as  
*che si va a nord*  
 that SI<sub>imprs</sub> goes to north  
 "White elephants grow larger as one goes north"  
  
 \**Elefanti di colore bianco sono così chiamati per la pigmentazione*  
 elephants of color white are so called for the pigmentation  
*della loro pelle*  
 of the their skin  
 "White elephants are so-called because of the pigmentation of their skin"

Contrasting Chierchia's (1998) predictions, with three types of predicates discussed so far (K-level, episodic S-level, and I-level predicates) it is impossible to obtain a generic reading, even when in English it is straightforward. Furthermore, English and Italian/Romance vary with respect to allowing their BNs to be kind-referring. Some examples of K-level predicates and anaphora show that Italian BNs cannot yield a generic reading if the nominal denotes a kind. When a generic reading is not possible for a BN, such reading is accessible with the definite DP. Still, English and Italian definite DPs in anaphoric environment give rise to ambiguity between the "species" and the "distributive"<sup>10</sup> reading, as shown by (2.25), where *themselves* refers to each individual cat or the specie.

<sup>9</sup>The crucial junction of the argument is this: "to be dangerous" is more eventive than to "to be prosperous". The eventivity of "to be dangerous" can yield a "habitual" (hence a Generic reading) but the stativity of "to be prosperous" cannot.

<sup>10</sup>In Longobardi's terms.

(2.25) *Cats think very highly of themselves*

BNs in Romance seem to be always quantificational variables that are existentially or generically bound.

### Indefinite and Definite Generics

Further similarities between BNs in Romance and overt indefinites are also that, in the (logical) representation of Romance BNs a variable is introduced. Such variable needs independent binding (i.e. Romance BNs are interpreted as Ex or Gen just like Romance and English overt indefinites, plus the Ex or Gen operators comes from the sentence), and it ranges over tokens of the kind the noun refers to. So, unlike subjects of K-level predicates and similarly to indefinites, BNs do not denote kinds. Again similarly to indefinites, BNs can only give rise to the distributive reading in anaphoric structures. So, Longobardi suggests that BNs are said to denote what is denoted by (the values of) the variable and, similarly to what happens to quantificational Ds, the kind is the predicate of the restrictor. Since a generic reading is obtained either via quantificational generalization over tokens of a kind, or via a direct kind denotation, Romance BNs cannot be referential (they cannot yield a Gen Reading via kind denotation), but only quantificational.

Romance BNs pattern with the indefinites because plural and mass definite generics behave similarly to singular count definite generics: they all can subject K-level predicates, be antecedents of anaphors, and occur in episodic sentences. For Longobardi, kind denotation might be yielded by the ability of the nominal argument to act also referentially, as a kind name. This is because, the genericity of definite generics seems to be DP-internal (because definite generics are not restricted to characterizing environments<sup>11</sup>), but at the same time, they denote kinds and not objects.

Summing up, Romance definites can denote kinds, but not BNs nor indefinites. In order for a BN in Romance to be interpretable, an existential or a generic quantification is needed (they both introduce of an object variable): a kind-denoting generic needs an definite DP (i.e. a referential argument), whereas an object-denoting generic

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<sup>11</sup>Longobardi calls “characterizing” the following environments:

- S-level predicates with habitual aspect
- I-level predicates with habitual aspect
- Adverbs of generalizing quantification

can denote a kind via an indefinite DP (i.e. a quantificational argument) bound by a generic operator. Such operators are provided by an habitual aspect, adverbs (e.g. *always*), and some predicates (e.g. *be widespread*).

### 2.4.3 The cross-linguistic analysis

Longobardi shows that, in English, genericity can also occur with episodic predicates, with non-eventive I-level predicates and with K-level predicates, and, unlike in Romance, kind anaphora is possible.

Descriptively:

- Romance BNs behave like Romance and English overt indefinites
- English BNs and some overt definite singulars behave like Romance overt definite nominals.

According to Longobardi, for the correct interpretation of overt indefinites, the generic reading related to characterizing environments must be universal. At this point, if English BNs are just another option to achieve genericity, their genericity must be DP-internal for the following reason: if a DP can denote a kind, then any BN, which is even more unlikely to have any quantificational structure, should be able to do the same. The consequence Longobardi draws is that English BNs must be kind-referring, i.e. they are proper names of kinds. This could be indicated by the semantic ambiguity of English BNs between names of kinds and existentially- or generically-bound variables (See. Carlson and Pelletier, 1995).

Summing up, in Romance languages, BNs are limited to being quantificational expressions, whereas in English they can also be referential. That is why, in Romance, BNs pattern with overt indefinites (and not with proper names), whereas in English, they pattern with proper names (and not with indefinites). The scheme summarizing the parametrization proposed in Longobardi (2001) is replicated below.

<i>English BNs</i> :	{	<i>referential</i> <i>Gen</i> ( <i>in all environments</i> ) <i>quantificational</i> <i>Gen</i> ( <i>in characterizing environments</i> ) <i>EX</i> ( <i>in S – Level environments</i> )
<i>Romance BNs</i> :	{	<i>Gen</i> ( <i>in characterizing environments</i> ) <i>EX</i> ( <i>in S – Level environments</i> )

Compare the following English/Italian pairs. Note that, in English, the ambiguity is expected in both cases while, in Italian, the ambiguity is predicted to occur only in (2.27 b).

(2.26) (a) *White-colored elephants will undergo the Final Judgment tomorrow at 5*  
(Ex/Gen)

(b) *Elefanti di colore bianco passeranno il Giudizio Universale domani alle 5*  
(Ex)

(2.27) (a) *In such cases, firemen of great experience run to the rescue of the victims of the accident* (Ex/Gen)

(b) *In questi casi, pompieri di grande esperienza intervengono in soccorso delle vittime dell'incidente* (Ex/Gen)

#### 2.4.4 Conclusions

This account discusses the interpretations of English and Romance overt indefinites and BNs, and the latter's relation with the syntactic behavior of proper names, also presenting a cross-linguistic level generalization. Longobardi preserves Carlson's intuitions about English BNs and kinds, and distinguishes between two types of genericity: quantificational and referential. The overarching conclusion is that what regulates the interpretation of (both proper and common) bare nouns depends on the mapping between syntax and semantics. Cross-linguistic variation is parametrizable in terms of (independent) morphosyntactic differences, such the need of a functional head to be (overtly) targeted by movement. Finally, Longobardi concludes that the need for semantic parameters, like the ones proposed by Chierchia, and discussed in the previous section, still needs to be proven.

## 2.5 Summary

In the first part of this chapter we discussed the general topic of bare nouns by providing a detailed overview of two central and diverse accounts. The first account discussed is a semantic account of Chierchia (1998). The second account we discussed is the syntactic alternative of Longobardi (2001). In the following part, we will present and discuss four different accounts that specifically target the phenomenon of bare predicates, in the attempt of gaining a preliminary understanding of the phenomenon.



## Part II

### Bare Nouns in predicative position



## 2.6 Part overview

In the second part of this Chapter, we will focus on the specific studies dedicated to the bare predicates. There are several ways of looking at the phenomenon, and we will overview four radically different ones. As we already introduced in Section [1.1], the general tendency is to build an account by individuating a link between the bare predicates and some other language-specific feature.

First we will discuss the account of Matushansky and Spector (2005). The focus of this article is on French bare predicates, but some consideration can be extended over the boundaries of one language and tested cross-linguistically. The basic claim is that the phenomenon of bare predication can be accounted for in terms of the interaction between two features that post-copular nouns must have: [+*SENTIENT*] and [−*SCALAR*]. We discuss it in Section [2.7].

The second account is built around the *NUMBER* projection. Munn and Schmitt (2005) claim that the basic difference that sets Romance languages apart from English is that the projections of *Agreement* and *Number* can be realized separately in Romance, but in English they are always “fused”. So, Romance predicates lack the Number Projection, but in English, said projection must always be there. As a consequence, the article can be omitted in Romance but not in English. We discuss it in Section [2.8].

A third account is presented in Zamparelli (2005). In his view, bare predicates are dependent on a different linguistic aspect, namely *GENDER*. The nouns that can occur as bare predicates lack the gender feature. Stipulating that the presence of the article is merely a reflection of gender, the author argues that its absence is expected in constructions involving gender-defective nouns. We discuss it in Section [2.9].

Finally, in Section [2.10], we will present the system presented in De Swart, Winter and Zwarts (2005-2007) and slightly modified by LeBruyn (2010). This Carlson-inspired system accounts for the existence and the behavior of the bare predicates in terms of reference to *CAPACITIES*, an addition to the language ontology, similar in some ways to the pre-existing one of kinds, but ontologically (and sortally) distinct from it.

Summing up, a direct comparison of the points in which all these accounts vary is provided in Section [2.11], and Section [2.12] concludes this overview with some final remarks.

## 2.7 An account in terms of Scalarity

The account put forth in Matushansky and Spector (2005) mainly focuses on bare predicates in French, trying to provide an answer to the question “What are the conditions regulating the presence and the absence of the determiner preceding a noun in predicative position?” The proposal is that bare predicates have the feature combination [+*SENTIENT*, –*SCALAR*], and the presence of the article is the sign of the saturation of one or some NP-internal argument slots. Cross-linguistic variation originates from how different languages may vary in the way they treat the argument slots of their nominals, and it is hinted that Russian Nominative/Instrumental predicate case marking governed by the same principle that regulates the insertion of the article in French. The reader who is familiar with this account can continue reading from the commentary Section [2.7.2].

### 2.7.1 Basics

Matushansky and Spector show several contrasts between the occurrence of determined or bare post-copular noun phrases in the singular (xNPs, in their terms). For example, the different contexts are shown in (2.28 a-2.28 b).

- (2.28) (a) *Qui est Cyntia? Une physicienne / \*Physicienne* (fra)  
 who is Cynthia a physicist / physicist  
 "Who is Cyntia? A physicist"
- (b) *Qu' est Cyntia? (Une) physicienne*  
 who is Cynthia (a) physicist  
 "What is Cyntia? A physicist"

The different truth values or the two versions of (2.29) indicate the restrictions that limit the use of the bare predicate, when its time argument slot is not bound by that of the main verb.

- (2.29) *Bush est (un) gouverneur*  
 Bush is a gouverneur  
 "Bush is a governor"

Sentence (2.30) results odd if uttered by someone outside that fictional world (e.g. Harry Potter’s world), shows the restrictions that limit the use of the bare predicate if the world of evaluation of the predicate is independent to that of the main verb.

- (2.30) *Harry Potter est magicien*  
 Harry Potter is wizard  
 "Harry Potter is a wizard"

### Animacy and Scalarity

Matushansky and Spector define the nouns that can be used as bare predicates as [+*SENTIENT*, −*SCALAR*]: according to the authors, this specification is what allows for the omission of the article. The specification [+*SENTIENT*] is motivated by the fact that, in French, bare predicates can occur with human subjects, or with “anthropomorphized” entities (2.31 a), but nothing else.

- (2.31) (a) *Fido est chien d’aveugle*  
 Fido is dog of blind  
 "Fido is a seeing eye dog"

They assume that predicative copulas are based on small clauses, so structures containing small clauses can be used to test the acceptability of the predicates. In this perspective, (2.32 a) and (2.32 b) show that [+*SCALAR*] nouns require an article,<sup>12</sup> whereas (2.32 c) and (2.32 d) show that [+*SENTIENT*] nouns allow the article omission.

- (2.32) (a) ?*Cette maison, je la crois une affaire*  
 this house I it believe a bargain

- (b) \**Cette maison, je la crois affaire*  
 this house I it believe bargain

- (c) \*?*Cet animal, je le crois un mammifère*  
 this animal I it believe a mammal

- (d) \**Cet animal, je le crois mammifère*  
 this animal I it believe mammal

---

<sup>12</sup>The classical diagnostics for scalarity is based on the empirical observations that [−*SCALAR*] nouns cannot:

- be used as *epithets*
- occur as the complement of *seem*
- occur in the *N of an N* constructions
- occur with a degree modifier (such, utter, etc.)

The way of capturing the non-scalarity of this class of nouns is by assuming that these nouns do not have a degree argument slot.

Semantically, the small clause denotes a proposition (type  $\langle s, t \rangle$ ), and its predicate a propositional function (type  $\langle e, \langle s, t \rangle \rangle$ ) that has the argument slot, phi-features and the  $[\pm SENTIENT]$ -feature are abstracted away. The article insertion in (2.33 b) causes a type clash and hence the ungrammaticality. According to the authors, the presence of the article merely signals the saturation of an argument slot of a  $[+SENTIENT]$  noun.

- (2.33) (a) *Pierre croit Marie physicienne*  
 Pierre believes Marie physicist  
 "Pierre believes that Marie is a physicist"
- (b) \**Pierre croit Marie une physicienne*  
 Pierre believes Marie a physicist

In conclusion, scalar nouns require an article since its presence is a signal of the saturation of the degree argument slot (or they would not be able to combine with the subject of the predication). On the other hand, in the same small clause contexts, determined non-scalar nouns (e.g. *physicienne*) cause a type clash.<sup>13</sup>

The remaining issue is the case in which a non scalar noun (e.g. *genie* 'genius') occur with an article. These cases are treated by Matushansky and Spector as involving the equative verb *to be*. In other words, all instances of non-bare predication with a non-scalar predicate are understood as equative sentences, and the authors show that there is a clear symmetry between these constructions (a, b) and (unambiguous) equative sentences (c, d).

- (2.34) *Qui est Cicéron?*  
 who is Cicero  
 "Who is Cicero?"
- a. *Cicéron (c') est Marcus Tullius*  
 Cicero (it) is Marcus Tullius  
 "Cicero is Marcus Tullius"
- b. \**Cicéron, il est Marcus Tullius*  
 Cicero, he is Marcus Tullius  
 "Cicero, he is Marcus Tullius"
- c. *Cicéron (c') est un orateur*  
 Cicero (it) is an orateur  
 "Cicero is un orateur"

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<sup>13</sup>For the details of how this is implemented, see refs.

d. \**Cicéron, il est un orateur*  
 Cicero, he is an orator  
 "Cicero, he is an orator"

To account for the fact that some predicates occur more easily in bare predicate constructions, the authors suggest that what sets apart professions, roles, etc. from the other predicates is that all such predicates are stage-level properties that, according to their account, they should always occur as bare predicates. However, when the interpretation of such predicates needs to be temporally independent of the main verb, the relevant argument slot of the predicate needs to be saturated, the article is inserted, and the identity copula is used to avoid a type clash.

## 2.7.2 Comments

Several points are interesting to discuss. First of all, all cases of predication involving a predicate and a determiner are equative sentences, since the equative version of the copula is needed, in order to avoid type clash (between the determined predicate and the subject of the predication). This is interesting, but difficult to disprove. The consequence of this claim is far more pervasive than what is discussed in the article, because when every instance of *x is a Y* is an equative sentence, it must be so, even when there is no contrast to account for (e.g. with non-sentient, or non-human nouns). We do not disagree on the fact that sentences of the type *x is a Y* have are equatives in French, but even if the presence of the equative reading is undeniable, in every language that shows this alternation, it is impossible to claim that the equative is the only option for every language that does not show the same restrictions as French. In other words, it is difficult to extend this account in a straight-forward way. Consider the following Italian example:

(2.35) *Marco Tullio è un oratore* (ita)  
 Marco Tullio is an orator  
 "Marcus Tullius is an orator"

It is possible to distinguish three readings for this sentence:

1. The specific reading is the traditional equative reading;
2. The non-specific reading is a reading that resembles the partitive reading;
3. The predicational reading (MT really has those oratorical properties).

We can disambiguate the readings as shown by the following examples:

1. *Marco Tullio è un oratore, ossia Cicerone (specific)*  
 Marcus Tullius is an orator, namely Cicero  
 "Marcus Tullius is an orator, namely Cicero"
2. *Marco Tullio è un oratore, ma non so quale (non-specific)*  
 Marcus Tullius is an orator, but not know which  
 "Marcus Tullius is an orator, but I don't know which one"
3. *Marco Tullio è davvero un oratore (predicational)*  
 Marco Tullio is really an orator  
 "Marcus Tullius is really an orator"

We believe that given the account of Matushansky and Spector, cannot account for this contrast.<sup>14</sup> On the other hand, we definitely agree that the interpretation of the indefinite article is not necessarily  $\exists$  (the generalized quantifier  $\lambda X \lambda Y. X \cap Y \neq \emptyset$ ).

Another interesting aspect to discuss concerns the extension of Matushansky and Spector's account to any language, other than French (or even to dialect (i))<sup>15</sup>. The type-clash between the determined predicate and the subject of the predication should happen all the times and in every language, but if it gets resolved by using the equative version of the copula (instead of the predicative one), why cannot French resort to the equative copula all the times? And why do the other languages do? Quoting Boone (1987), the authors acknowledge the fact that the determined predicate has a different meaning than the bare predicate.

(2.37) *Après avoir effectué cette opération, (fra)*  
 after to have done this surgery,  
 "After having performed this surgery,

(2.38) *Max est devenu un médecin*  
 Max is become a doctor  
 Max has become a doctor"

The authors claim such contrast can be accounted for in terms of coercion. The meaning of the noun shifts from namely non-scalar to a scalar, hence, the NP gains

<sup>14</sup>Also note that the oddity of (2.36).

(2.36) <sup>?</sup> *Marco Tullio è davvero un oratore, ossia Cicerone*  
 Marcus Tullius is really an orator, namely Cicero

<sup>15</sup>Original section [1.3]

a degree argument slot (and the insertion of the article follows by hypothesis). Essentially, this last point boils down to having the difference between (2.39 a) and (2.39 b) accounted for in terms of (2.39 a) being non scalar and (2.39 b) being scalar.

- (2.39) (a) *Être médecin*  
to be doctor  
"Being a doctor"
- (b) *Être un médecin*  
to be a doctor  
"Being a doctor"

## 2.8 An account in terms of (lack of) Number

The main topic discussed in Munn and Schmitt (2005) is that Romance languages allow bare singulars more freely than English and, according to the authors, this fact reflects the way (semantic) Number is realized. They propose an extension to the nominal projection of Bobaljik's (1995) "Free Agr Parameter" where Romance languages realize two separate heads for Number and Agreement, while in English these two heads are always fused. Next to the Free Agr Parameter, the authors assume Longobardi's "strong/weak D Parameter" to account for the cross-linguistic variation in Romance and English.

This summary proceeds as follows: first an overview of the relevant technical aspects is presented, then some more details are given on the so-called as-constructions, as well as on the discussion on role nouns. The reader who is familiar with this proposal can continue reading from the commentary section [2.8.3].

### 2.8.1 Basics

Munn and Schmitt try to embed predicative bare singulars in a theory that accounts for the behavior of argumental bare nouns. In doing so the authors try to preserve Williams' (1983) intuition that nominals have a uniform syntax and different semantics. So, the differences between bare predicates and bare arguments depend on the interaction between such uniform syntax and either an argumental or a predicative semantics.

The authors try to explain the different behaviors of Brazilian Portuguese<sup>16</sup>, English,

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<sup>16</sup>In this thesis, all the examples marked with the Ethnologue code *por* are Brazilian Portuguese examples. As of when this thesis has being compiled, there exist no independent ISO-SIL code to distinguish Brazilian Portuguese from European Portuguese.

and the Romance languages. These three pattern differently in two respects: English and Brazilian Portuguese show an unrestricted distribution of the bare plurals, which are not allowed in the same way in Romance. On the other Brazilian Portuguese and the other Romance languages allow bare singulars in predicative position, but English does not.

The first difference is explained in terms of some properties of  $D^0$ , i.e. Longobardi's (1994, 2001) strong/weak D parameter. Following Longobardi, the authors maintain that Italian has a strong D, whereas in English is weak. So, Brazilian Portuguese is argued to have, like English, a weak D.

The second difference, namely the lack of bare singulars in predicative position, in English, is accounted for in terms of another parameter, the Free Agr Parameter (Bobaljik, 1995), which the authors claims needs to be extended to the DP domain.

The authors assume that, in all languages, D must select some functional element via the intermediation of Num or Agr (mirroring what happens, at the clausal level, between C and VP) and the spell-out of singular Num is the indefinite article. If D is missing or null, Num must be overt.

Stipulating the Free Agr Parameter (presumed active in all Romance languages), bare singulars in Brazilian Portuguese and Romance can essentially be seen as DPs with an empty determiner and no Number projection. In English, on the other hand, bare singulars are not predicted to exist, since the two heads are fused and Agreement can never surface without Number. Furthermore, since D must select some functional element via the intermediation of Num or Agr, the straightforward prediction about English is that Num always lexicalizes (with plurals or indefinite articles).

## 2.8.2 Predication and Number

Munn and Schmitt discuss several types of constructions to show how the Free Agr parameter helps producing the correct generalizations. The main point is that some types of constructions require Number, whereas others do not.

The authors assume the three-layer DP. When a DP has one argument, there are three options: either the argument is an NP (i.e. a theta marking configuration, where the DP is within the lexical domain), or the argument is a NumP (i.e. a predication configuration) and an identification configuration (i.e. the argument is also a DP, and both DPs are saturated by their determiners).

Munn and Schmitt see predication as necessarily involving the relation between a NumP and a DP, in which the DP subject theta-binds the open position of the nominal. The authors specify that only thematic argument of the noun merge lower than NumP. This explains why generally, nominal predication requires number. There are some cases, however, in which Number is not required, and it will surface only if the Free Agr parameter is not active, and Agreement and Number are fused (e.g. in English). In particular, they discuss two types of post-copular predicational constructions and claim that Number is not needed only with a specific class of nouns, namely role nouns, because these nouns have a specific structure (i.e. they are eventive), which ultimately requires the absence of Number. They compare post-copular predication with *as*-constructions, and show that *as*-constructions are such that require Number pattern with the predicational cases involving role nouns.

**Roles nouns and predicative *as*-constructions** These two types of predication are the two environments in which the different setting of the Free Agr parameter derives the different behavior of English and Romance. First of all, role nouns can occur as bare predicates in Romance but not in English, as shown by (2.40 a-2.40 b).

- (2.40) (a) *Jean est médecin* (fra)  
           Jean is doctor  
           "Jean is a doctor"  
       (b) \**John is doctor* (eng)

Secondly, bare singulars can occur embedded under the preposition *as* in Romance, but again, not in English (where the nominal must agree in number with the subject of which the predicate *as*-phrase). Both contrasts are shown in the examples below.

- (2.41) (a) \**Nobody will be able to use us as witness*  
       (b) \**Nobody will be able to use him as witness*  
       (c) *Nobody will be able to use us as witnesses*  
       (d) *Nobody will be able to use him as a witness*

- (2.42) (a) *Personne ne nous pourra prendre comme témoin* (fra)  
           nobody not us<sub>plur</sub> can<sub>fut</sub> take<sub>inf</sub> as witness<sub>sing</sub>  
           "Nobody will be able to use us as witnesses"  
       (b) *Nadie podrá usarnos como testigo* (spa)  
           nobody can<sub>fut</sub> use<sub>inf</sub> us<sub>clit, plur</sub> as witness<sub>sing</sub>  
           "Nobody will be able to use us as witnesses"

- (c) *Ninguém poderá nos usar como testemunha* (por)  
 nobody can<sub>fut</sub> us<sub>plur</sub> use<sub>inf</sub> as witness<sub>sing</sub>  
 "Nobody will be able to use us as witnesses"

In the first case, the nouns that show this behavior are only the role nouns. According to Munn and Schmitt, these nouns are different from the other nouns because, instead of denoting natural subsets of individuals, they denote socio-culturally defined concepts. Furthermore, role nouns do not behave as I-level predicates but as S-level predicates. For these reasons, the authors suggest that the nouns in this class are eventive. This particular characterization predicts the fact that they can freely occur bare, in predicative position because, instead of having a referential argument bound by D, the nouns in this class have an event argument that must be bound by Tense.

In the second case, for the argumental *as*-constructions, the authors suggest that Romance languages allow bare singulars after *as* in predicative position because the particle *as* acts like Num in standard predication: *as* shields the subject from being the theta-marking by the noun. For this reason the absence of Agreement is not only not expected but necessary.<sup>17</sup> In English, on the other hand, shows Agreement effects. The reason that Munn and Schmitt suggest is that English cannot license a predicate without interpretable Number, and therefore, it must match the number on the subject.

### 2.8.3 Comments

In what follows we will discuss three aspects of Munn and Schmitt's analysis. First, the relevant data in Italian seems difficult to account for, simply given the strong/weak D and the Free Agr parameters. Secondly, the issue of plurals in French. Finally, we will briefly discuss the meaning alternation.

**A note on plurals in French** The Free Agr Parameter should hold in every Romance Language, and its very existence is motivated by the presence or absence of Agreement in some configuration (e.g. *as*-constructions). However if one compares

<sup>17</sup>The authors point out that *as*-constructions require agreement if in adjunct position because *as*-phrase must agree (via PRO) with the subject of the main clause.

(2.43) \**Como abogado, sabín qué hacer* (spa)  
 as lawyer, we knew what to do

French (2.42 a, here repeated as 2.44 a), a singular predicate can be predicated of plural subjects.

- (2.44) (a) *Personne ne nous pourra prendre comme témoin* (fra)  
 nobody not us<sub>plur</sub> can<sub>fut</sub> take<sub>inf</sub> as witness<sub>sing</sub>  
 "Nobody will be able to use us as witnesses"

With *témoin* 'witness' and many other predicates, the trouble is that the plural form is phonologically indistinguishable from the singular form. With a modified predicate, the *liaison* - or the pronunciation of word-final consonant before a following vowel sound - makes the plural audible. As we have seen in many occasions, bare predicates cannot be modified unless the result of the modification yields a well established property. One predicate that can be tested is *professeur associé* 'associate professor', which has a modifier that can trigger the *liaison*, and is allowed as bare predicate, as shown by (2.45).

- (2.45) *Jean est professeur associé*  
 Jean is professor associated  
 "Jean is an associate professor"

When tested with plural forms, it is possible to show that these predicates have (or at least can have) Number.<sup>18</sup>

- (2.46) (a) *Ils nous ont choisi comme professeurs associés*  
 they us have chosen as professors<sub>plur</sub> associated<sub>plur</sub>  
 "They chose us as associate professors"
- (b) \**Ils nous ont choisi comme professeur associé*  
 they us have chosen as professors<sub>sing</sub> associated<sub>sing</sub>

**Italian data** The active status of the Free Agr parameter in Romance, and the possibility for the Agr head to occur without Number, are the central claims of Munn and Schmitt (2005). The Free Agr is supposed to be active in every Romance language, and there are some clear predictions that such parametrization makes. For instance, in (argumental) *as*-constructions the hiatus between English and Romance is quite clear. In Romance, Number is supposed to lack (unless needed for semantic

<sup>18</sup>My informants only accept the plural form. However, it might be possible that some speakers would omit the *liaison*, hence resulting in a plural predicate sounding like a singular predicate. The omission of the *liaison* however is a phenomenon of informal registers (cf. van Oostendorp 1997), so dependent on different factors.

reasons) while in English, Number cannot lack, as illustrated by the examples (2.41 a-2.41 d) above.

It is interesting that, in Italian (a Romance language), we can observe that number cannot lack, and the nominal embedded under the preposition *come* 'as' necessarily agrees with the plural subject of the predication.

(2.47) (a) \**Nessuno ci potrà usare come testimone* (ita)  
 nobody us<sub>plur</sub> can<sub>fut</sub> use<sub>inf</sub> as witness<sub>sing</sub>

(b) *Nessuno ci potrà usare come testimoni*  
 nobody us<sub>plur</sub> can<sub>fut</sub> use<sub>inf</sub> as witness<sub>plur</sub>  
 "Nobody will be able to use us as witnesses"

In this respect, Italian patterns similarly to English. However, it is hard to tell if Italian is just an exception, within the Romance languages, which might simply have the same parametrization as English. Clearly, Italian patterns with the rest of the Romance languages in that role nouns occur as bare predicates, in the same type of environments. One possibility to explain the behavior of Italian with respect to Number could be that the lack of Number (that the authors claim for Romance languages) depends on some alternative reason. For instance, if we consider a different type of predicate, e.g. *tavolo* 'table', we can notice an interesting phenomenon (cf. Section [6.1.2], example (6.12 a) and following).

(2.48) (a) *Voi potete usare questi cinque tronchi come tavolo* (ita)  
 you<sub>plur</sub> can use these five trunks as table  
 "You can use these five trunks as a table"

(b) *You can use these five trunks as a table*

Both these sentences have two different readings: they either mean that the people end up with five tables, or that they all combine the five trunks to build one table. Note that in the reading in which there are five tables, there is no semantic number agreement between the predicate and the subject about which the *as*-phrase is a predicate. In Italian, the number mismatch in the sentences containing the bare singular embedded under *come* are possible only with non-human predicates. What is interesting is that, it appears clear that the article must be present in English. However, semantically there is a number mismatch. We will discuss these types of sentence in Section [6.1.2], but this phenomenon might be relatable to a collective/distributive reading contrast. It appears that, in some languages, there is a constraint limiting the collective reading of *as*-phrase, depending on the features of

the noun thereby contained, so that it cannot be interpreted as distributed over a plural subject.

## 2.9 An account in terms of (lack of) Gender

In his 2005 article, Zamparelli approaches the issue of bare predication in Romance languages. Unlike others (e.g. Munn and Schmitt, 2005), in this article the phenomenon of bare predicates is seen as having a different root than bare arguments, essentially because there is no one-to-one correlation between the two phenomena across languages. For example, as already discussed in several occasions, English has very restricted possibilities of the occurrence of bare predicates, but allows bare arguments quite freely, while in French bare arguments are practically non-existing, but bare predicates are permitted. This paper is, to my knowledge, the only one where a unified account of bare predicates based on lexical generalizations that go beyond the class of roles and professions is proposed. Zamparelli points out that, for instance in Italian, not only role nouns can occur as bare predicates but also many relational nouns and many kinship nouns.

This overview will proceed as follows, first we will present the account on which Zamparelli is building, namely Heycock and Zamparelli (2005), in which it is proposed that the nouns that can occur as bare predicates have an impoverished set of features, and licensing takes place via an agreement operation between the predicate itself and the subject of the predication. Then, we will see how this bears on Zamparelli's account of bare predicates, that are seen as nouns that are defective of the gender feature, and discuss how this can be motivated. Finally we will see how Zamparelli accounts for the English data, and what is the semantics of bare predicates. The reader who is familiar with this proposal can continue reading from the commentary section [2.9.2].

### 2.9.1 Basics

**Similarities between bare predicates and relational nouns** Zamparelli points out that there is a striking similarity between role nouns, in (2.49 a) and Italian relational nouns in (2.49 b):

- (2.49) (a) *Carlo è (un) insegnante*  
           Carlo is a teacher  
           "Carlo is a teacher"

- (b) *Marta è (una) parente / cugina di Marco*  
 Marta is a relative / cousin of Marco  
 "Marta is a relative / cousin of Marco('s)" or "Marta is Marco's r. / c."

Zamparelli highlights how any account of bare predicates should try to understand the following points: first, why bare predicates cannot be modified by adjectives, PPs or relative clauses<sup>19</sup>, as shown by the examples in (2.50) and (2.51).

- (2.50) *\*Gianni è bravo medico*  
 Gianni is good doctor  
 "Gianni is a good doctor"
- (2.51) *\*Gianni è medico che capisce i pazienti*  
 Gianni is doctor who understands the patients  
 "Gianni is a doctor who understands the patients"

Secondly, which predicates can be bare, and why is it difficult to use bare predicates with non-human subjects, as shown by the examples in (2.52).

- (2.52) *\*Fido è cane guida*  
 Fido is dog guide  
 "Fido is a sight-seeing dog"

Finally, why do bare predicates have a more restricted interpretation than determined predicates. That is to say, for instance, why is it impossible to obtain metaphorical readings with bare predicates, as shown by the contrast in (2.53 a - 2.53 b) in Italian.<sup>20</sup>

- (2.53) (a) *Il mio dentista è un artista*  
 the my dentist is an artist  
 "My dentist is an artist"
- (b) *Il mio dentista è artista*  
 the my dentist is artist  
 "My dentist is an artist"

Note that in (2.53 a), it is possible to interpret the determined predicate *an artist* as "a dentistry artist". On the other hand, the bare predicate in (2.53 b) can only be read literally: the dentist happens to be an artist, as well as a dentist.

<sup>19</sup>With two exceptions: some complements (e.g. *religion teacher*), and the modification by certain adjectives or nouns, when these help define the subject of the predication. In this light, he assumes that Adj.+N combinations are compounds.

<sup>20</sup>This example is not the original example appearing in Zamparelli (2005).

**(Against) the adjectival hypothesis** Zamparelli argues against the adjectival hypothesis of bare predicates, i.e. the idea that bare predicates have an adjectival syntax (as proposed i.a. by Pollock, 1983). The adjectival analysis is based on the empirical observation that, just like adjectives, bare predicates cannot be modified by other adjectives or relative clauses. Also, just like adjectives, when the lexicon permits it, bare predicates normally agree in gender with their subjects. However, the absence of an extended reading does not follow from an adjectival analysis and there are other reasons to agree on the fact that such an analysis is unappealing (see also Kupferman (1991) for tests in French). For instance, bare predicates cannot occur in *somebody*-partitive constructions.

- (2.54) (a) *Qualcuno di malato*  
 somebody of sick  
 "Somebody sick"
- (b) \**Qualcuno di professore*  
 somebody of professor

Zamparelli further reports from Kupferman that when bare predicates pattern with some adjectives, they pattern with stage-level adjectives, rather than individual-level ones. Even as the continuation of the “here’s what happens” remark.

[*Ce qui se passe* 'This occurs':]

- (2.55) (a) *Luc est malade / ivre / furieux / absent*  
 Luc is sick / drunk / furious / absent  
 "Luc is sick / drunk / furious / absent"
- (b) *Luc est médecin / président / père de huit enfants*  
 Luc is doctor / president / father of eight children  
 "Luc is a doctor / president / father of eight children"

Building on Heycock and Zamparelli (2005), Zamparelli (2005) maintains that the common mass/count distinction can be described in terms of the semantic property of cumulative/divisive reference which is associated to a semilattice. Such lattice structure is generated inside the DP, where either one of two operators (one for Mass and one for Count) apply to the denotation of the noun. These operators are located in a functional projection (PIP), higher than NP. Modifiers (e.g. numerals, etc.) need this structure (to acquire meaning) and are, in turn, located higher than the projection that hosts the semilattice. Pl has a LATT(ice denotation) feature that is positive when pluralization takes place, negative when it does not. N is unvalued

for the feature [*LATT*] but gets its value (via percolation) from Pl. Essentially, this is a way of capturing the generalization that when no semantic pluralization takes place, N cannot get a value for [*LATT*]. The [*LATT*]-feature can be located in any functional projection as long as there is a trace of grammatical agreement, since Zamparelli notes that predication itself is not enough to justify morphological agreement. Consider what happens with what Zamparelli refers to as collective predicates (i.e. *un problema* 'a problem', below).

- (2.56) (a) *Quelle donne sono un problema*  
 those<sub>plur, fem</sub> women<sub>plur, fem</sub> are a<sub>sing, masc</sub> problem<sub>sing, masc</sub>  
 "Those women are a problem"
- (b) \**Quelle donne sono problematico*  
 those<sub>plur, fem</sub> women<sub>plur, fem</sub> are problematic<sub>sing, masc</sub>  
 "Those women are problematic"

The contrast is between the collective predicate, whose gender mismatch is unproblematic and the adjective which must agree in gender. For Zamparelli, it is crucial that role nouns have no inherent specification for gender (i.e. have no gender feature), and that can follow from the intuition that they can apply to both men and women. The contrast between the gender-related behavior of bare predicates and the behavior of the determined predicates further emerges when the following is observed: the gender of the determined predicate follows the gender of the referent of the subject, whereas the gender of the bare predicate depends on syntax. The main evidence in favor of the lack of a gender feature is provided by examples in which the noun has two gender forms that are morphologically realized as *-o/-a* or *-e/-essa*, respectively for masculine and feminine. In such cases, Zamparelli points out that the absence of the determiner leaves the gender dependent on syntax and the realization of the feminine is impossible: when the predicate is a noun with no lexicalized feminine form (e.g. *ministro* 'minister'), the mismatch between a feminine subject and a masculine bare predicate is unproblematic.<sup>21</sup>

- (2.57) (a) *La cugina di Carla è ministro*  
 the<sub>fem</sub> cousin<sub>fem</sub> of Carla is minister<sub>masc</sub>  
 "Carla's cousin is a minister"
- (b) *Il ministro è una cugina di Carla / una*  
 the<sub>masc</sub> minister<sub>masc</sub> is a<sub>fem</sub> cousin<sub>fem</sub> of Carla / Ph.D<sub>fem</sub>  
*dottoressa in scienze politiche*  
 of sciences political  
 "The minister is Carla's cousin / a Ph.D in political science"

<sup>21</sup>The glosses, "fem" or "masc", always report the surfacing morphological gender.

Zamparelli claims that if the same noun is put in subject position, it mismatches with a feminine bare predicate (e.g. *cugino/cugina* 'cousin', *dottore/dottoressa* 'doctor'):

- (2.58) \**Il ministro è cugina di Carla / dottoressa in scienze*  
 the<sub>masc</sub> minister<sub>masc</sub> is cousin<sub>fem</sub> of Carla / Ph.D<sub>fem</sub> of sciences  
*politiche*  
 political

The proposal that Zamparelli puts forth is that the subjects of the bare predicates are generated in a position close to NP (probably an NP-Adjunct position) from where they can trigger agreement. From that position, the [*LATT*] feature can be transmitted from the DP to the (bare) predicate. Subjects can be close to predicates only when it is necessary to transmit agreement information. In the case of a predicate with a determiner, the [*LATT*] feature is provided by the article/determiner.

The nouns that allow close subjects are, as we said, those nouns which need some agreement information. He identifies three classes of role nouns: pure relational (family and social relations), unique descriptions and professions. The first differentiates from the other because 1) the arguments of the relation must be overtly saturated; 2) they are not restricted to [+*HUMAN*] subjects; 3) they are not stage-level nor eventive (and they are restricted or impossible in some languages). These nouns are virtually ambiguous: they can either denote activities or classes of human beings.<sup>22</sup> So, when they occur bare they denote activities that define natural and well-established classes of individuals (and they have no gender feature). When they need to denote classes of human beings (they have a gender feature), they need the determiner to deliver the lattice denotation.

## 2.9.2 Comments

We agree with Zamparelli in trying to account for the similarities in behavior and distribution of all the bare predicates (role nouns, relational nouns, etc.). It is an undeniable empirical fact that, in Italian and other Romance languages, not only role nouns occur easily as bare predicates. Let us see what is of difficult understanding in the tests proposed by Zamparelli. We will conclude this section with a brief comment about English.

### On gender tests

<sup>22</sup>For Zamparelli bare predicates need to denote “stable” classes of individuals expressing an important classification; this rules out *tenant* or *walker*; for identical reasons some human subkinds can only refer to stages of someone’s life (e.g. boy, kid, etc.) hence they are ruled out.

Recall that Zamparelli claims that, since role nouns are not specified for gender, so nouns like *ministro*, even if lacking a grammaticalized feminine form, are unproblematic in constructions like (2.59)<sup>23</sup>.

- (2.59) *Tina è ministro*  
 Tina<sub>fem</sub> is minister<sub>masc</sub>  
 "Tina is a minister"

However, some points are not entirely clear. In Italian there are many nouns (mainly ending in *-e*, and some ending in *-a*) which show no gender inflection on the noun itself, but do so on the article.<sup>24</sup> In other words, nouns like *collega* 'colleague' get the masculine article when it refers to a man. It is unclear if, in Zamparelli's idiolect, the indefinite article matching *ministro* should be the feminine *una* or the masculine *un*, since, for some speakers of Italian, the preferred choice is (2.62 a) and for other is (2.62 b).<sup>25</sup>

- (2.62) (a) *Tina è un ministro*  
 Tina<sub>fem</sub> is a<sub>masc</sub> minister<sub>masc</sub>

- (b) *Tina è una ministro*  
 Tina<sub>fem</sub> is a<sub>fem</sub> minister<sub>masc</sub>  
 "Tina is a minister"

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<sup>23</sup>This example, and all of the following are calqued onto Zamparelli original (42), but slightly adapted for legibility reasons.

<sup>24</sup>The following are cases of nouns in which the ending does not change as a consequence of agreement, but the article does:

- (2.60) *un/una cantante* 'a singer'  
*un/una presidente* 'a president'  
*un/un'insegnante* 'a teacher'  
*un/una collega* 'a colleague'  
*un/una turista* 'a tourist'  
*un/una pirata* 'a pirate'

<sup>25</sup>There is a further problem, specific to the nouns that refer to some types of professions. For some of these nouns, the feminine form has never been needed until approximately fifty years ago (there were no minister women before Tina Anselmi, in 1976, and no so many women who were lawyers, surgeons etc.); however, the morphology of *ministro* 'minister', *avvocato* 'lawyer', *chirurgo* 'surgeon', *medico* 'medical doctor' could allow a straight-forward femininization (replacing the ending *-o* with *-a*). The following forms are all attested feminine forms of *a minister*:

- (2.61) *Tina è (un) ministro*  
*Tina è (una) ministro*  
*Tina è (una) ministra*  
*Tina è un ministro donna* (a minister woman)

With this in mind, let us discuss the argument. Zamparelli wants to show that there is a difference between those (role) nouns that have the double form and the ones which do not. His point is that with role nouns that have the double form, if the article is present, the predicate agrees in gender with the referent, but without the article, the gender becomes sensitive to syntax, and a mismatch is not tolerated.

- (2.63) \**Il ministro è dottoressa*  
 The<sub>masc</sub> minister<sub>masc</sub> is Ph.D<sub>fem</sub>  
 "The minister is a Ph.D"

However, given what we said earlier, when confronted with (2.63), the question that arises is if the ungrammaticality that Zamparelli assigns to the sentence derives from DP *il ministro* being expected to pick up a female referent, or from a general gender mismatch between the subject and the predicate. In other words, the problematic point is that, for the speakers who accept (2.62 a), (2.63) is grammatical; on the other hand, for the speakers that only accept (2.62 b), (2.63) is ungrammatical. But if the latter is the case, such ungrammaticality would not be different from the ungrammaticality of (2.64).

- (2.64) \**Il sole è rossa*  
 The<sub>masc</sub> sun<sub>masc</sub> is red<sub>fem</sub>  
 "The sun is red"

Zamparelli furthermore points out that it is still possible to say (2.65), where the mismatch is avoided by the presence of the article. The difficulty here is that it is unclear if this example is a case of an equative sentence.

- (2.65) *Il ministro è una dottoressa*  
 The<sub>masc</sub> minister<sub>masc</sub> is a Ph.D<sub>fem</sub>  
 "The minister is a Ph.D"

Note that (2.66) is grammatical (under the equative reading), even though there is mismatch in gender, number, and animacy.

- (2.66) *Il ministro è / sono due sedie*  
 The<sub>sing, masc</sub> minister<sub>sing, masc</sub> is / are two chairs<sub>plur, fem</sub>  
 "The minister is / are two chairs"

To conclude, consider a noun like (*una*) *guardia* '(a) watch' that belongs to a class of nouns where both the noun and the article show feminine morphology, even though the role the noun refers to is traditionally covered by men.<sup>26</sup> When no agreement

<sup>26</sup>Some of the nouns in this class are reported in (2.67).

is possible, not contrast emerges and no ungrammaticality arises. This is shown in (2.68 b).

- (2.68) (a) *Gianni* / *Maria* è *sentinella*  
 Gianni<sub>masc</sub> / Maria<sub>fem</sub> is watch<sub>fem</sub>  
 "Gianni / Maria is a watch"
- (b) *La* *sentinella* è *dottore* / *dottoressa*  
 The<sub>fem</sub> guard<sub>fem</sub> is Ph.D<sub>masc</sub> / Ph.D<sub>fem</sub>  
 "The watch is a Ph.D"

**On predictions about English** The last comment concerns the prediction that this account makes about English. Zamparelli's idea is that with bare predicates, English does not have the same freedom that other languages have, because English lacks grammatical gender. But it is observed that English's dramatically different behavior is such that bare predicates are possible only if they refer to a unique position (even contextually unique). What also Le Bruyn (2010) points out is that, once the indefinite article functions only a number marker, it is impossible to derive the fact that English bare predicates have a presupposition of uniqueness.

## 2.10 An account in terms of Capacities

In this section we will discuss the account put forth in De Swart et al. (2005), De Swart et al. (2007), and the refinements presented in Le Bruyn's (2010). These papers are dedicated to the construction of a model that can account for the behavior of unmarked nominals (i.e. non-determined and non-plural) in Dutch. At the base of the proposal is the assumption of a new semantic category that enriches the list of the e types: "capacities". The idea is that unmarked nominals refer to capacities, "kind-like" entities which, instead of being natural, are socially defined.

This overview will proceed as follows: first we will present the concept of "capacities" as well as the theoretical motivations underlying its assumption and briefly overview the bare predicate environments. Finally, we will present the actual analysis and its type-shifting components (as refined in Le Bruyn, 2010). The reader who is familiar with this proposal can continue reading from the commentary section [2.10.4].

- 
- (2.67) *una guardia* 'the guard'  
*una recluta* 'the recruit'  
*una sentinella* 'the watch'  
*una spia* 'the spy'

### 2.10.1 Capacities

That of “capacities” is a semantic category that reunites the terms that refer to “professions” and “social roles”, “religions”, and “nationalities”. Capacities are similar to “kinds” (both are of type *e*), but what descriptively sets them apart is that capacities are culturally defined and kinds are not. According to the authors, capacities cannot be assimilated to either properties or kinds. The first case can be illustrated by examples like the following.

- (2.69) (a) *Jean travaille comme professeur dans un collège* (fra)  
 Jean works as professor in a high school  
 "Jean works as professor in a high school"
- (b) *Jean travaille comme prêtre dans un collège*  
 Jean works as priest in a high school  
 "Jean works as priest in a high school"

The authors suggest that the if set of the *professors* equates the set of the *priests*, and if Jean does not e.g. teach religion at that high school, we would encounter an extensional identity problem: (2.69 a) would be true, and (2.69 b) false. This shows that if the meaning of the capacity equated its extension (like it is for properties), we could have *substitutio* of the two capacities *salva veritate*, and the truth values of the two sentences would not change.

On the other hand, even being both of type *e*, capacities are distinct from kinds. According to the authors, this can be shown, for instance, by the fact that kinds can be referred to using a bare plural, in (2.70 a), or a definite singular, in (2.70 b).

- (2.70) (a) *Dinosaurussen zijn uitgestorven* (nld)  
 dinosaurs are extinct  
 "Dinosaurs are extinct"
- (b) *De dinosaur is uitgestorven*  
 the dinosaur is extinct  
 "The dinosaur is extinct"

The same is not possible with capacity nominals (2.71 a-2.71 b), and it can only be done with a bare singular (2.71 c).<sup>27</sup>

<sup>27</sup>To some of my informants, *leraar* 'teacher' in (2.71 c) is marked; instead some informants prefer *leraarschap* 'teaching'.

- (2.71) (a) *\*Leraren is / zijn een mooi beroep*  
 professors is / are a nice profession  
 "Professors is / are a nice profession"
- (b) *\*Een / \*de leraar is een mooi beroep*  
 a / the professor is a nice profession  
 "A / the professor is a nice profession"
- (c) *Leraar is een mooi beroep*  
 professor is a nice profession  
 "The professor is a nice profession"

### 2.10.2 Environments and contrasts

De Swart et al. discuss several types of contrasts that distinguish the use and meaning of bare predicates and determined predicates. Next to the classic basic contrast, they notice that modified predication is possible but restricted to some adjectives.<sup>28</sup> Then, they notice that unmarked (bare) predicates always receive a “strict” or “literal” interpretation, whereas (determined/plural) predicates receive some sort of “metaphorical” or “figurative” interpretation.

- (2.72) (a) *Jan sprak als dominee*  
 Jan spoke as vicar  
 "Jan spoke in his capacity as vicar"
- (b) *Jan sprak als een dominee*  
 Jan spoke as a vicar  
 "Jan spoke like a vicar"
- (c) *Jan en Karel spraken als dominee*  
 Jan and Karel spoke as vicar  
 "Jan and Karel spoke in their capacity of vicar"
- (d) *Jan en Karel spraken als dominees*  
 Jan and Karel spoke as vicars  
 "Jan and Karel spoke as vicars"

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<sup>28</sup>The authors discuss a very interesting pattern of Dutch, language in which adjectives are inflected with the ending *-e*, if they modify a masculine or feminine noun. When an adjective modifies a bare predicate, however, it does not inflect (even if it would inflect, in normal environments): *Jan is werkloos visser* 'Jan is unemployed fisherman' Vs. *\*Jan is werkloze visser*. This kind of examples “materialize” the intuition that modified bare predicates must be “well-established” properties and not properties that get modified syntactically. In a sense, the adjective and the noun are combined at an earlier stage.

Furthermore, unmarked nominals/capacities can be embedded under phrases as *the role of, the function of, the profession of*, etc., and, can be the complement of verbs like *elect, appoint, vote for*, etc.

Finally, in some languages, unmarked nominals/capacities can subject higher-order predication, as shown in (2.71 c).

### 2.10.3 Type-shifting operations

The basic assumption about the DP structure is that it has the following layered structure  $[_{DP}D [_{NumP}Num [_{NP}N]]]$ . Syntactically, a bare predicate is an NP without functional projections, so the presence of the article entails, at least, the projection of NumP (cf. Munn and Schmitt, 2005). Predication, for cases of the shape of “x is P”, is understood in the following way: the entity **x**, denoted by  $x$ , is a member of the set **P**, denoted by  $P: x \in P$ . So, when  $P$  is an NP, NumP or DP, the membership relation involves the denotation of  $x$ , and the set of entities obtained by mapping the denotation of the noun contained in  $P$  to a set of entities of type  $\langle e, t \rangle$ .<sup>29</sup> In order to be able to occur in predicative position, they must undergo type-shifting and become of type  $\langle e, t \rangle$ . The operation that turns kinds into sets is *REL* and the similar operation that turns capacities into sets is called *CAP*. They assume that the “sign” of the realization of *REL* is the projection of NumP. On the other hand, there is no overt sign of the realization of *CAP*, which can occur freely within the NP. The system is also endowed to a mechanism to coerce capacity  $e$ -type elements to kinds  $e$ -type elements. This operation is called “kind coercion”, and it takes place every time a capacity noun occurs with a determiner. Le Bruyn (2010) adds to this model another coercion operation, which is essentially the counterpart of the “kind coercion”, namely the “cap coercion”. This operation is the one that can account for the cases where a kind noun (such as *man*, or *wolf*) occurs as a bare predicate. With this addition, the system can also account for cases like (2.73 a), where the way to interpret the two predicates *rat* and *raaf* is to refer to the players in the game “Rats and Ravens”. These nouns are thus interpreted, respectively, as the capacity-*rat* and the capacity-*raven* (and not the kind-*rat* and the kind-*raven*).

- (2.73) (a) *Één kind van het tweetal is rat, de andere raaf*  
 a child of the couple is rat, the other raven  
 "One child of the couple is the rat, the other is the raven"

<sup>29</sup>Recall that for De Swart et al. kinds and capacities are both of type  $e$ .

Le Bruyn also modifies the assumption about the presence of the article which occurs with the kind-reading of a predicate. According to him, the realization operation *REL* is linked to the presence of the indefinite article, rather than to NumP. Simplifying the reasoning, Le Bruyn's idea is the following: first, the indefinite used to be a marker for non-uniqueness only; at the point when *REL* and *CAP* needed to be distinguished, it was the indefinite which took over the function of marking *REL* because: 1) *REL* needed to be marked more than *CAP*; and 2) because the indefinite marked non-uniqueness<sup>30</sup>, and non-uniqueness is necessary for a kind to be a kind (See. Le Bruyn (2010) for details).

#### 2.10.4 Comments

In the following two paragraphs, we will discuss first the *as*-constructions as a reliable test for capacity/kind readings, then we will raise some questions about the ontological status of capacity, and the consequences for our understanding of the linguistic ontology.

**Testing *as*-constructions** Recall that, in discussing the *as*-constructions examples, the authors point out that bare predicates are always interpreted literally, whereas determined or plural predicates can be interpreted “metaphorically”. It is, however, difficult to understand, given these types of constructions, if the “metaphorical” reading arises from the markedness of the predicate or from the type of construction. Note that it still possible to observe identical effects also in Italian, language in which capacity nominals show no number neutrality, and must agree in number with their subjects. Indeed, the sentence containing a bare plural (2.74 a) is ambiguous between the two readings (“literal” and “metaphorical”), whereas the one with the plural indefinite, in (2.74 b), is only interpreted in a “metaphorical” way.

The difficulties with the kind of sentences containing the determined predicate is to tell them apart from elliptical comparatives. If such sentences are comparatives, and we will discuss more examples like these in Section [6.1], then the “metaphoric” reading is just a “comparative” reading (See. Lechner, 2004).

- (2.74) (a) *Gianni e Carlo parlano come vicari* (ita)  
 Gianni and Carlo speak as vicars  
 "Gianni and Carlo speak as vicars" or "Gianni and Carlo speak like vicars (do)"

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<sup>30</sup>As opposed to the definite article that marked uniqueness.

- (b) *Gianni e Carlo parlano come dei vicari*  
 Gianni and Carlo speak like partitive plural vicars  
 "Gianni and Carlo speak like vicars (do)"

**The lexical distinction and the ontological nature of Capacities** Another difficulty arises when discussing the ontological nature and the expectations that follow from the assumption of the existence of capacities in the linguistic ontology. We know that capacities are formally very similar to kinds, yet “sortally” distinct from them. We also know that, that in the model of De Swart et al., a type shifting operation can turn a capacity into a kind (and Le Bruyn’s extension indicates the way to turn a kind into a capacity). In these terms, capacities and kinds are the two sides of a coin: the natural side, that is kinds, and the social/cultural side, that is capacities. Recall that De Swart et al. suggest that capacities need to be distinct from kinds because they show a different distribution. We have seen in (2.70 a - 2.71 c), here adapted in (2.75) and (2.76).<sup>31</sup>

- (2.75) *De dinosaur is uitgestorven* (nld)  
 the dinosaur is extinct  
 "The dinosaur is extinct"

*\*Dinosaurus is uitgestorven*  
 dinosaur is extinct

- (2.76) *\*De leraar is een mooi beroep*  
 the professor is a nice profession

*Leraar is een mooi beroep*  
 professor is a nice profession  
 "The professor / Teaching is a nice profession"

The difficulty in following this argument is that these examples are artificially dissimilar. However, two contrasts hold: first of all that the Romance counterpart of 2.76 would have opposite grammatical judgements, as shown by the Italian examples below.

- (2.77) *Il professore è un bel mestiere* (ita)  
 the professor is a nice job  
 "Teaching is a nice profession"

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<sup>31</sup>Examples (2.75) and (2.76) are from De Swart et al. (2007), whereas all the other ones, in this section, are mine.

\**Professore è un bel mestiere*  
 professor is a nice job

Secondly, there is an unquestionable contrast, that is specific to Dutch, shown again by (2.78 a-2.78 b).

(2.78) (a) (\*De) *leraar is een mooi beroep* (nld)  
 (the) professor is a nice profession

(b) \*(De) *tijger is een prachtige diersoort*  
 (the) tiger is a beautiful specie  
 "The tiger is a beautiful specie"

The conclusion that the authors draw from the examples above is that capacities (e.g. *leraar*) cannot be equated to kinds. However, there is little evidence to understand if such behavior is not simply showing that *leraar* behaves like a proper name (of job), just like *rood* and (with some variation) *Oncidium*.<sup>32</sup>

(2.80) (\*De) *rood is een prachtige kleur*  
 (the) red is a beautiful color  
 "Red is a beautiful color"

(2.81) %(De) *Oncidium is een prachtige soort*  
 (the) Oncidium is a beautiful genus  
 "Oncidium is a beautiful genus"

Clearly, it might be that capacities cannot be equated to kinds. Yet, if we are to introduce, in our linguistic ontology, a new semantic category, it is probably commendable to produce more evidence in support of this hypothesis. since as soon as we start introducing new elements in the linguistic ontology, and we start postulating the existence of some lexical class, there are many consequences that have to be taken into account. For instance, a topic that is interesting to investigate is the flexibility of any lexical class. We know that some elements contained in lexical classes may be different across languages (e.g. grooming verbs, see also Section [2.12]). So,

<sup>32</sup>Note that, coherently, in Italian/Romance the following forms are grammatical, and the determiners cannot be omitted:

(2.79) *Il professore / La tigre / L' Oncidium / Il rosso è un X interessante*  
 the professor / the tiger / the Oncidium / the red / is an interesting X  
 "Teaching / The tiger / Oncidium / Red is an interesting X"

in the case of capacities, the question that naturally arises is the following “Does the occurrence of a nominal as a bare predicate (in a given language) entail that the nominal refers to a capacity (or that it has been cap-coerced)?” If we accept capacities as a semantic category, it is interesting to wonder if they are to be seen as a universal. If that is the case, what does it mean, for our linguistic ontology, to have a socio-cultural universal? Overall, we should try to compare this option against the one in which a deeper universal constraint, maybe independent on socio-cultural aspects, can be instantiated in various ways. One of these ways could then be what we can perceive as the kind/capacity contrast.

One of the reasons why we suggest this theoretical option is that it is difficult to conclude, for Italian/Romance that nominals like *amico* (*di*) ‘friend (of)’, which can occur as bare predicates, can refer to a capacity. On the other hand, if the occurrence of a bare predicate (in a given language) does not entail that that nominal refers to a capacity, or that it has been cap-coerced, then the occurrence of *amico* (*di*) as a bare predicate is a different phenomenon, and it is unrelated to capacity-referentiality. But if that is the case, then the similarities in meaning contrasts between *un amico* and *un dottore* and *amico* and *dottore* are lost (cf. Section [2.9]). We will discuss this in the next chapters.

## 2.11 A direct comparison

There are several main points in which various accounts of bare predicates may be different. We will list the aspects and provide examples from the literature discussed in the previous part of the chapter. If the account presents a lexical analysis, the first point is the specification of the lexical class, i.e. how are the nouns that occur as bare predicates different. Then, they can vary with respect to the role of the article. The (in)definite article can have semantic content or not. If the latter is the case, the article can be the reflex of a syntactic operation or of a semantic operation. Furthermore, interwoven with what we already mentioned is the treatment of cross-linguistic variation as well as the treatment of the English and its uniqueness condition. One final point, that we consider very important, is the discussion about the similarity between the effects on the meaning of the presence/absence of the article with other lexical items. In other words, the similarity with count and mass predicates.

### 2.11.1 The specification of the lexical class

As we already mentioned in several different parts, all the accounts that we discussed have a lexicalist approach to the phenomenon of bare predicates. Necessarily, every lexical account is constructed around some specification of this lexical class.

For **Matushansky and Spector**, who discuss the phenomenon only for French, the generalization is the following:

#### Generalization

*Only nouns that are [+SENTIENT, –SCALAR] allow article omission in French.*<sup>33</sup>

For **Munn and Schmitt**, bare predicates are eventive and behave like stage-level properties. They contrast with determined predicates which behave like individual-level properties. The relevant passage is reported below.

*[T]he class of nominals that can appear bare is semantically restricted. More specifically, roles and professions are acceptable, while inherent categories or classes are not. According to Kupferman (1991), the nominals allowed cannot denote inherent or natural subsets of individuals; rather they must denote socio-cultural sets and therefore these sets are contingent and transitory.*<sup>34</sup>

For **Zamparelli**, the crucial intuition is that the nouns that can form bare predicates are not specified for gender.

*Pre-theoretically, role nouns seem to refer to roles which can be acted or taken up by human beings [...]. Due to this semantics, they don't seem to be lexically specified for abstract gender [...]; rather, they adopt the syntactic gender specification of the noun they apply to.*<sup>35</sup>

More specifically, he claims that, of the three sub-classes of bare predicates that he identifies (in Italian), namely “pure relational”, “unique descriptions” and “professions”, the latter denote:

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<sup>33</sup>p. 243

<sup>34</sup>p. 846

<sup>35</sup>p. 14, emphasis mine.

*[P]roperties which define well-established kinds [...]. [A]ctivities which are typical of natural classes of entities could also be used to individuate them (let's call them well-established activities), and [...] the third class of bare predicate nominals (thus excluding "pure relational" and "unique description" cases like fratello 'brother' and re 'king') can denote such activities.<sup>36</sup>*

The crucial aspect of having profession-bare predicates refer to activities (typical of well-established kinds) is that it allows to exclude "achievements", "states" and "primary occupations". Also, said activities cannot access metaphorical/extended interpretations.

For **De Swart, Winter, and Zwarts** the class of the nouns that form bare predicates is defined as including three categories of roles: professions, religions and nationalities.

*The class of nominals in Germanic and Romance languages that can occur bare [...] is quite restricted. [...] The nominals in bare constructions are often simple expressions that resist modification. They usually have human referents, and denote specific roles in society: professions, religions or nationalities. Other nominals (non-human or human) that are not related to such roles generally resist taking up a bare nominal position[.]<sup>37</sup>*

These three groups of roles are what these authors call "capacities", an addition to the language ontology.

*The interpretation of BNs in Romance and Germanic languages involves reference to semantic entities which we refer to as capacities. [C]apacity interpretations of nominals should be distinguished from property interpretations [...], and from ordinary reference to kinds in the sense of Carlson (1980) [...]. Capacities are treated as type e entities, but they are sortally distinguished from kinds.<sup>38</sup>*

*We also show some patterns [...] that provide further cross-linguistic support for the postulation of capacities as a separate ontological category, specific to a low position within the DP.<sup>39</sup>*

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<sup>36</sup>p. 20, emphasis mine.

<sup>37</sup>2007, p. 3

<sup>38</sup>2007, p. 3-4

<sup>39</sup>2007, p. 1

**Le Bruyn**, further elaborates the analysis presented by De Swart et al. According to him, capacities are the opposite of kinds: if the latter are naturally defined, the former are socially defined.

*Capacity is a cover term for professions, nationalities and religions. The link licensing this cover term is that professions, nationalities and religions all stand for the position of an individual in society, be it at a professional, civil or religious level. They all specify what an individual stands for[.]*

*[C]apacities [...] are culturally defined [hence they reflect] no inherent property of an individual [. They] exist by virtue of a cultural decision and need not reflect the position of any existing individual.<sup>40</sup>*

### 2.11.2 How meaning variation is understood

In what follows is summarized the treatment of the meaning alternation between the bare and the determined predicate.

For **Matushansky and Spector**, the meaning of the determined predicate is reported below.

*This interpretation is that of “a typical doctor”, “a real doctor” a meaning shift typical of scalarity coercion ( $P \rightarrow$  “having properties stereotypically associated with being  $P$ ”), which takes place when a non-scalar predicate appears in a scalar context.<sup>41</sup>*

On the other hand, this is how **Zamparelli** distinguishes the meaning of determined predicates from that of bare predicates as reported below.

*[T]he profession nominals that can make up bare predicates are ambiguous: they can denote classes of human beings, or they can denote the abstract well-established activities which identify those classes. [T]hey are just like all other nouns [...], the copular construction is simply interpreted as membership (arguably the default value for copular predication):*

*Ada è una dottoressa*

Ada is a doctor

*Ada  $\in$  (doctor'  $\cap$  female')*

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<sup>40</sup>p. 141

<sup>41</sup>p. 253

[T]he role nominal denotes an activity (an abstract notion), which in turn defines a natural/well-established class of people. [T]he noun has no gender value of its own, and assigns a theta role to the subject of the predication in the NP-adjunct position. The theta-marked argument is identified with the agent that participates in the activity (indicated as acting-as-N in a Parsons-style semantics).<sup>42</sup>

*Ada è una dottoressa*

Ada is a doctor<sub>fem</sub>

$\exists e[\text{acting} - \text{as} - \text{doctor}'(e) \wedge \text{Subj}(e, \text{Ada})]$

**De Swart, Winter, and Zwarts** contrast generally the meaning of modified nouns (MNs) and that of bare nouns (BNs) bare as reported below. The former include the determined predicates, and the latter includes the bare predicates.

*Where both MNs [marked nominals, including determined predicates, MC] and BNs [bare nominals, including bare predicates, MC] are possible, their meanings tend to be different. [I]t has been observed that BNs have more literal and stereotypical meanings than the marked singular indefinites, which may typically receive figurative or approximative interpretations.*<sup>43</sup>

For the authors, bare predicates refer to capacities, a different semantic entity, formally similar to kinds yet distinct. They are the socio-cultural counterparts of kinds. **Le Bruyn** builds on this account and is more specific about the difference between bare and modified predicates.

*Crucial for capacities is that they are culturally defined. This has two consequences. The first is that there is no inherent property of an individual that makes it into a doctor, American or muslim. [T]he second consequence is that capacities exist by virtue of a cultural decision and need not reflect the position of any existing individual. One could e.g. establish the capacity king of the US independently of anyone ever holding this position.*<sup>44</sup>

For **Le Bruyn**, the determined predicate corresponds to a kind, and kind membership is described in the following terms:

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<sup>42</sup>p. 21

<sup>43</sup>2007, p. 3

<sup>44</sup>p. 141

[C]apacities are culturally defined. Kinds are exactly the opposite: they form natural classes of individuals. The term natural is opposed to cultural and reflects the intuition that kinds are different from capacities in two respects. The first is that kind membership is based on inherent properties: a wolf belongs to the kind wolf not by accident but because it has inherent properties that make it into a wolf. The second respect in which kinds are natural and capacities cultural is that kinds cannot be established by virtue of a cultural decision but exist by virtue of there being individuals that share the same inherent properties.<sup>45</sup>

Two things are important in Le Bruyn’s discussion of the difference between kinds and capacities. First of all, he points out that capacities do not depend on any “inherent” property, whereas kind membership “is based on inherent properties”. Second, we find the concept of “inherence” baked in the meaning representation of the predicate appearing with a determiner. The intuition behind the concept of “inherence” of a property is very clearly a way of describing what we defined as “intrinsicality”, but in Le Bruyn, such notion is not discussed. Secondly, inherence is formalized as “the property of being inherent” that a property can have. Let us see how this is done.

*The (bare, MC) predicate [...] denotes the set of individuals that work as managers whereas the (determined, MC) predicate in [...] denotes the set of individuals that have the inherent properties we typically associate with managers: being organized, being able to delegate, ...*<sup>46</sup>

The contrast between the semantics of the bare predicate and that of the determined predicate emerges from the two meaning representations below. The first meaning representation corresponds to the meaning of the bare predicate *manager*, and the second to the meaning of the the determined predicate *een manager* ‘a manager’.

- 1)  $\lambda x (\text{professional\_manager}(x))$
- 2)  $\lambda x \forall P (\forall y (\text{professional\_manager}(y) \supset P(y)) \& \text{Inherent}(P) \rightarrow P(x))$

*The set in (1) only contains professional managers. The set in (2) contains those individuals that have all the inherent properties we typically associate with professional managers. Note that “ $\supset$ ” stands for “if... then”*

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<sup>45</sup>p. 142, emphasis mine.

<sup>46</sup>p. 150, emphasis mine.

*normally” and is borrowed from the literature on non-monotonic inferencing [...]. What kind seems to do then is to take a capacity and return the kind consisting of all the individuals that have the inherent properties that are typically associated with the individuals that have this capacity.*<sup>47</sup>

However, in order to interpret a predicate in an inherent way, we need to know what “inherent” means, just in the same way in which we need to know what “red” means to know which objects are red objects. There are two consequences: first of all, if the interpretation of a predicate, e.g. “inherent P” is dependent on the interpretation of the predicate “inherent”, then it means that we, as speakers, need to know the principle of application of “inherent”, otherwise we do not know the meaning of this adjective. Secondly, the fact that a predicate is inherent or not has zero consequences on the predicate’s nature and behavior. This is a strong conviction, because, as we have noticed from the observations emerged in the other analyses, bare and determined predicates generate an array of semantic effects, that are underrepresented, given a meaning representation as (2). In a sense, what we can conclude from the discussion about the other analyses, is that the realization of the meaning difference between bare and determined predicates should be a consequence of their semantic structures.

### 2.11.3 The role of the article

For **Matushansky and Spector**, the article is simply the signal of an operation, namely, the saturation of an argument slot.

*[T]he indefinite article contributes no meaning (i.e.  $un(e)$  is vacuous), but is only a reflex of a syntactic operation.*<sup>48</sup>

Such vacuity is clearly (and explicitly) entailed by their rule for predicate marking:

#### (14) French predicate marking

*The indefinite article in the post-copular position in French signals the saturation of one of the argument slots of an unmodified [+SENTIENT] noun.*<sup>49</sup>

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<sup>47</sup>ibid.

<sup>48</sup>p. 245

<sup>49</sup>ibid.

As we mentioned in the specification of this lexical class, the presence of the article signals the saturation of an argument slot of a [+*SENTIENT*] *noun*.

We have argued that post-copular *xNP*<sup>50</sup>-marking in French (presence vs. absence of the indefinite article) reflects the saturation of an *xNP*-internal argument of the post-copular [+*SENTIENT*] *xNP*.

- A. when the *xNP* is scalar, the article is obligatory
- B. when the *xNP* is not scalar, the indefinite article results in ungrammaticality unless
- C. the identity *be* is used with indefinite *xNPs*

As a result, we can now formally deal with the indefinite/bare alternation in unmodified post-copular *xNPs* in French.<sup>51</sup>

For **Munn and Schmitt**, the indefinite article is simply the spell-out of a singular Num.

[...] *Romance generally should have bare singulars* [includes bare predicates, MC] *in many places where English does not, i.e., English must always lexicalise Num with either Plural or the indefinite article a, while Romance need not lexicalise it where it is not required for independent reasons.*<sup>52</sup>

The authors, however, specify that every quantificational use of determiners entails the necessary spell-out of Num:

*Crucially we take quantificational uses of determiners to require Num, on the assumption that quantification requires a counter of some sort. This rules out structures of the sort [DPD [AgrPNP]] even in a Free Agr language. The null determiner is not quantificational, as evidenced by the scopelessness of bare nominals generally.*<sup>53</sup>

The fact that no particular consideration is elaborated about the meaning alternation between bare and determiner predicates is compatible with such view of the article.

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<sup>50</sup>Extended Noun Phrases

<sup>51</sup>p. 252

<sup>52</sup>p. 829

<sup>53</sup>p. 829, footnote 10

**Zamparelli** builds his analysis on Heycock and Zamparelli (2005), and crucially, according to them, the article has the role to assign nouns value for a semantic feature:

*[S]ingular count nouns need articles at least because they need to receive from them a value for a semantic feature (called LATT, for lattice denotation) which would otherwise remain unvalued on N.*<sup>54</sup>

*[T]he need for an overt determiner can be derived from the necessity for N to obtain a value for its unvalued feature LATT when the operation of semantic pluralization does not take place, as it is the case with syntactically singular count nouns.*<sup>55</sup>

The presence and absence of the article can thus be dependent on different factors.

*[T]he account points to the existence of three fundamental ways in which nouns can avoid taking articles: a noun can be licensed by a semantic operator (when mass or plural), by movement to D or [Spec, DP] (proper names, coordinated Ns, maybe kind-denoting bare plurals in Germanic), and by coindexation with a DP which is independently licensed (in bare predicate nominals and probably in appositions).*<sup>56</sup>

For **De Swart, Winter, and Zwarts**, the article is understood as the spell-out of a type-shifting operation:

*We take Num to involve Carlsons realization operator REL [...]. In [a] predicative construction [...], NumP coerces the capacity denotation of [an] NP into a kind denotation, without which the realization operator originating from the Num cannot apply to the NP denotation.*<sup>57</sup>

The main difference between **Le Bruyn**'s account and the one of De Swart et al. is that Le Bruyn links the REL type-shifting to the article, instead of Num. For him, the indefinite article in predicative position shifted its meaning from marking "non-uniqueness" to marking REL:

*[T]he indefinite article used to mark non-uniqueness [which] is closely linked to the application of REL because of the non-uniqueness constraint on the elements of kind-sets.*

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<sup>54</sup>p. 3

<sup>55</sup>p. 13

<sup>56</sup>p. 23

<sup>57</sup>2007, p. 19

### 2.11.4 Cross-linguistic variation and the treatment of English

For **Matushansky and Spector**, cross-linguistic variation should be accounted for in terms of the different ways in which nominal argument slots are treated by the various languages (but no explicit claim is made about English).

*We [...] show how this saturation [of a nominal's argument slot, MC] is reflected in the interpretation of the post-copular xNP and [...] argue that various languages treat different nominal argument slots slight differently: while in Dutch (de Swart, et al. (2004)[]) and in German xNP-marking behaves as in French, Instrumental vs. Nominative Case-marking on Russian post-copular xNPs is different in an interestingly predictable way. This leads us to conclude that the indefinite article is not (necessarily) interpretable.*<sup>58</sup>

**Munn and Schmitt**, propose a parametric analysis of the distribution of bare singulars (both in argumental and in predicative position) in a cross-linguistic perspective. Specifically, the parameter that is involved in the behavior of bare singulars in predicative position is one which regulates the surface of two different heads (Agreement and Number).

*[There is] a significant distinction between English and the Romance languages in terms of the realisation of Number within the noun phrase. [W]e proposed that Romance realises separate heads for (semantic) number and agreement, while English “fuses” the two into a single head. This is the so-called “Free-Agr” hypothesis. A consequence of this analysis is that bare count singular nominals [...] should be allowed in many more places in the Romance languages compared to English.*<sup>59</sup>

On the other hand, **Zamparelli**, does not make specific claims about how to account for the observable cross-linguistic variation among European languages. He mainly focuses on the contrast between English and the other (European) languages discussed is captured by a very immediate observation. Zamparelli's account works on gender agreement, but English, unlike the other languages, has no grammatical gender, and the contrast between the “professions” and the other nouns is neutralized.

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<sup>58</sup>p. 241-2

<sup>59</sup>p. 822

*Why does English, unlike its continental Germanic cousins, have no generalized bare predicates with role nouns? The key is that English has no grammatical gender [...]. If [...] nouns cannot appear in syntax within the AGREE domain of another noun unless one of them needs to transmit feature values via AGREE, the lack of gender features in English automatically entails that the subject of the predication must start out in an external position even with predicative role nouns.*<sup>60</sup>

In **De Swart, Winter, and Zwarts**, especially 2007, the focus is on the commonalities of the interpretation of bare nominals. The analysis is built on Dutch and the cross-linguistic considerations aim at highlighting the similarities among various languages. English is mentioned with respect to the uniqueness condition of the predicates.

*We also find capacity qualifiers in English[...] [h]owever, the fact that they occur with a marked nominal indicates that they do not have the same properties as their Dutch counterparts. English lacks the general use of capacity nouns in bare predicative constructions[...]. [P]redicative BN constructions are not impossible in English, but [...] the capacity needs to have a uniqueness condition attached to it [...].*<sup>61</sup>

It is also mentioned that English shows a similar effect with adjectives.

*[T]he semantic contrast between BNs and MNs we found in predicative constructions in Germanic and Romance can be mirrored in English in the adjectival versus the nominal predicative constructions [...]. [The adjective] is quite neutral [...]. In addition to this neutral interpretation, [the determined predicate] allows a reading that calls up (positive or negative) stereotypes that can be associated with [the noun/predicate].*<sup>62</sup>

The generalization, that is however only suggested, is that the similarity between bare predicates and adjectives lies in the fact that they both lack the Number layer.

*A tentative explanation we would like to propose for the similarity between bare nominals and adjectives is that adjectives do not present the layered structure of DPs. In particular, Dutch and English adjectives do*

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<sup>60</sup>p. 17

<sup>61</sup>2007, p. 23

<sup>62</sup>ibid.

*not involve a 'number' layer, the level at which the standard realization operator REL applies.*<sup>63</sup>

For **Le Bruyn**, the behavior of English can be accounted for as a pragmatic/historic effect, consequence of its not having lost the original function of marking “non-uniqueness”.

*Suppose now that in English the indefinite article got linked to REL in the same way as in Dutch but that it did not lose its original function of marking non-uniqueness. [...] Suppose now that speakers have the desire to mark the distinction between unique and standard capacities and [...] the definite and the indefinite article compete. The definite article would then go with unique capacities whereas the indefinite article would go with standard capacities. [A]ccording to [Zeevat (2005),] a form can only acquire a new function if the new function is applied more frequently than the old function. For the indefinite article however it is plausible to assume that the transition from explicitly marking non-uniqueness in [...] capacity predication[,] to obligatorily marking all standard capacities would lead to a widening of its application domain. What the application domain constraint tells us then is that the only process that might have taken place to mark the distinction between standard and unique capacities is the one leading the indefinite article to mark standard capacities.*<sup>64</sup>

In this section we have seen how different lexical approaches to the phenomenon of bare predicates approach the various components of the analysis. In the next and final section we will summarize the discussion emerged so far and expand it with some considerations about the pros and cons of a lexical analysis as opposed to a non-lexical one to account for bare predicates.

## 2.12 Concluding remarks

In this chapter we first reviewed the general discussion on bare arguments and kinds reference, started by Carlson (1977). Then we moved onto the discussion of two different types of accounts; first the one by Chierchia (1998) in which an analysis based on a semantics parametrization is presented. Next, we discussed a

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<sup>63</sup>2007, p. 24

<sup>64</sup>p. 162-3

syntactic account, namely the one presented in Longobardi (2001), according to which the whole class of the phenomena related to bare nouns can be traced back to an independently-motivated syntactic phenomenon. These accounts, for clear scope limitations, are not explicit with respect to bare nominals in predicative position, and for this reason, we subsequently focused on accounts on bare predication. All these accounts provide interesting insights that are useful to focus on the various problematic junctures of the issue of bare predicates. We commented the problematic aspects of each account at the end of each section, while the useful aspects, as well as the data put forward by these authors, will be further integrated in our discussion in the following chapters.

Overall, the crucial passages are three: first of all, what is variation and how to encode it; secondly, if it exists, what is the relation between bareness in argument position and in predicate position; and thirdly, must the fact that some nouns tend to occur as bare predicates more easily be lexically encoded, or can it be related to some knowledge of the world?

While we will return to the first two questions in the next chapters, one thing can be said about the third. The position defended in this thesis is against the lexical encoding of the nouns that refer to professions, social roles, play/theater parts, game roles, sometimes nationalities or religions. We defend this view because, first of all because, once this distinction is made lexical, all the times that the nominals that do not belong to the lexical class (e.g. of roles, professions, etc.) occur bare, some type-shifting operation or coercion must be assumed. Secondly, once these nominals are set in the lexicon as a subset of whatever type element (say, *e*) two new problems arise. The first is that subset-specific operations will apply to one or the other “twin” sets, unless further stipulations are made. In other words, in order to prevent the system from over-generating, there are truly theoretical and ontological questions to be answered, for instance “How is the domain and range of coercion defined” and “To which part of our cognition does this mechanism belong, or does it belong to the model of language, only supposed to work computationally?” If that is the case, then many technical aspects become crucial. The second problem concerns the rationale behind a (new) lexical class; in other words, why should these nouns be different from the others. The most common idea is to say that professions and *similia* are different from other nouns exactly in that they denote role-like properties. But this leaves out all cases of relational nouns (briefly introduced in the summary of Section [2.9], but present in some languages under scrutiny). Finally, it is hard to see how these nouns should be different, formally. The problem with trying to identify a “natural class” is that it should be possible to set apart the elements of that natural

class in several different ways, and not merely by the fact they *mean* something similar. In other words, there do not seem to be enough syntactic differences to call for any lexical distinction/natural class. In fact, we can prove that true natural classes behave, even under some coercive “stress”, very differently from “role nouns”. Let us have a quick look at “grooming verbs”.

**Lexicon and natural classes** Grooming verbs are notably recognized to form a natural class, in many languages. The peculiarity of these verbs is that they are said to be inherently reflexive. This inherent property - the property that, in the end, motivates their setting apart as a natural class - shows in the fact that, in some languages they have the option not to require overt syntactic reflexivization. In other languages, they do not allow certain types of reflexive marking.

- (2.82) (a) *John washes / dresses / shaves himself*  
 (b) *John washes / dresses / shaves*

Notice that in both cases, the sentences in (2.82 a) have the same meaning of the sentences in (2.82 b). However, the same does not happen with any transitive verb, and the sentences in (2.83 a) cannot be reduced to (2.83 b).

- (2.83) (a) *John kisses / touches himself*  
 (b) \**John kisses / touches*

In Italian, for instance, grooming verbs are impossible to reflexivize by *auto*-prefixation:<sup>65</sup>

- (2.84) (a) *Gianni si autoaccusa / autoincorona*  
 Gianni SE *autoaccuses / autocrowns*  
 "Gianni accuses / crowns himself"  
 (b) \**Gianni si autolava / autopettina*  
 Gianni SE *autowashes / autobrushes*  
 "[intended] Gianni washes / brushes himself"

Setting aside the reasons underlying these different behaviors, and focusing on what is at stake for us, there is an issue of productivity: no “normal” transitive verb can be “turned” into a grooming verb by employing it as a grooming verb. Quite unlike this clear-cut situation, *any* noun that is “forced” to occur as a bare predicate assumes

<sup>65</sup>See Castella (2010) for a discussion on Italian reflexive marking and its restrictions.

a meaning that is role-like, profession-like, simply temporally defined, etc. In sum, such a word assumes a non-kind meaning.

To sum up, given that there is no straightforward way of unifying the category of nouns that “can easily be bare predicates”, and there is no strict syntactic distinction, unlike what can be observed for other natural classes, an account that is based on a lexical distinction seems rather unattractive.



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Predication and meaning patterns

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### 3.1 Introduction

The most important observation that emerged from the discussion of the literature is that, before addressing the question of the syntax and the semantics of bare predicates, it is necessary to fully understand what the meaning variation between the determined and the bare predicate is. The most direct way of doing it is by starting from the discussion of some English examples. We mentioned several times that English bare predicates are only allowed if they denote one, contextually-unique, referent (see Stowell 1989, 1991). This can be shown by the example below.

(3.1) *He is (the/a) team captain, and she is \*(a) team member*

Once we choose a noun that respects this uniqueness condition, we can notice an interesting meaning alternation between the bare and the determined predicate. Consider the following pair.

(3.2) (a) *He has been president without (ever) having been a president*

(b) *He has been a president without (ever) having been president*

As many authors pointed out (see Section [2.11] and [2.11.2]), we can informally say that what (3.2 a) means is that the person referred to by the pronoun *he* was officially elected as president, but did not have the qualities that are normally expected from

someone occupying that role. Conversely, (3.2b) means exactly the opposite. The interesting aspect of this pre-formal intuition is that it corresponds precisely to an existing philosophical dichotomic distinction, introduced by Lewis (1983, 2001), between intrinsic and extrinsic properties. A working criterion to distinguish an intrinsic property from an extrinsic property is spelled out in (3.3).

- (3.3) A property  $P$  is intrinsic iff the instantiation of  $P$  by an individual  $x$  is independent of the features of the environment of  $x$ ;  
otherwise  $P$  is extrinsic.

So, in these terms, we can understand being *president* as a property that depends on the environment of the subject, for instance because there has been an election and a contract has been signed. In other words, it is a property that is recognized by subject-external agents. On the other hand, being *a president*, when interpreted as a moral/characteristic/qualitative property, is a property that the subject holds independently of the surrounding environment. Being *a president*, in this sense, is an intrinsic property because no contract, nor official external recognition is necessary.

The speakers seem to be able to understand and express this distinction, and the European languages that we will discuss have it lexicalized with the bare/determined predication. Nonetheless, other languages might encode it with different structures, if at all. For instance, case languages like Czech and Russian reflect it with different case assignment, Koine Greek supposedly with the distinction between nouns and adjectives.

Note that there is an important difference between what language can express in a lexicalized way, and what we can suppose belongs to the world's ontological reality. In other words, it should not surprise the reader that *a president* reflects an intrinsic property even though, in order to be able to conceptualize the concept "president" there have to exist certain institutions, hence some subject-external entities. Also, a fact that will emerge more and more clearly is that our world's (naïve) ontology influences which concepts surface as default-extrinsic and default-intrinsic. For this reason, the languages that we analyzed in this study, and most importantly their speakers, show a preference in expressing "truly" intrinsic properties (e.g. "man", "woman", and so on) as determined predicates and "truly" extrinsic properties (e.g. roles and professions) as bare predicates. We will discuss this at a later stage. In what follows, we will see how the "president pattern" extends to other languages as well. We will see, furthermore, how the meaning alternation that emerges from the "president pattern" extends, in languages other than English, to all human predicates. Then, we will discuss the "metaphorical" readings of the determined predicates.

## 3.2 Other languages

Other (European) languages display the same meaning contrasts between bare and determined predicate observed in (3.2 a-3.2 b), given the same type of construction.

(3.4) (a) *E' stato un presidente senza mai essere presidente* (ita)  
 he is been a president without never to be president  
 "He has been a president without being president"

(b) *E' stato presidente senza mai essere un presidente*  
 he is been president without never to be a president  
 "He has been president without being a president"

(3.5) (a) *Hij is een koning geweest zonder koning te zijn* (nld)  
 he is a king been without king to be  
 "He has been a king without being king"

(b) *Hij is koning geweest zonder een koning te zijn*  
 he is king been without a king to be  
 "He has been king without being a king"

(3.6) (a) *Er war ein Präsident ohne Präsident zu sein* (deu)  
 he was a president without president to be  
 "He has been a president without being president"

(b) *Er war Präsident ohne ein Präsident zu sein*  
 he was president without a president to be  
 "He has been president without being a president"

(3.7) (a) *Ha sido un presidente sin llegar nunca a ser presidente* (spa)  
 he has been a president without reaching ever to be president  
 "He has been a president without being president"

(b) *Ha sido presidente sin llegar nunca a ser un presidente*  
 he has been president without reaching ever to be a president  
 "He has been president without being a president"

- (3.8) (a) *Han har vært en president uten å være president* (nor)  
 he has been a president without to be president  
 "He has been a president without being president"
- (b) *Han har vært president uten å være en president*  
 he has been president without to be a president  
 "He has been president without being a president"

Once we assume the distinction between intrinsic and extrinsic properties, the contrast between (a) and (b) sentences is clearly captured. Of course, there is more to the meaning of these sentences, and most importantly, to their pragmatics. In other words, their use could be further clarified by saying that there are certain aspects that are associated with being *a president*, such as moral height, courage, honesty, knowledge, etc. We will not focus on this particular aspect of the characterization, because the idiosyncratic behavior and vagueness of any characterization of this type do not add insightful content to the contrast we are interested in. Our understanding of the contrast, expressed by all of the examples above, is that predicating *a president* of someone equals predicating “presidenthood” as an intrinsic property, which makes the subject a specific spatio-temporal individual instance of a kind. On the other hand, predicating *president* of someone equals predicating “presidenthood” as an extrinsic property, and bare predicate *president* simply denotes a set. For now, we will understand the difference between intrinsic and extrinsic as bearing on the role of the environment of the subject of the predication. In other words, a property is intrinsic when a subject instantiates it independently of the environment.

### 3.3 Other predicates

Earlier we mentioned that languages other than English show the same meaning alternation emerging from the “president pattern” to all predicates ascribing properties to humans. The Italian example below shows the same meaning contrast discussed in the previous section. The difference holding between a sentence like (3.9 a) and a sentence like (3.9 b) is that (3.9 a) contains a predicate that is interpreted as an extrinsic property and (3.9 b) contains a predicate that is interpreted as an intrinsic property.

- (3.9) (a) *Niccolò è (stato) avvocato* (ita)  
 Niccolò is (been) lawyer  
 "Niccolò is a lawyer / has been a lawyer"

- (b) *Niccolò è (stato) un avvocato*  
 Niccolò is (been) a lawyer  
 "Niccolò is a lawyer / has been a lawyer"

An interesting informal test to highlight the contrast is provided by the following context.

- (3.10) (a) What did you expect? *Niccolò è avvocato!*  
 (b) What did you expect? *Niccolò è un avvocato!*

The right context for (3.10 a) is discussing something that *Niccolò* did, while doing his job. The sentence equals saying “Of course he did thing x, it’s (a part of) his *job!*”.<sup>1</sup> On the other hand, the right context for (3.10 b) is one where the person did something that is not necessarily “prescribed” by his profession or role, but rather something that one could have expected because of the way he is. The sentence equals saying “Of course he did thing x, it’s in his *nature!*”, or “he’s *that kind of person!*”.

The contrast is replicated also in Dutch, German, Spanish and Norwegian. All of these languages allow human predicates to alternate between the same two meanings.

### 3.3.1 Bare Predication

- (3.11) (a) *Nick is advocaat (geweest)* (nld)  
 Nick is lawyer (been)  
 "Nick is a lawyer / has been a lawyer"
- (b) *Nikolas ist Anwalt (gewesen)* (deu)  
 Nikolas is lawyer (been)  
 "Nikolas is a lawyer / has been a lawyer"
- (3.12) (a) *Nicolás es abogado / ha sido abogado* (spa)  
 Nicolás is lawyer / has been lawyer  
 "Nicolás is a lawyer / has been a lawyer"
- (b) *Nikolai er / var advokat* (nor)  
 Nikolai is / was lawyer  
 "Nikolai is / was a lawyer"

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<sup>1</sup>It is easier to create realistic minimal pairs of predicates which have a socio-cultural stereotypes associated to them (e.g. politicians, salesmen, etc).

### 3.3.2 Determined Predication

- (3.13) (a) *Nick is een advocaat (geweest)* (nld)  
 Nick is a lawyer (been)  
 "Nick is a lawyer / has been a lawyer"
- (b) *Nikolas ist ein Anwalt (gewesen)* (deu)  
 Nikolas is ein lawyer (been)  
 "Nikolas is a lawyer / has been a lawyer"
- (3.14) (a) *Nicolás es un abogado / ha sido un abogado* (spa)  
 Nicolás is a lawyer / has been a lawyer  
 "Nicolás is a lawyer / has been a lawyer"
- (b) *Nikolai er / var en advokat* (nor)  
 Nikolai is / was a lawyer  
 "Nikolai is / was a lawyer"

## 3.4 Extended and metaphorical readings

Another context in which we can identify a meaning contrast between a bare and a determined predicate is one in which the determined predicate appears to allow for an extended or metaphorical reading. Consider the following scenario.

### 3.4.1 The “dentist” scenario

Apparently, in each minimal pair, the bare predicates contained in the (a) sentences are interpreted “literally” and the determined predicates contained in the (b) sentences can be interpreted “metaphorically”.

- (3.15) (a) *Il mio dentista è artista* (ita)  
 the my dentist is artist  
 "My dentist is (literally) an artist"
- (b) *Il mio dentista è un artista*  
 the my dentist is an artist  
 "My dentist is an artist (of dentistry)"
- (3.16) (a) *Mijn tandarts is kunstenaar* (nld)  
 my dentist is artist  
 "My dentist is an artist"

- (b) *Mijn tandarts is een kunstenaar*  
 my dentist is an artist  
 "My dentist is an artist"

- (3.17) (a) *Mein Zahnarzt ist Künstler* (deu)  
 my dentist is artist  
 "My dentist is an artist"

- (b) *Mein Zahnarzt ist ein Künstler*  
 my dentist is an artist  
 "My dentist is an artist"

- (3.18) (a) *Mi dentista es artista* (spa)  
 my dentist is artist  
 "My dentist is an artist"

- (b) *Mi dentista es un artista*  
 my dentist is an artist  
 "My dentist is an artist"

- (3.19) (a) *Min tannelege er kunstner* (nor)  
 my dentist is artist  
 "My dentist is an artist"

- (b) *Min tannelege er en kunstner*  
 my dentist is an artist  
 "My dentist is an artist"

There are several problems to be considered. First of all, when uttered with unmarked prosody, (b) sentences can give rise to different readings.

1. The equative reading, which corresponds to the interpretation "there is an artist such that my dentist is that artist".
2. The predicational reading. The sentence states that, in addition to being a dentist, the dentist can be e.g. a painter, a photographer, etc.
3. The "metaphorical" reading. The sentence states that the dentist is a *dentistry artist*.

The equative interpretation described in (1), semantically, involves the equation of two entities of the same type, and syntactically, it involves a referential argument as the argument of the identificational *be* (see Section [2.7]). A parallel phenomenon is reported by Stowell (1991), where it is pointed out that numerals and non-specific quantifiers are allowed only in equative/identificational sentences.

(3.20) ?*John and Bill are two doctors (who live next door to me)*

So in (3.20), the expression *two doctors* is acceptable when referential (i.e. when it introduces the subject) but it cannot be interpreted as a predicate. For this reason, equative readings do not concern us, and will be briefly discussed in Section [5.4].

The readings in (2) and (3), on the other hand, are always treated as two different readings, but in fact the predicational reading and the metaphorical reading emerge only given certain contextual characteristics, and are simply two possible interpretations of an intrinsic property. In what follows we will consider some data that will help clarify this point.

### 3.4.2 Metaphorical interpretations

Recall that in the account proposed by De Swart et al. (2007), it is stated that, in (3.21), the predicate *a manager* can be interpreted either literally or metaphorically. According to that account, every “metaphorical” reading of a predicate is derived by an operation of “kind coercion” that shifts an element from capacities to kinds. It is because of this coercion that the resulting predicates acquire that slightly marked flavor.

(3.21) *Lui è un manager* (ita)  
 he is a manager  
 "He is a manager"

Le Bruyn (2010) introduced the opposite coercion operation, the “cap coercion”, shifting elements from kinds to capacities, and that accounts for cases like (3.22):

(3.22) *Lei è volpe*  
 she is fox  
 "She is a fox"

When a noun like *fox* refers to a kind/animal, it does not occur bare. However, if it occurs bare is interpreted as a role; one way in which (3.22) can be interpreted is

within the scenario of a school recital, where the kids are dressed like some animals. One unattractive detail of this account, however, is the following: let us consider once again (3.21). In order to obtain the “metaphorical” reading of *manager*, we need to “feed” the kind-coercion mechanism with some lexical item originally stored as a capacity.<sup>2</sup> However, every noun can be interpreted “metaphorically”, and it does not seem to be an effect that is specific to capacity nominals.

- (3.23) (a) *Gianni è un armadio*  
 Gianni is a cupboard  
 "Gianni is a cupboard = a strapping fellow"
- (b) *Gianni è un maiale*  
 Gianni is a pig  
 "Gianni is a pig = a disgusting person "

Natural languages seem to allow metaphorical readings in a very prompt and productive way, although the meaning of such expressions is entirely dependent on social/cultural factors that are not relevant for us.<sup>3</sup>

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<sup>2</sup>This requirement is not made explicit, but I assume it must exist, otherwise there is no possible way in which the “kind-coercion” (and the “cap-coercion”) would know what nouns it can coerce.

<sup>3</sup>It could be claimed that, in Italian, as well as in English and many other languages, the word *maiale* ‘pig’ has a lexicalized meaning (see [http://www.locuta.com/anim\\_meta.html](http://www.locuta.com/anim_meta.html)). This is reasonably true but it certainly does not affect the argument. If, on the one hand, some lexicalizations are indubitable, on the other hand any noun can be interpreted with the same margin of doubt of any profession, with absolutely predictable effects. For instance, non-complex professions (e.g. chef) and animals that are well-known for one striking detail (e.g. giraffe) are easier to interpret “metaphorically”, as shown by the following examples.

- (3.24) (a) *He is a giraffe / a rabbit*  
 (b) #*He is a crane / a ferret*  
 (c) *He is a chef / a dictator*  
 (d) #*He is an associate professor / a paralegal*

Also, the properties can be further negotiated, just as it can happen with a profession/role noun or an animal, as shown by the following examples (I’m adopting Laurence Horn’s practice, so the examples marked with a ‘ $\gamma$ ’ are actual Google examples).

- (3.25) - What do you mean he’s a dictator? Is it because of his strong leadership and stern manners?  
 - Also / No, because he doesn’t like when people disagree with him.
- (3.26) - What do you mean he’s a beaver? Is it because of  $\gamma$  his buck-toothed smile?  
 - Also /No, because  $\gamma$  of his hardworking, tenacious attitude.
- (3.27) - What do you mean she’s a Paris Hilton? Is it because she’s so rich and spoiled?  
 - Also / No, because she is a fashion-victim socialite.

The controversial juncture is the following: if, on the one hand, De Swart et al. provide a mechanism to derive “metaphorical” readings from a certain type of nominals, on the other hand, the similarities between interpretation of “dictator” and the metaphorical interpretation of “cupboard” or “pig” is lost, even though, obviously, the coercion mechanism they designed was not intended or expected to account for the metaphorical interpretation of any nominal. At this point, which position is preferable depends on a number of other factors, that we will not discuss here, for scope constraints, but it is still important to mention that there is another class of examples that is relevant to this discussion, and that we will briefly discuss in what follows. Consider the pair below.

- (3.28) (a) *Quella ragazza è Paris Hilton*  
 that girl is Paris Hilton  
 "That girl is Paris Hilton"
- (b) *Quella ragazza è una Paris Hilton*  
 that girl is a Paris Hilton  
 "That girl is a Paris Hilton"

(3.28 a) is true when uttered when pointing, for instance, at a picture representing Paris Hilton. Conversely (3.28 b), in the same context, results somehow odd, but it is perfectly acceptable if uttered when pointing at some young woman with certain characteristics. The determined predicate *una Paris Hilton* in (3.28 b) seems to be interpreted exactly with the same mechanism that allows the interpretation of all of the above determined predicates. It could be claimed that the interpretation of the proper name in a “metaphorical” way depends on some other property relatable to proper names. Luca Ducceschi (p.c.) pointed out that, in some cases, a proper name seems to be interpretable in a metaphorical way, even without the occurrence of the determiner. This is illustrated in (3.29).

- (3.29) [John is playing the guitar].  
*Yes, he's Jimi Hendrix!*

There are two things that it is important to point out. First of all, (3.29) is an identificational sentence and *Jimi Hendrix* is a referential argument of the equative *be*. Secondly, there is a contrast in terms of truth values, because (3.29) is a false proposition. In other words, in this case, the “metaphorical” interpretation of the proper name might be a pragmatic effect, and the “metaphorical” effect can be explained by resorting to e.g. Grice’s Maxim of Quality.<sup>4</sup> The same cannot be said for (3.28 b) or (3.31).

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<sup>4</sup>This effect is even more clear in cases like (3.30):

(3.31) *He is a Jimi Hendrix*

The fact that the interpretation of (3.31) cannot be derived in the same ways in which we derive (3.29) can be shown by observing that (3.29) can be ambiguous because it is compatible with the scenario in which John is a really good musician, as well as one in which John is a very bad musician. On the other hand, (3.31) is only compatible with a scenario in which John is “Jimi Hendrix-like” (unless again, the sentence is uttered with an ironic prosody).

Summing up, all predicates, independently on whether they are human, non-human, or inanimate are in principle interpretable in a “metaphorical” way. The fact that the “metaphoric” predicates pattern together in many respects can be seen as the hallmark of their having something in common, and the fact that other “metaphorical” readings can arise in other cases, can be explainable resorting to other mechanisms. The stand taken in this thesis is that understanding the “metaphorical” reading as derivable - given certain contextual settings - by the interpretation of the predicate as an intrinsic property is ultimately more convenient.

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(3.30) *Marko is the master of the Universe*



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### Restrictions and the shape of the world

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In this chapter we will be concerned mainly with the interaction between the alternation of bare and determined predicates and the most typical realization of properties as intrinsic or extrinsic depending what the languages we are concerned with seem to reflect of the world's ontology. So, we will begin the discussion seeing how the intrinsic/extrinsic distinction predicts which predicates surface (mainly) bare or determined. Then, we will discuss why this pattern is more common with human predicates, and the issue of the existence of non-human extrinsic properties, encoded in language. In doing that, we will expand the discussion on the types of predicates that, from a cross-linguistic perspective, can or cannot productively lexicalise the extrinsic/intrinsic distinction and discuss the behavior of relational nouns. Finally we will conclude with some observation on the relation between human bare/determined predicates and the mass/count distinction.

#### 4.1 Introduction

Let us now move onto a more in-depth discussion of the extrinsic/intrinsic distinction. We already said that some properties of any individual depend purely on the beholder, and other properties depend on the environment surrounding that individual. Lewis (1983) expressed the distinction in the following way.

*A sentence or statement or proposition that ascribes intrinsic properties to something is entirely about that thing; whereas an ascription of*

*extrinsic properties to something is not entirely about that thing, though it may well be about some larger whole which includes that thing as part. A thing has its intrinsic properties in virtue of the way that thing itself, and nothing else, is. Not so for extrinsic properties, though a thing may well have these in virtue of the way some larger whole is. [...]*

*If something has an intrinsic property, then so does any perfect duplicate of that thing; whereas duplicates situated in different surroundings will differ in their extrinsic properties.<sup>1</sup>*

Even if, philosophically, this is not an uncontroversial claim, we can see how, even at a basic level, intuitions of this type can help the understanding of the common occurrences of certain predicates as bare or determined. For instance, there is a clear contrast between relations and natural objects. Being a natural object or, arguably, a mathematical object (e.g. a shape) is an intrinsic property. Conversely, relations are properties that necessarily involve some other object (i.e. the other argument of the relation). So, from a philosophical standpoint, relations trivially correspond to extrinsic properties.<sup>2</sup> If we wonder why nouns like *uomo* 'man' *donna* 'woman' *bambino* 'child' etc. show (also cross-linguistically) some stability in occurring mainly as determined predicates, we should not be surprised, since these nouns are most frequently used to realize "man", "woman", "child" as intrinsic properties (of individuals). In other words, we express that the way in which a "circle", a "man" or a "woman" etc. is independent of anything else in the environment in which they are placed, but dependent only on their internal structure. In any case, the nature of the internal structure of these objects determines the way in which the corresponding nouns surface, but only in terms of frequency, not in terms of possibilities. There is no complementary distribution between bare predicates and the nouns that occur most frequently in a determined predicate, because there is a division of labor between bare and determined predicates (as structures), which trivially follows from the fact that they have different meanings. In section [4.2], we will see the corresponding cross-linguistic data involving these types of nouns.

We said that the nouns that usually refer to natural or mathematical objects get more typically realized as intrinsic properties, surfacing as determined predicates. An example is, for instance, the concept of shape. We said that, linguistically, these concepts are typically realized as intrinsic properties, and this seems to capture the contrast shown in the examples below.

<sup>1</sup>Lewis (1983) "Extrinsic Properties", *Philosophical Studies*, 44. 197-200. p. 111-2

<sup>2</sup>There are certain controversies, both in the case of natural object being intrinsic and relations being necessarily extrinsic. We will discuss them briefly later.

- (4.1) (a) ??*Questo è cerchio*  
 this is circle  
 "This is circle"
- (b) *Questo è un cerchio*  
 this is a circle  
 "This is a circle"

A claim that there can be an extrinsic concept of shape which is linguistically encoded would be hard to defend. On an intuitive level, shape is one unproblematic intrinsic property that objects have. Philosophically, however, whether shapes are intrinsic or extrinsic properties is debatable. When discussing the world's ontology, it is reasonable to wonder if the shape of a body depends entirely on the body itself or not. We are aware that there are object-external factors influencing the shape of an object, for instance the curvature of the space. From a linguistic perspective, however, these types of observations seem completely irrelevant, and these factors seem to not be encoded in language.

Let us now discuss the nouns that, philosophically, are more typically seen as encoding extrinsic properties. These nouns are, for instance, the nouns encoding relations. If our generalization is on the right track, relational nouns should occur - in some language - as bare predicates. These nouns are also expected to alternate between the bare and the determined form, if they occur without the second argument. The reason why this variation is expected to exist is that, when one of the arguments of the relational noun (the one occurring in the *of*-phrase) can be omitted, we expect - by assumption - the noun to shift its meaning from explicitly extrinsic, to a condition where both the extrinsic and the intrinsic readings are possible. When this happens, then the regular variation should occur.<sup>3</sup>

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<sup>3</sup>Note that not necessarily for every language the intrinsic/extrinsic realization of the property must be lexicalized with the presence of the determiner, or its absence. In English, for instance, relational nouns (with both arguments realized) cannot occur bare, even if they denote contextually unique positions.

- (4.2) \**John is father of Mary*

This could also depend on the fact that some languages have alternative constructions to express such relations, for instance the Saxon genitive, shown in (4.3).

- (4.3) *John is Mary's father*

The absence, in various degrees, of bare relational nouns is not surprising in languages that can resort to the Saxon genitive (typically, the Germanic languages), but would be surprising in languages that do not have the Saxon genitive option (typically, the Romance languages). We are not going to discuss the intrinsic/extrinsic alternation including these type of constructions, because this topic is tangent to the one of this thesis. However, it is definitely interesting to see if the insights that we discuss can be used to capture some contrasts involving also possessive constructions and Saxon genitive.

From a philosophical perspective, even in (4.4), what is expressed by the predicate *father* is an extrinsic property, since the possibility of ascribing it to some man depends on the existence of at least one child of the man it is predicated of.

(4.4) *John is a father*

From a linguistic perspective, however, “fatherhood” is neither intrinsic nor extrinsic, until it is realized because, potentially, the concept can be realized as an intrinsic or an extrinsic property. Consider the following pair, in Italian.

- (4.5) (a) *Gianni è padre*  
 Gianni is father  
 "Gianni is (extrinsically) a father"
- (b) *Gianni è un padre*  
 Gianni is a father  
 "Gianni is (intrinsically) a father"

For (4.5 a) to be true, Gianni simply has to have at least one child. Indeed, (4.5 a) is true even in a scenario where Gianni does not know that he has children, because (4.5 a) refers to a situation in which the environment around Gianni has changed, and that affects him but only in terms of his extrinsic properties. So, an environmental change does not necessarily modify Gianni’s internal structure (e.g. his morals, or his psychological attitude). On the other hand, (4.5 b) is true when Gianni is intrinsically father-like. Crucially, we can say that Gianni is a father even without having children. In other words, here the distinction between (4.5 a) and (4.5 b) can be understood also in terms of entailment. While (4.5 a) entails that Gianni has at least one child, (4.5 b) does not.

Interestingly the same pattern can be found also with nominals that are not in the class of the kinship nouns. In (4.6 a-4.6 b) is presented another instance in which we can identify the extrinsic/intrinsic contrast, expressed with the bare or determined predicate.

- (4.6) (a) *Lei è vedova*  
 she is widow  
 "She is (extrinsically) a widow"
- (b) *Lei è una vedova*  
 she is a widow  
 "She is (intrinsically) a widow"

The simple fact that a woman’s husband dies extrinsically makes her a widow. However, if she starts wearing the prescribed colors and behaving in some widow-like way, then it is possible to understand those as signs that she underwent some internal/psychological change, and became “a widow”.

Summing up, the fact that the properties in (4.5 a) and (4.6 a) are extrinsic can be understood as being informative about the world around the subject. The fact that the properties in (4.5 b) and (4.6 b) are intrinsic can be understood as being informative about the subject.<sup>4</sup>

The difference between (4.7 a) and (4.7 b) is that (4.7 a) expresses what is called “mere Cambridge change” (see. Geach, 1969), and (4.7 b) expresses what is called “intrinsic change”.

(4.7) (a) *Diventare padre (di Gianni) / vedova (di Gianni) / amico di Gianni*  
 to become father (of Gianni) / widow (of Gianni) / friend of Gianni

(b) *Diventare un padre / una vedova / un amico*  
 to become a father / a widow / a friend

In Section [4.3] we will present the cross-linguistic dataset on relational nouns, as well as a more detailed discussion of the readings.

## 4.2 “Man”, “woman”, etc.

Earlier, we mentioned that nouns like *uomo* ‘man’ *donna* ‘woman’ etc. show some stability in occurring mainly as determined predicates. We also said that, when

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<sup>4</sup>Gateano Fiorin (p.c.) pointed out that another relevant distinction is the one between Primary and Secondary properties. This is a distinction discussed by Galileo, Descartes, Locke among many others. This observation deserves more space to be discussed in detail, however we can highlight some aspects.

The distinction between primary and secondary property is a distinction conceptualized in terms of the presence of an experienter / observer in the broad sense. A secondary property is a property that depends, conceptually, on an experience of some kind (e.g. to be visible, to be disgusting, etc.). A primary property does not depend on any experience. In this sense, the distinction does not seem applicable in this context, because even if the experience-related property seems to share some aspects of an extrinsic property, it is immediately clear that it is not enough to generalize over the phenomenon we have been observing. Consider being (extrinsically) a father, and the following scenario: Gianni has a son, and suppose that Gianni is not aware of that. Suppose furthermore that the son has never met Gianni. This is the case in which the bare predicate would be preferred over the determined predicate. However, the experience of Gianni’s son or anyone else seems completely irrelevant to grasp the meaning of the predicate.

occurring as determined predicates, they express that the property they encode is independent of the environment. For this reason, if these nouns occur as bare predicates, they are odd or harder to interpret.

(4.8) (a) *??Lui è uomo / bambino* (ita)  
 he is man / boy  
 "He is a man / a boy"

(b) *??Lei è donna / bambina*  
 she is woman / girl  
 "She is a woman / girl"

(4.9) (a) *??Hij is man / jongen* (nld)  
 he is man / boy  
 "He is a man / a boy"

(b) *??Zij is vrouw / meisje*  
 she is woman / girl  
 "She is a woman / girl"

(4.10) (a) *??Er ist Mann / Junge* (deu)  
 he is man / boy  
 "He is a man / a boy"

(b) *??Sie ist Frau / Mädchen*  
 she is woman / girl  
 "She is a woman / girl"

(4.11) (a) *??El es hombre / niño* (spa)  
 he is man / boy  
 "He is a man / a boy"

(b) *??Ella es mujer / niña*  
 she is woman / girl  
 "She is a woman / girl"

(4.12) (a) *??Han er mann / gutt* (nor)  
 he is man / boy  
 "He is a man / a boy"

- (b) *??Hun er kvinne / jente*  
 she is woman / girl  
 "She is a woman / girl"

It is crucial that all the sentences above are not ungrammatical. The problem, clearly is that most speakers tend to reject them because, pragmatically, the speakers will assume that such sentences should mean that of the subject it is predicated some type of human subkind. The (sub)-kind meaning however corresponds to the intrinsic meaning, that is associated with the determined predicate, and not to the bare predicate. Note how the bare predicates are perfectly acceptable when the right meaning is associated with them. Compare (4.13 a) to (4.13 b).

- (4.13) (a) *Gianni, dopo aver cambiato sesso, è diventato donna.*  
 Gianni, after have<sub>inf</sub> changed sex, he is become woman  
 (ita)

"Gianni, after having changed sex, he has become a woman"

- (b) *Gianni, (...), è diventato una donna.*  
 Gianni, (...), he is become a woman  
 "Gianni, (...), he has become a woman"

So, (4.13 a) means that Gianni underwent a sex changing operation, and interestingly, (4.13 b) means something different. The second sentence means that, after the sex-changing operation, Gianni intrinsically changed, and became a woman. So, the sentence containing the determined predicate conveys the meaning of a deeper, intrinsic, change in Gianni, which is not necessarily related to the operation *per se*, whereas the sentence with the bare predicate simply states that a change has affected Gianni.

Consider another case.

- (4.14) *Gianni ha estratto il rosso e quindi è donna*  
 Gianni has extracted the red, and hence he is woman  
 "Gianni picked red, hence is a woman"

Similarly, (4.14) is easy to interpret imagining a scenario where there is a game with two teams (the team of the men, and the team of the women) and some contestants are sorted out randomly by picking a card of the associated color. If, in the same context, we replace the bare with the determined predicate, as shown in (4.15), the

meaning of the sentence would be something else. 4.15 means that, as a consequence of his picking the red card, Gianni is magically transformed into a woman.<sup>5</sup>

- (4.15) # *Gianni ha estratto il rosso e quindi è una donna*  
 Gianni has extracted the red, and hence is a woman  
 "Gianni picked red, hence is a woman"

Concluding, both types of predicates realize different types of properties. The frequency of the occurrence of certain predicates bare or determined is just informative about the shape of the world as we perceive it. Given the right context, it is easy to show how the bare predicate is necessary to convey a certain meaning, even if it rarely occurs in that way.

### 4.2.1 Coerced Adjectives

There are occurrences of nouns like *uomo* or *donna* in predicative position and without a determiner that could be used against our analysis, because they do not seem to be interpreted as extrinsic properties. Consider the cases below, presented in Italian and Spanish.

- (4.16) (a) *Rispetto ai suoi compagni, che sono più maturi,*  
 in front at the his mates, that are more mature,  
 "Compared to his friends, who are more mature,

%è *proprio / molto bambino* (ita)  
 is really / very child  
 he's very child(ish) "

- (b) *Respecto a sus amigos, que son más maduros,*  
 in front at his friends who are more mature,  
 "Compared to his friends, who are more mature,

% *el es muy niño* (spa)  
 is very child  
 he's very child(ish) "

These sentences are slightly colloquial and, arguably, dispreferred in formal or written registers (hence the grammaticality judgement “%”). The fact that these examples are sensible to register variation seem to indicate that the bare nouns thereby

<sup>5</sup>Or alternatively, if the cause-effect relation is inverted, the sentence means that “the cause of Gianni’s picking red is that Gianni is a woman”.

contained are somewhat different from the other bare predicates that we have seen in the previous examples. And indeed, the presence of *molto* 'very' indicates that these nouns have been coerced into scalar predicates (see also Matushansky, 2002). Furthermore, in these contexts, the nouns become arguably adjectives, since they cannot be modified by other adjectives, but only by adverbs, as (4.17 a-4.17 b) show.

- (4.17) (a) %*Lui è molto uomo* (ita)  
 he is much/very man  
 "He is very man(ly)"
- (b) ??/\**Lui è vero uomo*  
 he is real man

It is also impossible to argue that *uomo*, *bambino* etc. could be stored twice in the lexicon because, next to being sensitive to registers, they also fail the coordination test with other adjectives. Since it is normally harder to coordinate two elements of different categories, if these predicates existed as separate entries, the coordination with an unambiguous adjective would be successful, but it is not the case.

- (4.18) (a) ... \**è proprio bambino e simpatico* (ita)  
 ... he is really kid and funny  
 "[intended] ... he's really childish and funny"
- (b) ... \**el es muy niño y gracioso* (spa)  
 ... he is very child and funny  
 "[intended]... he's very childish and funny"

Finally there is one last piece of evidence that viewing these cases as coerced adjectives comes from Norwegian. Compare the pattern discussed so far to the Norwegian counterparts in (4.19 a - 4.19 b). Here too, it is crucial to note that the grammaticality judgements are of a different nature.

- (4.19) (a) %*Han er veldig mann*  
 he is very man  
 "He is very man(ly)"
- (b) ??*Han er ekte mann*  
 he is real man

Essentially, what we observe is that the unacceptability of (4.19 b) depends on the fact that *ekte* (unlike *veldig*) does not trigger the coercion into an adjective of

*mann*.<sup>6</sup> Since the noun is not coerced, the predicate is interpretable only as a well-established property. But the *ekte mann*, in Norwegian, is not a well-established property. Note that, evidence of the fact that the predicate would be interpretable if it was a well-established property comes from the fact that, in Norwegian, there exists a well-established property involving the noun *mann*, in (4.21).

- (4.21) *Han er skikkelig mann*  
 he is proper man  
 "He is a proper man"

### 4.3 Relational nouns

In this section we will discuss relational nouns and their behavior in the following order: first we will look at two languages that show very similar phenomena, i.e. Italian and Spanish, and understand what this phenomenon is all about; then we will consider German, where the phenomenon is non-existing as opposed to Dutch, a language where very strong restrictions apply. After having extensively discussed Dutch, we will discuss the data from Norwegian. It will become clear that the behavior and the asymmetries among nouns and languages do not deviate from the generalization discussed in the previous section.

#### 4.3.1 Introduction

In this group we can find nouns that refer to work-related relations, as well as other types of relations. These are, for instance *colleague of*, *roommate*, *neighbor of*, and all the nouns derived by *co*-prefixation.<sup>7</sup> Consider the contrast in (4.22 a - 4.22 b):

- (4.22) (a) ?*Gianni è subaffittuario*  
 Gianni is subtenant  
 "[intended] Gianni is a subtenant"

---

<sup>6</sup>Øystein Nilsen (p.c.) pointed out that, also in Norwegian, coerced adjectives fail the coordination test.

(4.20) *Når han oppfører seg sånn, er han \*(veldig barn og morsom)*  
 when he behaves self such, is he (very child and funny)

<sup>7</sup>The group of nominals reported here is the same appeared in Zamparelli (2005). It should be noticed that some of these nouns can appear as bare predicates without the *co*-prefix. This is accidental, since *co*- often applies to professions (e.g. *co-autore* 'co-author', *co-produttore* 'co-producer', *co-pilota* 'co-pilot', etc.). The argument is based on the presence of many exceptions.

- (b) *Gianni è subaffittuario di Marco*  
 Gianni is subtenant of Marco  
 "[intended] Gianni is a subtenant of Marco"

Recall that Zamparelli (2005) is the only study where relational nouns are discussed together with the rest of the bare predicates. Zamparelli provides a tentative explanation of the behavior of the entire class of bare predicates in terms of an impoverished set of features. Specifically, the nouns in this class lack a gender feature (because these nouns refer to properties that can in principle belong to men or women). Since these nominals need the gender feature, but the articles cannot provide it, they have to enter an agreement relation with the subjects of the predication. The distinction between the literal and the metaphorical reading is derived in the lexicon, and the impossibility of bare predicates in English is connected to the fact that English does not have grammatical gender.

In agreement with Zamparelli, we consider important treating bare relational nouns on a par with standard bare predicates. Differently from Zamparelli, we avoid the concept of lexical class to account for this phenomenon. However, the great similarities, pointed out by Zamparelli, with respect to the behavior and distribution of all the bare predicates in languages like Italian (be they nouns of professions, kinship nouns or general relational nouns) seems to point at a common interpretative mechanism. In what follows we will overview data from several different languages, point out the similarities, and discuss the differences. The general goal is to try to encompass a larger set of data that shows identical interpretative properties, on the basis of a common generalization.

### 4.3.2 Kith

Let us move to this group of nouns referring to relations, keeping in mind what we said about the expectations that the insight about the intrinsic/extrinsic alternation suggest with respect to relational nouns. Recall that the difference between the denotation of a predicate like “lawyer”, that can be modeled as a set of individuals, and a relational noun is that relational nouns denote a relation holding between a set of pairs. As a consequence of the existence of some subject-external object to which the noun refers, these noun surface easily as extrinsic properties. Unless a language is endowed with a different type of structure dedicated to these types of cases (e.g. the Saxon genitive), explicit relational nouns are expected to surface bare. This is the pattern that we can observe in Italian and Spanish, below.

### Italian and Spanish

In Italian and Spanish these nouns behave in an identical way. What we see in the next two sets is that most relational nouns behave like the following examples:<sup>8</sup>

(4.23) (a) *Gianni è amico di Marco* (ita)

Gianni is friend of Marco

"Gianni is Marco's friend"

(b) *Juan es amigo de Marcos* (spa)

Juan is friend of Marcos

"Juan is Marcos' friend"

As the reader can notice there is no difference between those relational nouns that already without the PP refer to professions or positions, and nouns that do not have that type of meaning.

(4.24) (a) *Gianni è vicino / dirimpettaio / subaffittuario di*

Gianni is neighbor / next door neighbor / subtenant of

*Marco* (ita)

Marco

"Gianni is Marco's neighbor / next-door neighbor / subtenant"

(b) *Gianni è collega<sup>9</sup> / coinquilino di Marco*

Gianni is colleague / roommate of Marco

"Gianni is Marco's colleague / roommate"

(c) *Gianni è cointestatario del conto / coautore del saggio*

Gianni is co-holder of the account / co-author of the essay

*/ coproduttore del film con Marco*

/ co-producer of the movie with Marco

"Gianni is the co-holder of the account / co-author of the essay /  
co-producer of the movie with Marco"

(4.25) (a) *Juan es vecino (de al lado) / subarrendatario de Marcos*

Juan is neighbor (of the side) / subtenant of Marcos

(spa)

"Juan is Marcos' (next-door) neighbor / subtenant"

(b) *Juan es colega / compañero de cuarto de Marcos*

Juan is colleague / mate of room of Marcos

"Gianni is Marcos' colleague / roommate"

---

<sup>8</sup>This list is not comprehensive.

- (c) *Juan es cotitular de la cuenta / coautor del libro / Gianni is co-holder of the account / co-author of the essay / coproductor de la película con Marcos / co-producer of the movie with Marcos*  
 "Gianni is the co-holder of the account / co-author of the essay / co-producer of the movie with Marcos"

Two facts are important to notice. First of all, there exists an alternation with the determined form, and that goes along the lines of what we have been discussing so far. Secondly, the meaning of the predicates is comparable to what we have observed with professional nouns. As we said, being in some relation with someone can be defined as an extrinsic property (of an individual), similarly to the way in which we can understand having a job. The interpretation of any bare relational predicate is that of an extrinsic property.

We will see that some languages disallow the structure (e.g. German), or allow it only in some specific case (e.g. Dutch) or more broadly (e.g. Norwegian). Most importantly, when present, the meaning alternation pattern is consistent with our predictions.

## Dutch and German

Throughout this study, we have noticed that Dutch and German have a very closely-related behavior. In both languages relational nouns in bare predicative position are essentially not accepted. In German the ungrammaticality seems a little stronger than in Dutch. In Dutch the tolerance can vary to some degree among speakers. The examples in (4.26 b) are ungrammatical and so their German counterparts in (4.26 a).

- (4.26) (a) *\*Martin ist Freund von Mark* (deu)  
 Jan is friend of Mark  
 "[intended] Jan is Mark's friend"
- (b) *Jan is \*vriend / \*(over)buurman / ??huurder / ??huisgenoot*  
 Jan is friend / (next-door) neighbor / tenant / roommate  
*van Mark* (nld)  
 of Mark  
 "[intended] Jan is Mark's friend / (next-door) neighbor / tenant / roommate"

---

<sup>9</sup>It is also possible to say "Gianni è collega d'ufficio di Marco", Gianni is office colleague of Marco.

Furthermore, it appears that in this predicative structures the grammaticality is more easily achieved when the predicate belongs to the set of professional nouns; otherwise they remain very marginal. The same applies below, where *co-pilot* can only be read as the actual profession (for instance, not in a scenario of a family driving the car on holidays).

- (4.27) (a) *Jan is ??collega / ?copiloot van Mark*  
 Jan is colleague / co-pilot of Mark  
 "[intended] Jan is Mark's colleague / co-pilot"
- (b) *Jan is mede-eigenaar van de rekening / co-auteur van dit essay / co-producent van de film met Mark*  
 Jan is co-owner of the account / co-author of this essay / co-producer of the movie with Mark  
 "Jan is the co-holder of the account / co-author of this essay / co-producer of the movie with Mark"

From this last set of examples (4.27 b), it seems that *co*-prefixation does not introduce another argument (realized in the *met*-PP or *mede*-PP); on the contrary the *met*-PP seems to behave like an adjunct. If the prefix *co*- is dropped the sentence is even more acceptable.

- (4.28) (a) *??Jan is mede-eigenaar van de auto met zijn vrouw*  
 Jan is co-owner of the car with his wife  
 "[intended] Jan is the co-owner of the car with his wife"
- (b) *?Jan is eigenaar van de auto met zijn vrouw*  
 Jan is owner of the car with his wife  
 "Jan is the owner of the car with his wife"

Enrico Boone (p.c.) pointed out that fronting makes the judgements clearer, perhaps because the *met*-PP can only be an adjunct to the VP and not to the DP. So, it appears that the prefix and the adjunct cover identical roles, their simultaneous presence causes a strong marginality to the sentence that, on the other hand, improves when the prefix is omitted.

- (4.29) (a) *??Met zijn vrouw, is Jan mede-eigenaar van de auto*  
 with his wife, is Jan co-owner of the car  
 "With his wife, Jan is the co-owner of the car"
- (b) *?Met zijn vrouw, is Jan eigenaar van de auto*  
 with his wife, is Jan owner of the car  
 "With his wife, Jan is the owner of the car"

The reading of (4.29 a) implies that there is another owner, next to Jan and his wife (both of them are co-owners, but that is not exclusive).<sup>10</sup> But the overall oddity of the set of sentences containing *co-* and *mede-* and a *met*-PP is relatable to the lexical semantics of such prefixes (possibly slightly changing across languages, or even possible of some intra-linguistic variation). We can roughly say that the semantics of *co-* and *mede-* in Dutch turns a property (such as the “property of owning a cafe”) into a symmetric relation between the subject of the predication and some other entity of the same type (there exists at least another owner). The crucial part, for Dutch, is that a *met*-PP cannot bind a variable inside the *co*-relation.

The *met*-PP and the *co-* have the same reading, and this is witnessed by the fact that (4.31 a) is grammatical only under the reading that there is at least one third author. It is ungrammatical under the reading that they are the only two authors.

- (4.31) (a) *Jan en Mark zijn de co-auteurs van dit boek*  
 Jan en Mark are the co-authors of this book  
 "Jan and Mark are the co-authors of this book"

The need to express explicitly the other argument of the *co*-relation is fulfilled with adjuncts (e.g. a *met*-PP ) but this is a context where Dutch native speakers report different levels of acceptability. A better case is (4.32 a), where the adjunct also has an unambiguous adjunct intonation, although still not fully grammatical.

- (4.32) (a) <sup>?</sup>*Jan is co-auteur van dit boek, samen met Mark*  
 Jan is co-author of this book, together with Mark  
 "<sup>?</sup>Jan is the co-author of this book, together with Mark"

## Statues and Relations

One apparently surprising piece of data from Dutch is the following contrast.

- (4.33) (a) *\*Jan is vriend van Marc*  
 (b) <sup>?</sup>*Jan is vriend van de Franse Koning*  
 Jan is friend of the French King  
 "Jan is a friend of the French King"

---

<sup>10</sup>In these sentences there appears to be an intonational break, probably indicating an adjunct (or a parenthetical). It is independent of the presence of the *co-* or *mede-* prefix, because the same intonation can be found in sentences like (4.30).

- (4.30) Jan is, met Mark, eigenaar van het café  
 Jan is, with Mark, owner of the cafe

- (c) *Jan is vriend van het Concertgebouw*  
 Jan is friend of the Concert Hall

Recall that explicit relations (relational nouns with the *of*-phrase, or “pure relational” in the terminology of Zamparelli) are expected to occur bare, given that the language allows bare predicates to instantiate extrinsic relations. However, we hinted that if another structure, for instance the Saxon genitive, is dedicated to these types of relations, then it blocks the realization of these extrinsic properties/relations with a bare predicate. Italian and Spanish do not have a competing structure, and we have seen that their equivalents of (4.33 a) are grammatical. This explanation is not enough to account for the grammaticality contrast presented in (4.33 a-4.33 b-4.33 c). One interpretative detail is crucial: in the case of (4.33 c), this “apparent” relation is interpreted as a social “status” of some sort, and the sentence is understood as stating that Jan owns some supporter card of the Concertgebouw, and makes donation to this institution. In this sense, relational nouns of this type do not denote a relation holding between a set of pairs, instead they can be modeled as a set of individuals. In other words, *Jan is vriend van het Concertgebouw* is not interpreted as  $\langle j, CG \rangle \in \|\text{friend}\|$ , but as  $j \in \|\text{friend van het Concertgebouw}\|$ . So, if the nominal is not interpreted as a relation between individuals, but as a property, and it defines an extrinsic property, then it shows the usual behavior of extrinsic properties, which in Dutch are expressed with bare predicates. In the same way we can understand the grammaticality judgement “?” assigned to (4.33 b). This sentence is acceptable only under the “status” reading and it is ungrammatical under the interpretation of friendship with the King. Note, furthermore, that the Saxon genitive can only be used in (4.34 a), and the interpretation is that Jan is a friend of the King, but it cannot have the “status” reading. And unsurprisingly, (4.34 b) is ungrammatical.

- (4.34) (a) *Jan is de Franse Koning 's vriend*  
 Jan is the French King 's friend  
 "Jan is the French King's friend"
- (b) \**Jan is het Concertgebouw 's vriend*  
 Jan is the Concert Hall 's friend

## Norwegian

In Norwegian, bare relational nouns in predicative position are allowed, but There are more complications related to restrictions that operate on the choice of the

preposition, as shown by, for instance, (4.35 a) to (4.35 b).<sup>11</sup>

(4.35) (a) \**Han er sjef til Kari*  
           he    is boss to Kari

(b) *Han er sjef over Kari*  
       he    is boss over Kari

(4.36) (a) ??*Jens er venn / nabo / kollega av Nikolai*  
           Jens is friend / neighbor / colleague of Nikolai  
           "Jens is Nikolai's friend / neighbor / colleague"

(b) *Jens er leieboer hos Nikolai*  
       Jens is tenant at place of / by Nikolai  
       "Jens is Nikolai's tenant"

### 4.3.3 Kins

Let us now move to another family of nouns that has something in common with relational nouns and, in some respects, it is very different: kinship nouns. These nouns refer to family relations and show, in some languages, behaviors that are homogenous among them, and different from other nouns. For instance, in some southern Italian languages (e.g. Neapolitan), only kinship nouns allow the possessive pronouns of first and second person singular to appear cliticized on the noun itself, as shown in (4.37).

(4.37) [*'frat*] brother       (nap)  
           [*'fratm*] my brother

Also in this study, kinship nouns behave in a similar and identifiable way. Let us begin by saying that, in English, even these bare predicates are forbidden.

(4.38) (a) \**John is father / dad / son / brother of Mark*  
           (b) \**Mary is mother / mom / daughter / sister of Mark*

---

<sup>11</sup>Note that, in Norwegian too, there exist a structure comparable to Saxon genitive which seems to be interacting with the possibility of expressing extrinsic relations with bare predicates. We will not be discussing the relation between Saxon genitive and the realization of relational nouns here, but we leave it open further research. Investigating the relation between these two structure, in the light of the insight presented in this study can lead to interesting results.

Note that these last two examples show that the particular behavior of English that allows nouns with an (even contextually) unique referent to appear bare cannot be described solely in terms of reference to a singleton set. If that was the case, nominals like “mother of Mark” would be allowed, but as we have seen in example (4.2), it is not the case. If bare, the form without the genitive argument is ungrammatical.

- (4.39) (a) \**John is father / dad / son / brother*  
 (b) \**Mary is mother / mom / daughter / sister*

In Italian, and Spanish, bare predication with kinship noun is essentially possible. Some cases are slightly marginal, but the overall pattern is consistent. The marginal cases will be discussed again in paragraph [4.3.3].

- (4.40) (a) *Gianni è ?padre / ?papà / figlio / fratello di Marco*  
 Gianni is father / dad / son / brother of Marco  
 "Gianni is Marco's father / dad / son / brother"  
 (b) *Claudia è ?madre / ?mamma / figlia / sorella di Marco*  
 Claudia is mother / mom / daughter / sister of Marco  
 "Claudia is Marco's mother / mom / daughter / sister"

- (4.41) (a) *Juan es ??padre / ??papa / hijo / hermano de Marcos*  
 Gianni is father / dad / son / brother of Marco  
 "Gianni is Marco's father / dad / son / brother"  
 (b) *Claudia es ??madre / ??mamà / hija / hermana de Marcos*  
 Claudia is mother / mom / daughter / sister of  
 Marcos  
 Marcos  
 "Claudia is Marcos' mother / mom / daughter / sister"

We will discuss the difficulty of dropping of the *of*-phrase in some cases (e.g. “son/daughter” and “brother/sister”). Nevertheless, in the right scenarios these cases can be brought to a level of interpretability that justifies the judgement “?(?)” instead of “\*”.

- (4.42) (a) *Gianni è padre / papà / ??figlio / ??fratello*  
 Gianni is father / dad / son / brother  
 "Gianni is father / dad / son / brother "

- (b) *Claudia è madre / mamma / ??figlia / ??sorella*  
 Claudia is mother / mom / daughter / sister  
 "Claudia is mother / mom / daughter / sister"

- (4.43) (a) *Gianni é padre / papá / ??hijo / ??hermano*  
 Gianni is father / dad / son / brother  
 "Gianni is father / dad / son / brother "

- (b) *Claudia é madre / mamá / ??hija / ??hermana*  
 Claudia is mother / mom / daughter / sister  
 "Claudia is mother / mom / daughter / sister"

In Dutch, kinship nouns can appear bare. They do so in a way that is very similar to the behavior we already observed for Italian and Spanish.

- (4.44) (a) *Jan is vader / pa / zoon / broer van Jan*  
 Jan is father / dad / son / brother of Jan  
 "Jan is Mark's father / dad / son / brother"

- (b) *Sophia is moeder / mama / dochter / zus van Jan*  
 Sophia is mother / mom / daughter / sister of Jan  
 "Sophia is Jan's mother / mom / daughter / sister"

Again, it is harder to omit the *of*-phrase with "son/daughter" and "brother/sister". In Dutch there seems to be a stronger dispreference for these forms, compared to other languages.

- (4.45) (a) *Jan is vader / pa / \*zoon / \*broer*  
 Jan is father / dad / son / brother  
 "Jan is father / dad / son / brother "

- (b) *Sophia is moeder / mama / \*dochter / \*zus*  
 Sophia is mother / mom / daughter / sister  
 "Sophia is mother / mom / daughter / sister"

German, on the other hand, is stricter on the (im)possibility of allowing bare relational nouns. We can observe that the relational kin nominal, in (4.46), is ungrammatical, while its variant without the PP in (4.47), is grammatical.

- (4.46) *\*Martin ist Vater / Dad von Susanne*  
 Martin is father / dad of Susanne  
 "[intended] Martin is Susanne's father / dad"

\**Susanne ist Mutter / Mom von Martin*  
 Susanne is mother / mom of Martin  
 "[intended] Susanne is Martin's mother / mom "

(4.47) *Martin ist Vater / Vati*  
 Martin is father / dad  
 "Martin is a father / dad"

*Susanne ist Mutter / Mama*  
 Susanne is mother / mom  
 "Susanne is a mother / mom "

Note two interesting facts: first of all, in German these examples work only with nouns that refer to a hierarchically higher position in the family, with respect to the person they relate to. In other words, one is a father when he has at least one child. When the relation is symmetric or from a lower position ("brothers" as opposed to "sons", etc) they are either impossible (as it is for German) or they need a lot of context to be acceptable, and still they sound very marked (as it is for Italian). This constraint seems to be related to pragmatics. In what follows, we will compare the behavior of the languages discussed so far to Norwegian, in order to understand something more about this asymmetry between the behavior of *father* and *mother*, on the one hand, and the other kinship nouns, on the other hand.

### Norwegian

In Norwegian, predicates with unique referents can appear with or without the definite inflection *-en*. However, between the two forms there is a clear difference. So, in a scenario where someone is explaining how are all the people in a picture related to some known individual (we all know Nikolai, but not his family members), only (4.48 a) is the form that expresses that Kari is Nikolai's sister, but not (4.48 b). Of course the same applies to the other kinship nouns.

(4.48) (a) *Kari er søstra / søsteren*  
 Kari is sister<sub>def</sub> / sister<sub>def</sub>  
 "Kari is the sister"

(b) #*Kari er søster*  
 Kari is sister

On the other hand, if we have the property of being a father, as in the “status” of having at least one child, that property is consistently expressed with the bare predicate *far*, in (4.49 a). The same reasoning holds for the statuses of *bror* ‘brother’, *mor* ‘mother’ and *søster* ‘sister’, as shown by the following examples.

- (4.49) (a) *Jens er far / bror* (nor)  
 Jens is father / brother  
 "Jens is a father / brother"
- (b) *Kari er mor / søster*  
 Kari is mother / sister  
 "Kari is a mother / sister"

In the discussion about the necessity of the definite inflection we will use the two kinship nouns that (traditionally speaking) comply with the uniqueness condition on the referent: *mor* ‘mother’ and *far* ‘father’:

- (4.50) (a) *Jens er far(en) til Nikolai*  
 Jens is father<sub>(def)</sub> to Nikolai  
 "Jens is Nikolai’s father"
- (b) *Kari er mor(en) til Nikolai*  
 Kari is mother<sub>(def)</sub> to Nikolai  
 "Kari is Nikolai’s mother"

The different meaning relate to the topic structure. Assume the following scenario: if *Nikolai* is the known person and the intent is to say that *Jens* is his father, then the definite form is obligatory. If instead *Jens* is the topic of our conversation and the communicative intent is to express one of his properties, then the bare predicate is necessary.

Quite clearly, the discussion over relational nouns is much more complicated than we can cover here, but it is interesting to notice that, once again, the pattern that distinguishes the interpretation of bare predicates *contra* that of the determined predicates is coherent and, across the board what we could have expected, given the insight discussed in the general introduction.

### “Brothers”

When we were discussing the other languages in the set (Italian, Spanish, Dutch, German), we pointed out that omitting the PP argument of relational nouns like

*brother* and *sister* results in (at least) odd sentences. As we said, whereas in the other languages there seems to be a restriction on symmetric relations, in Norwegian these cases are totally acceptable. So, this is an example in which the reason underlying a grammatical behavior depends on the minor lexical details.

## 4.4 Non-human predicates, symbols and mass

Throughout our discussion we have mentioned many times how bare predicates are productive if they are used to ascribe (extrinsic) properties to humans. Many pointed out (i.a. Zamparelli, 2005, De Swart et al., 2007) that some nominals can occur as bare predicates even if their subject is not human. This is the case of the examples reported below.

- (4.51) (a) *Questo fiore è simbolo di libertà*  
 this flower is symbol of freedom  
 "This flower is the symbol of freedom"
- (b) *Tutto può essere metafora di qualcos' altro*  
 everything can be metaphor of something else  
 "Everything can be a metaphor for something else"

Essentially if the nominal (the symbol-like element) is interpreted abstractly it can be used bare. The nouns that can appear in symbolic-relations are listed in (4.52).<sup>12</sup>

- (4.52) *allegoria* 'allegory', *cifra* 'figure', *concessione* 'grant', *dono* 'gift', *emblema* 'emblem', *esempio* 'example', *espressione* 'expression', *evidenza* 'evidence', *figura* 'figure', *immagine* 'image', *incarnazione* 'incarnation', *indice* 'index', *indizio* 'indication', *insegna* 'sign', *marchio* 'mark', *metafora* 'metaphor', *modello* 'model', *motivo* 'reason', *omaggio* 'gift', *prova* 'proof, evidence', *proiezione* 'projection', *ragione* 'reason', *rappresentazione* 'representation', *segno* 'sign', *segnale* 'signal', *simbolo* 'symbol', *simulacro* 'simulacre', *sintomo* 'symptom', *spia* 'indicator' (e.g. *di malessere* 'of a disease'), *stendardo* 'flag', *suggello* 'seal', *termometro* 'thermometer' (as an indicator, not the object), *testimonianza* 'witness', *traccia* 'trace'

There is an interpretative similarity between the sentences in (4.51 a-4.51 b) and (4.53) which involve mass and abstract nouns.

<sup>12</sup>The list is not exhaustive.

- (4.53) *Questa è acqua / felicità*  
 this is water / happiness  
 "This is water / happiness"

If the nouns in (4.52) were interpreted abstractly, their occurrence as bare predicates would not be surprising. In other words, if these nouns are abstract, they are expected to have mass-like semantics and therefore their ability to occur also as bare predicates is expected.

If the ability of the nouns in (4.52) to occur bare was not dependent on their abstract/mass semantics, then, in a context in which the abstract meaning is (pragmatically) blocked, they would be interpretable with their literal meaning without problems. But this is not what happens.

- (4.54) (a) *Questo comportamento è segno di malessere*  
 this behavior is sign of malaise  
 "This behavior is a sign of malaise"
- (b) ?? *Questo graffio è segno del becco di quell' uccello*  
 This scratch is sign of the beak of that bird  
 "[intended] This scratch is a sign of that bird's beak"

The contrast in grammaticality judgements between (4.54 a) and (4.54 b) depends on the fact that the abstract reading of *segno* in (4.54 b) is blocked by the context.

The question that arises at this point is "What is the relation between an abstract/mass reading and the (im)possibility of a predicate to ascribe properties to humans?" In other words, why is it the case that most (if not all) non-human bare predicates receive a mass or abstract reading? Before addressing this question, let us take a necessary step back, and focus on the relation between the intrinsic/extrinsic distinction and non human subjects.

## 4.5 Restricting extrinsic

Many properties can generally be understood as being extrinsic.<sup>13</sup> We discussed examples like the ones in (4.55 a-4.55 b), where extrinsicality depends on the existence of another individual or object.

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<sup>13</sup>Besides the properties encoded by nouns, which we directly deal with, also many adjectives, such as "wet" or "multicolor" are extrinsic, and logical properties, such as "knowing that a man was walking to the station", and so on, are extrinsic.

- (4.55) (a) *Gianni è amico di Marco*  
 Gianni is friend of Marco  
 "Gianni is a friend of Mark's"
- (b) *Gianni è proprietario di casa*  
 Gianni is owner of house  
 "Gianni is a house owner"

For most of the languages we have observed, a connection between bare predicates and a [+*human*] feature is an incontestable fact. The question is actually two-fold: on the one hand, why is it the case that extrinsic properties can more easily be generated if they are [+*human*], and on the other hand, what does it mean for a non-human property to be extrinsic? In other words, what is the context in which we can understand the difference between non-human intrinsic and extrinsic property?

The reason why a non-human extrinsic property is harder to achieve seems to be, intuitively, that there is less space for variation in what inanimate things can be with respect to other entities. "Rocks" and "leaves" are intrinsically "rocks" and "leaves", and it is also hard to conceptualize a "rock" as an extrinsic property. This is a crucial passage: the meaning of the extrinsic properties as we understand them as expressed by bare predicates is not the simply environment-related extrinsicality. Or better, unlike what we have seen with relational nouns above, if extrinsicality is not inherent to the property, then language still encodes the fact that extrinsic properties systematically supervene on some human volition/agency. Note that, once we understand this, it is also clear why most bare predicates are "social constructions", in Searle's terms. For example, someone is *president* if he has been elected and he signed some official documents. In Italian, someone is *dottore* if he has gone through a whole educational and training procedure and he has been hired by a hospital or a clinic, someone is *artista* if he is "recognized" as such by critics and the art establishment, and so on. Usually, we do not see inanimate objects in these terms, because no human volition or agency is necessary to acknowledge a "rock" as a rock or a "leaf" as a leaf, so the alternation between intrinsic and extrinsic is simply not expected.<sup>14</sup> At this point, it is interesting to see what happens with artifacts and institutions because, unlike natural or mathematical objects, the fact that some human agency is involved in the creation of artifacts and institutions is what ultimately causes them to have a function, and that is somehow parallel to humans having "roles". Crucially, when we discuss "the functional aspect/role" of some object or person,

<sup>14</sup>Denis Delfitto (p.c.) points out that there could be a relation with the qualia structure as described in Pustejovsky's (1991) Generative Lexicon. Essentially predicating of an artifact (e.g. a table) its the extrinsic property (e.g the function that a table has) is not expected because the function of the artifacts is their intrinsic property.

what we are really referring to is the following: a certain object (or person) has an extrinsic property, and if that extrinsic property (if it is not inherently extrinsic, i.e. relational) then it is extrinsic by virtue of a set of properties or events upon which it supervenes, and these necessarily involve human volition/agency. If this is the case, then we expect that, at least in some language, the intrinsic/extrinsic alternation should be productively lexicalized.

Indeed, we find a very interesting pattern in Norwegian. In standard situations, it is not possible to point at a hospital and utter (4.56 a). However, in the context of a refugee camp, where one tent is used as a hospital, it is possible to utter (4.56 b).

(4.56) (a) \**Dette er sykehus*  
           this is hospital

(b) *Dette teltet er sykehus*  
       this tent<sub>def</sub> is hospital  
       "This tent is a hospital"

This pattern is productive and the same can be done with other predicates, e.g. *kino* 'cinema' or *lab*.

(4.57) (a) \**Dette er kino / lab*  
           this is cinema / lab

(b) *Dette rommet er kino / lab*  
       this room<sub>def</sub> is cinema / lab  
       "This room is a cinema"

The meaning of this type of bare predicates is parallel to the meaning alternation between intrinsic and extrinsic properties. Observe how, in all the grammatical sentences, the tent and the room are not intrinsically hospitals, cinemas and labs, in other words they did not come into being as hospitals, cinemas and labs (see. Telic Role, in Pustejovsky 1991) but they are used as such (Agentive Role, *ibidem*), so they are extrinsically hospitals, cinemas and labs.

## 4.6 Concluding remarks and open questions

### 4.6.1 Intrinsic/extrinsic properties and the mass/count symmetry

Something that emerges from the discussion of the data presented thus far is that the presence or absence of the article causes *+human* predicates to alternate between two types of readings: on the one hand, what is normally referred to as “role” reading (e.g. the “capacity” reading of De Swart et al., 2007) and which we understand as the realization of an extrinsic property. On the other hand, a reading that reflects non-role properties (e.g. the “kind” reading of De Swart et al., 2007), which is said to allow for various extended interpretations, and which we understand as the realization of an intrinsic property.

The question that emerges at this point is what the contribution of *+human* portion of meaning is, and how it is encoded. To answer this question, two aspects are relevant. First of all, the Norwegian data shows that some non-human predicates (meaning e.g. “hospital”, “cinema”, etc.) can have the same meaning variation only when, at some level, human volition is involved. Secondly, the answer to the question “If a *+human* bare predicate is interpreted as a role (e.g. an extrinsic property), how is a *–human* bare predicate interpreted?” This is crucial because, in the same languages that show the phenomenon of bare predicates, the presence or absence of the article causes *–human* predicates to alternate between a mass and a count reading. In other words, there appears to be a symmetric effect affecting nominals in predicative positions and the article. This is represented in the scheme below, where the contrasts is presented in Italian, for simplicity.

In the upper part of the table, to the *+human* subject *Gianni* are predicated the *+human* predicates *eroe* ‘hero’ and *dottore* ‘doctor’. In the bottom part of the table, to the *–human* subject *questo* ‘this’ are predicated the *–human* predicates *tavolo* ‘table’ and *vino* ‘wine’. The rightmost column lists the type of interpretation that the predicates receive.

		<i>predicate</i>	<i>interpretation</i>
<i>+human</i>	<i>Gianni è</i>	<i>un</i>	<i>eroe</i>
			<i>dottore</i>
	$\phi$	<i>dottore</i>	<i>extrinsic</i>
		<i>eroe</i>	
<i>-human</i>	<i>Questo è</i>	<i>un</i>	<i>tavolo</i>
			<i>vino</i>
	$\phi$	<i>vino</i>	<i>mass</i>
		<i>tavolo</i>	

The question to be asked is “What happens if subject and predicate clash in terms of animacy?”

This is represented in the table below. In the upper part of the table, to the *-human* subject *questo* ‘this’ are predicated the *+human* predicates *eroe* ‘hero’ and *dottore* ‘doctor’. In the bottom part of the table, to the *+human* subject *Gianni* are predicated the *-human* predicates *tavolo* ‘table’ and *vino* ‘wine’. The rightmost column shows that, when a bare predicate is interpreted as a *-human* predicate, its interpretation shifts to mass.

		<i>predicate</i>	<i>interpretation</i>
<i>-human</i>	<i>Questo è</i>	<i>un</i>	<i>eroe</i>
			<i>dottore</i>
	$\phi$	<i>dottore</i>	<i>mass</i>
		<i>eroe</i>	
<i>+human</i>	<i>Gianni è</i>	<i>un</i>	<i>tavolo</i>
			<i>vino</i>
	$\phi$	<i>vino</i>	<i>extrinsic</i>
		<i>tavolo</i>	

Consider the two examples reported below, extracted from the table above.

(4.58) (a) *Gianni è tavolo*  
Gianni is table

(b) *Gianni è un tavolo*  
Gianni is a table

Note that, even in (4.58 a), *tavolo* is interpreted as a humanized predicate in that “table” has to be interpreted as a role of some sort. In other words if “table” has to be an extrinsic property of Gianni, the only way in which this predicate becomes interpretable is if we read it as some role of some sort. So, *tavolo* is extrinsic (because *Gianni* is a person and not a table), but in any given context that allows the sentence to be interpreted, *Gianni* is (also) a table, and can be used as one.<sup>15</sup> This trivially contrasts with (4.58 a) which, on the other hand, means exactly that “Gianni is a table”. If we compare the couple above with two examples where the subject of the predication (*questo*<sup>16</sup>, ‘this’) is compatible with a non-human reading, but the predicate is expected to be interpreted as *+human*, we find that, symmetrically, the interpretation of the predicate follows the mass/count pattern that is observed in the default cases (i.e. there is no clash between  $\pm human$  features and of the subject and of the predicate). The examples are reported below.

(4.60) (a) *Questo è dottore*  
this is doctor

(b) *Questo è un dottore*  
this is a doctor

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<sup>15</sup>We are not claiming that *Gianni è tavolo* is an unmarked sentence of Italian. We are only claiming that it is very clearly interpretable. In real-life circumstances, most speakers would choose the locution *fare il P* ‘act as the P’ because that is the way to express the *intentional* embodiment of an intrinsic property. In other words, Gianni “does/acts as the table” means that he consciously stages something/someone else.

(4.59) (a) *Gianni è tavolo (in that play)*

(b) *Gianni fa il tavolo (in that play)*

There are many differences that it is not important to discuss here (e.g. the expression *is tavolo* contains a definite determiner and it is kind referring, it is argumental, etc.) but, regardless, there is one crucial difference in the truth conditions of (4.59 a) and (4.59 b): in the sentence containing the bare predicate, the volition of Gianni is not taken into consideration (which follows directly from the argument structure difference between “to do / to act” and “to be” (cf. Reinhart 2002). So it would be irrelevant if most speakers would prefer (4.59 b) over (4.59 a), since the two sentences have different meanings.

<sup>16</sup>In Italian, *questo/quello* ‘this/that’ can be used as pronouns to refer to humans, but this fact is irrelevant here, because a very specific context or prosody would be required.

The massified reading of *dottore* in (4.60 b) is strikingly clear, especially given that the sentence is only interpretable in a scenario such as one where the speaker wears a blindfold and tries to identify the objects and surfaces surrounding him.

The actual question, that we posed at the beginning of this section is the following: why the +*human* feature of these predicates is what makes the difference between an extrinsic property reading and a mass reading? And, in this light, how do we explain the Norwegian data where, some non-human predicates allow for an extrinsic reading but only when some human volition is involved, in either the constructions or the fruition of said objects. In all the other cases, also Norwegian non-human predicates are interpreted as mass, if the article is missing.

Other accounts of bare predicates do not explicitly mention this effect. Clearly, the fact that, in the languages discussed here, mass nouns do not require the article is known and acknowledged. For instance **Munn and Schmitt** make an indirect reference to mass nouns being allowed as bare nouns:

[T]he generalization that argumental bare NPs are disallowed in French and are restricted to plurals and mass terms in Spanish.<sup>17</sup>

Similarly, **De Swart, Winter, and Zwarts** mention a connection to number marking:

*We do not address in this paper the question of mass terms, which are notable for their cross-linguistic variance, especially in connection to number marking. In line with this restriction, we also do not address the use of abstract BNs, like *motivo* 'reason' in (4.61 a) below. As pointed out by an anonymous reviewer, such abstract BNs may actually be mass terms, analogous to (4.61 b), which are not discussed in this paper.*<sup>18</sup>

(4.61) (a) *Questo fu motivo di aspre discussioni* (ita)  
           this     was reason for lively discussions

(b) *Questa è felicità*  
       this     is happiness

Some connection between bare predicates and mass/count is discussed by **Zamparelli**. To explain the omission of the determiner with certain predicates, he builds an

<sup>17</sup>p. 832, emphasis mine.

<sup>18</sup>2007, pg. 2, footnote 1, emphasis mine.

account using a semantic tool, originally developed to provide a different representation for the divisive/cumulative reference in the mass/count distinction.

*[T]he common distributional properties of plural count and singular mass/abstract nouns can only be explained by appealing to a common semantic property, cumulative/divisive reference (Quine 1960, Cheng 1973). In the semantic literature, this property has usually been captured by adopting a common denotational structure, i.e. a semilattice (see e.g. Link 1983). Rather than assuming that this denotational structure is associated with the lexical entry of plural and mass/abstract nouns, H&Z (Heycock and Zamparelli, 2005. MC) propose that the semilattice is generated only at a certain point in the DP structure, by the application of two semantic operators (one for mass, one for count nouns) to the nouns original denotations (sets of atomic objects).<sup>19</sup>*

Even if Zamparelli (building on Heycock and Zamparelli, 2005) uses the same mechanism used to derive the different behavior of the mass/count nouns, *modulo* some assumptions specific to the lexical class of nouns that forms bare predicates, this similarity is not exploited further, and the immediate shift of the interpretation of a bare predicate from role/extrinsic to mass, when there is no *human* feature, is not discussed. However, since Zamparelli treats the nouns that can occur as bare predicates as a lexical class, this type of discussion was not necessary.

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<sup>19</sup>p. 12

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### Intrinsic and extrinsic properties in language

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#### 5.1 Ontological questions

In what will follow, we will try to understand how to analyze the meaning of the bare vs. determined predicative nominals. We are also going to discuss the linguistic concept of “kind” from a philosophical perspective. We will not be discussing ontology *per se*, owing to reasons of scope and competence, but we will make use of some ontological considerations (for instance Lewis’ (1983) discussion on “intrinsicity”), because they reveal to be very useful to clarify the linguistic intuitions, and help understand the generalizations that emerge from the discussion of the data in this study. Importantly, I am not trying to argue that natural languages indicate which philosophical doctrine to follow, nor are we saying that we should look at languages to “unveil” the “shape of the world”, but it is not unreasonable to imagine that natural languages encode certain distinctions in a way that can influence the way their speakers’ conceptualizations. Studying a semantic phenomenon, some philosophical discussions can provide a background about some problems and distinctions.

Before starting the actual discussion, it needs to be stated clearly that we are not suggesting that we should look at what languages do in order to understand what the shape of the world is, or that we should look at what languages do in order to understand what their speakers think the shape of the world is. Also we are not suggesting that we should look at what languages do in order to decide what the best ontology is, or that we should use the best ontology in order to understand

what languages do. Finally, we are also not suggesting to force languages into reflecting better what (we think) the shape of the world is, nor that we should try to manipulate natural languages to modify the conception that speakers have of the shape of the world.<sup>1</sup>

## 5.2 Finding the right dichotomy

Having discussed the possibility of understanding some the bare/determined predication patterns in these terms, we will now proceed with the discussion about why the intrinsic/extrinsic distinction is to be preferred to other existing distinctions. Particular attention will be given to the comparison between Intrinsic/Extrinsic properties and Individual/Stage-level properties. Finally, we will reprise the characterization of the intrinsic/extrinsic properties and briefly discuss how bare predicates can either be inherently extrinsic or extrinsic as supervening upon human volition/agency.

As we said, the intuitive characterization of this distinction is the following: some properties of an individual depend purely on that individual, whereas some properties of an individual depend on the interaction of that individual with the environment. The classic way to exemplify the distinction (cf. Weatherson and Marshall, 2012) is to compare the concept of the “mass” of a body to its “weight”: the mass depends on the body itself, the weight depends, for instance, on the atmosphere of the planet on which the said body is located. We can expand the understanding of the distinction by repeating three aspects of the distinction, as presented by Lewis. The three aspects of the notion of intrinsicity can help better define the concept, and are presented in (5.1), (5.2), and (5.3).<sup>2</sup>

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<sup>1</sup>This last point is actually inherent to policies of political correctness. I remain agnostic as to whether these are meaningful or even useful. I’ve heard many arguments in favor and as many against. Consider this: Italian female politicians or Italian businesswomen complain regularly about the fact that, when one calls a woman by her last name in Italian, one (has to) add the feminine definite article. So, if somebody was talking about the author of these lines, in an Italian formal setting, the name used would be “La Castella”. The same does not happen when men are called by their family name, and this is supposedly a manifestation of a “masculinist” or “male-dominated” society. A consequence of this kind of complaints is that journalists and other public speakers are (periodically) forced into a routine of self-correction. In the best-case scenario, if the speaker uses the last name of a woman according to the requirements of political correctness, the result is pragmatically odd: even when we know that this person is a woman, the name “says” that it’s a man. Understandably, many women (among which the author) would rather be called by using the marked (feminine) last name than with what just sounds like their father’s name. Besides, it is not clear why the habit promoted by this policy should be less “masculinist” than the spontaneous one, in which the names have distinguishable genders.

<sup>2</sup>See Weatherson and Marshall (2012) for a discussion, and references therein.

- (5.1)  $F$  is an intrinsic property iff, necessarily, anything that is  $F$  is  $F$  in virtue of the way it itself, and nothing wholly distinct from it, is.
- (5.2)  $F$  is an intrinsic property iff, necessarily, for any  $x$ , an ascription of  $F$  to  $x$  is entirely about how that thing and its parts are, and not at all about how things wholly distinct from it are.
- (5.3)  $F$  is intrinsic iff  $F$  never differs between duplicates.

However, before accepting the intrinsic/extrinsic dichotomy, let us compare it to other possible approaches, each of which seems to be able to capture some aspect of the linguistic alternation under examination, and finally draw some conclusions.

There are several distinctions that divide predicates in ways that reveal some deep semantic contrast. These distinctions can be functionally comparable to the extrinsic/intrinsic and, for this reason, we will discuss how suitable each of them is, as a tool for analyzing the bare/determined predication alternation. Some of the distinctions that we will discuss can regard any type of predicate: verbs, adjectives, nouns.

## 5.2.1 Possible distinctions

### Essential / Accidental

A relevant distinction is the division of predicates into those denoting “essential properties” and those denoting “accidental properties” (distinction that roots back to Aristotle’s *Metaphysics*). In short, the distinction corresponds to the distinction between the notions of “necessity” and “possibility”: An “essential property” is a property an entity necessarily has, whereas an “accidental property” is a property that an entity might have.<sup>3</sup>

There are many ways in which essential and accidental properties can be captured:<sup>4</sup> Generally, when a notion is expressed in terms of possibility and necessity, we call this characterization “a modal understanding (of a notion)”. Specifically, the one

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<sup>3</sup>A property of these concepts is that they can be interdefined (Cf. Robertson and Atkins, 2013):

- something is necessary when its negation is not possible
- something is possible when its negation is not necessary

<sup>4</sup>Some aspects are still a matter of debate, but from a linguistic perspective, the points of disagreement are not relevant.

that we just mentioned is referred to as “basic modal characterization”, and it can be phrased as in (5.4).

(5.4)  $P$  is an essential property of an object  $o$  just in case  $o$  has  $P$  in all possible worlds;

$P$  is an accidental property of an object  $o$  just in case  $o$  has  $P$ , but there is a possible world in which  $o$  lacks  $P$ .

A variant that calls into play the role of existence is called “existence-conditioned modal characterization”. This is expressed in (5.5).

(5.5)  $P$  is an essential property of an object  $o$  just in case it is necessary that  $o$  has  $P$  if  $o$  exists;

$P$  is an accidental property of an object  $o$  just in case  $o$  has  $P$ , but it is possible that  $o$  lacks  $P$  and yet exists.

This distinction is relevant because it appears that predicating kind membership (*a human, a man, a woman, etc.*) patterns with essential properties, whereas (bare) professions and roles pattern with accidental properties.

### Scalarity

A third distinction, comparable to the ones we discussed so far, is the one that focuses on “scalarity” (used for instance by Matushansky and Spector, 2005). Essentially a predicate is scalar if it can be “sliced” into degrees, and non-scalar if such slicing is not possible. In principle, scalarity has many linguistic applications, but in this context what matters is the gradability or non-gradability of a property. Part of the assumption put forth by Matushansky and Spector is that every nominal that appears in bare predicative position bears the feature [*-scalar*]. This should prevent scalar nouns to appear as bare predicates and predict that the interpretation of a bare predicate is always non scalar. In the next paragraphs, we will discuss why we believe that such characterization is not sufficient to account for either the bare/determined predicates meaning alternation.

### Stage-/Individual-level

One of the most classic distinctions, in linguistics, is the one between “individual-level (I-level) and “stage-level” (S-level) predicates. We know that the predicate “brave”

(an i-level predicate) denotes a class of entities of which “brave” can be predicated without any time limitations. The predicate “tired” (an S-level predicate) is true of a class of entities only within a certain time span. So, the entities of which “brave” is true are stable members of the set denoted by “brave”, whereas the entities of which “tired” is true are not members of the set denoted by the predicate “tired” in a stable way. The application of an I-level predicate to a subject generates a different semantic interpretation than when we use an S-level predicate, in the same context (c.f. Carlson, 1977).

Compare (2.10), repeated as (5.6 a), to (5.6 b):

(5.6) (a) *Firemen are brave*

(b) *Firemen are tired*

What we know about the meaning of the predicate determines the reading of these sentences, it is therefore easy to see that (5.6 a) has a generic reading, i.e. the sentence is interpreted as a generic statement about all the firemen, and in contrast, (5.6 b) has (also) an episodic reading, i.e. it states that there are some firemen who are tired (at the moment).

All of these distinctions, including the one that we advocate as crucial for the phenomena involving bare vs. determined predication, are ways of looking at concepts and properties from different perspectives. For instance, it is true that some properties are scalar (e.g. “intelligent”) and some other are not (e.g. “alive”). But it is also true that language can make them surface in ways that seem to contradict this generalization. In discussing English, it seems that nouns are very resistant to comparative constructions, and in that, they seem to not allow for gradable interpretation.<sup>5</sup>

Each distinction captures a criterion to distinguish predicates, however, the question that remains is which distinction captures insightfully, and more adequately, the bare/determined contrast.

It is possible to make a correlation between stage- and individual-level properties, on the one hand, and accidental and essential properties on the other, because to be a necessary property of an entity encodes the intuition that such entity could not

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<sup>5</sup>Robert van Rooy (p.c.) pointed out that saying that “an object is *more table* than another object” is marginal (or restricted to an informal style), just as well as saying that “someone is *more genius* than someone else” is not acceptable. Furthermore, the latter is unacceptable independently of the fact that there can be degrees of geniality. One way of looking at those examples is that *table*, and *genius* are actually (used as) adjectives. But even if that is correct, the question “Why cannot nouns be used in comparatives?” still remain.

lack that property. Stage-level properties are comparable to accidental properties because the fact that they can change over time seems to entail that they are non-essential. However, even if an essential property is also an individual-level property, the opposite does not hold. A property that is accidental (e.g. disliking tea) needs not necessarily be restricted to being also a stage-level property.

We might try to correlate extrinsicity (as something that does not (entirely) depend on the way an individual is) to an accidental property or to a stage level property, but even there counterexamples abound (e.g. being meditative).

To express it with a metaphor, what we have are different ways of shedding light on a tridimensional object. Depending on the positioning of the light, the object (can) cast different shadows. But the categorical classifications that languages have (e.g. nouns, verbs, adjectives), and the distinctions we are discussing do not have a one-to-one match. Sometimes, even the borders of said categories are difficult to establish (e.g. is *table* in “more table than” an adjective?). Until we have an ideal and abstract dichotomy able generate all the alternations, we have to find for every linguistic phenomenon we want to investigate the right dichotomy.

### 5.2.2 Comparison

It is logically possible that two of the different dichotomies that we mentioned work equally well in predicting the meaning alternation of bare vs. determined predicates. Let us consider *Gianni è professore* as opposed to *Gianni è un professore*.

One could claim that the bare predicate is a non-scalar property (and it is indeed difficult to imagine degrees in the concept of working as a professor”, whereas arguably there can be degrees to the level in which one is “a professor”. One could claim that the professorhood of Gianni described by the bare predicate is an accidental property that he has. On the other hand, being “a professor” expressed by the determined predicate is essential to Gianni for being “truly” himself.

One could claim that the bare predicate refers to a stage-level property because Gianni has that property probably for a limited time in his life (he has not always worked as a professor), and can lose it at any time (he could retire or get fired). On the other hand it seems that the determined predicate means that *professorhood* is a real property of Gianni’s, because it is definitely unrelated to him being fired or retiring.

Let us see practically if some of these distinctions can provide us with a way to account for the true generalization to capture the meaning alternation between bare

and determined predicates.

When it comes to scalarity, it is important to say that it probably needs to be understood more as a grammatical feature, because it is hard to see in which sense “non-scalarity” is informative about the meaning of the predicate alternation. However, if that is the case, then the actual meaning contrast is left unexplained

First of all, productively employing the essential/accidental distinction is not immediate because, depending on the definition of an essential property, it might be counterintuitive to attribute essential properties for instance to humans (other than that of “being humans”). Secondly, it is hard to employ the essential/accidental distinction in this specific case. Consider the following difference between “Gianni is father” (which in proper English simply means that “Gianni has at least one kid”) and “Gianni is a father” (whose meaning could be emphasized by saying “Gianni is *truly* a father”). However Gianni can be truly “a father”, and yet this property could not be essential to him.

Finally, let us consider the S-/I-level distinction. Recall that kinds-level properties are properties of kinds, individual-level properties are properties of individuals (that belong to a kind) and stage-level properties are properties that these individuals (and, transitively, the kinds to which these individuals belong) have at given stages. In other words, any property that can be ascribed to kinds is a kind-level property, any property that can be ascribed to individuals is an individual-level property, and any property that can be ascribed to stages is a stage-level property. We are arguing that determined predicates denote intrinsic properties, and what we are trying to understand is if intrinsic properties can be replaced by individual-level properties (i.e. if there is no distinction between the two). If that was the case, then we would not expect determined predicates to be used to ascribe properties to kinds nor to stages. Conversely, we are arguing that bare predicates denote extrinsic properties, but if extrinsic properties equated stage-level properties, then bare predicates would not be expected to be used at a kind-level or at individual-level.

It appears impossible to use a kind-level bare predicate, because (5.7) only means that there is a definite lawyer who is a law P.h.D.

(5.7) *L' avvocato è dottore (in legge)*  
 the lawyer is doctor (in law)

Only meaning: "The (specific/definite) lawyer is a law Ph.D"

We might want to ask, if an intrinsic property can be a property of stages, and if an extrinsic property can be a property of individuals. Let us see some tests. First of

all, Zamparelli (2005) points out that bare predicates seem to be able to give rise to individual-level like readings, as shown by Zamparelli's examples, reported below.<sup>6</sup>

- (5.8) *Un Norvegese è spesso disponibile / presente / ubriaco* (S-level)  
 a Norwegian is often available / present / drunk  
 Possible meaning: "A Norwegian is available / present / drunk many times"
- (5.9) *Un Norvegese è spesso alto / poliglotta / biondo* (I-level)  
 a Norwegian is often tall / polyglott / blond  
 Only meaning: "Many Norwegians are tall / polyglott / blond"
- (5.10) *Un Norvegese è spesso pescatore / operaio petrolifero*  
 a Norwegian is often fisherman / petrol worker  
 Hard-to-get meaning: "A Norwegian is a fisherman / petrol worker many times"

At this point, consider the following examples. What is expressed by (5.11 a) has two readings, one is the clear I-level reading, and the other is the K-level reading, comparable to (5.11 b).

- (5.11) (a) *L' avvocato è un dottore (in legge)* (K- or I-level & Intrinsic)  
 the lawyer is a doctor (in law)  
 "The lawyer is a law Ph.D"
- (b) *Anche il pinguino è una specie* (K-level & Intrinsic)  
 also the penguin is a specie  
 "Also the penguin is a specie"

These sentences have a generic reading (the subject of the predication is kind-referring) so the determined predicate is kind-level but nonetheless intrinsic.

Now consider the following examples.<sup>7</sup>

- (5.12) (a) *Gianni è stato un cadavere per due ore*  
 Gianni has been a corpse for two hours  
 (S-level & Intrinsic)
- (b) *Gianni è stato cadavere per due ore* (S-level & Extrinsic)  
 Gianni has been corpse for two hours

<sup>6</sup>Original example numbers (51a-51b) and (52), p.17

<sup>7</sup>I'm grateful to Alexis Dimitriadis for having pointed out these examples to me.

In (5.12 a), the predicate *un cadavere* 'a corpse' is interpreted "metaphorically" meaning "tired". Note that it is possible to license *per due ore* 'for two hours' which is only allowed with stage-level properties. Furthermore note that the predicate "un cadavere" retains the intrinsic meaning that "tired" also has. Conversely, (5.12 b) is interpretable in a context of a theater play in which, for two hours Gianni was impersonating a corpse on stage. In both sentences the predicates are stage-level, yet the first is interpreted as an intrinsic (S-level) property and the second one as an extrinsic (S-level) property.

What we have shown in this section is that, even though many existing dichotomies can account for some aspect of the bare/determined contrast, the intrinsic/extrinsic distinction appears to be, across the board, more adequate.

In the next section we will see an interesting set of data in which it is possible to observe the behavior of determined predicates and how they generally trigger slightly different effects from the predicates that are standardly recognized as I-level properties.

### 5.3 Lifetime effect

This section is dedicated to a particular semantic effect, which normally emerges clearly predicating I-level properties. We will see that the behavior of determined predicates deviates from that of I-level predicates, in that determined predicates trigger also an alternative reading that is missing with I-level predicates. Consider the following examples.

- (5.13) (a) *Gianni esiste*  
Gianni exist  
"Gianni exists"
- (b) *Gianni è biondo*  
Gianni is blond  
"Gianni is blond"
- (c) *Gianni è nato in Italia*  
Gianni is born in Italy  
"Gianni is born in Italy"

The property in (5.13 a) is an essential property, the property in (5.13 b) is a typical I-level property, and the property in (5.13 c) is also an I-level property (in that it is an accidental property that is impossible to lose).

Since Kratzer (1989), we know that modifying the tense from present to past trigger, in certain properties, a particular interpretation with respect to the life of their subjects (See also Musan, 1995, 1997). So, while the presupposition in (5.13 a-5.13 b-5.13 c) is that Gianni is still alive, in (5.14 a-5.14 b-5.14 c) the same presupposition is false.

- (5.14) (a) *Gianni esisteva*  
 Gianni existed  
 "Gianni existed"
- (b) *Gianni era biondo*  
 Gianni was blond  
 "Gianni was blond"
- (c) *Gianni era nato in Italia*  
 Gianni was born in Italy  
 "Gianni was born in Italy"

Such effect is called “lifetime effect”. The interesting twist is that, if we try the same test with determined predicates, we can see that the lifetime effect can emerge, but it is not the only possible presupposition. Consider the sentences already presented as (3.9 b), and here adapted in (5.15).

- (5.15) *Niccolò è stato un avvocato / professore / artista*  
 Niccolò is been a lawyer / professor / artist  
 "Niccolò has been a lawyer / professor / artist"

Next to the “lifetime effect” reading, in which Niccolò is no longer a lawyer/ professor/ artist because he is no longer alive, there is a possible interpretation in which something changed in Niccolò’s nature. As we mentioned already several times, this “deep” change is called “intrinsic change”. Notice that, if we interpret determined predicates as intrinsic properties, we can explain the second reading - let’s call it “extrinsic change effect” - as an alternative reading to the lifetime effect. Also, notice that the “intrinsic change” is not readily available with the standard I-level predicates. Finally, note that bare predicates do not trigger any of the aforementioned effects.

- (5.16) *Niccolò è stato avvocato / professore / artista*  
 Niccolò is been lawyer / professor / artist  
 "Niccolò has been a lawyer / professor / artist"

There is a number of ways to motivate why Niccolò is no longer a lawyer/ professor/ artist, for instance, he changed job or that he lost his license, or he stopped making a living out his profession. There is no presupposition with respect to Niccolò's existence.

## 5.4 Distinguishing predication from equation

In this section we summarize how to distinguish equative/identificational reading or context, from the ones in which the determined nominal is actually a predicate.

When a determiner is present, there are two scenarios that are superficially identical. We can distinguish them with some additional context. The sentence (5.17) has two meanings, because it has two different possible structures.

(5.17) *Gianni è un professore*

One case is compatible with the continuation:

(5.18) *Gianni è un professore*

(that we met yesterday at the dinner party)

In (5.18) the DP *un professore* can head of a relative clause, which means that the sentence is an equative sentence and hence, we are not concerned with these cases.

The other possibility is easy to disambiguate using the context provided in (5.19).

(5.19) (of course he did that, what did you expect?)

*Gianni è un professore!*

What this second sentence means is that Gianni cannot really help his behavior, because it is a consequence of "his nature". In other words, "being a professor", or "professorhood" is a property of which Gianni can only lose by changing his nature. It is a property that is intrinsic to Gianni.

In this section we summarize how to distinguish equative/identificational reading or context, from the ones in which the determined nominal is actually a predicate. Furthermore, suppose that all instances of sentence like (5.20) were equative.

(5.20) *Gianni è un professore*

Gianni is a professor

"Gianni is a professor"

If that was true it would also mean that (5.21) should be interpreted as an equative.

- (5.21) *Gianni non è un professore*  
 Gianni not is a professor  
 "Gianni is not a professor"

The equative/identificational reading of (5.21) would mean that “there is a professor that Gianni is not”, but this is not the only meaning that the sentence has. So, let us see in which cases, distinguishing between equatives and predicative sentences is useful to reach a comprehend better our data.

### 5.4.1 Who vs. What

Matushansky and Spector (2005) point out that, as an answer to *who* or *what* questions, the possibilities of the use of the bare predicates are more limited than the possibilities of the determined predicate.

- (5.22) (a) *Qui est Cyntia? Une physicienne / \*Physicienne* (fra)  
 who is Cynthia? a physicist / physicist  
 "Who is Cyntia? A physicist"
- (b) *Qu' est Cyntia? Une physicienne / Physicienne*  
 who is Cynthia? a physicist / physicist  
 "What is Cyntia? A physicist "

In other words, *who*-questions require equative sentences as answers and bare predicate (or a sentence with containing a bare predicate) is perceived as a non-pertinent / infelicitous answer. On the other hand, a *what*-question requires for a trait of the identity of the subject. The same holds for Italian and the other languages in our data set as well.

- (5.23) (a) *Chi è Niccolò? Niccolò è un avvocato / ??Avvocato* (ita)  
 who is Niccolò? Niccolò is a lawyer / lawyer  
 "Who's Niccolò? A lawyer"
- (b) *Cos' è Niccolò? Niccolò è un avvocato / Avvocato*  
 what is Niccolò? Niccolò is a lawyer / lawyer  
 "What is Niccolò? A lawyer"

- (5.24) (a) *Wie is Nick? Een advocaat / ??Advocaat* (nld)  
 who is Nick? A lawyer / lawyer  
 "Who is Nick? A lawyer / lawyer"

- (b) *Wat is Nick? Een advocaat / Advocaat*  
 what is Nick? A lawyer / lawyer  
 "What is Nick? A lawyer / lawyer"

- (5.25) (a) *Wer ist Nick? Ein Anwalt / ??Anwalt* (deu)  
 who is Nick? A lawyer / lawyer  
 "Who is Nick? A lawyer / lawyer"

- (b) *Was ist Nick? Ein Anwalt / Anwalt*  
 what is Nick? A lawyer / lawyer  
 "What is Nick? A lawyer / lawyer"

- (5.26) (a) *¿Quién es Nicolás? Un abogado / ??Abogado* (spa)  
 who is Nicolás? A lawyer / lawyer  
 "Who is Nicolás? A lawyer / lawyer"

- (b) *¿Qué es Nicolás? Un abogado / Abogado*  
 what is Nicolás? A lawyer / lawyer  
 "What is Nicolás? A lawyer / lawyer"

- (5.27) (a) *Hva er Nikolai? En advokat / Advokat* (nor)  
 what is Nikolai? a lawyer / lawyer  
 "What is Nikolai? A lawyer / lawyer"

- (b) *Hvem er Nikolai? En advokat / ??Advokat*  
 who is Nikolai? a lawyer / lawyer  
 "Who is Nikolai? A lawyer / ??lawyer"

We agree with Matushansky and Spector for what concerns the analysis of French. As they show, in French every time that a predicate occurs with a determiner, the sentence is an equative sentence. It is reasonable to believe that, in French, the contrast between intrinsic and extrinsic properties is not lexicalized in a productive way, unlike what we have seen with the other languages in our data set. There are some exceptions, and some determined predicates can be successfully used with the intrinsic interpretation, but they are very few and lexicalized. It is the case of *un chef*, with the interpretation of “a bossy person”, *un artiste* “an artsy person” or in the metaphorical sense, *une pute* “a prostitute” in the offensive sense of the term, which contrast with the actual profession that needs to occur bare (*prostituée*), and few others. Note that, in French, it is impossible to express intrinsic “metaphorical” interpretation of proper names, as shown by the ungrammaticality of (5.28).

- (5.28) \**Cette fille est une Paris Hilton*  
 This girl is a Paris Hilton

However there are some lexicalized “metaphorical” properties, such as *un cochon* ‘a pig = a disgusting person’ or *un armoire à glace* ‘a vitrina = a strapping fellow’. The fact that there are some lexicalized intrinsic properties that occur with a determiner might be evidence that in the history of French the option of expressing both intrinsic and extrinsic properties like in the other languages was possible, and that subsequently disappeared. Which properties has French lost and why is an interesting line of research that we will leave open to further research.

There are other context in which a different behavior of bare and determined predicates can be highlighted. Keeping in mind what we said about the possible ambiguity of the sentences containing a determined predicate, let us now consider the final contexts.

## 5.5 Possible worlds

As noted by Matushansky and Spector (2005) there are scenarios in which a the sentence containing the post-copular bare noun is false, whereas the sentence containing a determined post-copular noun is true. According to their analysis, this is proof of the fact that the argument slot of a bare predicate cannot be bound by the main verb (cf. Matushansky and Spector, 2005) and Section [2.7] of this thesis). An identical contrast to the one discussed by Matushansky and Spector is replicated in (5.29 a). We will add add a different ways of obtaining truth values asymmetries, in (5.29 b). In both cases, (in 2013) the versions of the sentences containing the predicate with the determiner are TRUE, but the ones containing the bare predicate are FALSE.

- (5.29) (a) *Clinton è un presidente / #presidente*  
 Clinton is a president / president
- (b) *Elvis Presley è un musicista / #musicista*  
 Elvis Presley is a musician / musician

These two example look similar but are very different. Let us begin with the analysis of the first one.

- (5.30) (a) *Clinton è un presidente*  
 Clinton is a president  
 "Clinton is a president"
- (b) #*Clinton è presidente*  
 Clinton is president  
 "Clinton is a president"

Note that both (5.30 a) and (5.30 b) are grammatical. However, given the actual world, only (5.30 a) is true.

What do examples (5.29 a) and (5.30 a-5.30 b) show:

*These sentences exemplify the cases in which we predicate of a living person (e.g. Clinton) some property that he might no longer have (e.g. "being a president").*

The sentence involving *Clinton* and the determined predicate *un presidente*, is ambiguous between the reading in which we are ascribing to Clinton intrinsic *presidenthood*, and the identificational reading which is compatible with a partitive reading: i.e. the sentence is interpreted as meaning "Clinton is one of the several people who have ever had the role of president".

On the other hand, the bare *presidente* only refers to the extrinsic property/social object "president". Therefore, its interpretation has defined limits that follow from the officiality of the status. Defining bare predicates temporally is only partially correct, because there are social objects that do not have temporal limits (i.e. they never decay), for instance Nobel Prize or *senatore a vita* 'senator for life'.<sup>8</sup>

Now consider the second case.

- (5.31) (a) *Elvis Presley è un musicista*  
 Elvis Presley is a musician  
 "Elvis Presley is a musician"
- (b) #*Elvis Presley è musicista*  
 Elvis Presley is musician  
 "Elvis Presley is a musician"

Also the two sentences below are perfectly grammatical, but again, given the actual world, only (5.31 a) is true.

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<sup>8</sup>Clearly, the temporal perception of certain roles is strong, and at some level well-founded. After all, even social objects have a temporal dimension, like any other object. However, I am not convinced that an analysis or a modeling which is based uniquely on a temporal characterization is sufficient to capture their meaning.

It seems that for the parts of the identity of Elvis that “survive” his death, but not the ones which the bare predicate predicates about.<sup>9</sup> Across-the-board, we already said that bare predicates seem to select different “aspects” of their subjects, so what persists of Elvis’ identity can be *en rockstar*, but not *rockstar*. To put it differently “What is the interpretation assigned to *Elvis Presley* in sentences (a) *contra* (b) sentences?”

What do examples (5.29 b) and (5.31 a-5.31 b) show:

*These sentences exemplify the cases in which we predicate, of a deceased person (e.g. Elvis), some property that he had for his entire life (e.g. “being a musician”).*

First of all, in the case in which Elvis is dead, it is impossible predicate extrinsic properties of a non-existent entity, if extrinsic properties are extensional properties, thus sets interpreted with respect to this world, because there cannot be member holding between such a set and an entity which does not exist in this world.

On the other hand, setting aside the equative reading of sentence containing the determined predicate, how can we explain the interpretation of (5.29 b)? If intrinsic properties are intensional properties, then when they are true, they are true every world in which the subject exist. We can understand the referent of the proper name Elvis Presley as referring to a proxy of Elvis, namely his author-proxy (cf. Jackendoff (1992)). In the sense of an author, Elvis Presley keeps existing in the same way Shakespeare does. Of that proxy, we can predicate the intrinsic property “a musician”.

In the following sections, we will see how the data discussed far can be further explained. We will start by discussing the principle of identity and the role of the count feature. Then then we will discuss what is relation between the two structures and how the two meanings that we have discussed so far match the structures. Then, we will discuss what is the minimal machinery to derive said syntactic structures, and see what must be different in English to derive its different behavior, and why.

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<sup>9</sup>Øystein Nilsen (p.c.) pointed out that a similar phenomenon happens with some adjectives. For instance in (5.32 a - 5.32 c).

(5.32) (a) *Elvis Presley is famous* / #*tall* (eng)

(b) *Elvis Presley er kjent* / #*høy* (nor)

(c) *Elvis Presley è famoso* / #*alto* (ita)

In these examples as well, it appears that the part of Elvis’ identity that survives can be *famous* but not *tall* (clearly, independently of Elvis’ height when he was alive).

## 5.6 About Nouns

Traditionally, common nouns, (intransitive) verbs, and adjectives denoted sets which are elements of type  $\langle e, t \rangle$ . These elements can combine with elements of type  $e$  to yield truth values. For example, the sentences in (5.33) all state that the entity referred to by the name *John*, is a member of the set denoted by the verb, or the adjective, or the noun.

	John runs	$\text{RUN}_{\langle e, t \rangle}(j_e)$
(5.33)	John is red	$\text{RED}_{\langle e, t \rangle}(j_e)$
	John is a man	$\text{MAN}_{\langle e, t \rangle}(j_e)$

So, in the first case, the set collects all entities that *run*; in the second case the sets collects all entities that *are red*, in the third case the set collects all entities that *are men*.

From the logic literature, and particularly from Gupta (1980), we can understand something interesting on the linguistic category of nouns. The intuition that Gupta works out can be illustrated in two points. First, elements belonging to the three abovementioned categories (verbs, adjectives, nouns) have something in common: they are either true or false of objects. This ability of yielding a truth value means that verbs, adjectives, and nouns all provide a “principle of application”. The principle of application of, say, an adjective is what divides all entities/objects into two groups: those of which the adjective is true, and those of which the adjective is false. Knowing the “principle of application of *red*” equals to knowing “what an entity should be like to be red” (See. i.a. Geach, 1962 and Dummett, 1973). The second point is the following: Geach and Gupta point out that there is one crucial difference that sets nouns apart from verbs and adjectives: only nouns provide the information to be able to say whether an object  $x$  is *the same* as object  $y$ . In other words, only nouns provide the “principle of identity”. Geach points out that only nouns are acceptable in contexts of “sameness”.<sup>10</sup>

- (5.34) (a) *He is the same professor<sub>Noun</sub> that was teaching yesterday*  
 (b) \**He is the same tall<sub>Adj</sub> as the other guy*  
 (c) \**I heard him the same sing<sub>Verb</sub> again*

Gupta uses an insightful example to show that nouns can differ in the way their principle of identity is. Consider the paralogism in (5.35):

<sup>10</sup>The examples in (5.34 a-5.34 b-5.34 c) are adapted from Baker (2003).

- National Airlines served at least two million passengers in 1975
- (5.35) Every passenger is a person
- 
- National Airlines served at least two million persons in 1975

It is easy to see that the argument in (5.35) is invalid, and Gupta points out that the problem is related to the way in which the noun *passenger* and the noun *person* identify objects. Not only do *passenger* and *person* vary in their principle of application, since not every object which is a person is also a passenger, but they also vary in the way their principles of identity pick out referents.<sup>11</sup> We can borrow this insight, and use it to suppose that, in predicative position, the principle of identity, with which nouns are endowed, translates into the fact that only nouns bear the feature [*COUNT*]. This is compatible with the intuition that the principle of identity is that part of the meaning of nouns that enables us to track objects through possible worlds. Adjectives do not instantiate the principle of identity and are do not bear this feature. The absence of the feature explains why adjectives do not show different behaviors when they are interpreted as mass-adjectives or count-adjectives, as shown by (5.36 a - 5.36 b).<sup>12</sup>

- (5.36) (a) *Sand is red*
- (b) *The chair is red*

Suppose further that in Italian, Spanish, German, Dutch and Norwegian, nouns can enter the derivation with a valued or unvalued count feature. Clearly, the use of an unvalued feature is a more marked choice, as it requires more structure, namely (at least) the projection of the Number layer that hosts the article, whose [*+sing*]

<sup>11</sup>It is possible to argue that the difference between “passengers” a “persons” is ontological i.e. that they are simply different types of objects. (See. Gupta for a further discussion, and Loewe (1989, 2009) for a different perspective).

<sup>12</sup>Even though we will be concerned with the nouns/terms in generally marked [*COUNT*] (with the syntactic feature being interpretable or uninterpretable), we use the distinction between  $+count_t$  term and a  $-count_t$  term as it appears in Gabbay and Moravcsik, 1973.

- A  $+count_t$  term  $F$  is such that
  - there are some  $F$ 's, e.g.  $F'$  and  $F''$ , such that their union is itself not an  $F$ , or
  - there are no  $F'$  and  $F''$  such that one does not contain the other (with  $F' \neq F''$ ), or there is only one  $F$ .
- A  $-count_t$  term  $F$  is such that
  - the union of any two  $F$ 's, e.g.  $F'$  and  $F''$ , is also an  $F$ , or
  - there are some  $F'$  and  $F''$  such that neither contains the other.

feature can value [*uCount*] on the noun, while the use of a valued feature results in less structure. So, the bare predicate corresponds to an element of type  $\langle e, t \rangle$ , an extensional property, that denotes a set. Whereas a noun that bears an unvalued [*uCount*] feature realizes as an intensional property, of type  $\langle s, \langle e, t \rangle \rangle$  that holds in every possible world in which the subject exist.<sup>13</sup> So that would result in that the matching between form and meaning is intrinsic/intensional property - determined predicate, and extrinsic/extensional property - bare predicate.<sup>14</sup> The crucial aspect of this generalization is, however, that the bare predicate has no intensional level encoded in syntax.

In order to start discussing how this generalization accommodates the data that we discussed, let us take a step back and ask the following question: “How can we explain the behavior of English, in which what appears the less marked option is systematically almost prohibited?”

## 5.7 English and uniqueness

Recall the way we started our discussion in Section [1.1]. We discussed the fact that English bare predicates are only allowed if they denote a contextually-unique referent. We illustrated the contrast with (3.1), here repeated in (5.37).

(5.37) *He is (the/a) team captain, and she is \*(a) team member*

We have shown that, whenever the uniqueness condition is respected, English bare predicates and determined predicates show a meaning alternation that is similar to what the other European languages discussed in this study show. The two sentences below are not contradictions because there is a meaning difference between the bare and the determined predicates.

(5.38) (a) *He has been president without (ever) having been a president*

(b) *He has been a president without (ever) having been president*

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<sup>13</sup>The modal bare needs to be further restricted, in order to avoid the risk of a *de jure* overlap between an intrinsic property and an essential one, which does not correspond to the meaning that intrinsic properties have. The worlds in which the property holds could be the worlds that are coherent with the nature of the subject, but as Alexis Dimitriadis (p.c.) pointed out, this is a circular definition. In any case, we leave the restriction of the modal bare open to further research.

<sup>14</sup>This could follow, for instance, by Dalrymple et al.’s “Strong Meaning Hypothesis”.

Informally, we said that (5.38 a) means that the person referred to by the pronoun *he* was officially elected as president, but did not have the qualities that are normally expected from someone occupying that role, while (5.38 b) means exactly the opposite.

The puzzle with English is clearly about the uniqueness restriction. In accounting for this restriction, we will make use of another crucial difference between English and Italian (and the other languages that we discussed). In Italian (and the other languages), the agreement between the subject and the predicate is robustly present in both adjectival and nominal predication.

- (5.39) (a) *Gianni è simpatic**o** / professor**e***  
 (b) *Gianna è simpatic**a** / professor**essa***

In English, however, this is not the case (cf. Zamparelli, 2005).<sup>15</sup>

- (5.40) (a) *John is smart / a professor / director*  
 (b) *Mary is smart / a professor / director*

Suppose that in English, unlike the other languages we discussed, the Number feature (on *n*) of these lexical items can only be an unvalued [*uCount*]. If this is the case, we can understand why most nouns in English need to surface with an article: it is required for the valuation of the [*uCount*] feature on the noun. One solution to the uniqueness restriction puzzle could be what Delfitto (2011) proposed, *modulo* a small modification of the account. When the noun has a valued feature for count, it must be specified for singular or plural. This can happen through a determiner or, in some languages (Italian, etc.), via the subject-predicate agreement. In other words, in these languages, the subject-predicate agreement is an alternative to the creation of additional structure caused by the projection of NumP. However, as we have seen, in English, the subject-predicate agreement is not a viable option. The only viable option for English is then the projection of NumP.

As it happens, contextually unique nouns, such as president or CEO are always (i.e. in every language, so also English) lexically specified as [*+sing*]. Our claim is then that this small subset of the English nouns is different from the rest of the English

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<sup>15</sup>Of course, there are some exceptions. In Italian the adjectives in -e do not show agreement, e.g. *intelligente smart*. In Dutch, mainly adjectives, and some nouns, show agreement inflection, etc. The point really lies in how robust the phenomenon is, in a given language. To my knowledge, there is only one adjective that shows agreement in English and that is *blond/blonde*. Next to that, there are the nouns in *tor, ter / tress and trix*.

lexicon, by being inherently (i.e. lexically) specified for [+sing]. Because they are inherently specified as [+sing], these nouns are marked as [*iCount*]. In other words, while being different from the rest of the English lexicon, they are similar to the nouns of the other languages that we are discussing.

In contextually unique English nouns, just like the nouns in the other languages, there are two possible predicative structures, only one of which involves the projection of the Number phrase. Predictably, there is a specialization of the more elaborate structure for expressing a more complex meaning, and of the less elaborate structure (the one without NumP) for expressing a less complex meaning.

## 5.8 Meaning and Kinds

In this section we will discuss how intrinsicity relates to linguistic kinds and hence to the determined predicative structure. So, we will first discuss how intrinsicity relates to kinds and then, complementarily, we will discuss the meaning that is associated to the bare predicative structure.

### 5.8.1 Relation to kinds

With Le Bruyn (2010), our understanding of kinds is that of pluralities that emerge from the grouping of entities which all share one (and the same) intrinsic property. It is unsurprising that kinds are often described as “regularities occurring in nature” or “regularities occurring in the world”<sup>16</sup> because, being structured collections of entities that share the same intrinsic property, kinds are the natural candidates to be very strongly perceived as real linguistic entities.<sup>17</sup>

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<sup>16</sup>Even though one might (philosophically) incline towards a disagreement with realist ontological positions, that does not mean that they are committed to believing that languages must embody, or even justify, an anti-realist view. What I argue is happening in the languages considered in this study is, in fact, quite the opposite. We might even say that the very concept of “kind” is, in its essence, realist: natural languages group, and therefore mark, those objects that are seen as being as “a real discontinuity in the structure of the world”. So, the acknowledgement of the existence of a kind  $\alpha$  is the expression of the conviction that “being  $\alpha$ ” is part of the shape of the world, and that is understood as existing independently of our minds. In other words, believing in the existence of “kinds” and “properties” in the linguistic realm does not commit to the belief that these universals are also part of the real, nor that they should feature in nothing more than the linguistic ontology.

<sup>17</sup>Note that, for entities to “blend” into a kind, they need to share at least one intrinsic property. Therefore, also the question of “how many” properties are shared by the entities collected in a kind (or if they are “relevant”, or “prominent” properties, etc.) might be a philosophical issue, but it is hardly going to be a linguistic issue.

The phenomena that we have been observing indicate that natural languages mark with different grammatical structures the belonging of an entity to a kind, when the entity is part of the kind. Also, being a member of a kind, can be seen as something that can hardly, if ever, change (we might say that entities belong to kinds “unwillingly”).

It is not problematic that, in every language, there are some nouns which look like having default intrinsic meaning i.e. they primarily surface as members of a kind. In the languages we have considered, we can notice that the “extremes” of the gamut vary little or not at all. For example, it is unsurprising that nouns that refer to human sub-kinds (and arguably, animals, together with most inanimate objects) tend to surface more often as kind members: they are so hardly ever needed in their extrinsic sense, that they are probably even perceived as “truly” intrinsic. Speakers hardly ever need to convey the meaning of, say, “womanhood” as an extrinsic property, but as we have seen in cases like (5.41 a) and (5.41 b), here repeated as (5.41 a - 5.41 b), if the required meaning is the extrinsic meaning of “woman”, the bare-extrinsic form is necessarily used (recall (5.41 b) refers to a game context).

- (5.41) (a) *Gianni, dopo aver cambiato sesso, è diventato donna.*  
 Gianni, after have<sub>inf</sub> changed sex, he is become woman  
 "Gianni, after having changed sex, he has become a woman"
- (b) *Gianni ha estratto il rosso e quindi è donna*  
 Gianni has extracted the red, and hence he is woman  
 "Gianni picked red, hence he is a woman"

Intuitively, the distinction that we need to achieve is the following: extrinsic properties are extensional properties, and they denote elements of type  $\langle e, t \rangle$ . Intrinsic properties, on the other hand are intensional properties, they denote functions from possible worlds to sets, that is, elements of type  $\langle s, \langle e, t \rangle \rangle$ .

Kinds are type  $e$ , but how are they derived? The reification of a property (making an object out of a property) however cannot work with extensional properties because a kind does not arise from a property that is restricted only to that world in which the sentence is interpreted (i.e. the actual world). Consider (5.42).

- (5.42) *The dog is a mammal*

The sentence (5.42) is a generic statement that applies (and is true or false) of all the dogs that exist, that have ever existed and that will ever exist. Essentially, kinds are trans-world entities. According to Chierchia, kinds are derived from elements of

type  $\langle s, \langle e, t \rangle \rangle$ , via type-shifting, to elements of type  $e$ . This coherently predicts that we argue: if there is a link between the intrinsic property and a member of a kind, essentially intrinsic properties are intensional properties of individuals. This is why, if true, they are true in every possible worlds (in which the individual exists), just like if (5.42) is true, then it is true in all possible worlds.

One might ask what is the relation between kinds in argumental position and kind-membership that is the intrinsic property denoted by the determined predicate. Consider the following two pairs.

- (5.43) (a) *Presidents are powerful*  
 (b) *The president is powerful*

(5.44) *John is a president*

(5.45) *John is president*

Here is a crucial aspect. We said several times that the interpretation of the determined predicate is an instance of a kind, and the way this must be understood is the following: first of all, clearly, under the generic reading lawyers and the lawyer in (5.44) refer to the kind-lawyer. There is a property that, via type-shifting is reified, essentially by taking that all the individuals that fall in the extension of that property in all possible worlds and conceptualizing them as one entity. We understand (5.44), as stating that the individual denoted by the name John is precisely one of the individuals that fall in the extension of the property lawyer. At this point we see the difference between (5.44) and (5.45), for the interpretation of (5.44) is that falls in the extension of lawyers in all possible worlds (in which John exists), the interpretation of (5.45) is limited to the actual world. So the property in (5.44) is intensional, and the property in (5.45) is a standard extensional property. We said earlier, that to obtain a kind, the type-shifting operation must apply to an intensional property.

In a sentence that contains a kind-referring bare noun in argumental position, the argument is derived via the reification of intensional property, but when the intensional property is in predicative position there is no need for a mapping onto a type  $e$ , the property remains a predicate. By hypothesis, the article cannot be in D, instead we suppose that it is generated in Num, but the really crucial detail is avoiding the projection of the D layer to avoid the rising of the expression to a type  $e$ . So, syntax encodes the difference between extensional properties (sets, type  $\langle e, t \rangle$ ) and

intensional properties (functions from possible worlds to sets, type  $\langle s, \langle e, t \rangle \rangle$ ). So, we can understand the kind “president” as the extension of “president” in all possible worlds. But when of an individual is ascribed the intensional property *a president* then, that property holds for the same individual, in every possible worlds in which the individual exists. Recall that, as we mentioned in Section [5.5], the fact that extensional property are evaluated only in the actual world shows why, if a bare predicate is used to ascribe a property e.g. to someone who is deceased, the sentence is grammatical but false.

**Some final remarks on extrinsic properties and social objects** If we consider the observations from the previous section, where we said that there can be some nouns which look like having default intrinsic meaning, it is not surprising that nouns that refer to jobs or roles can ascribe intrinsic, as well as extrinsic properties. One relevant observation, at this point, is that extrinsic properties (unlike the intrinsic ones) have the possibility to rise to the status of social objects.<sup>18</sup> In Searle’s social ontology, a “social object” is an object that *counts as* something else, in a given context. The formula is (5.46).

(5.46) *x counts as y in context c*

A *declarative* speech act is an act that modifies the way the world is, introducing a new state of affairs. In other words, it imposes a function that is socially recognized: pronouncing vows (in a certain setting, and in front of certain people) makes two people into husband(s) and/or wife(s). Touching a man’s shoulder with a king’s sword will make him a knight, etc. The initial observation is that most professions (and roles) have a cut-off beginning that is established by some type of declarative speech act, upon which they profession etc (as extrinsic properties) supervene. A candidate has to be elected and sign some official documents before being able say of himself that he is *president*. Now, note that whenever there exist such a clear-cut point, the meaning of the bare predicate aligns with the “most (socially) constructed” meaning (e.g. “lawyer” expressed with a bare predicate can be said of someone who has passed the bar exam, and hardly - if ever - of someone with a law degree). Earlier we said that “scalarity” was entailed by the meaning of the property referred to by a bare predicate. It is clear now how this works: every bare predicate

<sup>18</sup>See. Searle, John R. 1995 “The Construction of Social Reality”, New York Free Press Searle, John R. 1969 *Speech Acts. An Essay in the Philosophy of Language*. Cambridge: Cambridge University Press.

Searle, John R. 1975 *A Taxonomy of Illocutionary Acts*, in K. Gunderson (ed.), *Language, Mind and Knowledge*. Minnesota

refers to an extrinsic property. If, as we have seen from the chapter on the literature background, we start from the assumption that there is a class of nouns (professions, roles, and so on) that can occur as bare predicates, we are going to argue ourselves into a dead end, and it will be very difficult to find any counterexample, since any profession or role (being social objects) have a cut-off starting point determined by some declarative or other, hence these predicates are necessarily non-scalar.

### 5.8.2 Conclusions

Summing up, intrinsic properties tend to surface (in the languages discussed in this study) in a way that is interpretable as a member of a kind. As we can see from the data of the languages discussed in this study, grammar can distinguish between an intrinsic property and an extrinsic property. However, it is incorrect to say that in every language intrinsicity is associated to the “category” *Noun*. In some languages, it might be the case, but in other languages that could also depend on the syntactic environment in which the noun appears. So, it is reasonable to assume that the noun by itself does not denote an intrinsic property. Instead, intrinsicity - being associated to an intensional property - emerges through the combination of the noun with the article. Also a structure like “*a N*” denotes a member of a kind, if kinds are collections of entities grouped by virtue of their intrinsic properties. It is in principle possible to have a property that is intrinsic to an individual and no one else. In general, to say that a structure like “*a N*” denotes an instance of a kind *de facto*, but not *de jure*, because the case just discussed would not entail the existence of a kind.



## CHAPTER 6

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### Conclusions

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This concludes the present study on bare predicates from the perspective of cross-linguistic variation at the syntax-semantics interface. “Cross-linguistic variation” might be misleading here, as only European languages were considered. These languages share, in most cases, large portions of their lexicon (in terms of cognates) and do not have particularly dissimilar syntax (Romance, Germanic-Scandinavian). I presented several different contexts in which bare predicates surface and discussed all the meaning alternations between sentences containing two types of predicative constructions: the ones in which a nominal/noun appears determinerless in post-copular position, and the counterparts of the same sentences, in which the predicate is introduced by a determiner (typically, an indefinite article). The importance of considering closely related languages, in this case was two-fold: 1) it helped us identify very robust patterns of meaning alternation (showing very little variation between languages, *modulo* some language-specific property that might ultimately restrict or extend the admissibility of bare predicates); 2) it helped us construct a generalization that can be further tested, as it is expected in many languages at some level. I have argued that the interpretation of the bare predicate is that of an extrinsic property, a property that depends on the external world around the individual to which that property is ascribed, often understood as involving human volition/agency. Exactly in the opposite way, the interpretation of the determined predicate is that of an intrinsic property, hence crucially dependent on the existence of its subject and its internal qualities. I have claimed that, unlike extrinsic properties, which simply denote sets, intrinsic properties should be treated as ex-

intentionally conditioned intensional properties that hold in every possible world in which the entity exists and that such a more complex semantics justifies and requires more structure - the article. There is a number of questions that still need to be answered. For instance, the present account fails to predict some language-specific behaviors. It also remains open why in Dutch bare predicates can appear in the singular form with a plural subject (but not consistently in every construction). It also remains to future research to establish what the relation between bare predicates and kind-level modification is. Currently I do not have satisfactory answers to these questions, however, I believe that the type of answers that these questions will be given by future research can hardly lead to a full rejection of the generalizations outlined in this thesis. If this analysis is on the right track, and, more importantly, if the insights of the analysis are correct, meaning alternations such as the ones we described observed in our data set should appear, one way or another, in every language. This is due to the fact that the type of contrasts our account is pointing at are deeply rooted in both our conceptual system and in our perception of the ontological reality.

Finally, I suggested that we needed to abandon the lexical approaches to bare predicates, not so much because there is no lexical component involved, but simply because of what restricting a phenomenon to a certain class amounts to, and what predictions it makes. In sum, I argue that there is no lexical phenomenon of bare predicates, but that instead, what we observe is just the reflection of a deeper conceptual distinction.

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## 6.1 Norwegian

The Norwegian data discussed in the thesis might need some particular explanation. A brief survey of the properties of Norwegian bare singulars precedes what we now know as the standard dataset for BPs. The reason for this particular choice is twofold: if, on the one hand, the semantic contrast of Norwegian BPs Vs. determined predicates is essentially identical to that of the other languages discussed in this thesis. On the other hand, the pervasiveness of Norwegian bare singulars in argument position must be taken into account. This is important especially since we need to discern what belongs to the bare predication spectrum *per se*, and what examples are influenced by the argumental bare singulars. To put it differently, knowing more about bare singulars in general helps understanding why some examples might seem deviant from the pattern.

There is another reason why the discussion of the Norwegian data is crucial: it is possible to use a bare singular with the range of interpretation that an NP introduced by an indefinite would have in Romance or Germanic. That is a phenomenon that exists in various languages (e.g. Icelandic, Hungarian, Welsh, etc.), but what differentiates those languages from Norwegian is the fact that Norwegian has the indefinite article whereas those other languages do not. At the same time, some of the uses of the bare singulars, as we will see, are compatible with the definite article in Romance. This makes of Norwegian a peculiar case that is interesting to consider.

What follows is meant to get the reader acquainted with Norwegian bare singular arguments (cf. Borthen (2003) for an extensive discussion and complete data; Pereltsvaig (2006), and Kallulli (1999) for different accounts).

### 6.1.1 Norwegian Bare Singulars

Norwegian is a language endowed with both definite and indefinite articles, however only singular indefinites look somehow similar to English-like indefinites. All plurals and all definites inflect on the noun. In the table below is illustrated the basic inflection pattern for masculine nouns.<sup>1</sup>

	<i>Singular</i>	<i>Plural</i>
<i>Indefinite</i>	en hest	hester
<i>Definite</i>	hesten	hestene

As mentioned in the introduction, some Norwegian singular count nouns can appear bare (BSs henceforth), as in the following:<sup>2</sup>

- (6.1) *Alle barna prøvde jakke*  
 all children<sub>def</sub> tried jacket  
 "All the children tried on a jacket"

The interpretation of the BS in (6.1) is *some jacket or other*, because, first of all, Norwegian BSs are not specific: even when interpreted existentially, they always take narrow scope and, indeed, they can never be combined with adjectives denoting specificity (e.g. *bestemt* 'certain').

The problem with this example is that the wide scope reading of the bare singular is entailed in the narrow scope. However, it is true that Norwegian bare singulars do not take wide scope, and a better way of showing it is to make cause interactions with negation. Indeed, in (6.2), the wide scope reading for *jakke* 'jacket' is not allowed. It is impossible to interpret the sentence as meaning "there is one jacket that nobody tried".

- (6.2) *Ingen barn prøvde jakke*  
 no child tried jacket  
 "No child tried on a jacket"

Next to being not (specifically) referential, Borthen claims that Norwegian BSs are also impossible to use as partitives, as shown in (6.3).

<sup>1</sup>Norwegian also has feminine and neuter genders but, for the purpose of this overview, spelling out the whole paradigm is pointless.

<sup>2</sup>Unless otherwise specified, all examples in this subsection are from Borthen (2003)

- (6.3) *Det var igjen mange sykler etter salget,*  
 it was left many bikes after sale<sub>def</sub>,  
 "There were many bikes left after the sale, ..."

?? *så jeg ga sykkel til Kari*  
 ... so I gave bike to Kari  
 [intended] ... so I gave Kari a(ny) bike"

This example however needs some clarifications. The “??” grammaticality judgement of (6.3) is restricted to a context where the sentence has no particular focus, so the natural focus is on the most embedded element *til Kari* ‘to Kari’ (Cinque, 1993). When *sykkel* ‘bike’ is (contrastively) focused the sentence is perfectly grammatical. So if a person is wondering what kind of present they should give to Kari, a bicycle or something else, and they they walked passed a shop where there were many bicycle left, (6.4) is absolutely perfect:

- (6.4) ... *så jeg ga SYKKEL til Kari*  
 ... so I gave bike to Kari  
 "... so I gave Kari a bike"

- (6.5) ?? *Katt har myk pels*  
 cat has soft fur  
 "[intended] The cat has soft fur"

They can rarely be used as generics, as shown in (6.5) and, *ceteris paribus*, their determined counterparts are better antecedents for anaphoric expressions, as shown in (6.6 a-6.6 b).

- (6.6) (a) \**Den tredje oppgaven var å sette papegøye på pinnen*  
 the third task<sub>def</sub> was to put parrot on perch<sub>def</sub>  
*sin*  
 his<sub>refl, poss</sub>  
 "[intended] The third task was to place a parrot on its perch"
- (b) *Den tredje oppgaven var å sette en papegøye på pinnen*  
 the third task<sub>def</sub> was to put a parrot on perch<sub>def</sub>  
*sin*  
 his<sub>refl, poss</sub>  
 "The third task was to place a parrot on its perch"

BSs cannot be externally-merged subjects (e.g. they are ok in passive sentences and some unaccusatives). A further restriction concerns the type of nouns that can be realized as BSs: Borthen observed that descriptively-poor nouns tend to be unacceptable as BSs, as shown by the examples in (6.7 a - 6.7 b):

- (6.7) (a) *Det ligger kniv på bordet*  
 there lies knife on table<sub>def</sub>  
 "There is a knife on the table"
- (b) *\*/?? Det ligger ting / object på bordet*  
 there lies thing / object on table<sub>def</sub>  
 "[intended] There is a thing / object on the table"

However, there BSs behave like “focus magnets” in that they seem to always want focus, and that might explain why, as we have seen, object positions are hardly problematic. If that is true, and BSs want to be in focus, in this case there seem to be an issue of focus alternative (Rooth, 1992): what else other than an object could be lying on the table? If we consider a different context, for instance a context of imagination, the table turns: what we obtain is a “descriptively-poor noun” such as *object*, in the sense of ‘object as a category’ to which we can oppose some other category. In this case, focus is satisfied, and, as expected, the result grammatical.

- (6.8) *Han diskuterte objekt som en kategori*  
 he discussed object as category  
 "He discussed the object as a category"

Intuitively, for Borthen’s example (6.7 b), e.g. *a glass of wine* could never be considered as an alternative to *object* in that it is semantically “covered” by it. In a sense this is similar to what happened in (6.3 - 6.4) with the bicycle case: if the default focus is on the PP *til Kari* ‘to Kari’ the bare *sykkel* is cannot be in focus and the sentence is borderline to ungrammatical; when, instead, *sykkel* is focused (a bicycle as opposed to something else), the sentence is perfectly acceptable.

Another straight-forward fact is that BSs are good antecedents for pronouns referring to non-animate kinds (6.9).<sup>3</sup> They suit generic statements well (6.10), and they can subject higher-order predication (6.11).

- (6.9) *Ola har fin bil. Det har Kari også*  
 Ola has nice car<sub>masc.</sub> That<sub>neut</sub> has Kari too  
 "Ola has a nice car. That Kari has too"

<sup>3</sup>In Borthen (2003) it is claimed that, since *det* has many common properties with BSs, it is actually their pronominal counterpart.

(6.10) *Man bør bruke jakke om vinteren*  
 one should use jacket in winter<sub>def</sub>  
 "One should use a jacket in winter"

(6.11) *Datamaskin er et nyttig hjelpemiddel*  
 computer is a useful tool  
 "A / the computer is a useful tool"

One very informative kind of examples is the illustrated in (6.12 a - 6.12 b). Notice that BS can only be replaced by the neuter form *det* 'that<sub>neut</sub>':

(6.12) (a) *Bil, dét har jeg sett før*  
 car<sub>masc</sub>, that<sub>neut</sub> have I seen before  
 "A car, that I have seen before"

(b) *\*Bil, den har jeg sett før*  
 car<sub>masc</sub>, that<sub>masc</sub> have I seen before  
 "[intended] A car, I have seen it (i.e. the car) before"

One interesting fact is that simply replacing the BS with the corresponding DP will not make the match with the masculine *den* 'it<sub>masc</sub>' grammatical and still the neuter form is preferred. This point is particularly interesting, as we will discuss it again, at a later stage in [].

(6.13) (a) *\*En bil, den har jeg sett før*  
 a car<sub>masc</sub>, that<sub>masc</sub> have I seen before  
 "[intended] A car, I have seen it (i.e. a car) before"

(b) *?En bil, dét har jeg sett før*  
 a car<sub>masc</sub>, that<sub>neut</sub> have I seen before  
 "[intended] A car, I have seen it (i.e. a car) before"

Notice that a similar agreement phenomenon can be shown also with predicates. Again, the masculine noun *bil* 'car' as a BS does not trigger the agreement on the post-copular adjective *kjekt* 'handy' that appears in its neuter form. The contrast is with the definite DP and the indefinite DP, which in turn, both trigger the gender agreement.<sup>4</sup>

(6.14) (a) *Bil er kjekt / \*kjekk å ha*  
 car<sub>masc</sub> is handy<sub>neut</sub> / handy<sub>masc</sub> to have

<sup>4</sup>My informants disagree on the grammaticality judgement of (6.13 b). They assign to it a judgement of full grammaticality.

- (b) *En bil er ?kjekt / kjekk å ha*  
 a car<sub>masc</sub> is handy<sub>neut</sub> / handy<sub>masc</sub> to have  
 "A car is handy to have"
- (c) *Bilen er \*kjekt / kjekk å ha*  
 car<sub>masc, def</sub> is handy<sub>neut</sub> / handy<sub>masc</sub> to have  
 "The car is handy to have"

In partial disagreement with Borthen's grammaticality judgments, and in order to explain the reason of such disagreement, one aspect needs to be emphasized: the version of example (6.14 b) where the adjective agrees in gender with *en bil* 'a car' is not odd. What it is interpreted in a different way. If the (basic) non-agreeing version means "it's handy to have a car", the agreed version means "there is a car such that it is handy to have". Now, this latter reading might be odd in that it is hard to figure out what it means, but the sentence itself is grammatical. It is easier to see it, when we replace the verb *is* with *would be*.

- (6.15) *En sånn bil, som jeg så i går, ville være fint å ha*  
 a such car<sub>masc</sub>, that I saw yesterday would be nice<sub>masc</sub> to have  
 "A car like the one we saw yesterday would be nice to have"

Finally, via some contextual licensing, BSs can be used in eventive sentences:<sup>5</sup>

- (6.16) *Sykebil er på vei / er underveis*  
 ambulance is on way / is underway  
 "The / an ambulance is on its way"

**Conclusion** To conclude this appendix, let us summarize the properties of Norwegian BSs. We have seen that they are weak and, even when they are interpreted existentially, they cannot take wide scope. They are not specifically referential, and they seem to attract or want focus. Furthermore, they are not good antecedents for anaphoric expressions and they do not trigger agreement on a pronoun that reprises them nor on a predicate. Norwegian BSs can be used as kind-referring expressions, but only in constructions of higher-order predication (exemplified by the contrast between (6.5) and (6.11)), and while they function well in generic statements (e.g. (6.10)). However, their use is not restricted to generic statements: they can also be used in eventive sentences as well, as shown by (6.16).

<sup>5</sup>I am aware that "contextual licensing" is a vague expression, specifying it is a task that lies outside the scope of this section.

Note that some differences between Norwegian and the other languages of the data set will be easier to understand given what we know about what Norwegian bare singulars can do in argument position. In other words, this appendix is meant to supply some general information in order to understand how Norwegian is more similar to the other languages in the set, than it might superficially appear.



## 6.1 Bare Singulars in *as*-constructions

**Introduction** In this appendix we will summarize contexts and observations about the constructions that involve bare nominals appearing as arguments of *as* in Italian and some other languages.

There are two main contexts in which the *as*-phrase can occur. Either the *as* as an argument of the main verb, exemplified in (6.1), or as a DP-adjunct, exemplified in (6.2).

(6.1) *Il gruppo ha scelto Gianni come rappresentante*  
the group has chosen Gianni as representative  
"The group chose Gianni as a representative"

(6.2) *Come professore, Gianni può bocciare Maria*  
as professor, Gianni can fail Maria  
"As a professor, Gianni can fail Maria"

We will first discuss the bare singular as the argument of the preposition *as*. Then we will discuss some cases where the occurrence of the bare and the determined predicate is determined by two different structures: the determined cases can be analyzed as instances of comparative/elliptical sentences. Finally we will briefly present some data about the Italian preposition *da*, which roughly translates into *as*, but that shows a radically different behavior.

### 6.1.1 *As*-phrases as arguments

There is a number of verbs that can have an *as*-phrase as an argument. One example is the verb in (6.3), and other verbs that pattern together are *scegliere* 'choose',

*votare* 'vote', *nominare* 'nominate', and a specific sense of *usare* 'use' (that we will discuss in a coming section), *eleggere* 'elect', etc.

- (6.3) *Il gruppo ha scelto Gianni come rappresentante*  
 the group has chosen Gianni as representative  
 "The group chose Gianni as a representative"

### A superficially similar structure

It is important not to confuse the sentences like the one above with some that look similar and mean something similar. Let us see what they are in (6.4) and (6.5)

- (6.4) *Il gruppo ha reso Gianni (?un / ?il) rappresentante*  
 the group has made Gianni (a / the) representative  
 "The group made Gianni a representative"

- (6.5) *Il gruppo ha eletto Gianni (\*un / \*il) rappresentante*  
 the group has elected Gianni (a / the) representative  
 "The group elected Gianni as a representative"

These are cases of sentences containing a small clause: the presence of predication in the absence of tense, as well as the impossibility of having intervening material (e.g. temporal adverbs), as shown in (6.6 a), are clear clues.

- (6.6) (a) *Il gruppo ha eletto Gianni (\*ieri) rappresentante*  
 the group has elected Gianni (\*yesterday) representative

One question could be why is there a difference between the acceptability of the determiner (between brackets) and, relatedly, why only in (6.4) is it possible to (contrastively) focus the determiner, but no such option is available for (6.5)?

- (6.7) (a) *Il gruppo ha reso Gianni UN rappresentante*  
 the group has made Gianni A representative  
 "The group made Gianni A representative (not the only one)"  
 (b) *\*Il gruppo ha eletto Gianni UN rappresentante*  
 the group has elected Gianni A representative  
 "The group elected Gianni A representative (not the only one)"

Interestingly because some of these verbs, for example *eleggere* 'elect', *chiamare* 'call', *rendere* 'make', *nominare* 'nominate', etc., can appear in naming constructions, whereas verbs like *rendere* 'make' cannot. We can understand naming constructions in the same way in which we understand (6.8 a) and (6.8 b), and (6.8 c).

- (6.8) (a) *Hanno chiamato Gesù Cristo 'Il Salvatore'*  
 the have called Jesus Christ The Savior  
 "They called Jesus Christ 'The Savior'"
- (b) *Hanno chiamato loro figlio 'Vittorio'*  
 the have called their son Vittorio  
 "They called their son Vittorio"
- (c) *L' hanno incoronata 'Miss Italia'*  
 her the have crowned Miss Italy  
 "They crowned her as 'Miss Italy'"

On the other hand, verbs like “rendere” can have as argument a determined predicate which is semantically the same as what we have been observing in the examples of the previous sections. This becomes more clear if the force that “modifies the nature” of Gianni is not a group (of people) - as it is in the example - but rather a life-experience. Compare (6.4) with (6.9):

- (6.9) *La fame ha reso Gianni un cacciatore*  
 the hunger has made Gianni a hunter  
 "Hunger made Gianni a hunter"

Of course it is interesting that the interpretation assigned to the determined predicate *un cacciatore* 'a hunter' is someone who is intrinsically a hunter: hunting is/became his drive, is “nature”. We can contrast (6.9) with (6.10), and in the latter we can see that the interpretation of the bare predicate *cacciatore* is simply “someone who hunts”.

- (6.10) *La fame ha reso Gianni cacciatore*  
 the hunger has made Gianni hunter  
 "Hunger made Gianni a hunter"

Now that we have seen the cases in which *as* was not present, we have understood better how the lexical semantics of the verb either allows a bare singular or a determiner singular (because it allows its meaning). This is never possible, as we have seen, in naming constructions.

## 6.1.2 Verbs of creation

Some of the considerations that we have made so far will be relevant again, but let us go back to the original question, namely: what kind of structures are the ones in which the *as*-phrase is an argument of the verb?

- (6.11) *Il gruppo ha scelto Gianni come rappresentante*  
 the group has chosen Gianni as representative  
 "The group chose Gianni as a representative"

It is easy to notice, especially comparing (6.11) to (6.12 a) and following, that we can unify these sentences by looking at them as tokens on sentences in which a verb of creation is involved. Of course the variables are 1) the animacy of the arguments, 2) if the concept of creation is to be understood in a literal or more abstract way, and 3) if the verb is extensional or intensional.

Let us start from the beginning, consider (6.12 a), which behaves exactly like the other languages in our set. Also note the striking similarity between a verb like *choose* (*as*) and a verb like *use* (*as*), in (6.11).

- (6.12) (a) *Voi potete usare questi cinque tronchi come (un) tavolo*  
 you<sub>plur</sub> can use these five trunks as (a) table  
 "You guys can use these five trunks as a table"
- (b) *Puedes usar esto como (una) silla (spa)*  
 you can<sub>plur</sub> use<sub>inf</sub> this as (a) chair  
 "You can use this as a chair"
- (c) *Du kan bruke denne boksen som (en) stol (nor)*  
 you can use this box<sub>def</sub> as (a) chair  
 "You can use this box as a chair"
- (d) *Du kannst diese Schachtel als Stuhle benutzen (deu)*  
 you can these boxes as chair use  
 "You can use this as a chair"
- (e) *Je kunt deze dozen als stoelen gebruiken (nld)*  
 you can these boxes as chair use  
 "You can use this as a chair"

Because verbs like *use* belong to the class of the verbs of creation, it is not surprising to imagine that anything can be “used as” anything because it is nomologically possible to use *a sweater as a sun screen*, *a person as a coat stand*, and so on; and at least logically possible to use *an elephant as a house*, or *a bathtub as an hourglass*. These sentences are not ungrammatical, merely hard to interpret, just like some equative sentences can convey wacky meanings and still be grammatical. The question is “Is there a contrast between the interpretations of the bare vs. the determined form (if the latter is allowed)? And what does the version of the sentence containing the bare singular mean?” Let us begin from this latter question.

For obvious space constraints the sentences are collapsed together, so consider the version in which “table” occurs without a determiner. These sentences have two different readings: they can either mean that the people end up with five tables, or that they all combine the five trunks to build one table. The reading where there is only one table cannot be derived by letting the NP *tavolo* ‘table’ take wide scope. If that was the case, the NP would out-scope the verb and the sentence would mean that there is a particular table that the trunks are being used as, but it is not the intended meaning. Instead, on the one-table reading, the DP *questi cinque tronchi* ‘these five trunks’ takes a collective reading (i.e. a single entity-group of the five trunks combined).<sup>1</sup> In the reading where there are five tables, the DP is interpreted as distributed over the plural subject (*voi* ‘you guys’). This partially answers our question, because we still do not know how “table” is interpreted, but first there is another question to be answered, namely, “Why cannot the same effect be obtained with a human predicate in Italian, whereas in other languages (Spanish, Dutch) it is possible?”<sup>2</sup> In Italian, the predicate must agree in number and in Spanish there is a strong preference for the agreeing form.

- (6.13) (a) *Nadie podrá usarnos como testigo* (spa)  
 nobody can<sub>fut</sub> take us<sub>plural</sub> as witness<sub>singular</sub>  
 "Nobody will be able to use us as witnesses"
- (b) *Niemand kan ons gebruiken als getuige* (nld)  
 Nobody can us use as witness  
 "Nobody will be able to use us as witnesses"
- (c) *??/\*Nessuno ci potrà usare come testimone* (ita)  
 nobody us-plur can<sub>fut</sub> take as witness<sub>singular</sub>  
 "Nobody will be able to use us as witnesses"

Here it seems that it is not the distributive vs. collective reading that fails (in the languages where these sentences are ungrammatical) but the interpretation of “witness”. As we said earlier, we still need to know how “table” was interpreted, and now we have a similar problem. The only way to understand it is, as usual, to confront the sentences with their counterparts where the determined noun is used. So 1) is it possible to obtain both readings also with the determiner? and 2) how does the meaning change?

In the collective reading there are some five trunks (already close to one another) and the speaker can show them to the other people and utter (6.14 a). In the distributive

<sup>1</sup>Eddy Ruys (p.c.) pointed out that this effect disappears with a distributive DP: *usate ciascuno di questi cinque tronchi come tavolo* ‘use each of these trunks as a table’.

<sup>2</sup>The examples are calqued on some examples appeared in Munn and Schmitt (2005).

reading, the trunks can be already apart from one another, and when the speaker utters (6.14 a), the distributive would be the favorite interpretation.

- (6.14) (a) *Usate questi cinque tronchi come un tavolo*  
 use<sub>imper</sub> these five trunks as a table  
 "Use these five trunks as a table"

The interpretation of “table” is not some abstract conceptualized notion of a “table”. What is being conveyed is “use X in the same way as you would use a Y”, and the fact that it is possible to pronounce the elided part, as shown by (6.15 a), is a sign that these sentences are elliptical comparatives. Note two things: 1) the meaning of the sentence with the determined singular is entirely different from the reading we obtain from the bare singular, and 2) it is not possible to do so in the version containing the bare form, in (6.15 b).

- (6.15) (a) *Usate questi tronchi come (usereste) un tavolo*  
 use<sub>imper</sub> these trunks as (you would use) a table  
 "Use these trunks as (you would use) a table"

- (b) *Usate questi tronchi come (\*usereste) tavolo*  
 use<sub>imper</sub> these trunks as (you would use) table

- (6.16) (a) *Puedes usar estos cinco troncos como (usarias)*  
 you can<sub>plur</sub> use these five trunks as (you would use<sub>plur</sub>)  
*una mesa (spa)*  
 a table  
 "You can use these five trunks as (you would use) a table"

- (b) *Puedes usar estos cinco troncos como (\*usarias)*  
 you can<sub>plur</sub> use these five trunks as (you would use<sub>plur</sub>)  
*mesa*  
 table  
 "You can use these five trunks as (you would use) a table"

- (6.17) (a) *Du kan bruke denne boksen (slik) som (du ville bruke)*  
 you can use this box<sub>def</sub> (just) as (you would) use  
*en stol (nor)*  
 a chair  
 "You can use this box just as you would use a chair"

- (b) *Du kan bruke denne boksen (slik) som (\*du ville bruke)*  
 you can use this box<sub>def</sub> (just) as (you would use)  
*stol*  
 chair

As we mentioned, let us discuss in what sense the meanings of the two versions of the sentence (with and without determiner) are different. The sentences with the determiner mean: “use the trunks as you would use a table”. The sentences without determiner can be rephrased as “use the trunks for what a table’s purpose is”. In other words for the table’s telic role. This sense is entailed by (a) but (a)’s sense cannot be achieved by (b) sentences, and it can be shown but comparing the oddity of two possible replies: since “table” in (b) has a “purpose” or “functional” reading, a proper reply could be: “Ok, I will eat on it.”, but it could never be: “Oh, but it has no legs” (which is something a real table is expected to have). This latter reply is, on the other hand, perfect for (a):

		<i>table’s telic role</i>	<i>real table</i>
a	<i>come un tavolo</i>	<i>OK</i> I’ll eat on it	<i>OK</i> But it has no legs!
b	<i>come tavolo</i>	<i>OK</i> I’ll eat on it	#But it has no legs!

### 6.1.3 *As*-phrases adjuncts or arguments?

#### What ellipsis does buy us

In the previous subsection, we have seen how the elliptical analysis is a useful way to capture two different types of sentences containing an *as*-phrase, and revealing that, in the “table”-cases had a different structure than it appears superficially. But, the elliptical analysis is also an interesting way of looking at a related *as*-construction, because, as we will see, it can easily account for the following meaning contrasts. We also need to distinguish the cases in which the *as*-phrase is an argument and the cases in which, on the other hand, is an adjunct. Consider the following constructions.

- (6.18) (a) *Gianni ha agito come poliziotto* (ita)  
 Gianni has acted as policeman  
 "Gianni acted as a policeman"
- (b) *Juan actuó como policia* (spa)  
 Juan acted as policeman  
 "Juan acted as a policeman"

- (c) *Per handlet som politimann* (nor)  
 Per acted as policeman  
 "Per acted as a policeman"

(6.19) (a) *Gianni ha agito come un poliziotto* (ita)  
 Gianni has acted as a policeman  
 "Gianni acted as a policeman"

(b) *Juan actuó como un policia* (spa)  
 Juan acted as a policeman  
 "Juan acted as a policeman"

(c) *Per handlet som en politimann* (nor)  
 Per acted as a policeman  
 "Per acted as a policeman"

Similarly to what we have seen in the “table”-example (cf. (6.15 a) and (6.15 b)), we can understand that the cases containing the full DP *a policeman* are elliptical. Enrico Boone (p.c.) points out that these sentences also react positively to a classic test for ellipsis, that is about agreement mismatch, as shown by the Italian example in (6.20 a).

(6.20) (a) *Gianni ha agito come un poliziotto e Sofia anche* (ita)  
 Gianni has acted as a policeman and Sofia too  
 "Gianni acted as a policeman and Sofia too"

*Gianni ha agito come un poliziotto e loro anche*  
 Gianni has acted as a policeman and them too  
 "Gianni acted as a policeman and them too"

It is clear that, in (6.20 a), it is unproblematic to interpret that *Sofia* and *them* all acted in the same way that Gianni did, as a policeman would have. Note that there is no gender mismatch with *Sofia* (that would require a feminine noun, so *poliziotta* ‘policewoman’) nor number mismatch with *them* (that would require a plural, so *poliziotti* ‘policemen’). The fact that the agreement mismatch does not influence the grammaticality is a classic ellipsis effect. Another test for ellipsis is the the strict/sloppy reading, that is exemplified below:<sup>3</sup>

(6.21) (a) *Io amo il mio appartamento come un architetto*  
 I love the my appartamento as an architect  
 "I love my appartament as an architect (loves his)" sloppy reading

<sup>3</sup>Clearly, the interpretation “I love my apartment like I would do if I were an architect” is also possible.

- (b) *Io amo il mio appartamento come un architetto*  
 I love the my appartamento as an architect  
 "I love my appartament as an architect (would love / loves mine)" strict reading

So, if it is really the case that these two sentences have a dramatically different syntax, this very fact could appear more explicitly in some language or other. Indeed, it is exactly what happens in German, where the choice of the preposition changes: one selects a CP and another one selects an NP.<sup>4</sup>

- (6.22) (a) *Er handelte als Polizist* (deu)  
 he acted as policeman  
 "He acted as a policeman"(in the capacity of)
- (b) *Er handelte wie ein Polizist (handeln würde)*  
 he acted as a policeman (hacted would have)  
 "He acted as a policeman (would have done)"

Only the comparative nature of these structures fails to provide the entailment that  $g \in [[police\ man]]$ . This means that, in every elliptical case, the subject is not necessarily a member of the set referred to by the noun in the *as*-phrase.

#### 6.1.4 More “functional” readings

Consider these cases where, as we said, the *as*-phrase appears as a DP-adjunct modifying the subject of the sentence.

- (6.23) (a) *Come professore, Gianni può bocciare Maria* (ita)  
 as professor, Gianni can fail Maria  
 "As a professor, Gianni can fail Maria"
- (b) *Som professor, kan Per stryke Kari* (nor)  
 as professor, can Per fail Kari  
 "As a professor, Per can fail Kari"
- (c) *Como jefe, Juan puede despedir a Maria* (spa)  
 as boss, Juan can fire to Maria  
 "As boss, Juan can fire Maria"

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<sup>4</sup>Apparently, a similar effect can be found in English between the use of “as” and the use of “like”. Although it is difficult to determine whether this is still a trait of the living grammar, it must have been a feature of the language at some point of its history.

From the examples above, we can understand that there is something that the subject (e.g. *Gianni*) can do (e.g. *fail Maria*) because of his professional role (e.g. *professor*) or within its professional role. Stripping away the deontic powers that professions have associated to them, and we reduce to the bare minimum “what it means act within one’s position”, we can see that it is not different from what we can observe in the next set of examples.

(6.24) (a) *Come amico, ti dico questo..., come medico ti dico questo...* (ita)  
 as friend, to you I tell this..., as doctor, to you I tell this...

"As a friend, I'm telling you this..., as a doctor I'm telling you this... "

(b) *Als Freund sage ich dir..., als Arzt sage ich dir...* (deu)  
 as friend, tell I this..., as doctor, tell I this...

"As a friend, I'm saying this..., as a doctor I'm saying this... "

To phrase it differently, the “friendship” relation and the “doctor-patient” relation have areas of obvious non-overlap. Even when somebody can be at the same time a friend and a doctor to someone else, the *friend*-role and the *doctor*-role might require different behaviors, in that they select different aspects of the same person.

The generalization is that the *as*-phrase is interpreted as a restriction applying to the main clause. Essentially, as we said above, it selects an “aspect” of the subject.

(6.25) *Come professore, Gianni è molto severo*  
 as professor, Gianni is very stern

"As a professor, Gianni is very stern"

In (6.25) the judgement *is stern* is given to the *professor*-side of Gianni, not to the person as-a-whole. A continuation could be “but as a friend he can be very understanding”. Recall that as in the “policeman”-cases which contained the bare predicate, the bare singular in the *as*-phrase was interpreted as “by virtue of / within his role”. In (6.25) and the examples above too, the part of meaning that does not depend on the semantic contribution of the preposition is still interpreted as the extrinsic property of the subject.

The final section of this appendix is dedicated to a type of constructions that deserve to be mentioned because they shows an interesting ambiguous behavior.

### 6.1.5 The strange nature of *da*

There are many particles and prepositions that can roughly be translated into the English preposition *as*. In Italian, we discussed the use of *come*, but another particle that can, in some cases, serve a similar function is the preposition *da*. So far, we noticed that there is a one-to-one interpretative match between the presence or the absence of the determiner, in the *as*-constructions, and the possibility of reading the *as*-phrase as a comparative, and the reading of the predication as a restriction on the “aspects” of the identity of the subject of the main clause. Now, consider the example illustrated in (6.26).

- (6.26) *Gianni ha agito da poliziotto*  
 Gianni has acted as policeman  
 "Gianni acted as a policeman"

The complexity of *da* lies in the fact that sentences like (6.26) are ambiguous between two readings. Let us first understand which kind of scenarios allow the disambiguation of (6.26).

#### Reading 1

It is possible to imagine that *Gianni acted like a policeman* if he arrested his own wife because she had some marijuana in her purse. He is a real policeman and he puts the law before everything else. Informally, we can say that this meaning of (6.26) is “in the possible worlds in which Gianni is a member of the set of policemen, Gianni acts like one”.

#### Reading 2

On the other hand, we can imagine that *Gianni acted like a policeman*, when he woke up, in the dead of the night, simply for having heard some noises. He is not a policeman but his instincts or his nature, made him behave in the same way a policeman would have done. Informally, we can say that this meaning of (6.26) is “Gianni acts like he would act in the possible worlds in which he is a member of the set of policemen”.

What is very interesting is that, most clearly here reading 2 cantata derive from a comparative, since *da* can only select an bare singular (as shown by the ungrammaticality of (6.27 a)), and bare singulars, in Italian, cannot head be subjects.

- (6.27) (a) \**Gianni ha agito da un poliziotto*  
 Gianni has acted as a policeman

The problem seems to have shifted and it appears to be related more to the intensional nature of the preposition, than to the phenomena of bareness of the nominals. Furthermore, this phenomenon is not restricted to human predicates, as shown by the following examples, in which we can see that the meaning possibilities are the same as what we observed for (6.26).

(6.28) *Ma che ti aspettavi? E' un cane, e si comporta da cane.*  
 but what you expected? it is a dog, and SE behaves as dog  
 "What did you expect? It's a dog, and it behaves like a dog"

(6.29) *E' strano, è un gatto ma si comporta da cane.*  
 it is strange, it is a cat, but SE behaves as dog  
 "That's strange, it's a cat, but it behaves like a dog"

A natural question to ask is the following: if such proposition exist in one language, viz. an (intensional) preposition that selects only NPs, it is technically possible that there could be something similar in other languages as well?

In English (and to some extent in Dutch) we can find examples like the following:

(6.30)  $\gamma$ It cannot, qua film, have the scope of a large book

(6.31) This is  $\gamma$  an indefensibly bad poem qua poem

(6.32)  $\gamma$ Bobby was the first pig I had met qua pig, not qua pork

(6.33) Qua lover, he must be condemned for doing what, qua citizen, he would be condemned for not doing

S.v. *qua*, Fowler's Dictionary of Modern English Usage reads:

The real occasion for the use of q. [qua] occurs when a person of thing spoken of can be regarded from more than one point of view or as the holder of various coexistent functions, & a statement about him (or it) is to be limited to him in one of these aspects: *Qua lover he must be condemned for doing what qua citizen he would be condemned for not doing*; the lover aspect is distinguished from another aspect in which he may be regarded. The two nouns (or pronouns) must be present, one denoting the person or thing in all aspects (*he*), & the other singling out one of his or its aspects (*lover*, or *citizen*).<sup>5</sup>

<sup>5</sup>H. W. Fowler, *A Dictionary of Modern English Usage: The Classic First Edition*, Oxford University Press

Summing up, we have seen that certain prepositions can license bare singulars, which are interpreted as extrinsic properties. These cases are, for instance, *come* in Italian, *comme* in French, *als* in Dutch, and *qua* in English. The importance of discussing English and the *qua*-construction, is that it shows that there exists an English bare singular with no uniqueness requirement. This is not a trivial fact, and it indicates two important things. As Stavroula Alexandropoulou (p.c.) points out, it is important to consider the fact that the extrinsic meaning is available in English, and that, furthermore, it is associated with the bare form, as shown by (6.34).

(6.34) *Qua teacher, he has to grade the students*

However, when the bare singular is licensed by a preposition, the contrast between [ $\pm$ human] nominals is neutralized, so e.g. English and Italian can allow different types of bare singulars independently on [ $\pm$ human] or [ $\pm$ animate].

(6.35) *Come schermo, questo pannello è perfetto*

(6.36) *Come professore, Gianni è simpatico*

(6.37) *The first pig I've met qua pig and not qua pork*

From the observation that (some) prepositions can license bare singulars, we can understand something more. There is something in common between the bare singulars that are argument of as-like prepositions and the bare singulars in post-copular (predicative) position. We have shown that all these bare nouns are interpreted as extrinsic properties. So, crucially, the constraint is not on the availability of the meaning, but rather on the syntactic appearance of the bare noun. In other words, if the meaning alternation between intrinsic and extrinsic is available, then the question is What are the licensing conditions of bare singulars? Of the two cases in which we have encountered bare singulars, in one, we can suppose that the licensing depends on the preposition.<sup>6</sup>

Also, even if we believe, and we are ultimately arguing, that bare singular in predicative position and in (verbal) argumental position are distinct phenomena, then it would be unreasonable to assume that the same mechanism regulates the licensing of bare nouns in argument and predicate position. In the other case, the post-copular (predicative) position, what allows the bare singular to surface must be relatable to some formal property of the nominal.

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<sup>6</sup>Note that we are not suggesting that there are no differences among prepositions, for instance between as-like prepositions and locatives. However, we are not focusing on this topic.

A fine-grained analysis of these prepositions lies outside the scope of this study, but the data we identified and discussed throughout this thesis made it necessary to discuss at least some of the effects, and the interpretative pitfalls, of bare singulars embedded under *as* in general, and *da*, even at such an informal level. We leave this end open to further research but it is very important to remark how crucial it is to construct an analysis of bare predicates that can eventually meet the result of a more in-depth observation of these prepositions.

## 6.1 Expressing intrinsicity in the perspective of political correctness

In what follows, we will discuss the notion of intrinsic property in an informal way. The reader will get acquainted with familiar and accessible examples, and will see that this perspective can be illuminating for what concerns the intuitions associated to the alternations discussed so far. In order to illustrate a general an intuitive understanding of intrinsicity, we will here discuss contexts of political correctness. As we will see, determined predicates (or, depending on the language, nouns as opposed to non-nouns) show a strikingly constant behavior in expressing intrinsic properties. As it might be difficult to have clear intuitions about the bare/determined contrast for predicates, e.g. for the speakers of any language lacking articles, the purpose of this section is meant to present the same contrast in such a way that will facilitate our intuitions. Let us look at some examples.

### 6.1.1 Huck Finn, JFK, and the cleaning lady

Two centuries ago, and until roughly sixty years ago, in the United States, it was considered from “acceptable” to “normal” to refer to a black person as a *nigger*.<sup>1</sup> The derogatory use of the word caused the need to abandon its use, especially with the rise of the African-American Civil Rights Movement, in the mid-fifties of last century. Famous nineteenth-century American author Mark Twain has written one of the most controversial books, from the perspective (modern) linguistic political

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<sup>1</sup>I am grateful to Achille C. Varzi for discussing this topic with me.

correctness: Adventures of Huckleberry Finn. The book contains more than two-hundred tokens of the lexeme *nigger*:

Jim was monstrous proud about it, and he got so he wouldn't hardly notice the other niggers. Niggers would come miles to hear Jim tell about it, and he was more looked up to than any nigger in that country. Strange niggers would stand with their mouths open and look him all over, same as if he was a wonder. Niggers is always talking about witches in the dark by the kitchen fire; but whenever one was talking and letting on to know all about such things, Jim would happen in and say, "Hm! What you know 'bout witches?" and that nigger was corked up and had to take a back seat.

(Mark Twain, Adventures of Huckleberry Finn, Ch.2)<sup>2</sup>

A passage of this type can be so shocking to the American public because this word is commonly considered very offensive. It is often a matter of debate whether primary school students should be exposed to a language abounding in instances of the n-word.<sup>3</sup> We can observe how a new word for black american emerged in place of the previous one. In the historic speech on civil rights that the U.S. president J. F. Kennedy delivered on June 11, 1963, the lexeme *negro* is used both as a noun and as an adjective: the use of the word *negro* became the new norm of correctness.

That order called for the admission of two clearly qualified young Alabama residents who happened to have been born Negro.

[...] but are we to say to the world, and much more importantly, to each other that this is the land of the free except for the Negroes; that we have no second-class citizens except Negroes; that we have no class or caste system, no ghettos, no master race except with respect to Negroes?

(John F. Kennedy "Civil Rights Address", 11 June 1963)<sup>4</sup>

In the late seventies, *negro* started being generally less and less acceptable. However, the need of linguistically marking the distinction between the black population and

<sup>2</sup>The complete online resource can be found on <http://www.gutenberg.org/files/76/76-h/76-h.htm> and it is made available by Project Gutenberg.

<sup>3</sup>The debate was furthermore inflamed when the publisher NewSouth Books completely removed the word from the 2011 edition of the book. For different perspectives see Neal A. Lester's personal essay The N-Word: An Anatomy of A Course: <http://www.nytimes.com/roomfordebate/2011/01/05/does-one-word-change-huckleberry-finn>.

<sup>4</sup>The recording and the full transcription of the speech can be found here: <http://www.americanrhetoric.com/speeches/jfkcivilrights.htm>

the white one still existed. The form considered more neutral became *black*, used as an adjective.<sup>56</sup>

The generalization is that adjectives (even individual-level, like *black*) are perceived as more politically correct than nouns because speakers associate them to a minor stability and a softer meaning.

(6.1) (a) *Ben is a negro*

(b) *Ben is a black guy / black*

Note that there is no difference in the truth conditions of (6.1 a) and (6.1 b), yet *a negro* is interpretable as an instance of a kind. It encodes the stability linked to the intrinsicity of *negrohood*. Such intrinsicity, only expressed by (6.1 a), is that part of meaning that can be turned into an offense.

**Mandarin Chinese and Serbocroatian** American English is not the only language in which we can show phenomena of this type. There are very distant languages, in which the rejection of nominal forms for political correctness' sake take place. One is Mandarin Chinese. Consider the following.<sup>7</sup>

地板上都是水。我得和清洁工谈谈。

Diban shang dou shi shui. Wo dei he qingjiegong tantan  
floor on all COP water. 1SG have:to with cleaner talk

(6.2) 'There is water all over the floor. I have to talk with the cleaner.'

地板上都是水。我得和打扫房间的人谈谈。

Diban shang dou shi shui. Wo dei he dasao fangjian de ren tantan  
floor on all COP water. 1SG have:to with clean room MOD person talk

(6.3) 'There is water all over the floor. I have to talk with the person who cleans the room.'

The difference between (6.2) and (6.3) is that the former is considered impolite, whereas the latter is more acceptable.<sup>8</sup> Note that even though Chinese is a language

<sup>5</sup>For a short period, another adjective has been preferred to *black*: *colored*. Its life as the neutral term, however, did not last too long because it almost immediately started to be perceived as offensive in a different way.

<sup>6</sup>For a more extensive discussion, see Nguyen, Elizabeth. "Origins of Black History Month," San Jose State University (24 February 2004).

<sup>7</sup>I'm very grateful to Zhang Jingwei and Li Fang for an insightful discussion on politeness in Chinese and for showing me this contrast.

<sup>8</sup>Chinese also has the possibility of using a specific classifier, before the noun, to mark respect or politeness. To some speakers the classifier+noun is the preferred expression of politeness.

which is very distant from the languages that we have been discussing, the similarity is striking. The key generalization seems to be the following: with which form is the intrinsic/kind meaning associated? In this view, the form associated with an intrinsic meaning can be felt as / become offensive, so that form is avoided.

A pattern that is similar to the Chinese one can be found in SerBoCroatian. Consider the following:

- (6.4) (a) *Ova teta je čistačica*  
 this aunt is cleaner  
 "This aunt is a cleaning lady"
- (b) *Ova teta čisti ovde*  
 this aunt cleans here  
 "This aunt cleans here"

In SerBoCroatian, (6.4 b) is perceived as more polite. So, what does it mean that forms like (6.3) and (6.4 b) are more polite? The intuition, as we already said, is very elementary: if nouns can instantiate kinds, and kinds are collections of entities that are grouped according to the intrinsicity of a property  $P$  (see also Le Bruyn, 2010), then saying of some individual  $a$  that  $P_{kind}(a)$  is true, means to say that  $P$  can never be false of  $a$ . The predication cannot stop holding because the *cleaningladiness* is hardwired into  $a$ 's identity. On the political correctness side of the story, what these observations point at is that it is the fact that that property is perceived as intrinsic. Also, a property perceived as intrinsic can be connected to the perception of shame. In other words, saying to someone that she is "a cleaning lady" means to say that she is "doomed" to be a cleaning lady forever, because that is "who she (really) is". The polite form, on the other hand, suggests that she currently cleans, but it is not bound to be like that forever. Since across cultures, the job of a cleaning lady appears to be considered one of the most low-prestige jobs that a person can do, saying to someone that she can never change, equals to saying that she is not worth much.<sup>9</sup>

**Loans** There seems to be only one exception in which a politically "incorrect" noun is avoided by replacing it with another noun: if the new noun is a loan word.<sup>10</sup> This is not the place to discuss in which way loanwords are different from native words,

<sup>9</sup>We might disagree, but this is what speakers do, and what the strategies of political correctness are predicated on. I am not suggesting to embrace this view of the world, I am simply pointing out what languages do.

<sup>10</sup>As Marko Simonović (p.c.) points out, the same mechanism might apply to neologisms as well.

but it is the “newness” that they bring in the context that is crucial: loan words can always introduce a new meaning “nuance” (cf. “semantic specificity” as discussed in Simonović, forthcoming, and Arsenijević and Simonović, 2013), so when a noun has only an offensive connotation, a loan can be introduced in the lexicon to supply the lacking unoffensive nuance. However, if the same loanword can be used both as an adjective and as a noun, the noun is more easily associated with a stronger, intrinsic potentially more offensive meaning.<sup>11</sup> This is the case of (6.5 a - 6.5 b).

(6.5) (a) *Gianni è gay*  
Gianni is gay<sub>adj?</sub>  
"Gianni is gay"

(b) *Gianni è un gay*  
Gianni is a gay  
"Gianni is a gay"

**Offensive or flattering, shame or pride** In the previous subsection we reached the conclusion that a property of those expressions that capture (what speakers think is) “the way people are” tend to be used in an offensive manner. However, there is also the other side of the coin: expressions capturing intrinsicity can be used in a flattering way. With this in mind, consider the following pairs.<sup>12</sup>

(6.6) (a) *Sono imprenditore*  
i am entrepreneur

(b) *Sono un imprenditore*  
i am an entrepreneur  
"I'm an entrepreneur"

(6.7) (a) *Sono operaio*  
i am worker

(b) *Sono un operaio*  
i am a worker  
"I'm a (factory) worker"

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<sup>11</sup>I'm not even remotely suggesting that “gay” is an offense, or an offensive concept. I'm merely pointing out a linguistic use.

<sup>12</sup>I am grateful to Mirjam Hachem for having pointed out to me this detail, and for an interesting discussion on this topic.

It is more difficult to show that some forms can be used to define a certain “prestige”, because there are no changes such as those elicited by political correctness to help us identify neatly these types of processes. Even if this is only a speculation, imagine a case in which someone would want to “brag” about his being, or just define their identity with pride. Probably this person would prefer (b) to (a).