Bare singular nominals and incorporating verbs in Spanish and Catalan

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Abstract

This paper presents an analysis of bare singular nominals (BSNs) occurring in object position in Spanish and Catalan, on which the BSN is a syntactic complement to the verb, but not a semantic argument. After describing the properties that distinguish BSNs from other indefinite expressions (bare plurals, indefinite singulars preceded by *un* 'a', and bare mass terms), we argue for a monadic syntactic configuration (in the sense of Hale and Keyser 1998) for V + N structures and a property-type semantics for the BSN. We then discuss four possible semantic analyses for the V + N configuration and their limitations, proposing in the end a modified version of pseudo-incorporation (Dayal 2003). Specifically, the proposal consists of a lexical rule that generates the class of verbs to those that can productively combine with BSNs, along with a compositional semantic procedure that guarantees that the BSN is interpreted as a predicate modifier. We then show how the analysis can be naturally extended to existential sentences, which combine with BSNs although, prima facie, they do not appear to meet the lexical conditions for doing so.

1. Introduction

Under the most classical assumptions about the syntax-semantics interface (explicit in Montague 1974, but implicit in much other work), if an expression is a syntactic complement to a verb, it will also be a semantic argument. However, one area where this claim seems problematic is in an account of the syntax and semantics of bare singular nominals (BSNs) in object position in Romance languages such as Spanish and Catalan, as illustrated in (1):[1]

(1) SPANISH / CATALAN

Busco piso. / Busco pis.

look-1SG flat look-1SG flat

'I'm looking for a flat.' (I am flat-hunting.)[2]

Though some authors such as Chierchia (1998) have claimed that BSNs are not found in the Romance languages, ample data (cf. Schmitt and Munn 1999, Dobrovie-Sorin et al. 2006, among others) show that they are in fact a well-attested and productive phenomenon. Moreover, as we argue in Section 3 there is little doubt as to the fact that the BSN is a syntactic complement of the verb, syntactically indistinguishable from the DP complement in (2):

(2) Busco un piso. / Busco un pis.

look-1SG a flat look-1SG a flat

'I'm looking for a flat.'

However, it is also true that BSNs do not behave like normal arguments; rather, they form something like a complex predicate with the verb, as if they were incorporated. Dobrovie-Sorin et al. (2006) observe that BSNs are indefinite, number neutral (unlike singular nominals with a determiner), and nonreferential insofar as they lack any quantificational force and usually fail to license discourse anaphora – all semantic

properties associated with some types of incorporated nominals (see e.g. Van Geenhoven 1996, Farkas and de Swart 2003, Dayal 2003).

As already observed in the seminal work by Mithun (1984),[3] noun incorporation is a typologically diverse phenomenon, and in recent years several different semantic analyses for incorporation have been developed, in part reflecting this diversity (Van Geenhoven 1996, Farkas and de Swart 2003, Dayal 2003, Chung and Ladusaw 2004).[4] Which of these analyses is appropriate for the facts in (1), and what can an analysis of the Spanish and Catalan data contribute to our understanding of BSNs and incorporation-like phenomena more generally?

The point of departure for our paper is Dobrovie-Sorin et al.'s (2006) claim that BSNs should be analyzed in terms of Dayal's (2003) semantics for pseudo-incorporation, originally proposed to account for certain BSNs in Hindi. As we will show, however, Dayal's and Dobrovie-Sorin et al.'s implementations of pseudo-incorporation are conceptually inelegant, and certain details of the analysis simply do not work for Spanish and Catalan. Specifically, we present a reformulation of pseudo-incorporation which allows the verb to syntactically but not semantically select for the nominal, which treats the nominal as a verb modifier (in accord with both intuition and certain aspects of Dayal's analysis), and which, crucially, has the added advantage of establishing similarities with certain cases of noun modification by adjectives, by appealing to a semantic composition rule which closely resembles Pustejovsky's (1995) rule of *selective binding*.

The paper is structured as follows. Section 2 offers a description of BSNs in object position in Spanish and Catalan. Section 3 discusses the syntax of BSNs in object position. In Section 4 we argue that these BSNs denote properties and that the best compositional option for combining them with verbs is a version of Dayal's semantics

for pseudo-incorporation, though we leave the details of our reformulation of this rule until Section 6. Section 5 presents a detailed analysis of the predicates that combine with BSNs and the special entailments of the V + N combination. Finally, in Section 7 we show how our analysis extends naturally to existential sentences, despite the fact that they have a slightly different lexical semantics than the other predicates that combine with BSNs.

2. Bare singular nominals in object position

Some additional examples of BSNs which will form the basis for our discussion appear in (3).

(3) SPANISH / CATALAN

a. Busco asistente. / Busco assistent.
look-1SG assistant look-1SG assistant
'I'm looking for an assistant.' (I am assistant-hunting.)

b. Necesito canguro. / Necessito cangur.
need-1SG baby-sitter need-1SG baby-sitter
'I need a baby-sitter.'

c. Lleva sombrero. / Porta barret.
wears hat wears hat
'(S)he wears a hat.' ((S)he is hat-wearing.)

d. Tiene apartamento. / Té apartament.
has apartment has apartment
'(S)he has an apartment.' ((S)he is an apartment-owner.)

e. Esta tarde hay reunión. / Aquesta tarda hi ha reunió.
this afternoon there-has meeting this afternoon there has meeting
'There is a meeting this afternoon.'

A first, very basic observation to make about this construction is that doubling of the object BSN by an independent NP, or extra object, is not permitted in Romance, in contrast to what is observed in e.g. Chamorro (Chung and Ladusaw 2004).

(4) CATALAN

a. *Tinc pis un duplex
have apartment a duplex

b. *Va buscar parella aquest cambrer
PAST look-for boy this waiter

These data strongly indicate that the BSN in object position is a syntactic complement of the verb. In this respect BSNs closely resemble incorporated bare singulars in Hindi and Hungarian, since in these languages no doubling of the incorporated nominal is permitted.

Note, in addition, that the expressions in (3) are not idiomatic or fixed; rather, the process is potentially productive insofar any BSN can appear in the construction, as long as the overall semantic conditions on the resulting VP (to be described in detail below) are satisfied.

2.1. The interpretation of BSNs vs. that of other nominals

We begin by considering the properties of BSNs in object position, in contrast to those of other types of nominals. It is unexpected, given Chierchia's (1998) Nominal Mapping Parameter, that BSNs should occur productively, or even at all, in object position. According to this parameter, determinerless nominals in Spanish and Catalan, as in other Romance languages, are [-arg, +pred]; thus, BSNs in Romance are expected

to behave as predicates, not as arguments, and are expected to denote properties rather than individuals. As a result, they should not be allowed in argument position unless a Determiner category is projected.[5] Note that there is no syntactic evidence that a null D should be postulated; if a null D were freely possible, (5a) should be acceptable, but it is not.

(5) CATALAN

a. *Tanco porta.
close-1SG door

b. Tanco la porta.
close-1SG the door
'I'm closing the door.'

Given the choice between having to stipulate when a null D is or is not possible, the null hypothesis should be to explore when a bare nominal might or might not be possible.

BSNs are semantically distinct not only from proper names and other entity-type expressions, but also from three other classes of nominal expressions: singular indefinites (see (6b)), bare plurals (henceforth, BPs; see (6c)), and bare mass terms (see (6d)).

(6) CATALAN

a. Busco pis. = (1a)
look-1SG flat
'I'm looking for a flat.' ('I'm flat hunting.')

b. Busco un pis.
look-1SG a flat
'I'm looking for a flat.'

c. Busco pisos.
look-1SG flats
'I'm looking for flats.'

d. Busco cervesa
look-1SG beer
'I'm looking for beer.'

Two different tests show that BSNs are semantically more similar to BPs than they are to indefinite singulars with a determiner.[6] On the one hand, the data in (7) show that the scopal behavior of BSNs resembles that of BPs rather than that of indefinite singulars: whereas the bare nominals in (7a) and (7b) only allow a narrow scope interpretation with respect to the negative operator, the indefinite singular in (7c) is ambiguous between a narrow scope reading (i.e. the speaker is not looking for any flat) and a wide scope one (i.e. there is a flat the speaker is not looking for).

(7) CATALAN

a. No busco pis.
not look-1SG flat
'I'm not looking for a flat.'

b. No busco pisos.
not look-1SG flats
'I'm not looking for some flats.'

c. No busco un pis.
not look-1SG a flat
'I'm not looking for a flat.'

On the other, the data in (8) illustrate a difference involving the effect of the nominal on the telicity of a sentence. Neither BSNs and BPs can induce a telic reading on a verb

otherwise unspecified for telicity (see (8a) and (8b), which exclude the *en* 'in' adverbial admitted by telic predicates, allowing instead only a durative adverbial), whereas a singular indefinite can induce telicity, as the acceptable *en* adverbial in (8c) shows.[7]

(8) CATALAN

a. Ha buscat pis *#en* un matí / *durant* un matí.
has looked flat in one morning / during a morning
'(S)he has looked for a flat for a morning.'

b. Ha buscat pisos *#en* dos mesos / *durant* dos mesos.
has looked flats in two months / during two months
'(S)he has looked for flats for two months.'

c. Ha buscat un pis *en* un matí / *durant* un matí.[8]
has looked a flat in one morning / during a morning
'(S)he has looked for a flat for one morning (and by the end of the morning (s)he found one). / for one morning (and she has possibly not found one).'

However, in other ways BSNs contrast with BPs, thus indicating that they constitute a unique subtype of indefinite expression. For example, they behave similarly to remnant bare singulars, which are usually found in polarity contexts (cf. Déprez 2000, Espinal 2000), but differ from n-words, other number phrases, and –crucially– BPs in their ability to form contrasting pairs, as illustrated in (9). In the discourse in (9a) the Spanish BSN *secretaria* 'secretary' can alternate, like the remnant nominal *gran cosa* lit. 'big thing' (i.e. 'many things / much'), with another BSN such as *agenda* 'agenda', but not with a cardinal quantifier expression (cf. Espinal and Dobrovie-Sorin 2006, p. 341).

(9) SPANISH

a. No necesito secretaria. {Necesito *agenda*. / #Necesito *dos*.}
   not need-1SG secretary. Need -1SG agenda. / Need-1SG two.
   'I don't need a secretary. I need an agenda.'

b. No necesito gran cosa. {Necesito *agenda*. / #Necesito *dos*.}
   not need-1SG big thing. Need-1SG agenda. / Need-1SG two.
   'I don't need much. I need an agenda.'

In contrast, both the Spanish indefinite expression *una secretaria* 'a secretary' and the BP *secretarias* 'secretaries' can alternate in discourse with an n-word or with a cardinal quantifier, but not with a BSN, as illustrated in (10).

(10) SPANISH

a. No necesito *una* secretaria. { No necesito a *nadie*. / Necesito *dos*. /
   not need-1SG a secretary. Not need-1SG to nobody./ Need-1SG two./
   #Necesito agenda.}
   Need-1SG agenda
   'I don't need a secretary. I don't need anybody. / I need two. / I need an agenda'.

b. No necesito secretarias. {No necesito a *nadie*. / Necesito *una* secretaria./
   not need-1SG secretaries. Not need-1SG to nobody. / Need-1SG one secretary.
   #Necesito agenda.
   Need-1SG agenda.
   'I don't need a secretary. I don't need anybody. / I need one secretary. / I need an agenda'.

These facts suggest that BSNs lack any kind of number feature to contrast, while the other types of indefinites do have such a feature, whether manifest in a determiner or in plural marking.[9]

Relatedly, BSNs are semantically distinct from singular indefinites (see (11b)) and BPs (see (11c)) in that only BSNs have a number neutral interpretation, which means that they are compatible with atomicity as well as non-atomicity entailments (Farkas and de Swart 2003). Thus, as the discourse contexts adequately illustrate, (11a) is compatible with the BSN picking out either an atomic or a non-atomic individual, while the singular indefinite *un pis* 'an apartment' in (11b) picks out an atomic individual, and the BP *pisos* 'apartments' in (11c) implies a plurality of individuals.

(11) CATALAN

a. Busco pis. {Un a Barcelona. / Un a Barcelona i un a Girona}.
look-1SG apartment one in B. one in B. and one in G.
'I'm looking for an apartment. {One in Barcelona. / One in Barcelona and one in Girona.'

b. Busco un pis. {Un a Barcelona. / # Un a Barcelona i un a Girona}
look-1SG an apartment one in B. one in B. and one in G.
'I'm looking for an apartment. One in Barcelona.'

c. Busco pisos. {# Un a Barcelona. / Un a Barcelona i un a Girona}
look-1SG apartments one in B. one in B. and one in G.
'I'm looking for apartments. One in Barcelona and one in Girona.'

In this respect Romance BSNs closely resemble those in Hindi and Hungarian which, although singular in form, have a number neutral interpretation,

BSNs are also distinct from mass nouns.[10] Only mass nouns, and not bare count nominals, can be modified by a measure phrase (see (12)).

(12) CATALAN

a. L'ampolla té *dos litres d*'aigua. - *tenir aigua* 'have water'
the bottle has two liters of water
'The bottle contains two liters of water.'

b. *L'edifici té *una tonelada d*'ascensor. - *tenir ascensor* 'have a lift'
the building has one ton of lift

A final property that characterizes BSNs, and in which they contrast with both singular indefinites and BPs, is that they license only what we will call *type* anaphora, following Borthen (2003), and not *token* anaphora.[11] According to Borthen, a type-anaphoric expression is one which denotes a type of thing, whereas a token-anaphoric expression is one that is used to refer to particular instances of types of things.[12] This semantic difference is encoded syntactically in contexts such as those illustrated in (13), where the partitive clitics are type-anaphoric expressions, while accusative clitics are understood as token anaphors. The Catalan data in (13) illustrate the fact that BSNs do not participate in token anaphoric relations, whereas singular indefinites do.[13]

(13) CATALAN

a. Tinc anell. {*En* tinc des que em vaig casar. /
have-1SG ring it-PART have-1SG since that 1SG-REF PAST married.
#*El* tinc des que em vaig casar.}
it-ACC have-1SG since that 1SG-REF PAST married
'I have a ring. I've had one since I got married./I've had it since I got married.'

b. Tinc un anell. { *#En* tinc des que em vaig casar. /
have a ring it-PART have since 1SG-REF PAST married.
El tinc des que em vaig casar.}
it-ACC have since 1SG-REF PAST married
'I have a ring. I've had one since I got married./I've had it since I got married.'

Summarizing, we need a semantic analysis for BSNs that distinguishes them from indefinite singular nominals, BPs, and bare mass terms, and that captures the fact that they have obligatory narrow scope, cannot induce telicity, are number neutral, are incompatible with the addition of a measure phrase, and only permit type anaphora.

2.2. The predicates licensing BSN objects

Let us now consider the class of predicates that license BSNs in object position. In contrast to what Dayal (2003, 2006) observes for Hindi, this class does not correspond to the class of predicates that denote institutionalized activities, that is, those that are encyclopedically associated with canonical objects or probable themes. Thus, in spite of the fact that in particular contexts reading books or selling newspapers might be considered institutionalized activities, both (14a) and (15a) are ill-formed in Spanish and Catalan, even though their equivalents are acceptable in Hindi.[14]

(14) SPANISH

a. #Juan leía libro.
Juan read book

b. Juan leía libros.
'Juan read books.'

(15)a. #María vende diario.

Maria sells newspaper

b. María vende diarios.

'Maria sells newspapers.'

Rather, BSNs in Spanish and Catalan are largely restricted to a particular class of verbs that we will call *'have'-predicates*, following Borthen (2003).[15] As the examples we have already used indicate, this class is not limited to verbs of having, strictly speaking, such as *tener / tenir* 'have', or *poseer / posseir* 'possess', the latter of which is exemplified in (16).[16]

(16) SPANISH

Este proyecto posee licencia municipal.

this project possesses permit municipal

'This project has a permit from the city.'

Rather, the class also includes intensional transitive verbs that entail a relation that could be expressed via a verb of having in the relevant possible world, such as *necesitar / necessitar* 'need', *buscar / buscar* 'look for', as well as a small set of extensional verbs that entail a possessive or locative relation, such as *ponerse / posar-se* 'put on (as in clothing)', *llevar / portar* 'carry', *usar / fer servir* 'use', *comprar / comprar* 'buy', and *vender / vendre* 'sell', *encontrar / trobar* 'find', *obtener / obtenir* 'obtain', *recibir / rebre*. We offer some additional examples in (17) and (18).

(17) SPANISH

a. Usa bastón.

uses stick

'(S)he walks with a stick.'

b. Quien quiera vender piso...
who want sell flat
'Those who want to sell a flat…'

c. Ha obtenido permiso de trabajo.
has obtained permit of work
'(S)he has obtained a work permit. '

(18) CATALAN

a. S' ha posat faldilla.
REFL has worn skirt
'(S)he has worn a skirt.'

b. M' acabo de comprar cotxe.
REFL finish-1SG of buy car.
'I just bought myself a car.'

c. Ha trobat parella.
has found partner
'(S)he has found a partner.'

d. Ahir finalment vaig rebre carta.
Yesterday finally past-1sg receive carta
'Yesterday I finally received a letter.'

Finally, the class of 'have'-predicates includes the existential predicate *haber* / *haver-hi* 'there be' which, while perhaps not an obvious candidate for this class, is composed literally of the verb *haber* / *haver* 'have' plus, in the case of Catalan, a locative clitic. We will show how this verb fits naturally into the class of 'have'-predicates in Section 7.[17]

In addition to the restriction on the verbs that combine with BSNs, there is a constraint on the interpretation of the resulting predicate: the BSN is licensed only if, in accordance with specific contextual information, the VP could plausibly denote a *characterizing property* of the entity in subject position.[18] What do we mean by "characterizing property"? As mentioned, this property is not necessarily a prototypical, stereotypical or institutionalized property: it is not possible to determine on the basis of the larger cultural or cognitive context which exact combinations of V + N can occur in these constructions, as might be expected if the property had to be stereotypical or institutionalized. It also need not be a temporally stable property of the individual in question, as shown by examples such as (19); for this reason, we do not identify the notion of characterizing property with that of an individual level predicate.[19] Rather, what we mean for a property to be characterizing is that it can be used to make a significant distinction in a particular context between individuals that have the property and those that do not. This is best illustrated by example. For instance, uttered out of the blue, the sentences in (19) sound quite odd.

(19) CATALAN

a. (#)En Joan té joguina.[20]
   DET Joan has toy
   'John has a toy.'

b. (#)Aquest ordinador té virus.
   This computer has virus
   'This computer has a virus.' (This computer is infected.)

However, we can construct contexts in which such sentences are felicitous. Imagine that a nursery school teacher is organizing an activity for which each child in the group must have a toy. Just as the activity is about to start, the teacher checks to see which children

have toys and which do not. In such a situation, (19a) could be felicitously uttered as a confirmation that the child in question is ready to participate in the activity. Similarly, (19b) could be uttered by someone who is telling a system administrator which computers in a computer room need attention and which do not.

Of course, some properties that VPs with BSNs describe are easy enough to imagine as relevant in this way, or are frequently enough treated in this way, that they do not need any particular context at all to be felicitous or we can readily construct a context in which they would be. We would maintain that this is the case for all of the acceptable examples that have been used above, as well as for examples such as the following.

(20) CATALAN

a. En Joan té parella.
   DET Joan has partner
   'John has a partner.' (John is attached.)

b. Aquest ordinador té pantalla d' alta resolució.
   This computer has screen of high resolution
   'This computer has a high-resolution screen.'

That is, we attribute the contrast that speakers find between the sentences in (19) and (20) to the fact that those speakers (for whatever reason) can readily imagine situations in which they might consider it significant that an individual is in a relationship or not, or that a computer has a certain type of screen or not. The requirement that the V + N be characterizing plays an important role in explaining the fact that not all types of nouns sound equally felicitous as BSN complements with all types of 'have'-predicates, and it points to an important contrast between BSN and singular indefinite complements.

Further evidence for the characterizing nature of the VP is seen in the kinds of modification it does or does not allow. When the modifier clearly indicates that the property is not intended to characterize the individual, even for a short time (as with *a les tres* 'at 3 o'clock' in (21a)), the sequence is unacceptable. Moreover, the fact that the option of the BSN exists induces a strong preference for a non-characterizing reading when a determiner and a modifier such as *a les tres* are present (Bleam 2006, Gutiérrez-Rexach 2006, Leonetti 2006).

(21) CATALAN

a. En Joan ha portat motxilla *tot el dia* / **a les tres*.
DET Joan has carried backpack whole the day / at 3 o'clock
'John has carried a backpack all day.'

b. En Joan ha portat *una* motxilla *tot el dia* / *a les tres*.
DET Joan has carried a backpack whole the day / at 3 o'clock
'John (has) carried a backpack all day/at 3 o'clock.'

Locative modifiers and secondary predicates denoting accidental properties of the entity described by the object nominal have a similar effect: they are incompatible with BSNs, as in (22a-24a), because they make it impossible for the VP as a whole to be understood as characteristic of the subject referent.[21] In contrast, they are licensed with BPs and nominals bearing a determiner, as (22b-24b) illustrate.[22]

(22) CATALAN

a. En Joan porta motxilla (*a la mà).
DET Joan carries backpack at the hand.
'Joan carries a backpack in his hand.'

b. En Joan porta la motxilla a la mà.
DET Joan carries the backpack at the hand
'Joan carries the backpack in his hand.'

(23)a. Tinc cotxe (*al garatge).
have car at-the garage
'I have a car in the garage.'

b. Tinc un cotxe / cotxes al garatge.
have a car / cars at-the garage
'I have a car / some cars in the garage.'

(24)a. Tinc cotxe (*a punt).
have car at point

b. Tinc el cotxe a punt.
have the car at point
'I have the car ready.'

With the existential predicate *haver-hi* 'there be', the contrast in (25) shows that BSNs should describe a potentially characterizing property of what we will call a *situational argument* of the predicate (as opposed to the subject, which we take to be a null expletive). We shall come back to these data in Section 7.

(25) CATALAN

a. #Al carrer hi ha cotxe.
at-the street there has car

b. A aquest hotel hi ha piscina.
At this hotel there has pool
'There is a swimming-pool in this hotel.'

Finally, in this description of the set of properties that characterize the occurrence of BSNs in Romance, it should be noted that BSNs never occur as subjects, even of unaccusative verbs.[23]

(26) CATALAN

a. *Vam aconseguir que arribés metge.
PAST manage that arrive doctor

b. *Passa tren.
Pass train

c. *Creix flor.
Grows flower

To summarize this part of the discussion, we have shown that the set of verbal predicates that allow BSNs in object position is made up of the so-called 'have'-predicates. However, it is not the case that just any V + N sequence involving a 'have'-predicate is legitimate: the resulting VP must denote a characterizing property in the sense we have defined here. This restriction on the resulting predicate imposes certain limitations on the BSNs that will be licensed with a given 'have'-predicate in a given context. We have further observed that the argument of this characterizing predicate need not be the subject, as long as there is a situational argument available for predication. We now turn to the syntax of these V + N combinations.

3. The syntax of VPs with object BSNs

The verbs that allow BSNs in Spanish and Catalan require a complement in object position (see (27)), and permit no secondary predication (see the contrasts in (22) – (24)).

(27) CATALAN

a. *En Joan té/necessita/busca/porta/posa/usa

DET Joan has/needs/looks for/wears/puts on/uses

b. *Hi ha

there has

Our data thus suggest the structure in Figure 1 for a VP containing a BSN in object position.[24]

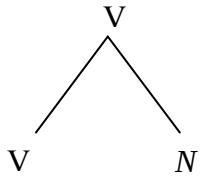

Figure 1

This structure is a minimal syntactic configuration in which the verb takes a nominal complement; in this sense it looks like the argument structure postulated for unergative verbs in Hale and Keyser (1998, 1999, 2002). Figure 1 is a monadic configuration in which the verbs that head these projections take a complement, and the structure they project does not include a specifier. However, there are some differences with true unergative constructions: (i) since the verb is phonologically constituted, its nominal complement does not conflate with V; (ii) since the nominal complement is not necessarily contiguous to V (Dobrovie-Sorin et al. 2006), it does not syntactically incorporate into V (Baker 1988, 2003); and, furthermore, (iii) since N may have a nominal complement (e.g., Spanish *Lleva sombrero de copa* '(S)he wears a top hat', *Esta tarde hay reunión de departamento* 'There is a departmental meeting this afternoon'), an NP can substitute for N.

Notice that this analysis contrasts with unaccusative proposals such as that presented in Guéron (1986) and reproduced in Figure 2 (see also Ruwet 1982, and Kayne 1975, 1982) for sentences such as those in (28).

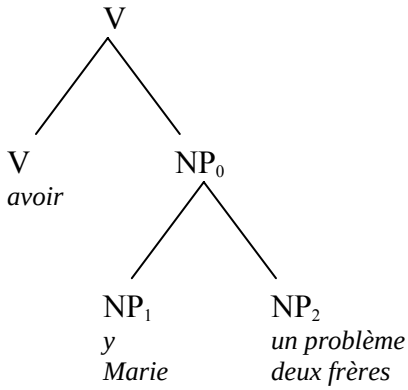

Figure 2

(28) FRENCH

a. Il *y* a un problème.

It there has a problem

'There is a problem.'

e. *Marie* a deux frères.

Marie has two brothers.

'Marie has two brothers.'

In this structure there is a predication relationship between the possessor NP_1 (*y* and *Marie*) and the possessee NP_2 (*un problème* and *deux frères*), with the latter functioning as a predicate nominal and the former as the subject of the predication. NP_0 is on this view a sort of small clause that denotes a state with a locative aspect.

The question that the structure in Figure 2 immediately raises, when trying to extend it to the data in (1) and (3), is whether it is feasible to postulate such a predication relation when the NP_2 is a BSN. According to de Swart et al. (2007, p. 195), BSNs that may act as predicates basically include in Dutch and some Romance languages nouns that "refer to *capacities*: professions, religions, nationalities or other roles in society. Capacities are analyzed as entities of type <e>, sortally distinct from

regular individuals as well as kinds". But as we have seen, BSNs in object position do not necessarily denote capacities, and even BSNs that do not denote capacities may occur in predicate position, as in (29).

(29) SPANISH

a. Gabriel García Márquez es *escritor* / *Premio Nobel de Literatura*.
   GGM is writer / prize Nobel of literatura
   'GGM is a writer / a Nobel Prize in Literature.'

b. Manresa es *capital de comarca.*
   Manresa is capital of county
   'Manresa is a county seat.'

More generally, we find it difficult to justify a syntactic structure such as that in Figure 2 for verbs like *portar* 'carry', *posar-se* 'put on, wear', or *buscar* 'look for' on semantic grounds. Such verbs do not denote properties of propositions, as the syntactic structure in Figure 2 would suggest, nor can these verbs be understood as truly "light" (as are the classic candidates for unaccusative predicates with small clause complements).[25]

As noted by Alexiadou (2003), an alternative to the predication relation represented in Figure 2 consists in representing an unaccusative structure with a predicator role assigned to a prepositional element (den Dikken 1995, Hoekstra 1994). According to this view, the possessor occurs in complement position of the P, and the possessee, in specifier position of the "small clause"-like PP (as might be relatively transparent for e.g. *Je prends la main à la petite fille*). On this analysis, (28) would be represented as in Figure 3.

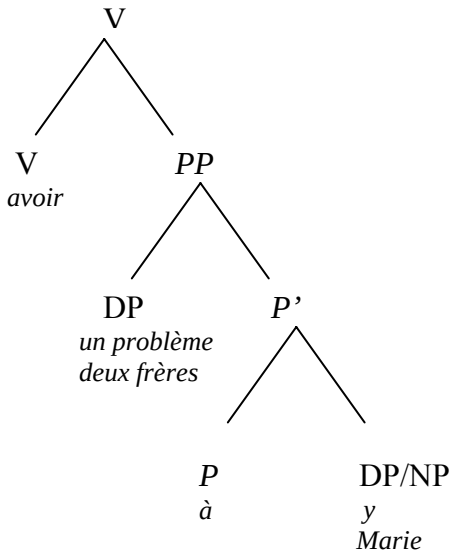

Figure 3

However, once again this structure cannot be used for the data in (1) and (3) because the external argument of the PP in this structure must be a DP, not a bare nominal. A predicate P′ needs an entity type argument in structural subject position, and – following e.g. Longobardi (1994) – D is the locus of nominal reference and must be projected in order for the argument to be of type <e>. But there is no morphological evidence that BSNs project a D; the discourse anaphora facts suggest that they do not denote entities; and the (a-b) contrasts in (22)-(24) clearly show that BSNs cannot anchor a secondary predication. Consequently, we reject the structure in Figure 3 for V + N sequences as well.

To conclude, in what follows we will assume for characterizing 'have'-predicates a nonagentive, monadic head-complement argument structure such as the one represented in Figure 1, since the syntactic configuration projected by a verb and its complement does not include a specifier. As will become clear in the next section, what the examples in (1) and (3) have in common with simple monadic structures is that a

nominal appears in object position in spite of the fact that it does not semantically saturate the verbal predicate.

Before we turn to a formal characterization of the type of predicate that licenses this structure, in Section 4 we first consider what BSNs in object position denote.

4. First approximation at a semantic analysis for the V + N

In order to account for the interpretation of the construction under discussion we must first decide what kind of denotation the BSN has. We posit that it denotes a *property*.[26] The proposal that BSNs denote properties might be considered the null hypothesis given the standard treatment of common nouns in formal semantics and the fact that Spanish and Catalan have standard determiner systems in which the determiner combines with a property-type nominal to form either an entity- or quantifier-denoting expression. It is also in line with specific proposals concerning BPs in the Romance languages (e.g. McNally 1995/2004; Dobrovie-Sorin 1997a,b; Dobrovie-Sorin and Laca 1996, Beyssade and Dobrovie-Sorin 2005), and with more recent work on bare singulars (see e.g. Farkas and de Swart 2003 for Hungarian; Dayal 2003, 2006 for Hindi; Borthen 2003 for Norwegian; and Dobrovie-Sorin et al. 2006 for Romance).

Since the general functioning of the diagnostics for property-type nominals are discussed in detail in these works, we will be very brief. The arguments against positing an *entity*- or *quantifier-type* denotation for BSNs are the following. First, such denotations fail to account for the obligatory narrow scope of BSNs (see (7a)); other examples of entity and quantifier-denoting expressions in Spanish and Catalan – notably, indefinite singular nominals – can in principle take wide scope, as observed above. Second, such denotations fail to explain the very limited distribution of BSNs; if BSNs denoted token entities or quantifiers, we would expect to find them in all kinds of argument positions, contrary to fact. Finally, a property denotation, but no other type of

denotation, accounts directly for the discourse anaphoric behaviour of BSNs which, as shown in (13a), only license *type discourse anaphora* to the partitive pronoun, which itself denotes a property.

Given that de Swart et al. (2007) have recently argued that BSNs in Dutch denote *kinds* or capacities, why not consider such an analysis for the BSNs discussed here? In particular, the obligatory narrow scope facts could be explained if BSNs were modeled as Carlsonian kinds, which are of type <e> (see Carlson 1977; see also Chierchia 1998). However, the restricted distributional facts and, more crucially, the difference in the anaphoric pronouns used for BSNs (the partitive pronoun) vs. kind-denoting terms (3rd person personal pronouns) argue against such an analysis. A further reason not to adopt de Swart et al.'s analysis to BSN objects is the fact that such objects behave differently from BSNs in predicate position with respect to anaphora. Anphora to the latter sort of BSN usually involves the neuter pronoun *ho* 'it / that' in Catalan, rather than the partitive or the accusative pronoun.[27]

(30) CATALAN

a. És metge? Sí que *ho* / #*n'* / #*l'*és
   is doctor yes that it-NEUT it-PART it-ACC is
   'Is he a doctor? Yes, he is.'

b. Manresa és capital de comarca i *ho* continuarà essent. / #...i *en*
   Manresa is capital of county and it-NEUT continue being / …and it-PART
   continuarà essent. / # … i *la* continuarà essent
   continue being …and it-ACC continue being
   'Manresa is a county seat and it will continue to be so.'

Recall as well that the BSNs we have considered are not in any way restricted notionally to capacities, a restriction which motivated de Swart et al.'s (2007) proposal, and are not restricted to predicate nominal position either.

Once we posit that BSNs denote properties, we are presented with the by now well-studied problem of how to combine them semantically with verbs that, for the most part, appear to denote relations between entities, as opposed to relations between entities and properties.[28] Among the possible alternatives, we will consider those proposed in Van Geenhoven (1996), Chung and Ladusaw (2004), Farkas and de Swart (2003), and Dayal (2003).

4.1. Semantic Incorporation

An analysis in terms of Van Geenhoven's (1996) *Semantic Incorporation* for VPs containing BSNs in Romance would look like (31) for the phrase *portar motxilla* 'carry backpack'.

(31) $\lambda P \lambda x \exists y[portar(x,y) \& P(y)](motxilla) = \lambda x \exists y[portar(x,y) \& motxilla(y)]$

On this analysis, the verb *portar* 'carry' is assumed to have two lexical entries – one as the expected relation between entities; but also another, represented in (31), on which the verb formally denotes a relation between an individual and a property, though that property ends up being ascribed to an entity that has the 'carried' role in the carrying event.

Notice that, because of the existential quantification over the *y* variable, this analysis incorrectly predicts the possibility of that the BSN will freely license discourse anaphora to token individuals (see comments in Farkas and de Swart 2003, Chapter 7 on this point); (13) shows that such anaphora is not possible. Also note that nothing in principle on this analysis excludes the possibility of having BSNs in subject position,

though the facts in (26) show that subject BSNs are impossible even when the verb is unaccusative and therefore might be thought to have a "deep" object position. We therefore will not adopt a semantic incorporation analysis, though by no means do we exclude the possibility that semantic incorporation might be the right analysis for other kinds of data in other languages.

4.2. Restrict

An analysis in terms of Chung and Ladusaw's (2004) *Restrict* rule faces similar problems. Restrict accomplishes via semantic composition rules what Semantic Incorporation accomplishes in the lexicon: It allows a predicate which denotes a relation between individuals to combine with a property-type expression, the property simply adding descriptive content to one of the arguments but not saturating that argument. Saturation results either via a separate rule of Existential Closure or when the verb phrase combines (by function application) with an extra object that denotes either an entity or quantifier. The output of Restrict for *portar motxilla* 'carry backpack' is presented in (32a); the output following existential closure appears in (32b) (see Chung and Ladusaw 2004 for further details).

(32)a. Restrict(λyλx[portar(x,y)], motxilla) = λyλx[portar(x,y) & motxilla(y)]

b. EC(λyλx[portar(x,y) & motxilla(y)]) = λx∃y[portar(x,y) & motxilla(y)]

As was the case with Semantic Incorporation, and for the same reasons, Restrict combined with Existential Closure incorrectly predicts the possibility of having discourse anaphora to token individuals and does nothing to exclude the possibility of having BSNs in subject position. Moreover, because the option of Restrict followed by function application also exists in principle, this analysis has the added difficulty that it does not exclude the possibility of doubling the incorporated nominal with an

independent NP, as is found, for example, in Chamorro. Compare the grammatical (33) (from Chung and Ladusaw 2004, p. 89, ex. (29a)) with the ungrammatical (34).

(33) CHAMORRO

Gäi-ga' un ga'lagu ennao na patgun.

agr.have-pet a dog that L child

'That child has a pet dog.'

(34) CATALAN

a. *Tinc pis un duplex (= (4a))

have apartment a duplex

b. *El va buscar cambrer

him PAST look-for waiter

Thus, we also will not pursue an analysis in terms of Restrict.

4.3. Unification

Now consider an analysis of *portar motxilla* 'carry backpack' following the proposal of Farkas and de Swart (2003). Farkas and de Swart propose an enrichment of Discourse Representation Theory (DRT) in which they distinguish between discourse referents – those individuals that *instantiate* the arguments of a predicate – and what they call *thematic arguments* – essentially, a representation of the arguments themselves (intuitively similar to, if not necessarily formally identical to, lambda-bound variables). They then propose two different kinds of semantic composition rules: 1) *Instantiation*, which allows a variable representing a discourse referent to replace a thematic argument in the discourse representation of a predicate (the rule given in (35) is for the instantiation of a verbal argument by the discourse referent associated with a nominal); and 2) *Unification* of thematic arguments, given in (36), which, under the right syntactic

conditions, has the ultimate effect of allowing information contributed by a verbal predicate and a nominal argument to become associated with one single thematic argument.

(35) *Argument-Instantiation*: Instantiate the n-th thematic argument of a verbal predicate by the discourse referent contributed by the fully interpreted nominal argument. (Farkas and de Swart 2003, p. 33)

(36) *Unification*: Replace the relevant thematic argument y of a verbal predicate with the thematic argument z contributed by a nominal argument of the verb. (Farkas and de Swart 2003, p. 65)

An illustration of the result of applying these rules in the analysis of the sentence (37) is given in Figure 4, where *u* is an instantiating discourse referent, and *y* is a variable representing a thematic argument.

(37) En Joan porta motxilla

DET Joan carries backpack

'John carries a backpack.'

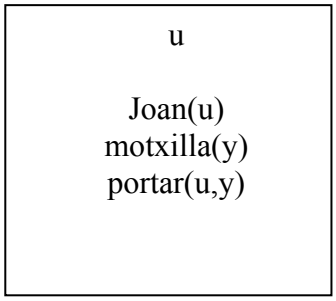

Figure 4

This Discourse Representation Structure (DRS) is verified if there is a sequence of entities $<e_1, e_2>$ in the universe of discourse such that the following conditions are met (where f assigns a value to the variable u):

(38)a. $<e_1, e_2> \in$ [[*portar*]]

b. $f(u) = e_1$

c. $f(u) = [[Joan]]$

d. $e_2 \in [[motxilla]]$

Unification is able to combine verbs with subjects as long as nothing in the verb's semantics requires a referential subject.[29] In Spanish and Catalan, however, BSNs have a limited, lexically restricted distribution which is not relatable to any sort of need to introduce a discourse referent. For example, recall that BSNs are impossible with unaccusative verbs like *créixer* 'grow' (see (26c)), but these verbs are typically the kind that permit highly nonspecific or nonreferential subjects, such as those introduced by bare plurals. They clearly do not permit BSNs because they are simply not what we have called 'have'-predicates. Thus, like the Semantic Incorporation and Restrict analyses, the Unification analysis fails to account directly for the prohibition on BSNs in subject position.

Another problem with this analysis is its failure to account for the lack of doubling in Romance, in the absence of specific, ancillary syntactic assumptions. This problem arises because, like Chung and Ladusaw, Farkas and de Swart use separate rules for the addition of descriptive content (Unification) and for the saturation of arguments (Instantiation). Although they allow for final DRSs in which only Unification but not Instantiation has applied to some argument,[30] it is not clear what would block the addition of a doubling nominal that would combine via Instantiation.

All three analyses we have discussed so far run into trouble in part because they assume that the "incorporating" nominal is combining with an argument of the verb. In the case of Semantic Incorporation, this assumption leads to the introduction of an existential quantifier in the incorporating verb's semantics which is problematic for the Spanish and Catalan data. In the case of Restrict and Unification, the problem is that the proposed composition rule is in theory freely available for any argument of any verb.

This suggests that Restrict or Unification would be good choices for languages in which incorporation-like phenomena are much more widely found than is the case for Spanish and Catalan. Moreover, none of the above analyses has anything to say about the special, "characterizing property" entailment that accompanies the use of a BSN object. The introduction of this special entailment in a specific class of verbs suggests that a lexical rule is involved in preparing these verbs for combination with a BSN.

In order to solve the problems facing these analyses, we propose to exploit such a rule to create a semantic environment in which the BSN can act as a true verb modifier (cf. Szabolcsi 1997, Carlson 2003).[31]

4.4. Dayal's (2003) Semantics for Pseudo-incorporation

As a starting point, we could consider de Hoop's (1992) suggestion that weak nominals be assigned to type <<e,t>,<e,t>>. However, we will avoid doing so simply because there is no independent evidence for assigning such a complex type to BSNs, as opposed to an <e,t> denotation. We therefore consider Dayal's (2003) semantics for *pseudo-incorporation*.

Dayal's semantics is deeply similar to de Hoop's proposal for weak indefinites. Pseudo-incorporation suppresses the theme in the 'deep' lexical semantics of the verb and treats the direct object as forming a kind of complex predicate with the verb. However, the technical means by which this is achieved does not involve reducing the superficial valency of the verb; the verb selects for two expressions – one that denotes a property, and one that denotes an entity. In this latter respect Dayal's analysis resembles Van Geenhoven's semantic incorporation. The general semantics for pseudo-incorporation is presented in (39a), and illustrated with *portar motxilla* 'carry backpack' in (39b).

(39)a. $\lambda P_{<e,t>}\lambda x\lambda e$[P-V(e) $\wedge$ Ag(e) = x $\wedge$ *Appropriately Classificatory*(e)]

b. $\lambda x\lambda e$[motxilla-portar(e) $\wedge$ Ag(e) = x $\wedge$ *Appropriately Classificatory*(e)]

The notion of *Appropriately Classificatory* is intended to capture the condition, operative in Hindi, that V + N combinations describe institutionalized activities.[32] We have already pointed out that the facts are different in Spanish and Catalan, and we will return to this point in the next section, providing an alternative. For now, what is relevant is the way in which the BSN combines with the verb. In this respect, observe the key role played by the event argument in this semantics. The event variable constitutes a locus for predicate ascription, crucially allowing the BSN to contribute descriptive content without forcing the presence of an individual variable associated with it: in this case, there is no variable corresponding to *motxilla* 'backpack'.

Suppressing the theme is the technique by which discourse anaphora to the incorporated nominal is blocked: if there is no existentially bound variable in the logical representation corresponding to the theme argument, Dayal's reasoning goes, there will be no variable for a subsequent pronoun to be coindexed with. Although Dayal does not discuss the sort of type anaphora facts we have previously mentioned, note that nothing need block the possibility of type anaphora – the partitive pronoun simply needs to be able to refer back to the property itself, which is of course explicitly represented.

In addition to accounting for the anaphora facts, Dayal's proposal stands out in its attempt to capture the intuition that the BSN, despite functioning syntactically as an object, is semantically a modifier. What remains unclear is how exactly *P-V* in (40a) is to be understood – the relationship between the verbal predicate V and the bare singular predicate P is left to intuition. Dobrovie-Sorin et al. (2006) attempt to make this more explicit with the representation in (40).

(40) $\lambda P \lambda y \lambda e[V(e) \wedge Ag(e)=y \wedge Th(e)$ has $P \wedge$ *Appropriately Classificatory*$(e)]$

Specifically, (40) encodes the fact that the property denoted by the BSN is attributed to the understood theme of the verb, which is not represented directly in the combinatorial semantics but is nonetheless manifest in the (enriched) lexical semantics of the verb as Th(e).[33]

On the other hand, both the proposals in (39) and that in (40) have the inelegant characteristic of purportedly suppressing the verb's internal argument while maintaining a bivalent combinatorial semantics for the verb. There could be two reasons for doing this: 1) maintaining a bivalent verb is one way to guarantee that the verb will actually combine with two nominals (as it must); and 2) it keeps semantic composition maximally simple, as it allows composition to proceed via function application. But, if we can guarantee in the syntax that the verb will have the complement it needs, and if we do not increase the inventory of semantic composition operations, a version of pseudo-incorporation that avoids this inelegance would be preferable. We will propose just such an alternative in Section 6. First, however, we must make explicit our analysis of the verbs that combine with BSNs and the special entailments of the V + N combination.

5. Lexical semantic conditions on the input and output predicates

We begin by considering Dayal's notion of Appropriately Classificatory in more detail. Dayal (2003, p. 16) defines this notion as in (41).

(41) An event denoted by a predicate δ that incorporates a property γ is *appropriately classificatory* iff

$\Diamond_{probable}(\exists e[\delta(e) \,\&\, \exists y[Ag(e)=y] \,\&\, \exists x[\gamma(x) \,\&\, Th(e)=x]])$ *(extensional verbs)*

$\Diamond_{probable}(\exists e[\delta(e) \& \exists y[Ag(e)=y] \& Th(e)=\gamma])$ *(intensional verbs)*

Intuitively, (41) says that an event of type δ is appropriately classificatory if and only if its theme is typically an individual of type γ. As we observed earlier, however, this notion, however appropriate it might be for Hindi, does not explain the unacceptability of examples such as those in (14a) and (15a) in Spanish and Catalan.

A more promising alternative for the data we are considering is that proposed in Borthen (2003, p. 190). Borthen proposes that BSNs in Norwegian are licensed (*inter alia*) as the 'possessed' argument of a predicate that introduces an asymmetrical 'have'-relation, either explicitly or implicitly (see note 15 for a definition of a this 'have'-relation). However, though Borthen's characterization is closer to what is needed for Spanish and Catalan, there are two facts it does not directly account for. First, it does not have anything to say about the fact that the resulting VP must denote a characterizing property, because it does not discriminate between subclasses of 'have'-relations: in Norwegian, all kinds of 'have'-relations can be expressed using BSNs. Spanish and Catalan differ in this respect (see (19)). Second, Borthen's description fails to account for the fact that this 'have'-relation cannot be expressed by a passive with the BSN as subject – again, a difference between Norwegian, which allows passives with BSN subjects, and Spanish and Catalan, which do not.

We propose capturing the semantics we need via a lexical rule which applies only to those predicates which explicitly or implicitly express a 'have'-relation, as described by Borthen, and which supresses the theme argument of the predicate and adds the appropriate entailment concerning its potentially characterizing nature.[34] We define this rule, which we will call the *Characterizing Property rule* (CP-rule), as in (42). Our representation of the verb is Parsonsian (Parsons 1990) insofar as it treats the verb as a predicate of events and separates out reference to the verb's participants, and

follows Kratzer (1996) in positing that the external argument is introduced via a functional voice projection; we follow Dobrovie-Sorin et al. (2006) in representing the verb's thematic roles as functions from events to the individuals that bear those roles.

(42) **CP**(λyλe[**V**(e) & θ(e)=y &

∃w[*C*(w)][∃e'[**Depend**(e,e',w) & **Have**(e') & **Havee**(e')=y]]])

= λe[**V**(e) & **Potentially-characterizing**(e) &

∃w[*C*(w)][∃e'[**Depend**(e,e',w) & **Have**(e') & **Havee**(e')=θ(e)]]]

The input to the CP-rule must meet some additional conditions. First, whatever situation it denotes must be one which depends in some way on the existence of a 'have'-relation involving the eventual subject referent and some other individual in some (not necessarily actual) world *w* (which might be subject to contextual restrictions as represented by the variable *C*). We represent this condition with the predicate **Depend**(e,e',w) and the accompanying requirement that *e'* be a **Have** relation, with *y* as the **Havee**. Thus, the CP-rule can apply to Spanish and Catalan *tener / tenir* 'have', which depends on what we might call a prototypical 'have'-relation holding in the very same world of evaluation. But it can also apply to *necesitar / necessitar* 'need', which requires a 'have'-relation to hold only in those (not necessarily actual) worlds in which the subject's needs are met.[35]

Now consider the output of this rule. As mentioned above, the object argument has disappeared. This leaves us for the moment with the problem of how to combine the BSN with the verb. The key to solving this problem, as we will show in the next section, is the fact that we crucially do *not* assume the disappearance of the entailment that the verb describes a situation involving two participants. We refer to the participant corresponding to the suppressed argument as θ(e).

What about the other effects the CP-rule has on the lexical entailments of the input predicate? Observe that the situation described by the output predicate must also depend on the existence of a 'have'-relation which holds between the same participants as in the input situation, though whether the participant θ(e) is entailed to exist or not will depend on the basic entailments associated with that participant in the semantics of the input verb: if the 'have'-relation on which the situation described by the resulting predicate depends is one that must hold in the actual world, its satisfaction conditions will guarantee that the **Havee** exists in the actual world; if not, it won't.

Finally, observe that the output of the CP-rule adds the condition **Potentially-characterizing**(e). This simply guarantees that the relation described by the detransitivized predicate is potentially characterizing of the eventual subject. However, note that this extra condition has a welcome consequence: it will always require there to be an individual which the detransitivized predicate can characterize. This can be considered the semantic reason behind restricting the CP-rule to predicates that have an internal argument, a restriction which will effectively guarantee that BSNs never appear in subject position.

With the output of the CP-rule in hand, we can now return to the question of how to combine the verb with a BSN.

6. Compositional semantics

What we want to preserve from Dayal's (2003) and Dobrovie-Sorin et al.'s (2006) analyses is the hypothesis that the BSN is a verb modifier rather than a 'true' argument; we also want to maintain the maximally simple hypothesis that the BSN denotes in type <e,t>. However, we want to avoid having the verb semantically select for the BSN. In order to do this, we propose that the verb and the BSN combine not via function

application, but rather via an alternative semantic composition rule. We present this rule in (43), where T(α) stands for the semantic characterization of α in logical terms.

(43) If T(V) = λe[**V**(e)] and θ is an implicit role function defined for e,
and if T(N) = **N**, a property,
then T([V N]) = λe[**V**(e) & **N**(θ(e))]

(43) applies to verbs which are missing only an external argument (setting aside the event argument) but for which a participant role beyond that ultimately contributed by the external argument is entailed as part of the lexical semantics of the verb. A nominal in the complement position of such a verb will, under this rule, be able to act as a modifier, placing a restriction on the individual that satisfies the unexpressed participant role.

The output of the CP-rule in (42) fits the requirements for the compositional rule in (43) to apply: the **Havee** role corresponds to θ. Consequently, the output of (43) applied to the semantics of *portar* 'carry' and *motxilla* 'backpack' would be as in (44).

(44) T([*portar motxilla*]) = λe[**portar**(e) & **Potentially-characterizing**(e) &
∃w[*C*(w)] [∃e'[**Depend**(e,e',w) & **Have**(e') & **Havee**(e')=θ(e)]] &
motxilla(θ(e'))]

The rule in (43) should not be considered an undesirable addition to the inventory of semantic composition rules in the language because it is essentially a version of a rule which has already been argued for in the literature, namely the rule of *Selective Binding* in Pustejovsky (1995). Selective Binding is defined as in (45); *qualia structure* are particular portions of an enriched lexical semantic representation for the modified predicate (see Pustejovsky 1995 for further details on qualia structure).

(45) Selective Binding: If α is of type <a,a>, β is of type b, and the qualia structure of β, QS_β, has quale, q of type a, then $\alpha\beta$ is of type b, where $[[\alpha\beta]] = \beta \cap \alpha(q_\beta)$. (Pustejovsky 1995, p. 129)

A typical example of the use of Selective Binding is to account for the modifying effect of adjectives such as *fast*, which would correspond to α in the formula: a fast car is a car that can move quickly or be driven quickly. In this sense, *fast* describes not so much a car as an event that a car routinely participates in, which in Pustejovsky's semantics would be encoded as part of the noun *car*'s qualia structure.[36]

The essence of Selective Binding is the idea that the lexical semantics of a predicate may provide information about relations between the individual or situation described by that predicate and individuals or situations other than those explicitly represented in the predicate's argument structure. Although Pustejovsky's formulation makes specific reference to the notion of qualia, there is no reason why this idea could not be generalized to other kinds of implicit semantic content. This is exactly what the compositional rule we propose in (43) does: the nominal modifies the description of a situation indirectly by providing a description of one of the individuals implicitly related to that situation.

Our proposal, however, does have a cost: it entails that syntactic selection and semantic selection do not always match perfectly, as we are positing that verbs can select syntactically for a complement without semantically selecting for it. Nonetheless, such an option is in line with a recent proposal by de Hoop (2006) that transitivity should be considered a sort of gradient phenomenon. The most prototypical case of transitivity will involve a verb of type <e,<e,t>>, combining via function application with a nominal of type <e> (or, alternatively, a generalized quantifier). Slightly less prototypical might be the sort of case represented by Semantic Incorporation:

incorporating verbs on e.g. Van Geenhoven's (1996) analysis denote in type <<e,t>,<e,t>> – not a usual type for a verbal predicate, but on the other hand the verb still combines via function application with its property-type internal argument. Still farther away from standard transitivity is the sort of analysis originally suggested in de Hoop (1992) for so-called weak Case nominals, in which the verb is semantically of an intransitive type <e,t> and the weak Case nominals are predicate modifiers (type <<e,t>,<e,t>>). In this case, function application still applies, but in the opposite direction from what is usual with transitive verbs. These three possibilities are represented in Figures 5, 6, and 7.

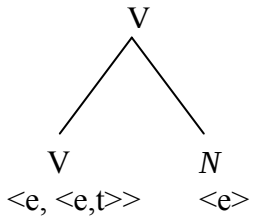

Figure 5

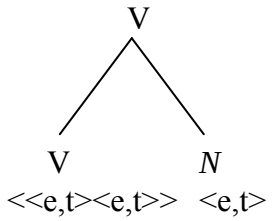

Figure 6

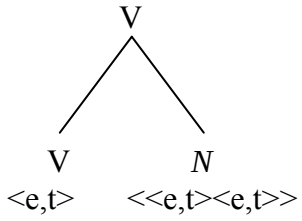

Figure 7

Our proposal can be viewed as an alternative to Figure 7, which carries this transitivity gradience one step further. The verb is semantically of an intransitive type; because we have adopted Kratzer's (1996) analysis of external arguments, strictly speaking the verb denotes a property of eventualities (the external argument being introduced and related to the verb via a higher functional head). The noun is also a property-type expression, though in the typical case it will denote a property of individuals. This is illustrated in Figure 8.

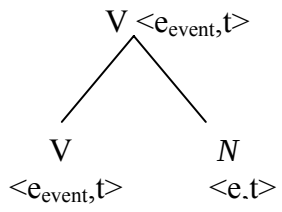

Figure 8

The verb then combines with its argument via a modification rule rather than via function application. The denotation of the higher verbal projection, for example *portar motxilla*, is a subset of the denotation of the lower V (e.g. *portar*). The rule in (43) creates this subset by allowing the nominal to impose an intersective condition on the verb's θ participant.

Note that with this analysis we can account for the set of semantic properties described in Section 2. First, as was the case on Dayal's (2003) analysis, BSNs are not normally the antecedents of token discourse anaphors because they do not license the introduction of any existentially quantified variable or corresponding discourse referent; though we cannot investigate this matter in detail here, this lack of discourse referent no doubt underlies the number neutrality of the BSN (Espinal 2008). Second, for the same reason, BSNs have only narrow scope with respect to other operators that might appear in the clause, such as negation. Third, the fact that the nominal is interpreted as a

modifier and not as saturating any argument of the main verb accounts for the inability of BSNs to be licensed as the external argument of a secondary predication: this latter external argument needs to be saturated, but the BSN cannot do the job. Fourth, the analysis accounts for the fact that predicates unspecified for telicity remain atelic when they combine with BSNs (recall the data in (8)): the BSN is number neutral and fails to provide any discrete discourse referent that could individuate or quantize the relevant events. Finally, the ban on BSN subjects follows from the fact that the CP rule, which provides verbs meeting the input conditions for the composition rule that licenses BSNs, creates a potentially characterizing property: this property needs some individual to be predicated of, and in principle only the external argument of the verb can provide that individual.

7. Extending the analysis: Existential 'have' sentences

Given the proposal in the previous sections, the acceptability of BSNs with existential *haver-hi* (Catalan, lit. 'have'+oblique clitic) and *haber* (Spanish, lit. 'have') might seem surprising. In this section, we show how our analysis can be extended straightforwardly to account for this possibility, and we point out the implications for the debate over how best to analyze the syntax and semantics of these constructions in Spanish and Catalan. The contrasts illustrated in (46) and (47) show that a BSN can occur in object position of an existential 'have'-predicate only if the BSN is anchored by the oblique clitic.[37]

(46) CATALAN

a. *Ha garatge
has garage

b. *Hi* ha garatge.
there has garage

'There is a garage.'

(47) SPANISH

a. *Ha garaje.

has garage

b. Hay garaje

has-there garage

'There is a garage.'

Compare (46) and (47) with a different construction where Catalan *haver-hi* 'there be' is understood as truly locative and followed by a full-fledged DP. This construction, exemplified in (48a),[38] has also been described for English (see (48b)).

(48)a. Hi havia el president.

there had the president

'The president was here/there'

b. There is a Ford T engine in my Saab. (Hornstein et al. 2002)

In order to account for certain semantic affinities between the verbs *haver-hi* 'have' and *ésser* 'be', Rigau (1997, 2005) (who follows the assumption that the *have / be* alternation can be syntactically derived from an unaccusative structure and Hale and Keyser's 1993 syntactic argument structure theory) argues that the Catalan locative verb *haver-hi* is an instance of the light verb *ésser* to which an abstract preposition of central coincidence has been syntactically incorporated. According to this unaccusative analysis for sentence (48a), the clitic *hi* is assumed to move from the Spec position of an abstract PP to a locative subject position, and the verb *haver* is obtained when the verb *ésser* is spelled-out with an incorporated preposition. See the input and output structures in Figures 9 and 10, from Rigau (1997, p. 399, (11) and (12)).[39]

(49) Hi_{Subj} havia el $president_{Comp}$

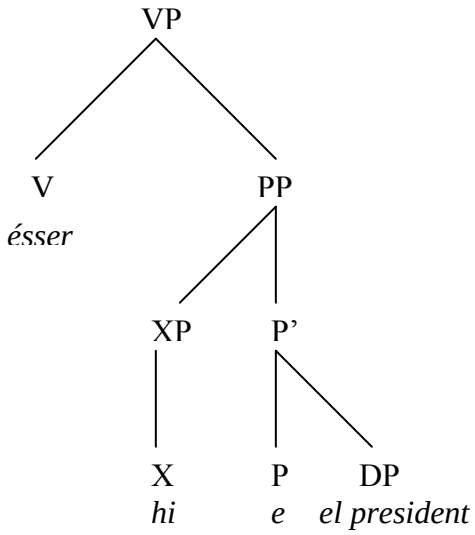

Figure 9

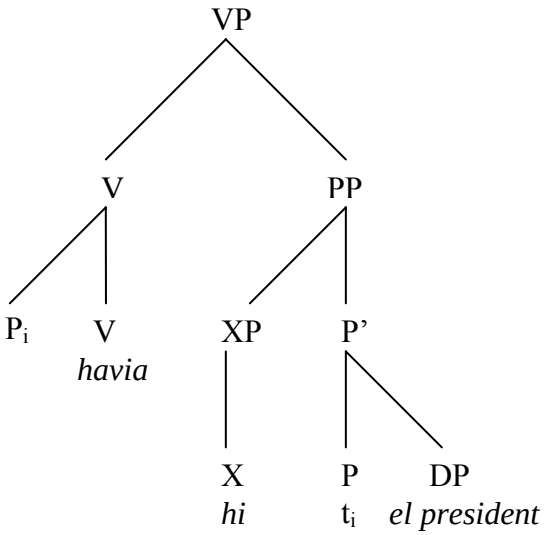

Figure 10

On the other hand, Hornstein et al. (2002) (following also Kayne 1993 and Szabolcsi 1981, 1983) propose an analysis of the English sentence in (48b) which relies on a small clause structure analysis.[40] More precisely, they defend the hypothesis that two different small clauses can be associated with (48b), which correspond to the two readings given

in (50): (50a), the integral whole-part or inalienable interpretation, and (50b), the standard locative interpretation. These two readings are paraphrased in (51).

(50) There is a Ford T engine in my Saab. (Hornstein et al. 2002, exx. (1) and (3))

a. …[$_{SC}$ My Saab [a Ford T engine]]…

b. …[$_{SC}$ a Ford T engine [in my Saab]]…

(51)a. My Saab has a Ford T engine. (Hornstein et al. 2002, ex. (2))

b. (Located) in my Saab is a Ford T engine.

Notice that, if we adopt either of these analyses, it is completely mysterious why BSNs would be able to appear in existential sentences, as shown in (46b) and (47b). On the unaccusative analysis, the object of the P is a DP. On the small clause analysis the subject of the SC is also a DP. (Compare also Figures 2 and 3 in Section 3.) Moreover, since the small clause analysis of the postverbal complement in existential sentences has not been universally accepted (see e.g. Chung 1987 for Chamorro, and McNally 1992 for English), we maintain our analysis of BSNs presented in the previous sections, and consider the facts in (46b) and (47b) as reason to explore a new approach.

In contrast to these analyses of existential sentences on which the complement of the verb is always a full DP, we present an analysis of existential *haver-hi* 'there be' with a nominal complement as in Figure 11 (inspired in Hale and Keyser 2002, Mateu 2002). This monadic configuration contains a light verb *haver* and a theme in object position; it differs from the one postulated in Figure 1 only in that the lexical verb is assumed to have a formal feature [Loc] (cf. Freeze 1992, Guéron 1998).

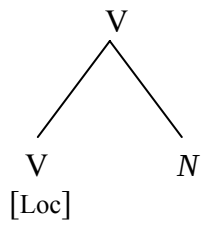

Figure 11

The weak pronoun *hi* 'there', which also has a [Loc] formal feature, merges with this argument structure.[41] The output of this merge operation is an anaphoric relationship between the clitic and 'have' that might be syntactically represented as an agreement relationship within a local chain.

(52) $[_{vP}$ Hi $[_{V}$ ha garatge]]
[Loc] [Loc]

As for the existential proform, on the one hand, note that it shares with other existential proforms found in Romance a lexically locative status (e.g. French *y*, Spanish *–y*, Italian *ci*), but this fact does not make it a deictic expression (cf. Freeze 1992), since it can cooccur with a true deictic adverbial, either locative (e.g., *aquí* 'here') or temporal (e.g., *avui* 'today'). See the examples in (53), where the clitic associated with the [Loc] feature does not refer to the place or time denoted by the deictic expression.

(53) CATALAN

a. Aquí hi ha piscina.
here there has swimming pool
'There is a swimming pool here.'

b. Avui hi ha casament.
today there has wedding
'Today there is a wedding.'

This suggests that it is not only the case that there is some sort of syntactic agreement between the clitic and the verb in existentials, but this chain is further extended to a true indexical expression in order to achieve a deictic interpretation.[42]

On the other hand, several arguments from Freeze (1992, Section 3.3) point to the conclusion that the proform is not a subject, but rather is adjoined to the verb, as is normally assumed for clitics in Romance.[43] First, Catalan, like Spanish, is a null-subject

language. This being the case it is expected that if *hi* were the subject it would be omissible, but it is not (see (46a), and (47a)).

Second, the existential proform cannot move with raising verbs, a behaviour which would be expected if it was a subject. See the contrasts between (54) and (55).

(54) CATALAN

a. Sembla que l'etimologia ve de…
   seems that the etimology comes of
   'It seems that the etymology comes from…'

b. ?L'etimologia sembla venir de…
   the etymology seems come of
   'The etymology seems to come from…'

c. L'etimologia sembla que ve de…
   the etymology seems that comes of
   'The etymology seems to come from…'

(55)a. Sembla que hi ha piscina.
   seems that there has swimming-pool
   'It seems that there is a swimming-pool.'

b. ?Sembla haver-hi piscina.
   seems have there swimming-pool

c. */??Hi sembla haver piscina.
   there seems have swimming-pool

d. *Hi sembla que ha piscina.
   there seems that has swimming-pool

Third, the existential proform can be preceded by the negative sentential marker *no*, a property which suggests that *hi* cannot be in subject position, since subjects cannot be preceded by the negative sentential marker. See the contrasts between (56) and (57).

(56)a. L'etimologia no ve de …

the etymology not comes of

'The etymology does not come from…'

b. *No l'etimologia ve de…

not the etymology comes from…

(57)a. A l'hotel no hi ha piscina

at the hotel not there has swimming-pool

'There is no swimming-pool at the hotel.'

b. *A l'hotel hi no ha piscina

at the hotel there not has swimming-pool

Therefore, in contrast to a quirky subject analysis of the lexically locative existential proform, we treat *hi* syntactically as the realization of an external situation argument that bears a locative formal feature and is merged with the verb in the course of the derivation.[44] This clitic is interpreted at the syntax-semantics interface as being bound to a (locative or temporal) deictic expression, to which the characterizing property denoted by the VP is anchored. See the syntactic structure in (58) and Figure 12.

(58) $[_{TopP}$ A l'edifici … $[_{vP}$ hi_{Sit} $[_{V}$ ha garatge]

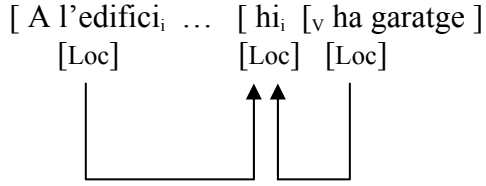

Figure 12

The examples in (59) illustrate the fact that the oblique clitic that anchors the V + N gets assigned a value situationally in the course of the syntactic derivation: it is overtly bound to a locative PP or AdvP that occurs in a left or right peripheral position.

(59)a. A l'edifici, hi ha garatge.
at the building there has garage
'There is a garage in the building.'

b. Hi ha garatge, a l' edifici.
there has garage at the building
'There is a garage in the building.'

However, when the PP occurs in predicate position of a small clause, only whole DPs, and not BSNs, can occur as subjects of small clauses. The reason for this behavior, illustrated in (60), is that the external argument of the non-verbal predicate must denote either an individual entity or a generalized quantifier expression, but not a property. Since Longobardi (1994, a.o.), it has commonly been assumed in the linguistic literature (cf. Chierchia 1998) that, in order to license a nominal expression as a semantic argument in a Romance language, a definite or indefinite determiner is required.

(60)a. */??Hi ha garatge a l' edifici.
there has garage at the building

b. Hi ha un garatge a l' edifici.
there has a garage at the building
'There is a garage in the building.'

c. Hi ha el garatge al mateix edifici.
there has the garage at-the same building
'The garage is in the same building.'

Parallel to (59), the data in (61) show that it is also possible for an event nominal like *reunió* 'meeting' to get an existential interpretation when the constituent in dislocated position situates the event inalienably with respect to a specific temporal coordinate.

(61)a. A les tres hi ha reunió.
at the three there has meeting
'There is a meeting at 3 o'clock.'

b. Aquesta tarda hi ha reunió.
this afternoon there has meeting
'There is a meeting this afternoon.'

c. Avui hi ha reunió.
today there has meeting
'There is a meeting today.'

Once the 'have' plus BSN is associated with the monadic structure in Figure 11 and merged with *hi* 'there' (which can be bound to an external deictic expression; see Figure 12), it will be able to undergo the CP rule in (42), above, since *hi* guarantees the availability of a situational anchor to which the characterizing property denoted by the 'have' predication plus the theme object can be ascribed. Crucially, instead of combining with an external argument via a voice or alternative functional projection, the output of the CP rule in existential 'have' sentences will combine with the situational argument which is licensed by *y / hi*. The existential predicate *haber* / *haver* differs from other unaccusative predicates precisely in licensing this situational argument via the formal feature [Loc].

8. Conclusion

In this paper we have argued for a pseudo-incorporation analysis of BSNs in object position in Spanish and Catalan which accounts for the specific lexical restrictions on this phenomenon and for the special entailments of the resulting construction. We have shown that BSNs in argument position denote simple first order properties but effectively function as verb modifiers. Our analysis relates this special semantics to the failure of BSNs to occur in subject position, and also makes clear what unites the existential predicate in Spanish and Catalan with the other verbs that allow BSN objects.

In addition, we have argued for a particular reformulation of semantic pseudo-incorporation which has two advantages. On the one hand, it establishes a parallelism with the independently postulated process of Selective Binding and similar modification rules that have been proposed in the literature. On the other, it serves to reinforce the view enshrined in Davidsonian verb semantics (Davidson 1967, Parsons 1990) that there are deep similarities between modification in the nominal and verbal domains.

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Notes

[1] In this paper we consider only bare singular nominals in object position, setting aside those that appear as predicate nominals or as complements to prepositions.

[2] The prescriptively preferable English translations for these BSNs involve singular indefinites. However, since indefinite singulars in English give rise to ambiguities that do not exist for the Catalan and Spanish sentences with BSNs, we will as often as possible put an additional paraphrase in parentheses which unambiguously conveys the interpretation of the sentence, even if in some cases this paraphrase will sound somewhat unnatural.

[3] See Mithun (1984) for a broad description of different types of incorporating languages. Mithun (1984) distinguishes four types of noun incorporation: type I is defined as a process of lexical compounding that lowers the valence of the verb by one; type II is defined as a syntactic process that advances an oblique argument into the case position vacated by the incorporated noun; type III –characteristic of polysynthetic languages– involves the manipulation of discourse structure by a backgrounding of the incorporated noun and a qualification of the verb; and, finally, type IV is characterized by the fact that a general noun stem is incorporated to narrow the scope of the verb but, additionally, the compound stem is accompanied by a more specific external NP which identifies the argument implied by the incorporated noun.

[4] It should further be noticed that the phenomenon of noun incorporation has received considerable attention in contemporary linguistics from different perspectives, in addition to the semantic one: descriptivist (Mardirussian 1975, Merlan 1976, Roberston 1980), typological (Mithun 1984, 1986), lexical (Rosen 1989, Snyder 2001), morphological (Spencer 1991, 1995), and syntactic (Sadock 1980, 1986, Baker 1988, Masullo 1992, Baker et al. 2004).

[5] Chierchia's (1998) discussion makes it clear that the term *argument position* applies only to those positions associated with arguments of type <e>, and he explicitly sets aside the possibility of incorporation.

[6] See Longobardi (2005) for additional discussion of the semantic properties of singular count nominals. BSNs contrast with singular count nominals on all of the diagnostics mentioned by Longobardi.

[7] A similar observation is made by Munn and Schmitt (2005:827) for Brazilian Portuguese: "Bare singulars also behave like non-quantised noun phrases in the way that they affect the aspectual interpretation of VPs. (…). Bare singular and the bare plurals pattern alike in this respect: both induce

durative readings, in contrast to the singular indefinite, which forces a terminative reading. This shows that the bare singular is not quantised, despite the fact that it is morphologically singular".

[8] We do not have an explanation for the fact that *buscar*, in contrast to *to look for* in English, can imply *look for and find* with a singular indefinite direct object. However, what matters here is that singular indefinites, presumably in virtue of being quantized (see Krifka 1989) can induce telicity, while BSNs and BPs cannot.

[9] See Dobrovie-Sorin et al. (2006) for additional arguments concerning number in BPs vs. BSNs.

[10] In this sense we provide additional support for Déprez's (2005:864) distinction between count BNs and mass nouns in Haitian Creole: "Haitian BN are under-specified for number, both morphologically and semantically. Yet, (…) being under-specified for number is not equivalent to having a mass denotation".

[11] Bare mass nouns are similar to BSNs in that they also license only type anaphora, though there are a number of facts that show that BSNs are semantically distinct from bare mass nouns. See Espinal (2008).

[12] Types are distinct from natural kinds (Carlson 1977): note that the pronoun used in type anaphora (the partitive pronoun in Romance, *one* in English) is not used for anaphoric reference to natural kinds. As will become clear below (and as can be inferred from one way of referring to this anaphora in English – common noun phrase anaphora) – a type on our view can be formally modeled as a property.

[13] A reviewer has pointed out the following possible counterexample to our claim that BSNs do not license token anaphora, since in this example the null subject of the second sentence appears to denote an entity which is described by the BSN in object position of the first sentence.

(i) SPANISH

Pedro busca secretaria. Tiene que hablar inglés.

Pedro looks-for secretary has that speak English

'Pedro is looking for a secretary. She has to speak English.'

This example involves modal subordination (see Roberts 1996 for an exhaustive overview). We follow Roberts' proposal that modal subordination does not involve direct anaphora but rather accommodation.

We have additional reasons for appealing to accommodation in such examples. First, if token anaphora were generally licensed with BSNs, discourses such as that in (13a) with the accusative clitic should be acceptable, but they are not, and the judgment that the token anaphora to BSNs is difficult, except under certain circumstances, is quite robust. Second, in those contexts where a token discourse referent which fits the description of the BSN can be licensed, the anaphora coincides with the presence

of other elements in the sentence or context which might be expected to facilitate accommodation, such as an episodic past tense that effectively yields an entailment that a token individual describable by the BSN exists, or an adverb such as *ya / ja* 'already,' as shown by the contrast between (13a) and (ii).

(ii) CATALAN

Ja tinc *anell*. Ahir a la tarda me'*l* vaig comprar

already have ring yesterday at the afternoon 1SG-REF + it-ACC PAST buy

'I already have a ring. I bought it yesterday afternoon.'

[14] There is an important difference between Spanish and Catalan on the one hand and Hindi on the other: in Hindi BSNs are number neutral from a morphosyntactic perspective. As a consequence, Dayal's (2003) semantic analysis of nominal expressions relies on case-marking: accusative-marked direct objects refer to contextually salient and unique entities, they correspond to DPs, and are not an instance of (pseudo-) incorporation, while non case-marked objects, although singular, have a number neutral interpretation, do not correspond to full DPs but to bare nominal projections, and are (pseudo-) incorporated.

(i) anu kitaab / kitaab-ko paRhegii.

Anu book / book-ACC will-read

'Anu will read a book / the book'.

[15] Borthen's analysis of the distribution of BSNs in Norwegian builds on the notion of a 'profiled have-relation.' According to Borthen (2003:190) a 'profiled have-relation'-construction in Norwegian is characterized by the following properties:

(i) a. Any kind of nominal phrase in Norwegian (including bare singulars) can occur as the *possessed argument* of a *have-predicate.*

b. A *have-predicate* is a word that introduces a have-relation (either explicitly or implicitly).

c. A *have-relation* is an asymmetrical coexistence relation between two arguments, called *the possessor* and *the possessed,* where the possessor is *superior* to the possessed rather than the other way round.

d. An argument can be *superior* to some other argument in terms of control, part-whole dependency, animacy, or point of view.

When considering Spanish and Catalan, more conditions apply, as will become clear below.

[16] A reviewer points out that the following example, with Spanish *poseer* 'have, possess' sounds odd:

(i) * El Senador señor Ríos posee dato que necesito.

the senator Mr. Ríos possesses datum that need-1SG

However, we attribute this fact to the more limited use of *poseer* (and the Catalan counterpart *posseir*) in general.

[17] See Guéron (1983, 1986, 1992, 1998, 2003) for a formal analysis that unifies *there* existential sentences in English and inalienable possession in French. See also Baron et al. (2001) and Coene and D'hulst (2003) for extensive work on the expression of possession in natural languages, and Freeze (1992) for a theory that unites the predicative locative, the existential and the 'have' predication.

[18] See Bosque (1996:43-5) for a first approximation of the idea that the V + N forms an individual level (Carlson 1977, Kratzer 1995) "or" characterizing predicate, although as noted below in the text, we do not identify the notion of 'characterizing predicate' with 'individual-level predicate.

[19] It is also relevant to note in this respect, as a reviewer points out, that unlike individual level predicates, the verbs that license BSNs can quite naturally appear in the progressive.

(i) Pedro está buscando apartamento.
Pedro is looking apartment
'Pedro is looking for an apartment.'

[20] We thank M.V. Escandell for pointing out the relevance of (16a) to us.

[21] In this respect we see another contrast between these BSNs and those count nouns that seem to behave as mass, as in (i). The latter allow modification by a locative PP (Borer 2005:102). Note that bare mass terms, which following Chierchia (1998) are lexically plural, are also allowed in this context.

(i) CATALAN

a. Hi ha (força / bastant) pollastre a la nevera.
there is much / quite a lot chicken at the fridge
'There is (much / quite a lot of) chicken on the fridge.'

b. Hi ha (força / bastant) vi a la nevera.
there is much / quite a lot wine at the fridge
'There is (much / quite a lot of) wine on the fridge.'

[22] See also Kayne (1975) and Guéron (1986), who observe that in French only an nominal specified by a determiner can be qualified by an adjective.

(i) FRENCH

a. Il y avait un problème embêtant.

it there was a problem annoying

'There was an annoying problem.'

b. *Il y avait problème embêtant.

it there was problem annoying

[23] The only apparent exception we have found so far is given in (i), but the fact that this predicate allows in prenominal position a degree quantifier (of the sort *molta* 'much', *força* 'quite a lot', *una mica de* 'a little of', etc.) suggests that in this particular example the bare singular *senyal* 'signal' is interpreted as a mass expression. See footnote 21.

(i) Vam aconseguir que arribés senyal a l' altaveu (Brucart 2002:1455)

PAST manage that arrive signal at the loudspeaker

'We managed to get a (or some amount of) signal to reach the loudspeaker.'

[24] We assume that the external argument is not introduced by a lexical category projection, but rather by a functional one. Different functional projections might be responsible for the assignment of nominative case or dative case. See Hale and Keyser (1993, 2002) for relevant discussion for keeping the external argument out of the lexical syntactic representation. See also Kratzer (1996) and Pylkkänen (2002), for the relevant functional category introducing this argument.

[25] See Bosque (2001) for the proposal that different light verbs can have different 'weights'.

[26] Though we will use possible worlds later, and for other reasons we might ultimately want to model these properties differently, for now we will keep things simple and model the properties denoted by BSNs as sets of individuals, type <e,t>.

[27] See Espinal (to appear) for an analysis of the various types of reference to abstract semantic objects that different clitic pronouns encode. Note that in Spanish, the neuter pronoun *lo* would be used in examples such as (30).

[28] The existential predicate might be an exception here, though see McNally (2008) for comments on potential variability in the lexical semantics of existential predicates. Also note that although Zimmermann (1997) argues that verbs such as *need* and *look for* select for property-type objects, Van Geenhoven and McNally (2005) argue that this is an epiphenomenon of the fact that these verbs allow for semantic incorporation of an argument which does not carry an existence entailment with respect to the world of evaluation.

[29] Farkas and de Swart (2003: Chapter 3) mention individual-level predicates as an example of predicates

that block Unification for this reason.

[30] In this respect analysis Farkas and de Swart's analysis differs from Chung and Ladusaw's: While the latter require all arguments to end up saturated (whether via existential closure or combination with an appropriate nominal via function application), the former do not impose this requirement.

[31] With the right additional assumptions, this modifier analysis could perhaps be embedded in Farkas and de Swart's (2003) general framework. Nonetheless, we propose an alternative account here, mainly because it will allow us to establish similarities with other kinds of modification processes in natural language which would not become manifest otherwise.

[32] The notion of 'Appropriately Classificatory' is due to Dowty (1979).

[33] Note, however, that Dobrovie-Sorin et al. (2006) fail to address the inadequacy of the notion of Appropriately Classificatory with regard to the Romance data. See Section 5 for details.

[34] This process can be viewed as forming part of the family of argument-suppression operations that have been proposed either in the lexicon or in the syntax, in order to account for phenomena such as passivization, reflexivization, anticausatives, middles, etc. As pointed out by Kallulli (2006:14), these operations "suppress either an argument position (external or internal), a theta role in the thematic grid of the verb, or some element in the lexical-semantic structure of a predicate (depending on the theory) (Grimshaw 1990, Woolford 1993, Levin and Rappaport-Hovav 1995, Reinhart and Saloni 2004, among others)."

[35] The input to the CP rule as stated is extensional insofar as it entails the existence of an individual *y* who participates in the relation the verb describes. This is obviously too strong for opaque verbs such as *need*, but there are various solutions to this depending on one's approach to opacity that can guarantee the necessary modal embedding of the participant that bears the θ_2 role. What is crucial is that (i) predicates such as *need* include as part of their semantics a dependency relationship between events with regard to a world of evaluation, and that (ii) the output of the rule will be the same both for opaque and transparent verbs, modulo any differences in existence entailments that are carried over from the input semantics.

[36] See also Larson (1998), and McNally and Boleda (2004) for different modification rules which are very similar in spirit.

[37] Spanish existential *haber* differs from Catalan *haver-hi* with regard to the fact that the oblique clitic *y* is only spelled out in the indicative present tense; because of this in the rest of the paper we shall focus only

on Catalan data. See e.g. Freeze (1992) for a description of the relation between existential and locative sentences.

[38] See, among others, Benveniste (1966), Guéron (1986), Freeze (1992), and Kayne (1993).

[39] For quirky subjects in Romance languages, see also Masullo (1993), Longa et al. (1998), and Fernández-Soriano (1999). However, notice that the examples in (46a) and (47a) cannot be claimed to be ungrammatical due to the need for an explicit subject, since (i) both Catalan and Spanish are pro-drop languages, and (ii) in verbal tenses other than the indicative present Spanish existential-*haber* does not require the locative clitic *y*.

[40] See Alexiadou (2003) for the contrast between the unaccusative and the small clause analyses, as applied to the structure of possession. See also Section 3 above.

[41] Oblique clitic *hi*, which comes from the Latin demonstrative *hic* and the Latin adverb *ibi*, is supposed to exhibit a double nature as a determiner and as a preposition (cf. Longa et al. 1998, Rigau 1997). This adverbial weak pronoun lacks any deictic use (that is, any specific spatio-temporal reference) unless it occurs in non-existential and non-idiomatic expressions (Kayne 2006).

See Cardinaletti (1999) and Cardinaletti and Starke (1999) for weak pronouns, and see Kayne (1975, 1989, 1991), and Sportiche (1999), among others, for morphosyntactic cliticization.

[42] See Kratzer (2005) for an analysis of minimal pronouns that acquire agreement features in the course of the derivation, via agreement and morphological spell-out.

[43] In French the existential proform is clearly not the subject, since subject position of existentials contains the dummy *il* (Freeze 1992:567).

(i) a. Il y a deux enfants dans l'auto.
it p has two children in the car
'There are two children in the car.'

b. *Deux enfants y a dans l'auto
two children p has in the car

c. *Y a deux enfants dans l'auto
p has two children in the car

[44] In Spanish this merge operation provides an overt conflation (in Hale and Keyser's terms) only in the case of the present tense form *hay* 'there is'.