

Eventive existentials in Catalan and the topic-focus articulation

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The role of codas in existential sentences has been a matter of debate since the early 70's, but under this label a quite heterogeneous set of material has been included, leading to much misplaced discussion. A case which is so far unresolved is that of eventive existential sentences: *Yesterday, there was a live pig roasted*. This existential construction asserts the existence of a situation involving the pivot (*a live pig*) and the coda (*roasted*) rather than just the existence of the individual denoted by the pivot. In this article I will revisit this construction in light of partially unattested data from Catalan, a Romance language which is well-known for showing a systematic violation of the Definiteness Effect in existentials. I will concentrate on extraction facts and information structure to show that recent proposals favouring a small clause analysis of eventive existentials in Catalan (Leonetti 2008) are weak on syntactic grounds, and inconsistent on semantic and informational grounds. Given this evidence, I will defend a VP-adjunct analysis of codas in eventive existentials, where both the pivot and the coda form part of the assertion, and a null stage topic, optionally restricted by an overt locative, counts as the topic of the sentence*.

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Throughout the text I follow the Leipzig Glossing Rules. I will thus use the following abbreviations: f=feminine, LOC=locative, N=neuter, PL=plural, PST=past, REFL=reflexive, SG=singular.

1. Introduction: eventive existentials

1.1. The theoretical problem

The role of codas in existential sentences has been a matter of debate since the early 70's, particularly with regard to the role played by their aspectual properties, such as the stage-level vs. individual-level predicate contrast in the following examples by Milsark (1974: ex. 108):

(1) a. There was a man sick/*tall.
b. There are people sick/*tall.

Yet, under the coda label quite a heterogeneous set of material has been included, leading to much misplaced discussion (see Francez 2007: ch. 2 for illuminating methodological insights). One outstanding case is that of eventive existential sentences, like the following from McNally (1992):

(2) a. There has just been a man shot. (McNally's ex. 310)
b. Yesterday, there was a live pig roasted. (McNally's ex. 293)

In this existential construction the coda is typically a past participle (or a gerund), and the existence of a situation involving the pivot (*a live pig*) and the coda (*roasted*) is asserted, rather than the existence of the sole individual denoted by the pivot. Moreover, the eventive nature of the coda is supported by the natural occurrence of event modifiers like *just* or *yesterday*.²

Two basic proposals have been put forward for dealing with eventive existentials. These proposals differ from each other with respect to the level and the means by which the eventive reading is obtained: a syntactic proposal, based on a small clause (**SC**) structure where the pivot is the subject and the coda is the predicate (Stowell 1978, Chomsky 1981, Safir 1985, Freeze 1992, Moro 1997, Leonetti 2008), and a semantic proposal, where, as in other existential constructions, the pivot is the complement of the existential verb, and the coda is either a VP adjunct (McNally 1992; Francez 2007, 2009) or a complement of the existential verb *be* (Keenan 1987; Pollard & Sag 1994).³ Here I will consider again the exact articulation of eventive codas in light of the observations raised by Leonetti (2008), regarding the connection between the Definiteness Effect (**DE**) and the coda. More specifically, Leonetti shows that Catalan existentials, which are commonly held to violate the **DE**, do respect this restriction in certain

circumstances. When a prototypical locative coda is present, definite NPs are fine if the coda is dislocated (3a-b), but odd if the coda is in canonical position (3c):

(3) a. Hi havia el degà, a la reunió.
LOC had the dean at the.F meeting
'The dean was at the meeting.'

b. A la reunió, hi havia el degà.
at the.F meeting LOC had the dean

c. ?? Hi havia el degà a la reunió.
LOC had the dean at the.F meeting

Notwithstanding, when an eventive coda is present forming a SC with the pivot, definite DPs and even proper names are fine (Leonetti 2008: ex. 21):

(4) Hi ha la Maria molt enfadada / al telèfon/ que espera.
LOC has the Maria very angry / to-the phone/ that waits
'Mary was very angry/at the phone/waiting.'

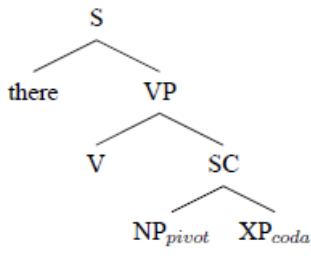
In this article, I will concentrate on this eventive existential subtype, which Leonetti (2008: 24) characterizes as follows (see Cruschina 2012 for similar insights and a fine-grained typology of Italian existential sentences):⁴

The second basic type is the eventive existential. I believe that the only thing that changes here, with respect to proper existentials, is that the post-verbal expression is propositional and of the Stage-Level kind. The syntactic format of the propositional content is a small clause with its own Topic/Focus articulation. Inside the small clause the DP acts like an internal topic, thus eliminating any motivation for the DE: we noticed that names and definite DPs are possible in these contexts (i.e. (4); XV).

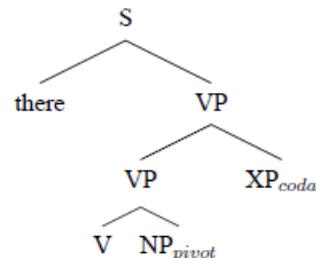
My goal will be to test the predictions of Leonetti's hypothesis against the formal and informational properties of the Romance SC, on the one hand, and of pivots and codas on the other. I will consider the results of some formal tests in section 2, and the topic-focus articulation of eventive existentials in section 3. On the basis of my findings, and the comparison with uncontroversial subject-predicate structures, we will be able to discard a SC analysis of eventive existential (5a), in

favour of a VP-adjunct approach along the lines suggested by McNally (1992) and Francez (2007, 2009), among others (5b):

(5) a.



b.



However, I will depart from Francez (2007, 2009) in taking both the pivot and the coda to be part of the assertion, as suggested by their being within the scope of adverbial quantifiers:

(6) Habitualment, als col·legis hi ha un director
 usually at.the.PL schools LOC has a principal
 criticant els pares.
 criticizing the parents

‘Usually, in schools there is a principal criticizing the parents.’

- i. “Usually, if there is somebody in schools, it is a principal criticizing the parents.”
- ii. #“Usually, if there is somebody criticizing the parents in schools, it is a principal.”

Before going into the details of the analysis, I shall delimit the exact nature of my object of study: what counts as an eventive existential?

1.2. *The empirical domain*

There is no widely accepted answer to the question of what counts as an eventive existential. For instance, McNally (1992: 4.4) restricts its scope to past participles (7), leaving aside relative clauses. On the basis of examples like (8), she claims that “DPs with full relative clauses do not give rise to ‘eventive’ existentials” (McNally 1992: 185):

(7) a. #There has just been a man who was shot.
 b. #Yesterday there was a man who was shot.
 c. #Yesterday, there was a live pig that was roasted.

(8) a. There has just been a man shot. (McNally's ex. 310)
 b. Yesterday, there was a live pig roasted. (McNally's ex. 293)

Here we can appreciate that the eventive value of the existential is linked to the presence of temporal delimiters like *yesterday* or an aspectual adverb like *just*, which favour the punctual reading of the perfect tense (on *just* see also the comments by Milsark 1974: 78ff). Other scholars (e.g. Beyssade 2004: 69ff, Leonetti 2008 or Cruschina 2012) take a broader stand and include relative clauses (9) or even locative PP codas (10):

(9) a. Il y a le telephone qui sonne. [French]
 it LOC has the phone that sounds

b. Il y a le chat qui meurt de froid dehors.
 it LOC has the cat that dies of cold outside

(10) a. C'è Gianni in giardino/al telefono /che aspetta. [Italian]
 LOC-is John in garden /at-the phone /that waits

b. Hi ha la Mariamolt enfadada /al telèfon /que espera. [Catalan]
 LOC has the Mary very angry /at-the phone /that waits

One can easily appreciate that the inclusion of locative PPs is a major source of ambiguity, since it makes really hard to distinguish eventives from purely locative existentials. Moreover, as Leonetti (2008) correctly points out, there is a lot of cross-linguistic variation here, as the Spanish case demonstrates: Spanish does not accept any of the options in (9) or (10). All this calls for a clear-cut battery of tests able to identify eventive existentials, which I cannot develop here, due to space restrictions. Therefore, to rely on uncontroversial evidence, in this paper I will restrict the discussion to participial and gerundival codas, which naturally possess eventive properties, giving preference to the latter for a practical reason: unlike English, gerunds in Catalan cannot be noun modifiers, and this allows us to remove from the picture the analysis of codas as modifiers of the pivot defended by Williams (1984). Hence, existentials like the following will serve as running examples thorough the paper:

(11) a. Hi ha la Maria esperant-se fa estona.
 LOC has the.F Mary waiting-REFL makes while
 'Mary has been waiting for a while.'

b. Hi ha la Maria adormida des d'ahir.
LOC has the.F Mary slept from of-yesterday
'Mary is sleeping since yesterday.'

Here the pivot is a proper name, which in Catalan is typically preceded by a definite article, and the coda is a verbal gerund (11a) or past participle (11b) (the presence of a temporal adverbial clearly suggests that we are dealing with verbal, and not adjectival forms see also § 2.1). Nonetheless, as one anonymous reviewer pointed out, participles in general and some gerunds in particular may be reanalysed as adjective modifiers. For instance, *vigilant* 'watching' can be both a verbal gerundive form and an adjectival one:

(12) a. El vaig enxampar vigilant les veïnes.
him PST.1SG catch watching the.F.PL neighbour.F.PL
'I caught him watching the neighbours.'

b. una persona vigilant
a.F person vigilant
'a vigilant person'

To avoid the latter reading, I will exclusively use transitive gerundive forms with direct object and with no adjectival use. As for participle codas, I will combine them with proper name pivots, thus avoiding a restrictive modification interpretation.

2. Formal tests of the eventive reading

Even though the SC analysis of existential sentences has a long-standing tradition, stemming from Stowell (1978) (see e.g. Chomsky 1981, Safir 1982, 1985, Freeze 1992, Moro 1997), its defenders do not offer much solid empirical evidence for this analysis, other than the availability of 'propositional' paraphrases. One notable exception is Safir (1983), who argues for the SC analysis on the basis of pairs like the following:

(13) a. There are [workers angry about the pay].
b. [Workers angry about the pay] is exactly the kind of situation we are trying to avoid.

He claims that the constituent between brackets is a SC and not an NP, as the agreement pattern in (13b) suggests. Yet, as Contreras (1987) and Baltin (1998) point out, Safir's argument is deviant for several reasons. On the one hand, they note that the agreement facts have nothing to do with syntactic structure, but rather with the possibility of interpreting the expression in subject position as a situation, as the following examples make clear (the first one is from Baltin 1998, the others are from Francez 2007):

(14) a. [Several angry workers] is just the sort of situation that the ad campaign was designed to avoid.
b. [No students] means you won't be nervous (when you give the talk).
c. [Few cars] means we'll get there faster.
d. [Many guests] means many presents.

On the other hand, Safir's (1983) SC analysis raises one crucial question: what forces plural agreement in the existential in (13a)? If the existential verb selects a SC, the verb should surface as singular (**There is workers angry about the pay*), exactly as in (13b).

In this paper, I will explore a more formal approach to this issue checking the SC hypothesis for eventive existentials against three standard tests regarding constituency: extraction, scope assignment, and negative polarity items (NPI) licensing.

Moreover, in order to refine the tests, I will compare the results of the eventive existentials with those of perception SCs like the following:⁵

(15) a. Vaig veure [la Maria espiant els veïns].
PST.1SG see the.F Mary spying the neighbours
'I saw Mary spying the neighbours.'

b. Vaig veure [la Maria asseguda a una cadira].
PST.1SG see the.F Mary seated to a.F chair
'I saw Mary sitting in a chair.'

Obviously, as Josep M. Brucart (p.c.) and one anonymous reviewer point out, one should be cautious on the conclusions regarding the comparison between eventive existentials and perception SCs, since we could be dealing with different subtypes of SCs with a great deal of internal variation (see for instance the approaches in Moro 1997, Rothstein 2001 or den Dikken 2006). Yet, beyond these relevant differences, the basis of the comparison remains unchallenged as long as we focus on con-

stituency beyond other factors. The SC analysis, whatever the flavour it comes with, makes clear testable predictions concerning the structural relations between the pivot and the coda, and their respective behaviour regarding extraction or scope. Moreover, these predictions are sharply different from the ones made by the VP-adjunct analysis. Henceforth, although tentative, the evidence in this section will help us test the respective values of each hypothesis, pending a more complete comparative study involving different kinds of SC structures.

2.1. Extraction

2.1.1. Extraction of pivot and coda as a constituent

When it comes to extraction, the most obvious test we can conduct is displacement of both the pivot and the coda as a single constituent. Yet, the facts are contradictory. On the one hand, extraction is entirely bad when the pivot is definite, but it improves when the pivot is indefinite:⁶

(16) a. Hi havia [el/un policia espaint els sospitosos].
LOC had the/a policeman spying the.PL suspects

b. Era [*el /?? un policia espaint els sospitosos]
was the / a policeman spying the.PL suspects
el que hi havia.
the that LOC had

c. El que hi havia era [*el/ ? un policia espaint els
the that LOC had was the/ a policeman spying the.PL
sospitosos].
suspects

This state of affairs is not reproduced with SCs of perception verbs, which do allow extraction of both the subject and the predicate as a unit regardless of the definiteness of the former:

(17) a. Vaig veure [el/un policia espaint els sospitosos].
PST.1SG see the/a policeman spying the.PL suspects

b. Era [el/un policia espaint els sospitosos]
was the/a policeman spying the.PL suspects
el que vaig veure.
the that PST.1SG see

c. El que vaig veure era [el/un policia espiant
 the that PST.1SG see was the/a policeman spying
 els sospitosos].
 the.PL suspects

If we consider a verb like *imagine*, the results are similar:

(18) a. M'imaginava [el/un policia espiant els sospitosos].
 to.me-imagine the/a policeman spying the suspects

b. Era [el/un policia espiant els sospitosos]
 was the/a policeman spying the.PL suspects
 el que m'imaginava.
 the that to.me-imagine

c. El que m'imaginava era [el/un policia espiant
 the that to.me-imagine was the/a policeman spying
 els sospitosos].
 the.PL suspects

Yet, one must note that SCs depending on verbs of judgment cannot be extracted:

(19) a. Considerava [el/*un policia corrupte].
 consider.1/3SG the/a policeman corrupt

b. *Era [el/un policia corrupte] el que considerava.
 was the/a policeman corrupt the that consider.1/3SG

c. *El que considerava era [el/un policia corrupte]
 the what consider.1/3SG was the/a policeman corrupt

On the other hand, as Manuel Leonetti pointed out to me, in Spanish, the following clefts are fine with the neuter article:

(20) a. Era un policía durmiendo lo que había.
 was a policeman sleeping the.N what had

b. Lo que había era un policía durmiendo.
 the.N what had was a policeman sleeping

Yet, this observation cannot be interpreted as evidence for his proposal for Catalan, for a basic reason: as he himself argues (Leonetti 2008: 24) the existential verb cannot select a SC as its argument in Spanish. Hence, in (20) we are confronted with the awkward situation in which the test supporting a SC analysis works fine in a language where no SC is predicted to exist. In any event, the main conclusion from the evidence provided so far is that the cleft test is inconclusive regarding the presumed SC formed by the pivot and the coda.

Focus fronting does not fare better, given that the same unexpected asymmetry is found with regard to definiteness, which does not appear in perception SCs:

(21) a. No t'ho creuràs: [*el/?? un policia
 not to.you-it believe.FUT.2SG the/a policeman
 perseguint-los a tots dos] hi havia.
 pursuing-them to all.PL two LOC had

b. No t'ho creuràs: [el/un policia
 not to.you-it believe.FUT.2SG the/a policeman
 perseguint-los a tots dos] vaig veure.
 pursuing-them to all.PL two PST.1SG see

c. No t'ho creuràs: [el/un policia
 not to.you-it believe.FUT.2SG the/a policeman
 perseguint-los a tots dos] es va imaginar.
 pursuing-them to all.PL two REFL PST.3SG imagine

2.2.1. Extraction from within the coda

Another piece of evidence against the SC analysis comes from the fact, well attested in the literature, that, whereas extraction of a complement of the coda is more or less fine in existentials, extraction of an adjunct is out (examples from McNally 1992: 68; see also Hartmann 2008: 173):

(22) a. To whom has there just been a celebrity introduced?
 b. *How badly has there been a man shot?

Hartmann (2008: 172) notes that this argument/adjunct extraction asymmetry is exactly what happens with non-tensed adjuncts generally:

(23) a. Which t_i did you leave [without talking about t_i]?
 b. *How t_i did you leave [without behaving t_i]?

If we apply these extraction tests to Catalan eventive existentials, we find that extraction from the coda is even more restricted than in English, given that neither arguments (24a) nor adjuncts (24b) yield a good result:

(24) a. *En què t_i hi havia la Maria interessada t_i ?
 in what LOC had the.F Maria interested.F
 b. *Com t_i hi havia la Maria d'interessada t_i ?
 how LOC had the.F Maria of-interested.F

Yet, this is not the case with past participle perception SCs, which allow extraction of both arguments and adjuncts:

(25) a. En què t_i vas veure la Maria interessada t_i ?
 in what PST.2SG see the.F Maria interested.F
 b. Com t_i vas veure la Maria d'interessada t_i ?
 how PST.2SG see the.F Maria of-interested.F

Nevertheless, with gerunds, extraction seems less straightforward, regardless of the argumental status of the extracted constituent (note also the obligatory inversion of the subject of the gerundival phrase):

(26) a. *Què t_i hi havia comprant t_i el policia?
 what LOC had buying the policeman
 b. *Com t_i hi havia comprant el diari t_i el policia?
 how LOC had buying the newspaper the policeman

(27) a. *Què t_i vas veure comprant t_i el policia?
 what PST.1SG see buying the policeman
 b. *Com t_i vas veure comprant el diari t_i el policia?
 how PST.1SG see buying the newspaper the policeman

To sum up, even though clefting and focus fronting are inconclusive tests for the SC analysis, when wh-extraction from the coda is considered, one can safely conclude that eventive codas are islands, unlike predicates of perception clauses. Obviously, this fact runs against the SC analysis of eventive existentials.

2.2. Scope

Scope relations within existential sentences have played a major role in supporting particular details of several semantic proposals, as is the case with McNally's (1992: §§ 3.2.2-3.4.2) analysis of pivots as property-denoting elements or Francez's (2007, 2009) analysis of codas as modifiers. Here, I will consider what scope relations between the pivot and the coda can tell us with regard to their syntactic placement and constituent structure. First, one must note that, as discussed at length by Francez (2007: ch. 5; 2009), building on original insights by Kuno (1971) and Heim (1987), the coda must scope over the pivot:

(28) Hi ha un policía perseguint cada lladre.
LOC has a policeman pursuing every thief

- a. 'For every thief there is a policeman tracking him down.'
- b. '#There is a policeman who is tracking every thief down.'

This situation is quite uncommon in Catalan, which generally disallows inverse scope with distributives, as in the following secondary predicate structures:

(29) ?? He descobert un policia molt enfadat amb cada lladre.
have.1SG found a policeman very angry with every thief

- a. '#For every thief I have found a policeman who is angry at him.'
- b. 'There is a policeman who I have found that he is angry at every thief.'

Here, it is impossible to get the distributive reading (29a). This leaves us with the awkward non-distributive reading of *cada* 'every' (29b), which, as is well-known, always has wide scope in Catalan. This description seems accurate when we consider the alternative sentence with the non-distributive universal quantifier *tot el N* 'every N' (lit. 'all the'):

(30) He descobert un policia molt enfadat amb tots
have.1SG found a policeman very angry with all.PL
els lladres.
the.PL thieves

- a. #‘For every thief I have found a policeman who is angry at him.’
- b. ‘There is a policeman who I have found that he is angry at every thief.’

In this case the position of the quantifier correlates with its preferred non-distributive reading in (30b). In any event, the evidence reviewed with regard to scope relations clearly indicates that the coda occupies a privileged scope position with respect to the pivot, which seems scopally inert, as suggested in the literature. Leaving aside the details of the denotation of the pivot and the coda, one can conclude that from a purely structural point of view, scope facts nicely follow from an analysis that places the coda in a higher VP position from where it c-commands the pivot, and can hardly be accounted for in a SC analysis.

2.3. *NPI licensing*

Another structural test that helps us ascertain the structural relations between the pivot and the coda in eventive existentials is the licensing of negative polarity items (**NPIs**), which must be in the scope of a downward entailing operator (see the ‘classic’ analysis in Ladusaw 1980, 1996 and a good critical review of the subject in Penka & Zeijlstra 2010). When we consider an NPI in pivot position, licensing is fine thanks to negation (NPIs are italicised for the ease of reference):⁷

(31) a. En aquesta ciutat no hi ha *cap* policia
in this.F town not LOC has no policeman
perseguint crims.
investigating crimes
‘In this town, there are no police officers investigating crimes.’

b. En aquesta ciutat no hi ha *ningú/cap* policia
in this.F town not LOC has nobody/no policeman
perseguint crims.
investigating crimes
‘In this town, nobody/no police officer is investigating crimes.’

One can safely conclude that the pivot is under the scope of negation. Compare, now, what happens when the NPI is in the coda:

(32) a. ??En aquestaciutat no hi ha policies
in this.F town not LOC has policemen
perseguint *cap* crim.
investigating no crime
'In this town, there are no police officers investigating any crime.'

b. ??Ara no hi ha policies perseguint *cap* crim.
now not LOC has policemen investigating no crime
'Nowadays, there are no police officers investigating any crime.'

The impossibility of licensing NPIs in the coda strongly suggests that the coda is out of the scope of negation in eventive existentials, which is in accordance with the VP-adjunct analysis, but seems unexpected under the SC analysis. Now, compare the behaviour of perception SCs:

(33) a. En aquesta ciutat no he vist policies
in this.F town not have.1SG seen policemen
perseguint *cap* crim.
investigating no crime
'In this town, I have not seen police officers investigating any crime.'

b. Ara no veus policies perseguint *cap* crim.
now not see.2SG policemen investigating no crime
'Nowadays, you do not see police officers investigating any crime.'

c. No m'imagino un policia perseguint *cap* crim.
not to.me-imagine a policeman investigating no crime
'I can't imagine a police officer investigating any crime.'

Here, licensing within the complement of the gerund is fine. Exactly as is the case with quantifier scope, if we take the standard assumption that negation scope must involve c-command, the NPI licensing data leads us to conclude that the eventive coda is too high in the structure to form a SC with the pivot, by contrast with what happens with perception eventive SCs.

3. Information status of the pivot and the coda

In section 1, we briefly discussed Leonetti's (2008: 24) characterization of eventive existentials in terms of the topic/focus articulation. He crucially argued that "[i]nside the small clause the DP acts like an internal topic". Unfortunately, Leonetti is not very specific about the content and properties of this 'internal topic'. My impression (shared by an anonymous reviewer) is that we can interpret Leonetti's internal topic in terms of Erteschik-Shir's (1997, 2007) concept of SUBORDINATE TOPIC, but this merits a brief discussion of Erteschik-Shir's system (see Lambrecht 1994 for similar insights, and Nikolaeva 2001 and Basilico 2003 for refinements), which I will provide in the next subsection. Then I will provide three pieces of evidence for analysing the pivot as part of the assertion of the sentence: the interaction with adverbs of quantification (§ 3.2), the nature of the pivot (§ 3.3), and focus oriented adverbs (§ 3.4).

3.1. Primary and secondary topics

Let us begin with the concept of stage topic by Erteschik-Shir's (1997: 26):

Spatio-temporal arguments (à la Kratzer) may play the role of a topic. [...] A card which signifies the "here and now" of the discourse situation is always located on top of the file. It follows that spatiotemporal arguments may play the role of topic and that the truth value of sentences with such topics is determined by examining a card with a spatiotemporal heading. Such topics I call Stage topics.

Interestingly, Erteschik-Shir presents existential sentences as a prototypical case of a construction involving a stage-topic and focusing the pivot, in the sense of informational focus, together with clefts, which involve contrastive focus (Erteschik-Shir 2007: 81):

(34) a. There is a FLY in my soup.
b. It was a MOSQUITO that bit me.
c. What I saw was A BIG WASP.

So, for Erteschik-Shir, pivots of existentials are unmistakable foci. Let us now consider subordinate topics. Erteschik-Shir (1997, 2007), like Lambrecht (1994), argues that the topic-focus articulation is recursive under certain conditions. Hence besides the stage topic, sentences allow subordinate (or secondary) topics, as in the following example:

(35) Q: Tell me about your brothers John and Bill.
A: JOHN is the smart one.

Here, Erteschik-Shir argues for the following focus-structure (2007: 48):

(36) $[\{John_{foc}, Bill\}_{top}]_{top} [is the smart one]_{foc}$

The main topic is the contextually salient set $\{John, Bill\}$, from where the focus *John* is obtained. The other element of the set, *Bill*, becomes then the subordinate topic, which can be dropped (35) or be pronounced:

(37) JOHN, not Bill, is the smart one.

Notably, in Erteschik-Shir's system, the subordinate topic is a proper subset ($\{Bill\}$) of the main topic ($\{John, Bill\}$). Consider a second case from Lambrecht (1994: 148):

(38) a. Whatever became of John?
b. He married Rosa,
c. but he didn't really love her.

While *John* is the (main) topic in both (38b) and (38c), the informational status of *Rosa* changes: it is a focus in (38b), but becomes topical in (38c), and it is realized as pronoun. Since the latter sentence is still about John, Lambrecht suggests that *her* (= *Rosa*) is a secondary topic (a subordinate topic in Erteschik-Shir's 1997, 2007 terms), namely a topic that is less salient than the main topic (e.g. *John*). The function of secondary topic is typically realized in English by object pronouns, but is conventionally realized by means of scrambling in Dutch or German, and by object shift in Scandinavian (see Erteschik-Shir 2007: § 3.4).

When we compare the role and content of secondary/subordinate topics with the behavior of pivots in eventive existential sentences, the conclusion is very clear: pivots are not secondary/subordinate. On the one hand, if we want to maintain, as Erteschik-Shir does, that the main topic of existential is a null stage topic (optionally restricted by a locative PP), then no obvious relation can be established between the main and the subordinate topic. It comes without surprise then that Erteschik-Shir (1997, 2007) takes existential sentences as prototypical examples of all-focus predication. On the other hand, as a quick comparison with the above cases of subordinate topics makes

clear, pivots cannot be dropped, nor can they be realized as pronouns or dislocated:

(39) a. Hi ha *(la Maria) passejant-se pel jardí.
LOC has the.F Mary walking-REFL by-the garden

b. *Hi ha ella passejant-se pel jardí.
LOC has she walking-REFL by-the garden

c. *Hi ha passejant-se pel jardí, la Maria.
LOC has walking-REFL by-the garden the.F Mary

Hence, there is every reason to discard the idea that pivots of eventive existential form a natural class with clear-cut topical elements like weak pronouns in English, scrambled DPs in German and Dutch, shifted objects in Icelandic or right-dislocates in Romance. All in all, the evidence clearly suggests that we are not dealing with a secondary/subordinate topic as defined by Lambrecht (1994) or Erteschik-Shir (1997, 2007).

3.2. Interaction with adverbs of quantification

There exists a great deal of work (see, among others, Hajicová *et al.* 1998, Partee 1999 and Herburger 2000) on the interaction between quantification and information structure. Among the findings, it has been firmly established that topics and background material map into the restriction of adverbs of quantification, whereas focus maps into the scope, sometimes with detectable truth-conditional effects. Moreover, it has been noted in the literature (Francez 2009: 39) that the pivot is projected into the scope of adverbs of quantification, whereas the coda is projected into the restriction. Hence, a sentence like (40a) gets the interpretation that most zoos have a zoo-keeper (40b) (from Francez 2009: 38):⁸

(40) a. There is usually a zoo-keeper in a zoo.
b. USUALLYx[zoo(x)][a(∃y[zoo-keeper(y)],*<x*)]

Francez's observation fits nicely with the original intuition by Rigau (1988, 1994) that in existential sentences the topic is the locative, be it overt (i.e. the locative PP coda) or null (i.e. a stage topic in Erteschik-Shir's 1997 terms).

Yet, when it comes to eventive existentials, where the coda is not locative, things are different: both the pivot and the coda project into the scope of the quantifier:

(41) Als col·legis sempre hi ha un director rondinant.
at-the.PL schools always LOC has a principal grumbling

- a. [_{operator} always], [_{restriction} in schools], [_{scope} there is a principal grumbling]
- b. # [_{operator} always], [_{restriction} grumbling in schools], [_{scope} there is a principal]
- c. # [_{operator} always], [_{restriction} a principal in schools], [_{scope} there is one grumbling]

(42) A les reunions de col·legi habitualment hi ha un pare
at the.PL meetings of school usually LOC has a father
queixant-se dels horaris.
complaing-REFL of-the.PL timetables

- a. [_{operator} usually], [_{restriction} at school meetings], [_{scope} there is a father complaining about timetables]
- b. # [_{operator} usually], [_{restriction} complaining about timetables at school meetings], [_{scope} there is a father]
- c. # [_{operator} always], [_{restriction} a father at schools meetings], [_{scope} he is there complaining about timetables]

The fact that both the pivot and the coda project into the scope of the quantifier in (41) and (42) strongly suggests that they are both part of the assertion, unlike what happens with locative codas of non-eventive existentials (e.g. Francez's 2009 example in (40)), and the locative adjuncts in (41-42).⁹ This nicely fits in with Rigau's (1988, 1994) insight that the topic of the existential sentence is the locative phrase or with the hypothesis by Erteschik-Shir (1997) that the topic is a null stage-topic, sometimes restricted by means of a locative PP (as suggested by an anonymous reviewer).

In any event, the behaviour of Catalan existentials with respect to adverbs of quantification runs counter to Leonetti's claim that "[i]nside the small clause the DP acts like an internal topic" (Leonetti 2008: 24), since his hypothesis wrongly predicts that the pivot should project on the restriction of the quantifier. Again, even though the evidence is subtle, the odds are clearly against the SC analysis, offering a straightforward answer to the facts reported.

3.3. *The nature of the pivot*

We have just seen that both the pivot and the coda project into the restriction of adverbial quantifiers, which is at odds with Leonetti's suggestion that the pivot is the topic of the SC selected by the existential verb. Another piece of evidence comes from the kind

of nominals we find as pivots, which are by no means those that one would standardly consider typical candidates for topichood. Without going into the details (see Villalba 2009: ch. 2) for extensive discussion), only quantifiers allowing a partitive reading are easily found as clitic left-dislocates. Consider, for instance, the contrast between monotone increasing quantifiers, on one hand (43), which allow a partitive reading, and monotone decreasing (44) or excess quantifiers (45), on the other, which do not:

(43) *Alguns/ Molts (dels) llibres, els vam trobar al calaix.*
 some many of-the.PL books them PST.1PL find at-the drawer
 ‘Some/Many (of the) books, we found in the drawer.’

(44) **Menys de quatre/*Pocs (dels) llibres, els vam trobar*
 less of four few of-the.PL books the PST.1PL find
 al calaix.
 at-the drawer
 ‘*Less than four/Few (of the) books, we found in the drawer.’

(45) **Massa /*Excessius (dels) llibres, els vam trobar*
 too.many excessive.PL of-the.PL books them PST.1PL find
 al calaix.
 at-the drawer
 ‘Too many (of the) books, we found in the drawer.’

In conclusion, only quantifiers that can be interpreted partitively make good topics in Catalan. Now, let us return to eventive existentials.

Given the evidence just reviewed, if pivots of eventive existentials were topics, as argued for by Leonetti (2008), the prediction could be made that only monotone increasing quantifiers would be fine in this position. Yet, this prediction is not confirmed at all by the evidence:

(46) a. *Hi ha alguns (dels) policies perseguint*
 LOC has some.PL of-the.PL policemen pursuing
 els lladres. [monotone increasing]
 the.PL thieves

b. *Hi ha pocs (*dels) policies perseguint*
 LOC has few.PL of-the.PL policemen pursuing
 els lladres. [monotone decreasing]
 the.PL thieves

c. Hi ha massa (*dels)policies persecuint
LOC has too.many-of-the.PL policemen pursuing
els lladres. [excess]
the.PL thieves

Note that the argument that the problem has to do with clitic left-dislocation can be easily discarded, given that this state of affairs extends to other Romance non-verbal subject-predication structures like the ‘N-of-an-N construction’ or non-verbal exclamatives, where it is well-established that the inverted predicate-subject structure parallels a comment-topic structure (see Villalba & Bartra-Kaufmann 2010 for details and references):

(47) a. Els idiotes d’alguns (dels) alcaldes. [monotone increasing]
the.PL idiots of-some.PL of-the.PL mayors
‘Those idiots of some mayors’

b. *Els idiotes depocs (dels) alcaldes. [monotone decreasing]
the.PL idiots of few.PL of-the.PL mayors

c. *Els idiotes de massa (dels) alcaldes. [excess]
the.PL idiots of too.many-of-the.PL mayors

(48) a. Magnífics,alguns(dels) llibres! [monotone increasing]
terrific.PL some.PL of-the.PL books
‘Terrific, some books’

b. *Magnífics, pocs (dels) llibres! [monotone decreasing]
terrific.PL few.PL of-the.PL books

c. *Magnífics, massa (dels) llibres! [excess]
terrific.PL too.many-of-the.PL books

To be fair, we should note that perception SCs do not show a contrast with existentials regarding this feature:

(49) Vaig veure pocs/ massa nens esperant-se
PST.1SG see few.PL too.many children waiting-REFL
al passadís.
at-the corridor
‘I saw few/too many children waiting at the corridor.’

A further piece of evidence against analysing pivots as topics comes from the interpretation we obtain with bare nouns. As Basilico (2003: 4) notes, while bare plurals in bare verbal SCs are interpreted as existentials (as expected from a thetic – i.e. all-focus – context), bare plurals in adjectival SCs receive a generic interpretation (as expected from a categorical – i.e. topic-focus – context):

(50) a. The guard saw prisoners leave.
b. The guard considers prisoners intelligent.

This contrast is expected from the different information structure of the SC involved. While bare verbal SCs as (50a) involve a categorical predication with an explicit topic and a focus, adjective SCs as (50b) involve a thetic predication, with an implicit stage topic, so that the bare plural subject forms part of the focus.

Interestingly, Catalan does not allow bare plurals (which cannot be interpreted generically; see Espinal 2011, and references therein) as subjects of SCs (see Ramos 2002: 2018 for Catalan and Demonte & Masullo 1999: 2502 for Spanish):

(51) a. ??/*Vaig veure presoners escapant per la finestra.
PST.1SG see prisoners escaping by the.F window
'I saw prisoners escaping through the window.'

b. *Considero presoners intel·ligents.
consider.1SG prisoners intelligent.PL
'I consider prisoners intelligent.'

c. *Semblen presoners intel·ligents.
seem.3PL prisoners intelligent.PL
'Prisoners seem intelligent.'

When we move to existentials, we are confronted with the well-known fact that bare plurals are perfect in pivot function, and only get the existential interpretation:

(52) Hi havia nens jugant al jardí.
LOC had children playing at-the garden
'There were children playing in the garden.'

Since Leonetti's SC analysis crucially assumes the bare plural in (52) to be the topic of the SC, and bare plurals cannot be topics as long as they cannot get a generic interpretation in Catalan (see Espinal 2011), he incorrectly predicts (52) to be totally impossible, contrary to fact.

Taken at face value, the evidence reviewed in this section casts serious doubts on Leonetti's claim that pivots of eventive existentials are topics.

3.4. (In)compatibility with focus particles

We have seen in the preceding subsections that pivots of eventive existentials do not behave as topics in any clear sense. In this subsection we will consider the behaviour of the pivot and the coda regarding focus particles like *només* 'only'. On the one hand, under a SC analysis, one could expect that the focus operator *només* 'only' would scope over both the pivot and the coda. Yet, it is far from clear that we have such a reading:¹⁰

(53) A l'habitació, hi ha només en Pere dormint...
at the-room LOC has only the Peter sleeping

- #i no pasla Maria estudiant.
and not NEG the.F Maria studying
- i no pas la Maria.
and not NEG the.F Maria
- #i no pas estudiant.
and not NEG studying

This impossibility seems even clearer when we make sure that the whole existential sentence is in focus, as in the following dialogue:

What's going on here?

(54) a. Res. Només hi ha en Pere dormint.
nothing only LOC has the Peter sleeping
'Nothing. It's just Peter sleeping'.

b. Res. #Hi ha només en Pere dormint.
nothing LOC has only the Peter sleeping
'Nothing. It's just Peter sleeping'.

In (54a) it is the whole sentence that gets under the scope of *només* ‘only’. Yet, the presumed SC formed by the pivot and the coda, which according to Leonetti should be granted propositional status, cannot, as shown in (54b).

On the other hand, as far as the coda is concerned, both the SC and the VP-adjunct analyses predict association with focus particles like *només* ‘only’. Even though in a previous version of the paper I suggested that the prediction was possibly wrong, as Yurena Gutiérrez pointed out to me, this association seems in fact acceptable:

(55) A l'habitació, hi ha en Pere només dormint
at the-room LOC has the Peter only sleeping
i no pas estudiant.
and not NEG studying

Again, even though subtle, the data concerning focus particles do not wholly confirm the predictions by Leonetti's (2008) with respect to the information structure of eventive existentials. Particularly, adverbs like *només* ‘only’ can associate not only with the coda, as expected, but with the pivot as well, making a crucial difference in terms of empirical coverage between the SC and the VP-adjunct analysis.

4. Conclusions

In this article we have reviewed Leonetti's (2008) proposal that eventive existentials in languages like Catalan, French or Italian select a SC, where the pivot is an internal topic and the eventive coda is a predicate. We have tested this hypothesis against two types of evidence: tests regarding the structural relation between the pivot and the coda (section 2), and tests concerning the information status of the pivot and the coda (section 3). As for the structural tests, we have discovered that extraction, scope, and NPI licensing suggest that the SC analysis is unwarranted, whilst the VP-adjunct analysis of the coda is clearly favoured. As for information status tests, neither the interaction of pivots and codas with quantifiers and focus particles nor the kinds of nominal found in pivot position support Leonetti's (2008) claim that the pivot is an internal topic of a selected SC. Rather, a different conclusion seems to be correct, namely that both the pivot and the coda are part of the assertion, and a null stage topic is the topic of the existential sentence.

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Note

¹ Note, for the sake of clarity, that the presence of an eventive coda is incompatible with a locative coda *in situ*. Hence, in examples where both an eventive coda and a locative final PP are present, either the PP modifies the eventive coda (ia) or it is a right-dislocated locative adjunct of the whole existential sentence (ib):

(i) a. Hi ha la Maria esperant-se al jardí.
LOC has the.F Mary waiting-REFL to-the garden
b. Hi ha la Maria esperant-se, al jardí.
LOC has the.F Mary waiting-REFL to-the garden

² I will not consider E. Williams' (1984) proposal that the eventive coda is a modifier of the pivot for reasons to be discussed below.

³ As Manuel Leonetti (p.c.) correctly points out, a source of misunderstanding might arise here concerning the extension of the pivot and coda constituents. Whereas I will follow common practice, and I will consider the DP following the existential verb to be the pivot, and the post-pivot constituent(s) to represent the coda(s), one should take into account the possibility that the pivot is the SC, including the DP and the eventive phrase, and the coda is an external locative PP. In any event, the terminological issue does not affect the empirical and theoretical core of the paper, which disputes the very possibility that eventive existentials select a SC.

⁴ Cinque (1995) offers interesting tests for pseudo-relatives after perception verbs, which are only partially relevant to our discussion, as Cruschina (2012: fn. 21) acutely notes when considering Italian existentials. Basilico (2003) is also a good source of comparison between verbal and adjectival SCs in English and Italian. I thank one anonymous reviewer for pointing out to me the relevance of Cinque's (1995) and Cruschina's (2012) work.

⁵ As one anonymous reviewer points out, this definite/indefinite asymmetry might suggest the existence of two subtypes of the eventive existential construction. The question certainly merits further research within the fine-grained typology of existential constructions developed by Cruschina (2012).

⁶ As one anonymous reviewer points out to me, Cruschina (2012: 15) claims that presentational *ci*-sentences, which according to his typology, include eventive existentials as a subtype, cannot be negated in Italian:

(i) * Non c'è Gianni infuriato.
not LOC-is John angry

Yet, as far as I can tell, the problem has to do with the definiteness pivot, since examples like (i) are equally bad in Catalan, and examples with NPIs are good in Italian (the Italian example is drawn from a Google search for “*non c'è nessuno aperto*”, which obtained 165 results):

(ii) a. ?? No hi ha en Joan perseguint els lladres.
not LOC has the John pursuing the.PL thieves
b. ma qui di domenica non c'è nessuno aperto!
but here of Sunday not LOC-is no-one open

⁷ The quantifier ‘a’ is Francez’s abbreviation of the standard Davidsonian ‘ $\exists e$ ’.

⁸ Josep M. Brucart (p.c.) suggests to me that this behaviour gives (indirect) support to the SC analysis, as one could argue that the pivot and the coda are projected as a constituent (i.e. a SC) in the scope of the quantifier. Yet, the conclusion is unwarranted as we have no way to ascertain whether they are projected as a constituent or as independent constituents (together, for instance, with the locative PP). Hence, this particular data tells us nothing about constituency, but rather is significant in terms of information status.

⁹ I have not included the version with pre-verbal *només* ‘only’, as it would introduce an unwanted ambiguity with a VP ellipsis contrast:

(i) Només hi ha en Pere dormint i no (hi ha)
 only LOC has the Peter sleeping and not LOC has
 pas la María estudiant.
 NEG the.F Mary studying

Bibliographical References

BALTIN Mark 1998. A nonargument for small clauses as constituents. *Linguistic Inquiry* 29. 513–514.

BEYSSADE Claire 2004. Les constructions existentielles. In BEYSSADE Claire & Carmen DOBROVIE-SORIN (eds.). *Définir les indéfinis*. Paris: CNRS. 49-81.

BOSQUE Ignacio & Violeta DEMONTE (eds.) 1999. *Gramática Descriptiva de la Lengua Española*. Madrid: Espasa.

CHOMSKY Noam 1981. *Lectures on government and binding*. Dordrecht: Foris.

CINQUE Guglielmo 1995. The pseudo-relative and ACC-ing constructions after verbs of perception. In GUGLIELMO Cinque, *Italian Syntax and Universal Grammar*. Cambridge: Cambridge University Press. 244-275.

CONTRERAS Heles 1987. Small clauses in Spanish and English. *Natural Language and Linguistic Theory* 5. 225-243.

CRUSCHINA Silvio 2012. Focus in Existential Sentences. In BIANCHI Valentina & Cristiano CHESI (eds.). *Enjoy Linguistics! Papers offered to Luigi Rizzi on the occasion of his 60th birthday*. Siena: CISCL Press. 77-107.

DEMONTE Violeta & Pascual MASULLO 1999. La predicación: los complementos predicativos. In Bosque & DEMONTE (eds.). 2461-2523.

ERTESCHIK-SHIR Nomi 1997. *The Dynamics of Focus Structure*. Cambridge: Cambridge University Press.

ERTESCHIK-SHIR Nomi 2007. *Information Structure. The Syntax-Discourse Interface*. Oxford & New York: Oxford University Press.

ESPINAL M. Teresa 2011. Bare nominals in Catalan and Spanish. Their structure and meaning. *Lingua* 120. 984-1009.

FRANCEZ Itamar 2007. *Existential Propositions*. Stanford: Stanford University. PhD dissertation.

FRANCEZ Itamar 2009. Existentials, predication, and modification. *Linguistics and Philosophy* 32. 1-50.

FREEZE R. 1992. Existential and other Locatives. *Language* 68. 553-595.

HAJIČOVÁ Eva, Barbara PARTEE & Petr SGALL 1998. *Topic-focus articulation, tripartite structures, and semantic content*. Dordrecht: Kluwer.

HARTMANN Jutta M. 2008. *Expletives in Existentials: English there and German da*. Tilburg: University of Tilburg. PhD dissertation.

HEIM Irene 1987. Where does the definiteness constraint apply? Evidence from the definiteness of variables. In REULAND & TER MEULEN (eds.). 21-42.

HERBURGER Elena 2000. *What counts: Focus and quantification*. Cambridge, Mass.: MIT Press.

KALLULLI Dalina 2008. There is secondary predication in *there*-existentials. In CHANG Charles B. & Hannah J. HAYNIE (eds.). *Proceedings of the 26th West Coast Conference on Formal Linguistics*. Somerville, MA: Cascadilla Proceedings Project. 279-287.

KEENAN Edward 1987. A semantic definition of “indefinite NP”. In REULAND & TER MEULEN (eds.). 286-317.

KUNO Susumu 1971. The position of locatives in existential sentences. *Linguistic Inquiry* 2. 233-278.

LACA Brenda 1999. Presencia y ausencia de determinante. In BOSQUE & DEMONTE (eds.). 891-928.

LADUSAW William 1980. *Polarity Sensitivity as Inherent Scope Relations*. New York: Garland.

LADUSAW William 1996. Negation and polarity items. In LAPPIN Shalom (ed.). *The Handbook of Contemporary Semantic Theory*. Oxford: Blackwell. 321-341.

LAMBRECHT Knud 1994. *Information Structure and Sentence Form. Topic, Focus, and the Mental Representation of Discourse Referents*. Cambridge: Cambridge University Press.

LEONETTI Manuel 2008. Definiteness effects and the role of the coda in existential constructions. In HØEG-MÜLLER Henrik & Alex KLINGE (eds.). *On nominal determination*. Amsterdam/Philadelphia: John Benjamins. 131-162.

MCNALLY Louise 1992. *An Interpretation for the English Existential Construction*. Santa Cruz: University of California. PhD dissertation. Reprinted: New York: Garland, 1997.

MILSARK Gary 1974. *Existential Sentences in English*. Cambridge, MA: MIT. PhD dissertation.

MORO Andrea 1997. *The Raising of Predicates*. Cambridge: Cambridge University Press.

NIKOLAEVA Irina 2001. Secondary topic as a relation in information structure. *Linguistics* 39. 1-49.

PARTEE Barbara 1999. Focus, quantification, and semantic-pragmatics issues. In BOSCH Peter & Robert VAN DER SANDT (eds.). *Focus. Linguistic, cognitive, and computational perspectives*. Cambridge: Cambridge University Press. 213-231.

PENKA Doris & Hedde ZEIJLSTRA 2010. Negation and polarity: an introduction. *Natural Language & Linguistic Theory* 28. 771-786.

POLLARD Carl & Ivan A. SAG 1994. *Head-driven phrase structure grammar*. Chicago: University of Chicago Press.

RAMOS Joan-Rafael 2002. El SV, II: la predicació no verbal obligatòria. In SOLÀ Joan et al. (eds.). vol. 2. 1951-2044.

REULAND Eric & Alice TER MEULEN (eds.) 1987. *The representation of (in)definiteness*. Cambridge, Mass.: MIT Press.

RIGAU Gemma 1988. Els predicats no verbals i l'efecte d'inespecificitat. *Estudi General* 8. 51-63.

RIGAU Gemma 1994. Catalan Presentational Sentences and the Properties of Agr Nodes. In CINQUE Guglielmo, Jan KOSTER, Jean-Yves POLLOCK, Luigi RIZZI & Raffaella ZANUTTINI (eds.). *Paths towards Universal Grammar*. Washington: Georgetown University Press. 343-359.

ROTHSTEIN Susan 2001. *Predicates and their Subjects*. Dordrecht: Kluwer.

SAFIR Ken 1982. *Syntactic Chains and the Definiteness Effect*. Cambridge, Mass.: MIT. PhD dissertation.

SAFIR Ken 1983. On small clauses as constituents. *Linguistic Inquiry* 14. 730-735.

SAFIR Ken 1985. *Syntactic chains*. Cambridge: Cambridge University Press.

SOLÀ Joan, Maria Rosa LLORET, Joan MASCARÓ & Manuel PÉREZ SALDANYA (eds.) 2002. *Gramàtica del català contemporani*. Barcelona: Empúries.

STOWELL Tim 1978. What was there before there was there. In FARKAS Donca (ed.). *Proceedings of CLS* 14. 458-471.

VILLALBA Xavier & Anna BARTRA-KAUFMANN 2010. Predicate focus fronting in the Spanish determiner phrase. *Lingua* 120. 819-849.

VILLALBA Xavier 2009. *The Syntax and Semantics of Dislocations in Catalan. A Study on Asymmetric Syntax at the Peripheries of Sentence*. Köln: Lambert Academic Publishing.

WILLIAMS Edwin 1984. There-insertion. *Linguistic Inquiry* 15. 131-153.

