WHAT INFORMATION STRUCTURE TELLS US ABOUT INDIVIDUAL/STAGE-LEVEL PREDICATES

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ABSTRACT. The goal of this paper is to explore the lexical-syntactic structure of copulative constructions and argument small clauses within the framework proposed by Gallego & Uriagereka (2011) for the Individual-Level/Stage-Level distinction (Carlson 1988, Kratzer 1995) and implement their theory by claiming that there is a crucial correlation between IL/SL constructions and their information structure. I argue that IL subjects are topics (and hence this is a categorical construction, following Kuroda 1972, Milsark 1977 and Raposo & Uriagereka 1995), whereas in SL constructions the topic may either be the subject or a silent spatiotemporal argument (their construction being thetic). I show the topic nature of IL subjects in contexts of specificity and subextraction. I ultimately derive the IS of IL/SL constructions from their lexical-syntactic structure and identify the type of topic here as an Aboutness-Topic (in the sense of Frascarelli & Hunterhölzl 2007, Lambrecht 1994, Erteschik-Shir 1997).

Keywords. individual-level/stage-level predicates, copulas, small clause, central-coincidence/terminal coincidence prepositions, topic, specificity, subextraction

1. Introduction

This paper addresses the information structure of copulative clauses and argument small clauses, and discusses the discourse role of the subject of individual-level and stage-level predicates. Since Carlson’s (1988) work, there is a general consensus about the classification of predicates in terms of individual-level (IL) predicates and stage-level (SL) predicates. Individual-level predicates denote permanent properties (intelligent, wise, tall, invisible, boring, etc.), whereas stage-level predicates convey transient or temporary properties (sad, glad, full, tired, scared, bored, etc.). A long-standing tradition within generative grammar has included this typology in the domain of the Lexicon. For many linguists, IL and SL are features which are inherent to predicates as lexical items and when these are picked up to enter a derivation, they come from the Lexicon with these properties (Kratzer 1995, Chierchia 1995, Ladusaw 1994).
In the Spanish generative tradition, Luján (1981) (see Bosque 1990 for a similar position) has also classified predicates following this line of reasoning, but using a different terminology (perfective for IL, imperfective for SL). There is massive literature on the correlation between the copulative verbs *ser/estar* ‘be’ in Spanish (and other Romance languages) and the lexical specification of the predicates they select. For some linguists the distinction between the two copulas is connected with aspectual factors (Camacho 2012; Demonte & Masullo 1999; Fernández-Leborans 1999; Jiménez-Fernández 1998; Luján 1981; Roby 2009; Zagona & Contreras 2011; among many others), and, more specifically, with the classification in terms of IL/SL-predicates (Arche 2006; Bosque 1999; Escandell & Leonetti 2002; Jiménez-Fernández 2002; Lema 1995; Leonetti 1994; Marin 2004, 2010; among others). In general, it is assumed that predicates are marked in the Lexicon as IL or SL (or even both). This is illustrated in (1):¹

(1) a. Jimena es inteligente. [IL]  
*Jimena be.3sg intelligent*  
‘Jimena is intelligent’

b. Jimena está deprimida. [SL]  
*Jimena be.3sg depressed*  
‘Jimena is depressed’

c. Jimena es/está muy guapa. [IL/SL]  
*Jimena be.3sg very beautiful*  
‘Jimena is beautiful’

The selection of the relevant copula has been claimed to be contingent on the type of predicate which is chosen. Nevertheless, a current line of research suggests that the IL/SL distinction can be captured in the lexico-syntax (l-syntax, hereafter) of the constructions under study (Brucart 2009; Camacho 2012; Gallego & Uriagereka 2011; Zagona 2010; and Zagona & Contreras 2011). For these linguists, the underlying structure of predicates includes a preposition which is incorporated into a light verb, thus accounting for the occurrence of either copula. Depending on the end-point (terminal-coincidence) or path (central-coincidence) nature of this preposition, the copula will be spelled-out as *estar* or *ser*, respectively. Technicalities vary among the approaches by the above-mentioned authors, but the common character of these analyses is that IL/SL are not intrinsic features of the predicates, rather this distinction is to be inferred from the mapping of syntax and context at LF.

To my knowledge, none of the studies about IL and SL predicates have paid much attention to the connection between the syntax and the IS of the constructions where they occur. Some relevant exceptions are Raposo & Uriagereka (1995), who claim that IL are categorical constructions whereas SL are thetic, after Kuroda (1972) and

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¹ The aspectual nature of predicates can be forced to change from denoting permanent properties to conveying temporary properties (Escandell & Leonetti 2002; Demonte 1979). An IL-predicate such as *inteligente* ‘intelligent’ can be coerced to express a transient state in a given context (*Juan ha estado inteligente hoy en la reunión* ‘John has been intelligent today at the meeting’). This is the notion of coercion, as it is understood by Escandell & Leonetti (2002). Although this is far beyond the scope of this paper, coercion may be seen as a lexical device which changes some grammatical feature of a lexical item. This change may be motivated by many factors. I refer the reader to the above-mentioned references for a full account.

² In this paper the distinction between categorical and thetic constructions is based on the type of judgment conveyed. Kuroda (1972: 154) holds that “there are two different fundamental types of judgments, the categorical and the thetic. Of these, only the former conforms to the traditional
Milsark (1977) or alternatively, ser and estar occur in categorical constructions, whereas only estar is selected in thetic constructions (Maienborn 2005). However, none of these proposals elaborate any further than simply mentioning this correlation.

The goal of this paper is to explore the lexical-syntactic structure of copulative constructions and secondary predicates within the framework proposed by Gallego & Uriagereka (2011) for the IL/SL distinction and implement their theory by claiming that there is a crucial correlation between IL/SL constructions and their information structure. I claim that IL subjects are topics – and hence this is a categorical construction, following Kuroda (1972), Milsark (1977) and Raposo & Uriagereka (1995) –, whereas SL subjects may not be (their construction being thetic).

If this analysis is around the right track, it predicts that in IL constructions there is a property which is predicated of a subject. The IS interpretation of sentences such as (1a) justifies its use as an answer to a question about the subject:

(2) Q: ¿Qué piensas de Ángela?
   A: Ángela es muy divertida.

   ‘What about Angela?’
   ‘Angela is very funny’

However, in SL-constructions the subject is not a topic and hence cannot be used as an answer to the same type of question:

(3) Q: ¿Qué piensas de Ángela?
   A: #Ángela está aburrida.

   ‘Angela is bored’

On the other hand, asked about a general situation the answer in (3A) is felicitous since it does not presuppose that Ángela is the topic.

(4) Q: ¿Qué pasa?
   A: Ángela está aburrida.

   ‘What’s up?’
   ‘Angela is bored’

   A’: #Ángela es muy divertida.

   ‘Angela is very funny’

paradigm of subject-predicate, while the latter represents simply the recognition or rejection of material of a judgment.” See section 4 for more details about the thetic/categorical distinction.

3 Throughout this paper I use the symbol # to indicate that a particular sentence is not felicitous in the relevant context. It is also important that examples have been taken from the relevant literature (when indicated so) or constructed by the author and tested with native informants.

4 As shown below, estar-sentences may also contain a topic subject given the right context.
This IS-effect is also detected in other predicative contexts such as argument small clauses, which can be taken as evidence for the presence of topics below phasal vP.

(5) Q: ¿Qué piensas de Ángela?
   what think.2sg of Angela
   ‘What about Angela?’
A: Encuentro a Ángela muy divertida.
   find.1sg to Angela very funny
   ‘I find Angela very funny’
A’: #Quiero a Ángela arreglada en cinco minutos.
   want.1sg to Angela dressed up in five minutes
   ‘I want Angela dressed up in five minutes’

I show the topic nature of IL subjects in contexts of specificity, property which has been independently claimed to characterize topics (Frascarelli & Jiménez-Fernández 2012; Jiménez-Fernández & Spyropoulos 2010). But also, assuming that topics are independent domains of spell-out (Frascarelli 2006), subextraction from subjects is another field to test the topic nature of IL subjects. I ultimately derive the IS of IL/SL constructions from their l-syntactic structure and identify the type of topic here as an Aboutness-Topic (in the sense of Frascarelli & Hunterhölzl 2007; Lambrecht 1994; and Erteschik-Shir 1997).

In Gallego & Uriagereka’s (2011) system, the estar-construction contains a spatio-temporal event. I will take this spatio-temporal argument as the topic in SL (thetic) constructions. This predicts that thetic constructions are not topicless, but rather their content is predicated about a spatio-temporal situation.

The paper is organised as follow: section 2 presents Gallego & Uriagereka’s (2009, 2011) l-syntactic approach to the IL/SL dichotomy, under which predicates contain a prepositional component whose nature derives and reveals the distinction under discussion (cf. Brucart 2010; Zagona & Contreras 2011); section 3 shows the extent to which discourse properties of IL/SL constructions are crucially influenced by the type of predicate, assuming that the IL/SL distinction and its information structure are related to the categorical/thetic distinction proposed by Raposo & Uriagereka (1995) and Maienborn (2005); in section 4 I argue that IL-constructions obligatorily contain a topic subject, whereas in SL constructions the topic may be either the subject or a spatiotemporal silent argument; section 5 discusses two arguments which support my IS-based analysis of IL/SL predicates in copulative clauses and argument small clauses; these two arguments are based on specificity effects and on the island effects in topics; section 6 makes some informal theoretical qualifications about the lexical-syntactic structures in Gallego & Uriagereka by proposing the presence of discourse features in their derivations; finally section 7 summarises the main findings.

2. Individual-level and Stage-level predicates: A lexical-syntactic approach

Since Carlson (1977), the distinction between individual-level and stage-level predicates has been a hot issue within generative grammar. There has been a popular

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5 An anonymous reviewer is sceptical about the felicity of example (5A’) and holds that the unacceptability can arise from the type of subject used. For instance, if the subject is pronominal (as in La quiero arreglada en cinco minutos ‘I want her dressed up in five minutes’), the sentence is fully well-formed. Note that the use of the subject pronoun implies that it is topical. Although below I will show that SL constructions allow the topic reading of their subjects under certain circumstances, it is not clear to me that in the context indicated in (5), this will be a felicitous answer.
idea that this difference is a reflex of the lexical classification of predicates. Kratzer (1995) distinguishes between the two types on the basis of the existence of a Davidsonian argument in stage-level predicates (Davidson 1967). This extra-argument is a spatiotemporal argument which restricts the property denoted by the predicate to the situation presented in the proposition. This results in a temporary property, as opposed to the permanent property of individual-level predicates, which are supposed not to contain any Davidsonian argument:

(6) a. She was bored in Italy.  
   b. She is intelligent.

With respect to the *ser/estar* paradigm, *ser* has been claimed to be compatible with individual-level predicates, whereas *estar* is selected with stage-level predicates. This observation has paved the way for a huge number of proposals to explain both standard cases of this distinction (those in 7) and cases which fall outside this correlation (those in 8):

(7) a. Juan es muy vago.  
   *Juan be.3sg very lazy*  
   ‘Juan is very lazy’  
   b. Juan está triste.  
   *Juan be.3sg sad*  
   ‘Juan is sad’

(8) a. Luis es/está feliz.  

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A peculiar property of adjectives which may occur with both *ser* and *estar* is that they may take a complement when selected by *estar*.

(i) Ángela está feliz con su pelota.  
   *Angela be.3sg happy with her ball*  
   ‘Angela is happy with her ball’

(ii) ?? Ángela es feliz con su pelota.  
   *Angela be.3sg happy with her ball*  
   ‘Angela is happy with her ball’

Not many studies of the IL-/SL-dichotomy have paid attention to adjectives when they are followed by complements. A notable exception is Bosque’s (1999) approach to adjectives. For Bosque (1999: 263), “Los adjetivos que se construyen con *ser* y *estar* (y denotan, por tanto, bien características inherentes, bien estadios temporales) tienden a rechazar el complemento en el primer caso.” [translation: Adjectives which combine with *ser* and *estar* (and thus denote either inherent properties or temporary stages) tend to be incompatible with a complement in the former case].

As Zagona & Contreras (2011: 108) suggest, adjectives have a complex structure involving an inner Attribute and an outer XP, responsible for the interpretive restrictions:

(iii) [\AP \Attribute_A]  
(iv) [\XP \LP {\AP \Attribute_A}]

The predicate X is a functional projection of the Adjective. It implies a spatio-temporal predicate, which Zagona (2010) has identified as an aspectual head (see also Jiménez-Fernández 1998 and subseq.). The possibility of complements in APs depends on the more or less articulated structure of APs. Only APs which project an XP can be followed by a complement. Hence only SL-predicates are compatible with a complement. The functional head X introduces the SL-interpretation and it is selected by verbs such as *estar*. Conversely, *ser* selects AP, DPs, but not phrases headed by the spatio-temporal head X.
Luis be.3sg happy  
‘Luis is happy’

b. La película fue/estuvo genial.  (Brucart 2010: 117)  
*the film be.3sg fantastic  
‘the film was fantastic’

Lema (1995) and Schmitt (2005) have argued that the distinction between IL and SL can be accommodated if SL predicates select the Davidsonian argument (eventive argument). Hernanz (1987) makes a similar proposal to account for the distinction between ser and estar. However, none of these proposals are without problems (see Camacho 2012, Gallego & Uriagereka 2011, and Brucart 2010 for an overview of the main shortcomings of the extra-argument approach).

For the purposes of this paper, I follow Gallego & Uriagereka’s (2011) analysis of ser and estar and their connection with the IL/SL distinction, which I briefly introduce now. For Gallego & Uriagereka (2011) (henceforth, G&U), the IL/SL dichotomy is not lexical (contra Kratzer 1995, and much subsequent work), but rather lexico-syntactic. They propose that different roots combine with appropriate morphemes to yield the IL or SL interpretation. In line with Freezer’s (1992) and Kayne’s (1993) analysis of have as containing a preposition in its lexical structure (an original idea of Benveniste 1960), G&U hold that estar shelters a covert preposition of the terminal coincidence type, in the sense of Hale (1986). Prepositions are divided into two types: terminal coincidence and central coincidence prepositions. Based on this classification, G&U contend that the IL/SL adjectival predicates show the following l-syntax:

However, this generalization is not exempt of problems since, as one of the reviewers points out, there are cases such as consciente ‘conscious’ which may be interpreted as IL or SL, yet it is when it is interpreted as IL that it can take a complement:

(v)  Mariano es/*está consciente del desempleo en España.  
*Mariano be-3sg aware of the unemployment in Spain.  
‘Mariano is aware of the unemployment in Spain’

There seem to be semantic properties responsible for the use of a complement with IL predicates, since the complement denotes a target or a company with respect to the adjective. Nevertheless, the PP complement of SL predicates conveys some sort of cause of the event denoted by the predicate, as is clear in (i) above.

It should be noted in passing that there are devices which can improve the degradation of examples such as (ii), as an anonymous reviewer points out. For example, when adverbs such as siempre ‘always’ are inserted or the impersonal clitic se is used, the result is much better:

(vi)  ¿Ángela es siempre feliz con su pelota. [IL]  
Angela be.3sg always happy with her ball  
‘Angela is always happy with her ball’

(vii)  Se es siempre feliz con una pelota. [IL]  
clitic be.3sg always happy with a ball  
‘One can always be happy with a ball’

Again some semantic/aspectual properties are behind the use of feliz here. In addition, in these examples the PP has an adjunct flavour. They are not true complements of the adjective. Recall that for Bosque (1999), the borderline between arguments and adjuncts in the adjectival domain is of a grey nature. I leave this question open for future research.

The existence of this eventive argument is subject to much debate. There are linguists who claim that both IL and SL predicates project this extra-argument (Brucart 2010; Chierchia 1995; Arche 2006); but other linguists hold that there is no such Davidsonian argument (Maienborn 2005).
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(9)  
   a. \([\text{PP} \text{PC} \sqrt{\text{ROOT}}]\)  
       IL ADJECTIVES  
   b. \([\text{PP} \text{PT} [\text{PP} \text{PC} \sqrt{\text{ROOT}}]]\)  
       SL ADJECTIVES

They follow Baker (1988) and later research in assuming that when two Ps occur, the lower P incorporates into the highest P, which in English has a PF reflex in complex Ps such as into. As for adjectives, the highest P will incorporate into the V, giving rise to ser or estar, depending on whether the P is central-coincidence or terminal-coincidence. The full lexical-syntactic representations for both possibilities are shown below:

(10)  
   a. \([\text{serP} [\text{PP} \text{DP} [\text{PC} + \sqrt{\text{ROOT}}]]]\)  
   b. \([\text{estarP} + \text{PT} [\text{PP} \text{PT} [\text{PP} \text{DP} \text{PC} + \sqrt{\text{ROOT}}]]]\)

On this view, the IL/SL distinction in terms of the type and number of Ps present in their lexical syntax is crucial to determine the composite nature of ser vs. estar.

G&U provide extensive evidence supporting this l-syntactic analysis. One of the most convincing pieces of evidence may be the morphological manifestation of PT in some adjectives (participial adjectives and some prepositions):

(11)  
   a. \{*Soy/Estoy\} avergonza-do.  
       be.1sg a-shame -PT  
       ‘I am ashamed’  
   b. \{*Soy/Estoy\} suele -to (#solta -do).  
       be.1sg loose-PT release-PT  
       ‘I am loose’  
   c. \{*Soy/Estoy\} *(de) profesor  
       be.1sg PT teacher  
       ‘I work as a teacher’

The idea is that the structure of estar-sentences is much more complex than that of ser-sentences (in a similar fashion to Zagona & Contreras 2011). In their analysis, the presence of a terminal-coincidence P is basic to choose the copula. Estar is selected only if there is a PT present in the structure. The inclusion of this PT is assumed to contextualize the property denoted by the adjective. Therefore, there is no need to postulate the extra-davidsonian argument in Kratzer’s system. Importantly, contextualizing a property implies anchoring in a spatio-temporal situation, which is represented in the case of estar as a covert classifier in Spec-PT:

(12)  
[\text{estarP} + \text{PT} [\text{PP} \text{X} [\text{PP} \text{PT} [\text{PP} \text{DP} \text{PC} + \sqrt{\text{ROOT}}]]]]
seq.) has claimed that argument SCs differ with respect to the type of predicate selecting the subordinate clause:

(13) a. Considero [a Jimena inteligente].
    \[\text{consider.1sg to Jimena intelligent}\]
    ‘I consider Jimena intelligent’
  
b. *Considero [a Jimena triste].
    \[\text{consider.1sg to Jimena sad}\]
    ‘I consider Jimena sad’

(14) a. Espero [el coche reparado para esta tarde].
    \[\text{expect.1sg the car repaired for this afternoon}\]
    ‘I expect the car fixed by this afternoon’
  
b. *Espero [el coche veloz para esta tarde]. (on the relevant interpretation)
    \[\text{expect.1sg the car fast for this afternoon}\]
    ‘I expect the car fast by this afternoon’

Following an original idea of Kitagawa (1985), verbs like considerar ‘consider’ are more easily combined with an SC whose predicate denote a permanent property (an IL predicate in our terminology), whereas verbs like esperar ‘expect’ seem to require an SC containing a predicate which denote a transient property (an SL predicate). If G&U’s analysis of IL/SL dichotomy is right, it suggests that SC predicates have a prepositional component. In light of examples in (13-14), I submit that this is tenable. In (13a) the adjectival SC combines with a central-coincidence P, giving rise to the IL interpretation that the main verb considerar requires; by contrast, in (14a) the adjectival SC merges with a terminal-coincidence preposition, in which case an SL reading obtains that is compatible with the selectional properties of the matrix verb esperar. By contrast, (13b) and (14b) are unacceptable since there is a semantic mismatch between V and SC. I will come back to this type of SC below.

3. Discourse matters

As stated in section 1, G&U’s (2011) analysis is one of the few which have paid attention to the discourse properties of copulative constructions. For these authors, SL predicates are anchored to the context via the deictic element in spec-\(P_T\). This explains why SL predicates can occur in situations which are contextualized in space and time:

(15) a. Jimena está enfadada en su habitación.
    \[\text{Jimena be.3sg angry in her bedroom}\]
    ‘Jimena is angry in her bedroom’
  
b. *Jimena es inteligente en su habitación.
    \[\text{Jimena be.3sg intelligent in her bedroom}\]
    ‘Jimena is angry in her bedroom’

\footnote{Examples such as (14b) can be rendered grammatical if some coercing mechanism is used. For example, if the adjective is in the comparative form, the sentence is fully grammatical:}

(i) Quiero el coche más veloz para esta tarde.
    \[\text{want.1sg the car more fast for this afternoon}\]
    ‘I want the car faster by this afternoon’

The type of modification implied in (i) is one of the devices language can use to change the aspectual feature of the predicate veloz ‘fast’, which becomes an SL predicate, and hence is compatible with matrix verbs such as querer ‘want’.
The difference illustrated in (15) has been addressed by Mainborn (2005) and Camacho (2012). They propose that due to the spatiotemporal variable present in SL predicates, these can be modified by locative adjuncts. However, Maienborn (2005) makes a distinction between VP-adjuncts and frame-setting adjuncts (sentence-adverbs), and shows that true VP-adjuncts are not compatible with SL predicates or IL predicates:

\[ (16) \]
\[
\begin{align*}
(a) & \quad *\text{El juguete es amarillo debajo del árbol.} \\
& \quad \text{the toy be.3sg yellow under the tree} \\
& \quad \text{‘The toy is yellow under the tree’}
\end{align*}
\]
\[
\begin{align*}
(b) & \quad *\text{Pilar es vanidoso delante del espejo.} \\
& \quad Pilar be.3sg vain in-front-of the mirror \\
& \quad \text{‘Pilar is vain in front of the mirror’}
\end{align*}
\]

\[ (17) \]
\[
\begin{align*}
(a) & \quad *\text{La camisa está mojada sobre la silla.} \\
& \quad \text{the shirt be.3sg wet on the chair} \\
& \quad \text{‘The shirt is wet on the chair’}
\end{align*}
\]
\[
\begin{align*}
(b) & \quad *\text{El champán está tibio en la sala.} \\
& \quad \text{the champagne be.3sg warm in the living-room} \\
& \quad \text{‘The champagne is.SL warm in the living-room’}
\end{align*}
\]
\[
\begin{align*}
(c) & \quad *\text{Carol está encinta en su dormitorio.} \\
& \quad Carol be.3s pregnant in her bedroom \\
& \quad \text{‘Carol is.SL pregnant in her bedroom’}
\end{align*}
\]

Maienborn (2005) discusses the status of estar as an eventuality expression and makes the observation that estar-predications do not contain any event argument (the spatiotemporal variable) which licenses time expressions. In strict terms, she draws the conclusion that neither ser nor estar contain an event argument. From this it follows that “the denotations of neither ser nor estar predications can be located in space.” (Maienborn 2005: 164)

The data in (17) poses some problems, though. Imagine a context in which there is a party in a big house. One of the invitees complains that the champagne is not cold enough. The host hears this complaint and says: “The champagne is warm in the living-room, but is cold at the terrace. Why not try that one?”. In this specific context, sentence (18) is acceptable.\(^{10}\)

\(^{10}\) A reviewer raises the question that the PP-adjuncts in these sentences may be directly modifying the DP subject, much in line with Fauconnier (1995). Hence, sentences such as (17b) has a counterpart such as El champán en la sala está tibio ‘The champagne in the living-room is warm’ in which case we are confronted with (at least) two types of the same entity, i.e. there are at least two bottles of champagne which are compared. Put bluntly, PP-adjuncts here do not relate to any possible event position of the property denoted by the relevant predicates; rather they are part of the DP subject. However, this interpretation is not in order for sentences such as (17c). More precisely, there is no such a counterpart as María en su dormitorio está en cinta ‘María in her bedroom is pregnant’. Examples such as this make me sceptical about the grammatical status of locative PP-adjuncts.

Higginbotham (2005) also discusses the non-availability of an event position in copular sentences. He agrees with Maienborn (2005) that copular constructions do not contain an eventive argument, but claims that the event provided by a PP-adjunct is overlapped in the event denoted by the predicative element in copular sentences. Higginbotham (2005: 353) provides with examples from English (his examples 12 and 13), which clearly contrast with (17) in the main text in terms of grammaticality:

\[
\begin{align*}
(i) & \quad \text{The dress was wet on the clothesline.} \\
(ii) & \quad \text{Carol was nervous in the car.}
\end{align*}
\]
El champán está tibio en la sala, pero fresquísimo en la terraza.

‘The champagne is warm in the living-room, but very cold at the terrace’

On the relevant reading, the properties assigned by the SL predicates are restricted by the PP-adjuncts and this restriction is directly related to the spatiotemporal situation underlying the predications in (18). Maienborn connects the use of time adverbials with the time topic of the sentence. Nevertheless, the time-setting adverbs under discussion are also available in ser-predications:

(19) a. En esta región las fresas son/están baratas.

‘In this region strawberries are cheap’

b. En Italia, Maradona fue adicto a la cocaína.

‘In Italy Maradona was addicted to cocaine’

These examples show that sentential time-setting adverbs are compatible with both ser and estar. However, the reason seems to be related to the information structure of these sentences. In the SL reading of (19a), the PP-adjunct is a topic for the whole predication ‘las fresas están baratas’. On the other hand, in the IL interpretation of (19a) the PP-adjunct is the topic which locates a situation where the subject las fresas ‘the strawberries’ is a second topic. More precisely, if topics are conceived as the

For Higginbotham (2005: 354), “[t]he interpretations that are available for (12) and (13) are not those in which a state – being wet, or being nervous – is located in some place, but rather those in which two states, one spatial and the other not, are said to be temporally related, with the time of the locative including or at least overlapping the time of the other.” In other words, two events are present in examples such as (i-ii) and the inclusion reading should be available; otherwise it yields unacceptability.

Finally, as this reviewer points out, there may be syntactic constraints on the use of copulative verbs which stops them from occurring with both the predicative adjective and the PP-adjunct at the same time (Brucart 2010):

(iii) María está en su dormitorio.

‘Mary is.SL in her bedroom’

(iv) María está en cinta.

‘Mary is.SL pregnant’

(v) *María está en cinta en su dormitorio.

‘Mary is.SL pregnant in her bedroom’

Given that there is no clear argument against assuming an event participant in predicative constructions, I will assume the presence of a spatio-temporal participant in both SL and IL constructions.

Manninen (2001) claims for a three-way distinction between predicates by stating that “while stage level predicates pick out specific spatio-temporally bounded events or situations (i.e. specific “space-time slices” of an individual), individual level predicates are divided into (a) habitual predicates, which express generalisations over a large number of recurring stage level events or situations, and (b) property predicates, which describe properties which are characteristic of an individual over an extended period of time” (ibid, 2001: 3). The IL readings in the examples in (19) illustrate the habitual
starting point of a predication, the whole predication is predicated about the PP-
adjunct in the SL reading, whereas under IL interpretation the subject Maradona and
the PP-adjunct are multiple topics which mark the starting point of the predication.
Note that the interpretation of (19b) confirms this intuition: When Maradona was in
Italy, he was addicted to drugs. I will return to this issue below. For the time being,
the (in-)compatibility with time adverbials is a matter of Information Structure. It does
not say anything about the difference between IL and SL predicates (though it is
obviously connected with this dichotomy).

The lexical-syntactic approach of G&U can account for the compatibility of SL
predicates and location adverbs if a further qualification is made about the structures
proposed for ser/estar. In their proposal, G&U make explicit mention of a
spatiotemporal variable in Spec-P. Recall the structure in (12). If we presume that
this is the position where adjuncts are generated, we correctly predict that location
adverbs are more readily acceptable in estar-predications. On the other hand, if ser-
predications do not project a P, there is no place to generate location adverbs thereby
explaining why these are more difficult to insert in ser-sentences. However, the use of
some location adverbs in ser-predications raises the possibility that under certain
circumstances, location adverbs are higher in the architecture of the clause, one
possibility that I discuss below.

4. The Information Structure of predicative constructions

Among the exceptional references to the Information Structure of IL/SL predicates,
there is a general idea that IL-predicates are involved in categorical constructions
whereas SL-predicates are exponents of thetic constructions (the original
categorical/thetic distinction is proposed in Kuroda (1972) and Milsark (1977). Based
on Ladusaw (1994), McNally (1998) establishes a clear-cut distinction between thetic
sentences and categorical sentences: “a thetic judgment, by a proposition composed of
a (possibly complex) description of an eventuality, which may include descriptions of
some or all of the individuals participating in it; a categorical judgment, by a
proposition crucially composed of an entity and a property to be affirmed or denied of
that entity.” (McNally 1998: 5)

For McNally a categorical sentence has some topichood properties. To my
knowledge, the correlation between topichood and categorical sentences in
promising way to address the differences between IL/SL predicates and their
compatibility with copulas.12

Raposo & Uriagereka (1995) identify IL predicates as categorical and SL
predicates as thetic and construe IL predications as a subclass of topicalisation.
In copulative constructions, IL-sentences (categorical) have their subject in a topic
position at LF, while in SL-sentences (thetc) the predicate is in an LF topic position.
In these authors’ view, the discourse properties of the relevant construction are
defined in terms of scope. In IL-constructions the subject scopes over the predicate,
whereas in SL-constructions the predicate takes scope over the subject. Although it is

IL subtype. In this respect, what is asserted in (19a) is that the strawberries in a specific place have
been cheap for a period of time.

12 The sensitivity of SLPs and ILPs to the thetic/categorical typology has also been pointed out by
reference to the correlation with ser/estar is taken into consideration.
not entirely clear what this hypothesis means for copulative sentences, it could be
tentatively argued that the structures proposed for (20) at LF are informally the ones
in (21), where the subindex Top stands for the topic position:

(20)  a. Ese libro es interesante.
    that book be.3sg interesting
    ‘That book is interesting’
b. Ese libro está roto.
    that book be.3sg broken
    ‘That book is broken’

(21)  a. [ese libro_{Top} [ser [ interesante]]] >>>>> categorical reading
    b. [roto_{Top} [estar [ese libro]]] >>>>> thetic reading

To the extent that predicative categories such as adjectives are not referential, I do
not agree with R&U’s claim that in thetic constructions the adjectival predicate is
categorized in a topic slot at LF. I contend that in thetic-predications the topic is either
the subject (as in categorical –predications) or a silent spatiotemporal argument (a
stage topic, in Erteschik-Shir’s (1997) terminology). This distinction in terms of IS
will be crucial in my analysis of IL/SL predicates since it makes predictions which
cannot be otherwise explained, as will become clear below.

Maienborn (2005) holds that in the correlation between the ser/estar alternation
and the thetic/categorial distinction estar-sentences are compatible with both
categorical and thetic judgments, whereas ser-sentences are compatible with only the
former. She illustrates this distinction with the examples (22-23) (Maienborn 2005:
174, her examples (41-42)):

(22)  What about Pablo? (categorial judgment)
    a. Pablo está enfermo.
       Pablo be.3sg sick
       ‘Pablo is sick’
b. Pablo es (un) enfermo.
       Pablo be.3sg a sick
       ‘Pablo is a sick person’

(23)  What’s up? (thetic judgment)
    a. Pablo está enfermo.
       Pablo be.3sg sick
       ‘Pablo is sick’
b. #Pablo es (un) enfermo.
       Pablo be.3sg a sick
       ‘Pablo is a sick person’

Following Lambrecht (1994) and Erteschik-Shir (1997), Maienborn assumes that
thetic-sentences are not really topic-less but ‘‘about’’ the actual discourse situation.
This is the situation topic that an SL-predication is about. On the contrary, since ser
predications cannot be linked to a specific discourse situation, they cannot be used as
thetic judgments. This can be true for thetic propositions, since in principle they are
claimed to be topicless. Erteshick-Shir (1997) has independently claimed that in
topicless sentences (such as thetic sentences), there is a topic corresponding to a
spatiotemporal situation.
I take from Maienborn (2005) the idea that in *estar*-sentences the topic is the spatiotemporal situation, but depart from her in that in *ser*-sentences the subject is a topic. In the IS of SCs the subject is a topic in IL, but this spatiotemporal argument is the topic in SL (Erteschik-Shir 1997, Lahousse 2009, in press).

In SL constructions, there is a null topic, related to a spatiotemporal event, which is responsible for the temporary or transient interpretation of the adjectival predicate. In Maienborn’s (2005: 173) words, “If a speaker chooses *ser*, the hearer may infer on the basis of pragmatic economy principles (Atlas and Levinson 1981; Horn 1984; Levinson 2000) that the speaker’s claim is not restricted to a specific topic situation — otherwise the speaker would have used *estar*. Thus, *ser* predications are interpreted as applying to the subject referent in arbitrary topic situations. This excludes temporary properties.”

In categorical constructions there is a topic, but this topic does not relate to a spatiotemporal situation. This time the topic is the subject and the permanent property is predicated about this subject without making reference to any specific situation. The property assigned applies to the subject regardless of the time and place setting of it, although there are situations (as seen earlier) where an IL predicate is interpreted as habitual over a period of time, in which case there is a spatiotemporal topic alongside the subject topic in IL-constructions.

In sum, what I want to propose is that in thetic constructions the topic is either the subject or a spatiotemporal argument which restricts the property denoted by the SL-predicate. By contrast, in categorical predications the topic is the subject (or alternatively the subject and the spatiotemporal event as multiple topics). I will show the validity of this hypothesis by using copulative constructions and argument small clauses. The behaviour of subjects is predicted to be completely different in categorical and thetic constructions.

4.1. *Ser/estar* alternation and IS

Copulative constructions conform to the IS partition of topic and comment/background (in the sense of Lambrecht). As stated in the previous section, I propose that in *ser*-constructions (IL-clauses) the subject is a topic, whereas in *estar*-constructions either the topic is the subject or there is a silent spatiotemporal topic. Following Lahouse (2009, in press), I will call this silent topic TOP. The examples in (21) will have the following possible IS representations:

\[(24)\]
\[
a. \; [\text{Top} \; \text{El libro} \; [\text{Comment} \; \text{es interesante}]]^{14} \\
b. \; [\text{Top} \; \text{TOP} \; [\text{Comment} \; \text{el libro está roto}]] \\
c. \; [\text{Top} \; \text{El libro} \; [\text{Comment} \; \text{está roto}]]
\]

If the tests for topicality proposed by Reinhart (1981) are correct, it can be expected that interpretations in (24a) and (24c) should be felicitous in a context where the information provided by the subject is given:

\[(25)\] [\text{context: I have been given a book by Susan for my birthday and after some time Susan asks me about the book}]

---

13 The notion of silent topic has been widely used in IS, albeit some refinements that need not concern us here (Zribi-Hertz 2003, Frascarelli 2007, Erteschik-Shir 1997, Lahousse 2009, in press, among others).

14 Recall that an IL construction can also contain a topic subject and a spatiotemporal subject, but I will leave aside this possibility since it is just in certain contexts where this interpretation arises.
Q: ¿Qué tal el libro?
   How the book
   ‘How was the book?’
A: [Top El libro [Comment es super interesante]]
   the book be.3sg absolutely interesting
   ‘The book is absolutely interesting’
A’: [Top El libro [Comment está roto porque se me cayó en la calle y lo aplastó un camión]]
   the book be.3sg broken because CL.3 CL.1sg fall.3sg in the street and CL.3sg squash.3sg a truck
   ‘The book is broken because it fell in the street and a truck squashed it’

In this context it seems clear that the DP el libro is interpreted as a topic which has been introduced by the previous context (the question). Both IL and SL constructions are predicted to satisfy the information request in the question only if the subject in both cases is identified as a topic. Now, consider the situation and examples in (26):

(26) [context: a couple meets after a hard working day]
Q: ¿Qué tal el día?
   how the day
   ‘How was your day?’
A: [Top TOP [Comment (yo) estoy cansadísimo]]
   I be.sg very tired
   ‘I am very tired’

According to the type of question in (26), we expect an answer where all the information included is new. If in all-focus (wide focus) sentences the presence of a silent or null topic is proposed, it is predicted that the subject may not be the topic of the predication. Hence, an SL-construction is acceptable as in (26). Conversely, an IL predication which obligatorily has a topic subject is predicted not to be felicitous in this very same context:

(27) Q: ¿Qué tal el día?
   how the day
   ‘How was your day?’
A: #La niña es muy quisquillosa.
   the girl be.3sg very picky
   ‘The girl is very picky’

The reasons for this anomaly are basically connected with the topic role of subjects in IL predications. Since it is obligatory for the subject to convey the topic of the sentence (given information) in IL predications, these cannot be used as an all-focus sentence.

4.2. IL/SL small clauses and IS
It has been commonly assumed that the choice of a predicate in argument small clauses is influenced by the type of property (permanent or temporary) that the matrix predicate selects (Kitagawa 1985; Raposo & Uriagereka 1990; Chung & McCloskey 1987; Bosque 1990; Jiménez-Fernández 1998, 2000, 2002):
WHAT INFORMATION STRUCTURE TELLS US ABOUT INDIVIDUAL/STAGE-LEVEL PREDICATES

(28)  
ap. Considero  a Ángela muy traviesa.  [IL]  
\textit{consider.1sg to Angela very naughty}  
‘I consider Angela very naughty’  
b. Veo  a Ángela muy cansada.  [SL]  
\textit{see.1sg to Angela very tired}  
‘I see Angela very tired’

(29)  
ap. *Considero  a Ángela muy cansada.  [SL]  
\textit{consider.1sg to Angela very tired}  
‘I consider Angela very tired’  
b. *Veo  a Ángela muy traviesa.  [IL]  
\textit{see.1sg to Angela very naughty}  
‘I see Angela very naughty’

However, the predicates which can be assigned either an IL or SL reading can appear with either class of verbs:

(30)  
ap. Considero  a Ángela muy guapa.  
\textit{consider.1sg to Angela very pretty}  
‘I consider Angela very pretty’  
b. Veo  a Ángela muy guapa últimamente.  
\textit{see.1sg to Angela very pretty lately}  
‘I see Angela very pretty lately’

Jiménez-Fernández (2002) accounts for this difference by proposing that argument SCs project an Aspectual Phrase which mediates between the main verb and the SC predicate. Similar proposals are Predication Phrase (Bowers 1993, 2001) or Relator Phrase (Den Dikken 2006). Whatever structure we assume for argument SCs, what is interesting is that the IL/SL distinction is also determined by the IS.

In this section I will discuss the IS of argument clauses and show that in IL SCs the subject is a topic, whereas in SL SCs the topic can be either the subject or a spatio-temporal argument. Again three different IS representations are obtained depending on the IL/SL nature of the SC predicate. The informal structures in (31) illustrate the three types of IS which show up for the examples in (28):

(31)  
ap. Considero [Top a Ángela [Comment muy traviesa]]  
b. Veo [Top TOP [Comment a Ángela muy cansada]]  
c. Veo [Top a Ángela [Comment muy cansada]]

By applying Reinhart’s (1981) tests for topicality, a key distinction is detected between IL and SL SCs:

(32)  
[context: two friends meet in a restaurant for dinner and start discussing the menu]  
Q: ¿Qué tal la ensalada?  
\textit{how the salad}  
‘How’s the salad?’  
A: Encuentro [topic la ensalada [comment muy pesada]].  
\textit{find.1sg the salad very heavy}  
A’: [topic La ensalada [comment la encuentro muy pesada]].  
‘I find the salad very heavy’
In the relevant context the IS of both answers in (32) presuppose that both speakers share the information provided by *la ensalada* ‘the salad’, and pick up this constituent as the topic. Note that (32A’) is a case of Clitic Left Dislocation (CLLD) which is associated to a topic interpretation. Interestingly, in the same context an SL construction could only be rightly interpreted if the DP *la ensalada* is given a topic function:  

(33)

Q: ¿Qué tal la ensalada?
   *How’s the salad?*

A: Noto [*topic la ensalada [*comment demasiado aliñada]*].
   *feel.1sg the salad too dressed*

A’: La ensalada la noto demasiado aliñada.

A’’: #Noto [*topic TOP [*comment la ensalada demasiado aliñada]*].
   *‘I feel the salad too dressed’*

As is clear, the answers in (33A) and (33A’) are both felicitous in this context since the question demands that the DP *la ensalada* be given a topic function. Conversely, when the topic is the spatio-temporal argument which represents the here and now of the situation (as in (33A’)), there is a discourse mismatch which leads to nonfelicity. Note that a pause after the topic *la ensalada* is natural in the intonation of the answer in (33A), which gives support to my characterization of SL subjects as possible topics. On the other hand, no such pause is detected in (33A’’), which is indicative that this time the subject is not a topic.

Now consider a slightly different context and question-answer paradigm:

(34)

[In the restaurant, one of the friends tastes his/her salad and makes a disapproving face]

Q: ¿Qué pasa?
   *What’s going on?*

A: Noto [*topic TOP [*comment la ensalada demasiado aliñada]*].
   *feel.1sg the salad too dressed*

   ‘I feel the salad too dressed’

---

15 Raposo & Uriagereka (1995) maintain that in thetic constructions such as SL SCs the subject cannot be a topic. Rather, this discourse function is developed by the SC predicate. As suggested by Lahousse (in press), APs cannot be topics because they are not referential expressions. Indeed, a predicate cannot be an aboutness topic. However, in Frascarelli & Hunterhözl’s (2007) typology of topic in terms of Aboutness, Contrastive and Familiar, predicates can be considered familiar topics (Jiménez-Fernández & Spyropoulos 2010). For the purposes of this paper, I will cling to the idea that in thetic SCs the topic is either the subject or the spatiotemporal argument. See Jiménez-Fernández (in press) and Jiménez-Fernández & Spyropoulos (2010) for the partition of SCs in terms of topic+focus.

16 I assume with Zubizarreta (1998, 2010) that topics are intonationally marked with a pause. As one of the reviewers comments, the presence of a topic is also signaled by vowel lengthening. When the topic is *la ensalada* the tonic vowel is slightly longer than usual. On the other hand, if the topic is the spatio-temporal argument, this lengthening is carried out on the tonic vowel of the immediately phonologically realized constituent, i.e. the V *noto*. There seems to be a strict correlation between pause and lengthening as far as the identification of topics is concerned, which supports my view that the information structure in IL- and SL-constructions is different. For a phonology-based account of different types of topic see Frascarelli & Hunterhözl (2007).
In this context the SL construction with the spatiotemporal topic is perfect. The absence of any pause after the SC subject suggests that this is not a topic. More precisely, the pause can be detected after the matrix verb, which may indicate the presence of the spatiotemporal topic.

It can be safely concluded that subjects are topics obligatorily in IL-constructions and optionally in SL constructions. When the subject is not the topic in SL predications a spatiotemporal argument is placed in topic position. The characterization of SC subjects as topics additionally proves the existence of an IS-based periphery below vP, as is extensively shown by Jiménez-Fernández & Spyropoulos (2010).

5. Arguments for the topicality of subjects and the IL/SL distinction

In this section I give evidence in favour of the IS-based analysis proposed for IL/SL constructions. I concentrate on two arguments: 1) topics are specific; 2) topics are islands for subextraction.17

5.1. Topics are specific

It is a well-known fact that topics show Definiteness/Specificity effects, as opposed to foci (Aboh 2010; Diesing 1992, 1997; Enç 1991; Erteschik-Shir 1997, 2006; Frascarelli 2007; Jayaseelan 2001; Leonetti 2004; Molnár 2006; Rodrigues 2008;). Before proceeding any further, in order to get a better understanding on the Definiteness effects in SCs, we first present some general aspects on the notion of Definiteness in its relation to topics. Although this is an extremely controversial issue, as Jiménez-Fernández & Spyropoulos (2010) put it, a Definiteness/Specificity constraint on topics is attested in many languages. Rodrigues (2008) provide with examples in English and Brazilian Portuguese which support the claim that topics are always definite/specific:

(35) a. *A student, I will see at LSRL.
    b. *Some/any/many student(s), I will see at LSRL.
    c. *Alguns/nenhum/muitos aluno(s), eu vou ver no LSRL.
        some/ no/ many student(s), I will.1sg see at the LSLR
        ‘I will see some/no/many student(s) at the LSLR.’

However, it is also reported that at least in Brazilian Portuguese some quantified DPs can occur in topic position if they contain a restrictive modifying element, as in (36a) (see Aguiar 2007 for data and a theory of quantified expressions as topics in Brazilian Portuguese).

(36) a. Alguns/nenhum/muitos aluno(s) que voce orientou, eu vou
        some/ no/ many student(s) that you advise.2sg, I will.1sg
        ver no LSRL.
        see at the LSLR
        ‘I will see some/no/many student(s) that you advice at the LSLR’

17 The argument based on the specificity of topics is used in Jiménez-Fernández & Spyropoulos (2010) to show that SCs conform to the pattern topic+focus. See this reference for other arguments lending further support to this IS partition.
The explanation that Rodrigues (2008) offer is that Definiteness is expressed in languages by a (non)definite feature in the structure of DPs and some DPs change this feature for different reasons. In particular, in the above examples the presence of the modifying phrases within the indefinite DPs forces a definite reading of the relevant quantified DPs. In our view, there is no need to postulate a change in the featural composition of DPs because some indefinites are ambiguous; hence both readings are possible (see below).

Furthermore, an appropriate context may trigger a definite reading of indefinite DPs, which may support the idea of a coercing mechanism changing the definite feature of DPs. Examples in (37) illustrate this point (Rodrigues 2008):

(37) Q: Você comeu os meus bombons?
   ‘Did you eat my chocolates?’
A’: Alguns, eu comi
   ‘I ate some’
A’’: Alguns deles/ dos seus bombons, eu comi
   ‘I ate some of them/of your chocolates’
A’’’: *Alguns bombons, eu comi.
   ‘I ate some chocolates’

Interestingly, the definite reading of indefinites is best viewed in light of the distinction between definite and specific (Suñer 2003, Frascarelli 2007, İşsever 2003). Indefinites are ambiguous in that they can have a specific or non-specific reading. All the indefinite DPs which can qualify as topics are specific. The crucial feature, thus, is specificity. Hence, the examples in (37A’) and (37A’’) are predicted to be correct because the preposed indefinite topics are specific (Alexopoulou & Folli 2011).

In Spanish there is also a general constraint on the specific/definite nature of topics to the effect that indefinite DPs are not generally picked up as topics, except if there is a trigger forcing a definite interpretation. This accounts for the marginal status of sentences such as (38):

(38) ¿Algunos bombones, me he comido.
   ‘I have eaten some chocolates.’

This sentence is acceptable only if the indefinite DP algunos bombones has an antecedent in the previous discourse, i.e. if it is specific. If uttered out of the blue, (38) is not felicitous.

The preceding remarks, taken from Jiménez-Fernández & Spyropoulos (2010), posit an intriguing question as far as the information structure of IL/SL constructions.
is concerned: Does the syntax of copulative sentences and SCs give rise to any Specificity Effect? Our immediate task is to explore the interplay between specificity and topicality in IL/SL constructions. The basic idea is that topics should contain a [+specific] feature which entitles possible candidates as suitable to be topicalised.

However, if my IS-based analysis of IL/SL predications is on the right track, we predict that in IL constructions the subject should always be specific (either definite or indefinite), since IL subjects are topics. By contrast but in SL constructions specificity should not be a key factor, at least in cases where the topic is the spatiotemporal argument. Regarding the estar/ser alternation, this prediction is borne out in the light of examples in (39) and (40):

(39)  
a. Estas niñas son muy inteligentes.  
* These girls be.3pl very intelligent  
‘These girls are very intelligent’
b. *Varias niñas son inteligentes.  
* Several girls be.3pl intelligent  
‘Several girls are intelligent’
c. *Cualquier niña es inteligente.  
* Any girl be.3sg intelligent  
‘Any girl is intelligent’

(40)  
a. Estas niñas están tristes.  
* These girls be.3pl sad  
‘These girls are very sad’
b. Varias niñas están tristes.  
* Several girls be.3pl sad  
‘Several girls are sad’
c. Cualquier niña estaría triste.  
* Any girl be.3sg sad  
‘Any girl would be sad’

The degradation of the nonspecific examples (39b-c) can be accounted for if it is presumed that these subjects should be topics and the absence of specificity avoids their selection as topics.\(^\text{18}\) On the other hand, in (40) there is no need for the subject to be specific since, at least in one possible interpretation, subjects are not topics and hence they can be specific or nonspecific.

As far as argument SCs are concerned, if IL SCs contain a topic, we predict that nonspecific subjects are not an option, as shown in (41) as opposed to (42):

(41)  
a. Encuentro a estas niñas muy inteligentes.  
* find.1sg to these girls very intelligent  
‘I find these girls very intelligent’
b. *Encuentro a varias niñas muy inteligentes.  
* find.1sg to several girls very intelligent  
‘I find several girls very intelligent’\(^\text{19}\)

---
\(^{18}\) If the reference of the indefinite DPs in (39b-c) is explicitly or implicitly present in the context, these indefinite DPs are interpreted as specific and hence they can be used as topics.

\(^{19}\) As a reviewer points out, example (41b) are acceptable when the SC subject varias niñas ‘several girls’ is emphasised. Indeed, this DP can be focused, in which case the interpretation is completely different from the one assumed in the text.
(42)  
a. Quiero a estas niñas vestidas a las 6.  
want.1pl to these girls dressed at the 6  
‘I want these girls dressed at six’

b. Quiero a varias niñas vestidas a las 6.  
want.1pl to several girls dressed at the 6  
‘I want several girls dressed at 6’

c. Quiero a algunas niñas vestidas a las 6.  
want.1pl to some girls dressed at the 6  
‘I want some girls dressed at 6’

As is clear, with a specific subject both IL and SL SCs yield an acceptable outcome. The contrast between (41a) and (41b-c) suggests that the postverbal slot is a topic position which can only be filled by a specific DP. Due to the fact that SL SCs may contain a topic subject or a spatiotemporal topic, (42a) is ambiguous given that two interpretations arise: on the one hand, the statement in the SC can be seen as being predicated of the SC subject topic (in which case it could be used as an answer to What’s up with the girls?); on the other hand, the information provided in the SC can be predicated of the spatiotemporal topic which restricts the occurrence of adverbials such as a las 6 ‘at six’.

Interestingly, the two sentences (42b-c) are not ambiguous. They contain indefinite DPs as subjects of the SL SC. However, these indefinite DPs can be interpreted as specific, as suggested earlier. A coercing element triggering the specific reading is the presence of the preposition a. Leonetti (2004) claims that a can only be used with specific humans and that it is indicative of their topicality. From this it follows that varias/algunas niñas is interpreted as specific. Yet the result is grammatical. This is predicted in my system since SL SCs can have a topic subject, which is the case in (42b-c).

A good field to test this analysis is in SL SCs where the subject is nonhuman and nonspecific. Consider examples in (43):

(43)  
a. Espero cualquier coche listo para el sábado.  
expect.1sg any car ready for the Saturday  
‘I expect any car ready for Saturday’

b. Espero algunos coches preparados para el sábado.  
expect.1sg some cars ready for the Saturday  
‘I expect any car ready for Saturday’

These two examples are ambiguous between one reading in which we are talking about some specific cars and another reading in which any possible cars are mentioned. In the former case the subject is the topic, whereas in the latter case the subject is part of the comment and the topic is the spatiotemporal argument anchoring the adverbials.

5.2. Topics are islands for subextraction.

Since the seminal works by Ross (1967, 1986) and Huang (1982), there has been a hot debate on the conditions which block extraction of elements out of a constituent. In general it is assumed that subextraction is barred out of subjects and adjuncts.
However, provided certain conditions are met subextraction out of a subject is possible. In other words, the island nature of subjects can be mitigated (Gallego & Uriagereka 2007; Gallego 2011; Jiménez-Fernández 2009, 2012; Haegeman, Jiménez-Fernández & Radford 2012). In this section, I will show that subextraction from the subject of a copulative clause or an argument SC is possible only if the copulative/SC construction is headed by an SL predicate.

Consider first the *ser/estar* alternation and the possibilities of subextraction (italics are used for the moved element and the gap in its original position is indicated by `---`):

(44)  a. El autor de Syntactic Structures está arruinado.  [SL]  
  *the author of Syntactic Structures be.3sg bankrupt*  
  ‘The author of Syntactic Structures is bankrupt’  

b. ¿De qué libro parece que [el autor ---] está arruinado?  
  *of what book seem.3sg that the author be.3sg bankrupt*  
  ‘Of which book does it seem the author is bankrupt?’

(45)  a. Las fotos de Madonna están retocadas con photoshop.  [SL]  
  *the pictures of Madonna be.3pl touched up with photoshop*  
  ‘The pictures of Madonna are touched up with photoshop’  

b. ¿De qué cantante parece que [las fotos ---] están retocadas con photoshop?  
  *of what singer seem.3sg that the pictures be.3pl touched up with photoshop?*  
  ‘Of which singer does it seem that the pictures are touched up with photoshop?’

(46)  a. El autor de Syntactic Structures es muy inteligente.  [IL]  
  *the author of Syntactic Structures be.3sg very intelligent*  
  ‘The author of Syntactic Structures is intelligent’  

b. ¿/*¿De qué libro parece que [el autor ---] es muy inteligente?  
  *of what book seem.3sg that the author be.3sg very intelligent*  
  ‘Of which book does it seem the author is so intelligent?’

(47)  a. Las fotos de Madonna son muy provocativas.  [IL]  
  *the pictures of Madonna be.3pl very provocative*  
  ‘The pictures of Madonna are very provocative’  

b. ¿/*¿De qué cantante parece que [las fotos ---] son muy provocativas?  
  *of what singer seem.3sg that the pictures be.3pl very provocative*  
  ‘Of which singer does it seem that the pictures are very provocative?’

The difference in terms of acceptability of subextraction in *ser/estar*-predications can be easily accommodated in my system if the following assumptions are further made: 1) Topics are independent spell-out domains (Frascarelli 2006, 2007; Frascarelli & Jiménez-Fernández 2012); and consequently 2) Topics are islands (Meinunger 2000: 185 and ff; Culicover 1996; Rochemont 1989; Polinsky et al. in press).  

If topics are islands and the subject of IL-predicates is a topic, the prediction arises that subextraction will be blocked from IL-subjects. This prediction is borne out by examples in (46-47). The APs *inteligente* ‘intelligent’ and *provocativo* ‘provocative’

---

Meinuner (2000: 192) claims that “topic arguments are selective with respect to the semantics of the extraposed element.” For the purposes of this work, I will leave aside the issue of the weak/strong dichotomy (see Szabolsci & Zwart 1997 for an overview).
denote a permanent property about the subjects *el autor de Syntactic Structures* and *las fotos de Madonna*, respectively. More precisely, the subjects are IL-topics. The island nature of topics correctly predicts that no subextraction will be permitted, as illustrated in (46b) and (47b). Note that the whole island can be moved along lines established by the Criterial Freezing Condition (which specifies that a constituent that has moved to its criterial position is frozen in place: Rizzi & Schlonsky 2005), producing acceptable results, which again supports the idea that IL-subjects are topics. This is fully expected since in this case no island is being trespassed.21

(48)  a. ¿*El autor de qué libro* parece que --- es tan inteligente?
    the author of what book seem.3sg that be.3sg so intelligent
    ‘The author of which book seems to be so intelligent?’
  b. ¿*Las fotos de qué cantante* parece que --- son muy provocativas?
    the pictures of what singer seem.3sg that be.3pl very provocative
    ‘The pictures of which singer seem to be very provocative?’

As regards the SL-constructions, I have claimed that the subject may be part of the comment, and hence does not qualify as a topic. The examples in (43b) and (44b) lend further support to this claim since in this case subjects are not topics and are thus transparent to subextraction.22

Now, I will focus on the interaction of the syntax and the information structure of argument SCs, with particular attention to subextraction. Consider the examples in (49-50):

(49)  a. Quiero *las fotos de esa actriz* retocadas con photoshop.
    want.1sg the pictures of that actress touched up with photoshop
    ‘I want the pictures of that actress touched up with photoshop’
  b. ¿*De qué actriz* quieres [las fotos ---] retocadas con photoshop?
    of what actress want.2sg the pictures touched up with photoshop
    ‘Of which actress do you want the pictures touched up with photoshop?’

(50)  a. Esperaba *las fotos de esta cantante* colgadas en su web.
    expect.1sg the pictures of that singer posted in her web
    ‘I expected the pictures of that singer posted in her web’
  b. ¿*De qué cantante* esperabas [las fotos ---] colgadas en su web?
    of what actress expect.2sg the pictures posted in her web
    ‘Of which singer did you expect the pictures posted in her web?’

(51)  a. Considero *las fotos de esa cantante* muy provocativas.
    consider.1sg the pictures of that singer very provocative
    ‘I consider the pictures of that singer very provocative’

21 When an IL-subject is not in topic position, subextraction is allowed. This strongly supports my view that in pre-verbal position IL-subjects are topics:

(i)  ¿*De qué libro* parece que es tan inteligente [el autor ---]?
    of what book seem.3sg that be.3sg so intelligent the author
    ‘Of which book does it seem the author is so intelligent?’
(ii) ¿*De qué cantante* parece que son muy provocativas [las fotos ---]?
    of what singer seem.3sg that be.3pl very provocative the pictures
    ‘Of which singer does it seem that the pictures are very provocative?’

22 The transparency to extraction of certain types subjects has been independently motivated by Stepanov (2007), Gallego & Uriagereka (2007), Gallego (2012), Jiménez-Fernández (2009, 2012), among many others.
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b. *¿De qué cantante considers [las fotos ---] muy provocativas? [IL]
of what singer consider.2sg the pictures very provocative
‘Of which singer do you consider the pictures very provocative?’ (52)
a. Encuentro las fotos de esa actriz muy favorecedoras.
find.1sg the pictures of that actress very flattering
‘I consider the pictures of that actress very flattering’
b. *¿De qué actriz encuentras [las fotos ---] muy favorecedoras? [IL]
of what actress find.2sg the pictures very flattering
‘Of which actress do you find the pictures very flattering?’

There is a clear-cut contrast between subextraction from the subject of an SL SC and subextraction from the subject of an IL SC. This is quite intriguing since, if extraction from subjects is allowed or blocked in a given language, it is predicted that the results are all either degraded or accepted. Again, there seems to be a difference in the kind of predicate (and consequently in the type of subject) of the SC. In SL SCs the subject may be part of the comment, and hence it is expected to be transparent to subextraction. This is illustrated in (49-50). However, in IL SCs the subject qualifies as an island. Indeed, this is fully expected if IL subjects are topics. Moving the whole topic results in grammatical sentences:

(53) a. ¿Las fotos de qué cantante consideras [--- muy provocativas]?
the pictures of what singer consider.2sg very provocative
‘The pictures of which singer do you consider very provocative?’
b. ¿Las fotos de qué actriz encuentras [--- muy favorecedoras]?
the pictures of what actress find.2sg very flattering
‘The pictures of which actress do you find very flattering?’

To recapitulate, in this section I have shown that subextraction is licit in SL-constructions, but illicit in IL-constructions. This supports my analysis of IL subjects as topics and SL subjects as part of the comment (on one of the two possible IS readings).

6. A final note on the syntax of the IS of IL/SL-sentences
As stated in section 2, one promising way to account for the differences between IL- and SL-predicates is the lexical-syntactic approach taken by Gallego & Uriagereka (2011), according to which the structure of IL-predicates includes a central-coincidence preposition (P_C), whereas the structure of SL-predicates additionally contains a terminal-coincidence preposition (P_T). The question arises as to which position is occupied in this structure by the subject. The two structures proposed by G&U are repeated in (54):

(54) a. [serP [PP DP [P_P_C + √ROOT ]]]
b. [estarP ser + P_T [PP X [PP P_T [PP DP [P_P_C + √ROOT ]]]]]

As argued earlier, for IL the subject is a topic, for SL the subject may not be. The analysis that I want to propose is sketched as follows. Assuming the operation of AGREE in terms of a probe/goal relationship (Chomsky 2008), for the ser/estar case, T is endowed with uninterpretable discourse features (maybe via feature inheritance as in Miyagawa 2010 and Jiménez-Fernández 2010, 2011). This discourse feature is valued as [TOP] via AGREE with the subject of the copulative construction, which
gives rise to the topic interpretation of the subject in IL and SL constructions. The subject moves to spec-TP attracted by an EPP feature. By contrast, in SL copulative constructions the AGREE relation can also be established between T and the silent topic in the SL predicate (indicated as X in (54b), in spec-PT). In that case, the subject may optionally move to spec-TP for other reasons (which need not concern us here). This corresponds to the comment interpretation of the subject in SL-constructions. Informally, the three possibilities are represented in (55):  

\[
\begin{align*}
\text{(55) a.} & \quad [\text{CP} \ [\text{TP} \ \text{DP}_{\text{Top}} \ [T \ [\text{ser}P \ \text{ser} \ [\text{PP} \ \text{DP} \ [P \ \text{P}_C + \sqrt{\text{ROOT}} \ ]]]]]] \\
\text{b.} & \quad [\text{CP} \ [\text{TP} \ \text{DP}_{\text{Top}} \ [T \ [\text{estar}P \ \text{ser} + \ P_T \ [\text{PP} \ P_T \ [\text{PP} \ \text{DP} \ [P \ \text{P}_C + \sqrt{\text{ROOT}} \ ]]]]]] \\
\text{c.} & \quad [\text{CP} \ [\text{TP} \ \text{X}_{\text{Top}} \ [\text{TP} \ \text{DP} \ [T \ [\text{estar}P \ \text{ser} + \ P_T \ [\text{PP} \ X \ [\text{PP} \ P_T \ [\text{PP} \ \text{DP} \ [P \ \text{P}_C + \sqrt{\text{ROOT}} \ ]]]]]]]] \\
\end{align*}
\]

The positional differences of subjects in ser/estar-predications reported by G&U (2011), Camacho (2012) and Brucart (2010) supports the view that SL subjects may remain in situ because the topic feature in T is satisfied by the null spatiotemporal topic. For Camacho (2012: 461), “Postverbal subjects of ser are marginal, postverbal subjects of estar are acceptable.” The relevant examples are from Gallego & Uriagereka (2009):

\[
\begin{align*}
\text{(56) a. Estará el hombre tonto.} & \quad \text{be.3sg the man silly} \\
& \quad \text{‘The man must be feeling silly’} \\
\text{b. *Será el hombre tonto.} & \quad \text{be.3sg the man silly} \\
& \quad \text{‘The man must be silly’}
\end{align*}
\]

On the other hand, due to the lack of this silent spatiotemporal topic in ser-constructions (see 54b and 55a), the only possibility is for the subject to move to spec-TP, explaining why post-verbal subjects are not available in IL-constructions, as shown in (56b). In (56b) the DP subject is not taken as a topic, hence it can be predicted that post-verbal subjects with a non-specific reading are available in estar-constructions. The prediction is borne out in (57):

\[
\begin{align*}
\text{(57) a. Están algunos libros rotos.} & \quad \text{be.3pl some books broken} \\
& \quad \text{‘Some books are broken’} \\
\text{b. Están rotos algunos libros.} & \quad \text{be.3pl broken some books} \\
& \quad \text{‘Some books are broken’}
\end{align*}
\]

The subject in estar-constructions can occur in an immediately postverbal position or in final position. In both situations, one of the possible readings of the indefinite DP subjects is as non-specific. Since in estar-constructions the subject can be part of the comment, it is expected that non-specific DPs can function as subject occupying a non-topic position.

---

23 I assume multiple specifiers to account for the presence of more than one element targeting the same head (Jiménez-Fernández 2011).
A piece of evidence for the structure proposed comes from morphology. For Gallego & Uriagereka (2011) the verbal endings of deverbal adjectives are PF reflexes of the terminal preposition (P_T). They illustrate with the examples in (10) (ibid: 26), repeated in (58) (see also Brucart 2010 in this respect):

(58) a. {*Soy/Estoy} avergonza-do
    \textit{be.1sg a-shame -P_T}
    ‘I am ashamed’

b. {*Soy/Estoy} suel -to (#solta -do)
    \textit{be.1sg loose-P_T release-P_T}
    ‘I am loose’

c. {*Soy/Estoy} *(de) profesor
    \textit{be.1sg P_T teacher}
    ‘I work as a teacher’

The use of \textit{estar} in (58a-b) is motivated by the presence of a P_T realized by the past participle morphology on the adjectives. Additionally, the preposition \textit{de} in (58c) can be taken as a PF reflex of P_T.

Implementing this idea, we can expect central prepositions to be phonologically realized under certain circumstances. Indeed, this is the case in examples where the verb \textit{ser} co-occurs with nominal predicates:

(59) a. El bikini es a rayas.
    \textit{the bikini be.3sg to stripes}
    ‘The bikini is striped.’

b. El bikini es de flores.
    \textit{the bikini be.3sg of flowers}
    ‘The bikini is flowery’

c. El piso es con muebles
    \textit{the flat be.3sg with furnitures}
    ‘The flat is furnished.’

The presence of the prepositions can be claimed to be due to the prepositional component of \textit{ser}-structures. Adjectives incorporate this prepositional feature inherently, but nouns do not, thereby predicting the occurrence of certain prepositions in P_C. The PPs in (59) can sometimes have an adjectival counterpart, which again includes verbal morphology, as shown in (60):

(60) El piso es amueblado.
    \textit{the flat be.3sg furnished}
    ‘The flat is furnished’

As regards SCs, assuming that they merge as complements of the VP, the different IS behavior of IL/SL-SCs can be explained by proposing that for IL SCs the matrix verb is endowed with discourse features (also via feature inheritance from the light \textit{v}, as in Jiménez-Fernández in press). This is an uninterpretable feature in charge of searching for a suitable goal, the IL subject. The feature is valued as TOP via AGREE with the IL-subject, which is attracted to spec-VP by an EPP feature under V. By contrast, in SL SCs containing a spatiotemporal topic, V agrees with this silent topic, which values V’s uninterpretable discourse feature as TOP. Hence, this accounts for
the possible interpretation of SL subjects are part of the comment and explains the grammatical properties associated with this type of subject. The informal representation of the three possibilities will then be as in (61):

$$(61) \begin{array}{ll}
a. & [v_P \{VP \{DP\{PP [v_P \{PC + \sqrt{\text{ROOT} }\}]\}\}\}] \\
b. & [v_P \{VP \{DP\{X \{PP X \{PP [v_P \{PC + \sqrt{\text{ROOT} }\}]\}\}\}\}] \\
c. & [v_P \{VP \{X\{Top \{VP \{DP \{V \{PP \{X \{PP [v_P \{PC + \sqrt{\text{ROOT} }\}]\}\}\}\}\}\}\}\}] \\
\end{array}$$

Evidence in support of this analysis may also be found in morphology. Brucart (2010) adopts Den Dikken’s (2006) claim that small clauses project a Relator Phrase, which links the subject and its predicate. The Relator head can sometimes delexicalized as we have seen for the structures of ser and estar. This Relator is what Gallego & Uriagereka have identified as P. We have seen that in ser- and estar-constructions the P can have a PF reflex. The structure proposed for argument SCs in (61) may be more strongly argued for if P lexicalizes as well in this environment. Consider the following examples:

$$\begin{array}{ll}
(62) \begin{array}{ll}
a. & \text{Tildó a Juan de inexperto en esos asuntos.} \quad \text{(Spanish)} \\
& \text{brand.3sg to Juan of unskilled in those affairs} \\
& \text{‘He branded Juan as unskilled in those affairs’} \\
b. & \text{Juan tomó a ese político por tonto.} \\
& \text{Juan take.3sg to this politician for foolish} \\
& \text{‘Juan took this politician for a fool’} \\
c. & \text{Convirtió a Juan en un gran artista.} \\
& \text{turn.3sg to Juan into a big artist} \\
& \text{‘He turned Juan into a big artist’} \\
\end{array} \\
(63) \begin{array}{ll}
a. & \text{I consider John as a good artist.} \quad \text{(English)} \\
b. & \text{He took that politician for a fool.} \\
c. & \text{He turned John into a big artist.} \\
\end{array}
\end{array}$$

In these examples the SC predicate is interpreted as IL or SL. However, this interpretation may be seen as a consequence of the preposition included in the SC (the selection of the relevant preposition is dependent on the matrix verb). What is crucial here is that $P_C$ incorporates to $P_T$ when the predicate is interpreted as SL, as exemplified in (62c) and (63c), which has been independently motivated by Hale & Keyser (2002) for prepositions such as into, as shown earlier. Note that the interpretation of the predicate in (62c) and (63c) is only that of SL. On the other hand, when the SC lacks a $P_T$, the lexicalized preposition must be different, supporting the view that in that case the preposition is generated as $P_C$, and the only interpretation available for the predicate is that of IL. In a nutshell, what the data in (62) and (63) demonstrate is that IL predicates are compatible only with prepositions of the central-coincidence type, whereas SL predicates are compatible only with terminal-coincidence prepositions. This ultimately supports the presence of both $P_C$ and $P_T$ in the two types of argument SCs that I have dealt with in this paper.

7. Conclusions

In this paper I have discussed the different discourse properties attested in copulative clauses and argument SCs. The selection of copulas ser/estar has been shown to be influenced by the interpretation as IL/SL of the predicates. When the adjectival predicate combines with a $P_C$, it is interpreted as IL and the copula shows
up as ser. Conversely, when the adjectival predicate projects a PT, it is interpreted as SL and the selected copula is estar. This lexical-syntactic distinction has been shown to have consequences in discourse. The information structure of IL/SL is completely different. In SL-structures, the subject is a topic about which something is predicated. On the other hand, in SL-structures the subject can either be a topic or part of the comment. In the latter case, there is a spatiotemporal topic which restricts the occurrence of time adverbials. Structurally, in IL-constructions the subject moves to spec-TP after valuing a discourse feature under T as [top]. In SL, this discourse feature can be valued via AGREE with either the subject or the spatiotemporal topic. This also has a correlation with the structure of SCs. In IL-SCs the subject is a topic, and hence moves to spec-VP, whose head contains a discourse feature. In cases of SL-SCs, there are two possibilities: 1) the subject is a topic and hence moves to spec-VP; 2) there is a spatiotemporal topic which moves to spec-VP.

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