A GUIDE TO IL AND SL IN SPANISH: PROPERTIES, PROBLEMS AND PROPOSALS

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ABSTRACT. This article provides with a state of the art of how the Individual Level / Stage Level distinction –and the related but distinct issue of the distribution of *ser* / *estar*– is instantiated in Spanish. We argue that the IL / SL distinction can be understood in two different ways: as a contrast between properties predicated of an individual or of a stage of that individual, and as a contrast between temporally persistent properties and temporary ones. The paper ends with a specific proposal about how to capture the distinction inside a structural system.

Keywords: Individual Level; Stage Level; copula; syntax; lexicon; semantics

RESUMEN. Este artículo es un estado de la cuestión acerca de la distinción entre predicados de individuo y predicados de estadio en español, con apuntes marginales acerca del problema –relacionado, pero diferente– de cómo caracterizar el contraste entre *ser y estar*. Proponemos que el contraste puede ser entendido en dos maneras: como el contraste entre propiedades que se predican de individuos o propiedades que se predican de sus estadios y como la diferenciación entre propiedades temporalmente persistentes y las que no lo son. El artículo termina con una propuesta específica acerca de cómo integrar los dos contrastes en un sistema estructural.

Palabras clave: Predicados de Individuo; Predicados de Estadio; cópula; sintaxis; léxico; semántica

1. What is the IL / SL distinction?

The observation that in linguistics there are many distinctions that we use but do not really understand is general, but more acute in some areas, perhaps one of which is the distinction between Individual Level (henceforth IL) and Stage Level (SL) predicates. We know that it is an honored distinction since the seventies, and one that seemingly has direct cross-linguistic consequences for phenomena like secondary predication, the interpretation of indefinites, choice of auxiliaries and copulative verbs and the interpretation of temporal expressions, to name just a few that will be reviewed here, but -as we will see- there is no clear unitary definition of what counts as an IL predicate and what is as SL. There are items that can alternate between the two readings with relative easiness, while others seem to be frozen in one of the two readings. To make things worse, some items display a mixed behaviour, acting like ILs for some tests but as SL for others, something that might suggest that the IL / SL distinction is a cover term to refer to the aggregation of characteristics that combine inside lexical items in a variety of ways. Perhaps, even, different subclasses of IL and SL have to be differentiated and they display the kind of distinctive behaviour that leads us to think that IL and SL, technically, are not primitives of linguistic analysis. Also, unlike other classifications that tend to be instantiated in only one grammatical category, the IL/SL distinction is cross-categorial -that is, appears materialised in different grammatical categories, perhaps all of them-.

© Antonio Fábregas. Borealis: An International Journal of Hispanic Linguistics, 2012, 1 / 2. pp. 1-71. http://dx.doi.org/10.7557/1.1.2.2296

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Once the definition and the classification themselves are problematic, it should not surprise us that most aspects of their analysis as still up in the air almost 50 years after the distinction is proposed for the first time (Milsark 1974). Scholars do not agree about whether the distinction has to be analysed as part of the conceptual interpretation of items –world knowledge reflected in individual lexemes–, as a pragmatic effect independent of the lexical items involved, or as the result of specific syntactic configurations.

Thus, the goal of this article has to be, forcefully, modest. We will not provide with a bullet-proof new analysis of the distinction that can cover all phenomena where it plays a role, and we will be able only occassionally to determine that a particular proposal seems not to account for (some of) the data. The cases where no clear consequences can be drawn from two opposed analysis will be more frequent than usual. Our goal here is simply to give an overview of where we stand now, what the problems are, and what the analytical options that we still have in front of us are. We do this in the hope that this will encourage others to question some of the assumptions and advance some proposal that might throw light in this distinction.

As we will see, the IL / SL distinction is first introduced as a difference between predicates that characterise individuals and are temporally persistent, and predicates that characterise states of individuals and are temporary. In later elaborations, these two characteristics are divided: some authors concentrate on the temporal persistency side, while others concentrate on whether the properties are predicated from individuals or from states of those individuals. Little by little, other approaches are presented, which take into account the information structure, pragmatics or even the count / mass distinction applied to the domain of states.

In the remainder of this section we will ellaborate on the proposals available to capture the distinction between IL and SL predicates. In §2 we will present other empirical properties of the contrast beyond those noted already. In §3 we will address their connection with the two copulae in Spanish. We will show which categories can instantiate the distinction in §4, and in §5 we will examine some factors that can influence whether a predicate is taken as an IL or a SL. In §6 we will show that specific adjectives do not fall neatly in the divide, and will suggest that as a result of that the IL / SL distinction has to be understood as a conglomerate of in principle independent properties. §7 presents a short overview of the three main possible ways of capturing this distinction and advances a possible proposal inside a syntactic framework. Let us start.

1.1. The origin

Let us start with their beginning in generative grammar. Milsark (1974: 210-216) analyses existential sentences in English and notices the following contrast (1), which can be partially replicated in Spanish (2). The propositional interpretation of the underlied predicate ('there are too many people that are X') is only possible with some constituents, which correspond to what Milsark calls the 'predicate restriction'.

- (1) a. There are too many people {bored / alert / hungry / sick}.
 - b. *There are too many people {boring / crazy / intelligent / beautiful}.
- (2) a. Hay demasiada gente {enfadada / alerta / hambrienta / enferma}. *There.is too.many people {angry / alert / hungry / sick}*
 - b. #Hay demasiada gente {cruel / loca / inteligente / hermosa}. *There.is too.many people {cruel / crazy / intelligent / beautiful}*.

Milsark (1974: 211-212) characterises the distinction as state-descriptive (1a, 2a) vs. property-descriptive (1b, 2b), and notes that the state descriptive adjectives are those that describe characteristics not possessed habitually. He discusses the example in (3) and notes that "at least in my speech", (3) [(101) in the original] "can be about someone who has been out celebrating the completion of his thesis, but is not a habitual drunkard, i.e. *drunk* in this sentence can denote a state".

(3) A drunk ambled down the street.

Then he proposes a working definition of the distinction, which he admits it is imprecise, and parts of which were inspired by Robert Fiengo (Milsark 1974: 212).

(4) a. Properties are those facts about entities which are assumed to be, even if they are not in fact, permanent, unalterable and in some sense possessed by the entity.

b. States are conditions which are, at least in principle, transitory, not possessed by the entity of which they are predicated and the removal of which causes no chance in the essential qualities of the entity.

It is probably already clear that property-descriptive predicates correspond to what later became to be known as IL predicates, while state-descriptive predicates are SLs. The first thing to notice in the definition is the combination of two criteria: the necessity (or not) of the characteristic expressed for the nature of the individual, and the criterion of temporal boundedness, which has been customarily adopted in the IL / SL distinction. According to this second criterion, one class is conceptualised as expressing permanent characteristics, and the other class, as expressing temporary characteristics. Definitions of the IL and SL distinction have oscilated between these two elements, which perhaps should be kept separate.

- a) The property is predicated directly of an individual –it is possessed by it– or from a stage of the individual –it defines a situation in which the individual is found–.
- b) The property is temporally persistent, implied to be stable, or is assumed to be subject to changes, and thus short in duration.

Carlson (1977: 72) criticises this second criterion, and decides to adopt only the first: "It appears to be reasonably clear that we cannot separate the two lists of adjectives [...] by simply putting a stopwatch on the length of time that a predicate might hold and seeng if the stopwatch reaches a certain critical time. For instance, something does not have to be big (a property) longer than it is open (a state) (e.g., an expanding door), though we generally expect this to hold". He goes on to notice predicates like those in (4), which denote 'states' but express properties that hold of long periods of time; the first of them, most probably, forever.

(4) Juan está {muerto / vivo}. Juan is_{estar} {dead / alive}

Carlson (1977: 73) refuses to give a direct definition of the distinction, but he suggests that the predicates that Milsark (1974) called state-descriptive are predicates that speak of happenings (versus those that denote characteristics of an individual).

More precisely, Carlson (1977: 77) says that "those [predicates] referred to by Milsark as 'states' [...] will be predicates that denote sets of stages; the others, like intelligent, will be represented as sets of individuals". Or, in other words, 'states' are predicated of a particular stage 'y' related (R) to an individual (5), while 'property-descriptive' predicates directly introduce characteristics of the individual (6).

- (5) John is available: $\exists y[R(y, j) \& A'(y)]$
- (6) John is intelligent: $\lambda P^{P}(j) (^{I}) = I(j)$

Ever since Carlson (1977), the terminology has been this: Individual-level predicates vs. Stage-level predicates, and despite the absence of an clear definition, it has been more or less generally assumed that IL predicates are those that express properties of an individual –and thus, properties considered necessary for the individual to be defined as such– and SL predicates qualify the stage –or situation–related to the individual without expressing necessary characteristics. In other words: if John loses the property of being intelligent, he is no longer the John of our world, but if he loses the property of being available he is still John. Similarly, Napoleon is not Napoleon by virtue of being dead, but because of other properties, such as being Corsican, short, a general, the Emperor of France between 1804 and 1815, etc.

Once the distinction is defined like this, it partially relies on conceptual meaning, and moreover, in an aspect which is quasi-philosophical, namely on which properties identity depends. As it happens in other cases where we use conceptual meaning to establish a definition, it seems clean at first, but once we poke it problems abound. It is relatively clear that the material of an object is part of its identity and that this table would not be the same table if it was not made in metal (7a), but we could spend long days with their nights discussing whether *La Regenta* would be the same novel if it had not been written in the 19th century (7b), or whether Hitchcock would have been the same person if he had not been British (7c). Note that nationality adjectives do not always designate the place where someone was born, but what kind of passport one has (as nationality can be lost and gained, 7d), so the question is whether in such cases the adjective is still IL, as according to this definition it would mean that we talk, at some level, about two different Terry Gilliams. Conversely, we could ask ourselves if someone with a cronic disease would be the same individual if he loses the property of being sick.

- (7) a. Esta mesa es metálica. *this table isser metallic*b. La Regenta es del siglo XIX. *La Regenta isser from-the century 19th*
 - c. Hitchcock era británico. *Hitchcock was_{ser} British*
 - d. Terry Gilliam era estadounidense, pero ahora es británico. *Terry Gillian was_{ser} USA-citizen, but now is_{ser} British*

Indeed, *a posteriori* it seems possible to find a reason to justify that a particular language treats as essential properties some notions, but it is not so easy to predict in advance what kinds of properties are treated as essential, or at least we are lacking the ontological theory necessary for that task. We probably would not expect a lot of cross-linguistic variation in this area, at least if the notion of identity is universal for all human groups.

1.2. Further ellaborations: IL and SL have different argument structures

Some have attempted a definition of IL and SL predicates that subsumes the Carlson-contrast (which was conceptual in nature) but codify it by purely linguistic devices. Kratzer (1989) is one such example. She treats SL predicates as predicates that include a spatio-temporal or event variable that can be bound by a temporal restrictor; IL predicates lack this variable. Tense binds this variable, so it locates the set of properties, just as in any eventive verb –in other words, Kratzer treats SL predicates as Davidsonian predicates, that is, predicates with a Davidsonian event argument–. In IL predicates, there is no such variable, so tense locates the individual. Each language would determine idiosyncratically which predicates have this variable and which would not.

(8) a. $\lambda x \lambda L[P(x, L)]$ b. $\lambda x[P(x)]$

Several grammatical properties follow from here. The presence of the event variable allows for temporal restriction of the properties, so –conceptually– they can be lost and gained without affecting the identity of the subject, and thus can be interpreted as temporary.

(9) Juan {está disponible / *es inteligente} hoy a las tres. Juan {is_{estar} available / is_{ser} intelligent} today at the three

Moreover, the so-called lifetime effect –the presupposition with IL predicates in some forms of the past that its subject has ceased to exist– is clamed to be explained, because the past tense can be restricted to the variable without applying to the individual.

(10) a. Juan estaba enfermo. Juan was_{estar} sick
[before now (L)] & [sick' (Juan, L)]
b. Juan era intelligente. Juan was_{ser} intelligent
[before now (Juan)] & [intelligent' (Juan)]

This formalisation lets us see clearly that Kratzer's approach still considers IL predicates to be temporally persistent. The crucial difference between the two classes is that only one has a spatiotemporal variable; in a sense, the temporal persistency effect is the semantic translation of the different argument structure that each one of these predicates exhibit. This causes trouble when confronted with examples like (11).

(11) Marta was blonde when she was little.

As noted in Arche (2006: 10), Kratzer needs to say that in these cases the context provides with a temporal variable; however, the temporal variable is part of the argument structure of the predicate, and it is not usually accepted that context is able to alter argument structure. Argument structure is generally considered –at least in generative models– either as a lexical property of items or as a configurational effect

of a particular syntactic structure. Problems such as these have prompted an account where the core intuition of Kratzer's approach relating IL and SL with different argument structures are kept, but defined independently of temporal persistence (§1.4). But first let us review the approaches where temporal persistence is the only defining property of IL predicates.

1.3. Further ellaborations: IL as temporally persistent

For some authors the lexical entries of IL and SL predicates must be very similar, and roughly the same primitives must be present in both of them. The first option – advocated, for instance, by the followers of the Neo-Davidsonian approach to predicate meaning (Higginbotham 1985)– is that every predicate must have a temporal variable. For them, the difference between IL and SL must follow from other principles. Chierchia (1995) is such an example. In his account, both SL and IL predicates have an event variable, but –crucially– IL predicates compulsorily are combined with a generic operator (12), while this operator is not compulsory with an SL predicate.

(12) [[Juan is intelligent]] = Gen s [C (J, s)] [intelligent (J,s)]

'Gen' is a quantifier over situations (s), restricted by C (that is, C defines the situations that have to be considered in order to determine if the sentence is true), and scoping over the predicate. In other words: for *Juan es inteligente* to be true, it must be the case that in every relevant situation that contains Juan, Juan is intelligent. Crucially, the role of C here is almost vacuous: the set of situations that have to be considered are all those situations that contain Juan –that is, from birth to death–. This contrasts with a generic sentence like *Juan fuma*, which in order to be true does not need Juan to be smoking in any situation where he is present, and where the only situations considered are those that fulfill some felicity conditions (that he is awake, that he feels like it, that he has the means to do so...). In IL predicates, C is set to a "maximally general locative condition **in**" (Chierchia 1995: 198-199), that is, independently of where the subject is located, the property holds, which gives us the more precise representation of an IL predicate in (13).

(13) $\alpha = \lambda x_1 \dots \lambda x_n$ Gen s [in $(x_1 \dots x_n, s)$] [$\alpha^+ (x_1 \dots x_n, s)$]

This explains that IL predicates do not accept temporal modifiers, because they lexically codify the restrictor as a general location and therefore do not allow more specific cases. One important issue here is, however, what forces the IL predicate to combine necessarily with a generic operator. Note that as the formula goes, the predicate itself (α +) only requires two things: a situational variable s and a subject x. Moreover, the compulsory presence of this operator cannot be understood as meaning that the predicate lexicalises the generic operator with it, because any predicate can coocur with this operator and we do not want to say that every predicate lexicalises a generic operator, and only some of them work without lexicalising it. Chierchia, thus, falls in the class of those that consider that ILs are characterised by some form of habituality, temporal persistence, etc.

There are, however, some problems. One noted by Arche (2006: 12) in her general critique of approaches where ILs are defined as temporally persistent is that it is difficult to lexically express the generic operator.

(14) #Generalmente Jean es francés.

generally Jean isser French

However, to the extent that (14) is acceptable –Arche notes–, it does get a reading where the operator quantifies not only over situations, but over situations and the life span of the individual. (14) can be accepted if we believe in reincarnation, and we want to say that, habitually, when Jean reincarnates, he does so as a Frenchman.

For other authors, the general character of an IL predicate is built inside their meaning, without the need for a quantifier. De Swart (1991: 59) claims that the difference between IL and SL predicates is that the former have built in their semantic entry a uniqueness presupposition affecting the Davidsonian argument that forces to interpret that in each model (that is, in each world) and for each assignment of individuals to the argument structure of the predicate (that is, for each possible subject) there is only one spatio-temporal location (that is, one time period where the predicate is true). Said in clearer terms, this means that in our world, if we say that *John is intelligent*, the eventuality expressed here is presupposed to be unique, and as such cannot be lost and possessed again by that individual, and for this reason tends to be interpreted as temporally coextensive with the whole life.

Finally, others also rely on the temporal persistence as a way of characterising the difference, but this time they present it as a pragmatic inference rather than as an entailment or a presupposition, making it easier to understand that in adequate contexts the uniqueness can be lost. Condoravdi (1992) is one such case; McNally (1994) also follow this proposal. That is, for these authors, IL predicates are those that have the default inference that "if an eventuality is going on at time t, and you do not have any information that it is not going on at some later time t', then infer that it is going on at that later time t' as well" (Condoravdi 1992: 9). In other words, there is no semantic or syntactic difference between the two classes, but it is derived from pragmatics. One immediate advantage of this approach, and of all the others that play with pragmatics in order to explain the distinction, is how they manage to account for the frequent cases of coercion in which an IL predicate is used as an SL predicate, such as (15), where it is pragmatically inferred that the otherwise characterising and persistent properties expressed by nationality adjectives are subject to change and restricted to specific situations.

(15) Juan se fue a Alemania español, pero volvió alemán. Juan SE went to Germany Spanish, but came.back German

These are cases of secondary predication, and as we will note in §2.2, in most accounts predicates that can act as secondary predicates are classified as SL; this is not so in McNally's approach, for instance, where the crucial property is whether it is informative to predicate a property of an invidivual during the time period defined by the main predicate.

However, predicates which do not have this inference are sometimes more difficult to coerce into IL predicates, something that, *prima facie*, is problematic for this approach. Consider, for instance, (16), built with the copula that in Spanish has been traditionally associated to IL predicates. Indeed, it is difficult to understand in (16) that Tarzan has always been naked and will die naked, even if this situation is not inconceivable.

(16) ??Tarzán es desnudo. *Tarzan is_{ser} naked*

Another problem with this approach is that no explicit reference to outer aspect is made (M. Arche, p.c.). Outer aspect determines which part of an eventuality is relevant for the situation that a sentence describes; for instance, in the sentences *John is running* and *John has run*, the same eventuality is presented, but the situations are very different, and this is so because of the different relations that the eventuality establishes with the points t and t'. It is not difficult to break the implication once outer aspect is, for instance, perfective: *Juan was charming*.

Maienborn (2004) also uses a pragmatic approach, but she has two differences with respect to the previous approaches. The first one is that she argues that neither an IL nor an SL predicate have a Davidsonian argument –in the terminology used by her, they are Kimian-states, pure states that do not allow for manner or place modification–. The second difference is related to this characterisation, as she analyses the constituents that, for other authors, are modifiers of the situational variable in SL predicates (17) not as event modifiers but as frame adverbials. Frame adverbials do not properly place the event in some domain, but restrict the overall proposition to only some specific time.

(18) Juan estaba cansado <u>ayer</u>. Juan was_{estar} tired yesterday

For Maienborn, the underlined modifier is a frame adverbial that specifies that the proposition 'John was sick' is true only of yesterday. The frame adverbial in such cases restricts the topic time of the sentence (Klein 1994), according to Maienborn.

Once the modifier is not viewed as locating an eventive variable, Maienborn points out that IL predicates also allow for frame adverbials of the same kind.

(19) María es rubia <u>en el coche</u>. María is_{ser} blonde in the car

The difference between (18) and (19) is that (18) allows for a temporal interpretation of the frame adverbial (that is, the proposition is true only during some time period), while this reading is not allowed in (21). It gets what Maienborn calls an epistemic reading: it seems that María is blonde only when she is in the car, because the light makes her hair seem blonde. The epistemic reading, then, sets a situational frame where some circumstances arise that make someone hold the belief that the individual has some property. One can conceive situations where someone might seem fat –for instance, when wearing some clothes–, pretty –when in a bar with dim lights–, etc., but outside from the frame defined by those restrictors, the belief that the property holds goes away.

Thus the problem reduces, for Maienborn, to why the temporal reading of frame adverbials should be absent from IL predicates. Her answer is, again, pragmatic. In order to give a temporal interpretation to the frame adverbial in (20), conditions of pragmatic felicity force the interpretation where the property expressed by the predicate is exactly coextensive with the time María was in the car. However, it would not be informative enough to interpret that she was blonde while in the car, because that property is assumed to be temporally persistent and therefore she would be blonde before and after. However, this coextensiveness can be pragmatically interpreted as someone having the belief that she was blonde during this time. However, treating temporal modifiers as frame adverbials might need further explanation, as it is not clear that *ayer* has the behaviour of a frame adverbial in (18). Note that frame adverbials are topics, and in clear cases, it is not possible to ask for them with normal when-interrogatives –perhaps because the answer to a question must be focus, not topic (García Fernández 2000: 126)– (20). In (20a), the time modifier has a reading where it marks the onset of the state –when it started being true that the child was home, back from a party; it can be an answer to the question in (21), interpreted also as a question about when it started being true that the child came back from the party. In contrast, the temporal modifier in (20b) does not locate when the state started; it just says that in a particular topic time, at three in the morning, the child held the state of being home. It cannot be an answer to the question in (21). Why can (20a) be used to answer (21)? Does this indicate that the temporal modifier has incidence over what Klein calls the event time –that is, the eventuality–? If would seem to suggest so.

(20) a. El niño estaba en casa a las tres. *The child was_{estar} at home at the three* b. A las tres, el niño estaba en casa. *at the three the child was_{estar} at home*(21) ¿Cuándo llegó el niño de la fiesta? *when arrived.3SG the child from the party?*

One of the main general questions (and perhaps a problem) with these pragmatically-oriented theories is that in some sense they must presuppose that some predicates have a stronger implication of temporal persistence than others. Why cannot speakers defeat the implicature that 'blonde' is a non persistent property and therefore assign a temporal reading to a modifier? If we claim that the reason are general conceptual assumptions about the world, two problems emerge, one of them already familiar. First, it must be explained why it is relatively easy to accept some sentences once our assumptions about the world change –and we accept a fairy tale-context, as in *The tree told the frog that she should not cross the forest*–, but it is so difficult to change our assumptions about these properties and even if we imagine a fantasy world where the colour of the hair of a character changes with her feelings it is difficult to accept something like (22), with the copula that normally accompanies SL predicates.

(22) ??La niña estuvo rubia mientras llovía, y luego se puso pelirroja. the girl was_{estar} blonde while it-rained, and then SE became red-haired

The difficulty of interpreting this seems to suggest that the distinction is deeper and cannot be modified by altering our assumptions about possible worlds. This takes us to the second complication, which is that ultimately these theories have to rely on accepting that the conceptualisation of some properties is necessarily different from the conceptualisation of others, even if this is not directly reflected in their grammatical properties. Again, we fall in the crucial question of which properties are considered essential and which properties are not, and how this reflects a deeper ontology of how humans categorise reality around them.

1.3. Severing temporal persistency from the type of predication

Accounts based on temporal persistency have been generally cricitised in the recent work of Arche (2006), building in observations made by others before her (Condoravdi 1992, Jäger 2001) that even when an IL predicate is coerced to a temporary reading, it still functions as an IL predicate.

To begin with, this author (2006: 199-200) notes that many IL predicates can be shown to be transitory.

- (23) a. Juan es concursante de *Quiere ser millonario*. Juan is_{ser} contestant of Who wants to be a millionaire
 - b. María era rubia en su juventud. María was_{ser} blonde in her youth
 - c. Juan era muy dulce cuando era niño. Juan was_{ser} very sweet when was_{ser}.3sG child

All these predicates apply to time intervals shorter than the life span of the individual, and still behave like IL predicates, for instance, with respect to temporal quantification. Arche's observation is that the interval during which a property is predicated plays no role in its IL or SL character. In relation to this, she notes –in line with Musan (1995)– that ILs do not produce lifetime effects in all cases. (24), for instance, does not.

(24) On that day I was introduced to Gregory and Eva-Lotta. Gregory was from America and Eva-Lotta was from Switzerland.

The reason is that, unlike in the out-of-the-blue cases where the lifetime effect arises, in (24) a specific interval of time is presented (the moment at which the speaker was introduced to Gregory and Eva-Lotta). Arche notes that Kratzer's proposal cannot explain the absence of a lifetime effect in (24). She argues, in fact, that both IL and SL predicates contain a temporal variable, and that in (24) the temporal variable is identified with the moment at which the speaker was introduced to Gregory and Eva-Lotta. Thus, the argument structure of IL and SL predicates would not be different, in her account. In this point, she follows Stowell (1993) in the claim that spatiotemporal variables are present in every predicate.

What is, then, the difference between IL and SL predicates? Her account follows closely Higginbotham & Ramchand (1996), who claim that the main property of SL predicates is that they link the set of properties displayed by an individual with an external situation. IL predicates would be classificatory, that is, would be used to place the individual in sets, and as such they display the normal characteristics of any predicate, but SL predicates would add something else to it, associating the properties to some situation. Eventual temporal persistency effects would follow from here: generally, it is easier to associate properties that are independent of situations with longer time intervals, and those that are linked to an external situation, with shorter spans, but not necessarily.

Adjectives, in Arche's view, are by default IL predicates. She quotes Demonte (1999) in the observation that inside NPs, adjectives get an IL reading. Those constructions are equivalent to copulative predications with *ser*, which in Spanish is considered to be the copula used with IL predicates; they are not equivalent to *estar*, the alleged SL copula (see §3).

(25) las chicas guapas = > las chicas son guapas, *las chicas están guapas the girls pretty the girls are_{ser} pretty the girls are_{estar} pretty

This means that, in order to become SL, the adjective needs to be embedded under a structure that gives that something else that allows for a linking with an external situation. Arche claims that *estar* plays that role, and that it lexically contains information that relates to an external situation.

(26) *Estar*: predicate that refers to a circumstance in which an individual is (Arche 2006: 251)

One complication with Arche' approach has to do with the meaning of the claim that adjectives inside NPs are interpreted as IL by default. This is true of adjectives that alternate between the two readings, IL and SL, but of course there are adjectives –and other noun modifiers– that get an SL interpretation inside NPs. Among others, we have those in (27). Perhaps this indicates that adjectives that alternate are basically ILs, and need some extra structure on top, while those that are strongly SLs are already defined as such in their lower structural layers.

(27) a. unas chicas desnudas some girls naked
b. unas chicas atónitas some girls astonished
c. una mesa rota a table broken
d. un hombre con sombrero a man with hat

1.4. Information structure and its connection to the external situation

A related characterisation of the IL / SL distinction that claims that each class of predicates takes different objects as their subjects is to posit a sortal difference that distinguishes between them by the nature of the properties they express. Even though both IL and SL predicates would share the same type in a Montaguean semantics (<e,t> for intransitives, <e,<e,t>> for transitives) the sort of property is different in that IL predicates denote properties of individuals, while SL predicates denote descriptions of eventualities (Ladusaw 1994). That is to say that in (28a) we introduce a topic (the subject) and then we adscribe some properties to that subject, but in (28b) we describe a particular eventuality. See also Jäger (2001), and Jiménez-Fernández (2012) for an elaboration of these ideas in Spanish.

(28) a. Juan es inteligente. Juan is_{ser} intelligent
b. Juan está enfermo. Juan is_{estar} sick

This distinction is related to Kuroda's (1972) contrast between categorical and thetic judgements. Categorical judgements are statements about an entity, and presuppose the existence of that entity, while thetic judgements are "the recognition or rejection of material of a judgement" (1972: 154). Evidence in favour of this distinction and its interaction with the IL and SL distinction comes from the

availability of the sentences in (28) in contexts where a previous question demands a description of a general situation, and not a description of an individual. Given a question like ¿Qué pasa aquí? 'What is happening here?', (28b) is a felicitous answer, but not (28a). Indeed, only predicates combining with *estar* allow posposition of the subject to the verb (Gallego & Uriagereka 2009), which is a syntactic property of thetic judgements:

(29) a. Estará el hombre harto. be_{estar} -mod the man fed-up b. *Será el hombre alto. be_{ser} -mod the man tall

This relates to some of the proposals made in Raposo & Uriagereka (1995). These authors claim that the ultimate distinction between IL and SL predicates has to do with which of the two members of the predicational structure, the subject of the predicate, stays inside the VP and which one is displaced to a topic position above it. In an IL predicate, the subject is displaced above the VP, so it is not under the scope of the event (30a). This means that the properties are predicated of it without reference to any event. In an SL predicate, the predicate moves above the VP, but the subject stays there (30b). This has the consequence that the subject stays under the scope of the event, and the predication is interpreted as affecting the subject to the extent that some event holds. Note that this connects also with Higginbotham & Ramchand's and Arche's characterisation of the IL / SL distinction.

(30) a. $[_{FP}$ [the man]_i F^0 [$_{VP}$ [[t_i] [nice]]] b. $[_{FP}$ [nice]_i F^0 [$_{VP}$ [[the man] [t_i]]]

When considered inside a wider set of data, however, this approach brings up important questions, not all of them seem to fall neatly in the proposal. It is a general property of stative sentences that they are not felicitous as thetic statements. To the aforementioned question *What is happening here?*, the answers in (31) would be as bad as (28a). Note that they are all stative verbs, but it is not clear that all of them express IL predicates in the sense that they express inherent properties of the subject or describe it in any intuitive way.

- (31) a. Juan tiene una bomba en la mesa. Juan has a bomb on the table
 b. La economía preocupa a Juan. the economy worries ACC Juan
 - c. Juan yace en la cama. Juan lies in the bed

Could this mean that the unavailability as thetic judgements is a property of stative predicates in general, and that, in some sense, certain SL predicates are not states? Perhaps the availability of (28b) depends on the presence of the copulative verb *estar*, along the lines argued for by Arche (2006) and some others before her.

Ultimately, the problem seems to be that by positing distinct argument structures for IL and SL predicates we are treating them as too different from each other, and crucially, that by saying that SL predicates contain a temporal variable (for some, an event) we are expecting them to be closer to event predicates than many data might suggest, such as the possibility of appearing in progressive forms (32). In the general case, IL predicates behave like SL predicates here.

(32) a. Juan lleva corriendo una hora. Juan carries running an hour
'Juan has been running for one hour'
b. *Juan lleva estando enfermo un mes. Juan carries being_{estar} sick a month
'Juan has been sick for one month'

1.5. IL / SL as two types of states

Finally, very recently Husband (2010) has offered an account of the IL / SL distinction which is based on the contrast between homogeneous and quantised state: IL predicates are homogeneous states, SL are quantized states. Husband's proposal comes from two observations. First, the IL or SL nature of a predicate is conditioned by the nature of its internal argument (Fernald 1994, 2000). In the following pairs of sentences, the 'a' examples have an IL interpretation –because they force a generic reading of the bare subject, which, as we will see (§2.1), is a property of IL predicates–. The 'b' cases, on the other hand, are SL predicates, because their subject is interpreted as an existential.

- (33) a. Monkeys live in trees.
 - b. Monkeys live in that tree.
- (34) a. Tycoons own banks.
 - b. Tycoons own these banks.
- (35) a. Students know answers.b. Students know this answer.

Husband notes that the effect is similar to what we see with Aktionsart in eventive predicates. (36a) would be an activity, (36b) would be an accomplishment.

(36) a. John solved problems (*in an hour).b. John solved these problems (in an hour).

Secondly, Husband notes that the distinction between open-scale adjective and closed-scale adjective, due to Kennedy & McNally (2005), also plays a role. Closed-scale adjectives are those which are associated to series of degrees such as that there is one maximal and one minimal degree; open-scale adjectives are those which lack at least one of the two boundaries. The 'a' examples are open-scale predicates, and they behave like ILs; the 'b' examples are closed-scale predicates, and they behave as SLs.

- (37) a. Whiskey bottles are brown.
 - b. Whiskey bottles are full.
- (38) a. Norwegians are tall.
 - b. Norwegians are drunk.
- (39) a. Rules are immoral.
 - b. Rules are necessary.

The adjectives in the 'b' examples trigger existential readings of the subject, and as such they behave as SL predicates. The can be shown to denote closed scales because

they are compatible with adverbials such as *completamente* 'completely', which presuppose that there is a maximal degree in positive adjectives like *full*, *clean* or *wet*, or a minimal degree in negative adjectives, such as *empty*, *dirty* or *dry*. The adjectives in 'a' are not compatible with this adverbial. Similar contrasts take place with the modifier *medio* 'half', which presupposes that the scale is bounded in both sides, because otherwise it is not possible to determine that the value is between a maximal and a minimal degree.

- (40) a. *completamente {marrón / alto / guapo / inmoral / justo / inteligent} completely {brown / tall / pretty / immoral / fair / intelligent} b. completamente {lleno / vacío / borracho / necessario / limpio / sucio} completely {full / empty / drunk / necessary / clean / dirty}
 (41) a. *medio {marrón / alto / guapo / inmoral / justo / inteligente} half {brown / tall / pretty / immoral / fair / intelligent}
 b. medio {lleno / vacío / borracho / necesario / limpio / sucio}
 - half { full / empty / drunk / necessary / clean / dirty}

Similarly, the nature of the scale influences the aspectual interpretation of eventive predicates, most saliently in the case of degree achievements (Hay, Kennedy & Levin 1999). A change verb built over an open-scale adjective can be atelic, but one built over a closed-scale adjective must be telic.

(42)	a. They are widening the road>	The road has widened		
	b. They are emptying the pool -/->	The pool has emptied.		

Given this similarity between IL / SL and telic / atelic predicates, Husband argues that the same set of primitives underlies the contrast. IL predicates are homogeneous states, in a manner similar to atelic predicates, which are homogeneous events, and SL predicates are quantised states, similarly to telic events.

The contrast between homogeneous and quantised is defined through the properties of cumulativity and divisivity, which are in turn related to boundedness. A predicate P is homogeneous if the two conditions are met (Borer 2005a,b):

- (43) P is cumulative iff for all x and y with property P, the union of x and y also has property P.
- (44) P is divisive iff for all x with property P there is a proper part y of x which also has property P and for all x and y with property P –if y is a proper part of x– the substraction of y from x also has property P.

Only when both properties are met a predicate is homogeneous.

Naturally, if a predicate has boundaries, it cannot be homogeneous. If it is bounded, say because it has an endpoint, it is not true that any two parts of it will have the same properties: one would be the endpoint. Divisivity is also blocked by boundedness: if we take a portion that includes the endpoint and something else, (44) does not apply, because the endpoint has different properties from any previous point included in that subinterval. The same applies to count nouns vs. mass nouns: any two portions of water would be water, and any (relevant) subpart of any portion of water is water, so the predicate is homogeneous; the same does not applies to a chair or a nose. And finally, the same can be said of open and closed scales: open scales are

homogeneous, because they lack maximal and minimal degrees, but closed scales are quantised.

The homogeneous / quantised contrast is, therefore, cross-categorial. Husband argues that it would be instantiated as the IL / SL distinction in the domain of states, but it is the same kind of distinction we find in nouns as the mass / count distinction or, in adjectives, as the open-/closed-scale contrast.

This cross-categorial nature explains why the count-mass nature of a complement, or the open or closed nature of the scale, influence in whether a predicate is IL or SL: if some constituent of the predicate makes it bounded, it is quantised, and then it gets defined as an SL predicate.

Husband's approach makes very strong predictions, and as such it faces some prima facie problems. Consider, for instance, the proposal that closed-scale adjectives, being bounded, produce quantised states. This would imply that whenever we introduce some element that closes the scale of the adjective, the whole predicate should behave as an SL predicate, because not it is a quantised state. It is not clear that the prediction is confirmed. González Rodríguez (2010) convincingly argues that adverbials such as *extremadamente* 'extremely' close the scale of an otherwise open-scale adjective, stating that there is no higher value than the one displayed by an individual (45, González Rodriguez 2010: 134).

(45) Pedro es {muy / #extremadamente} amable, aunque otros lo son más. *Pedro is_{ser} very extremely nice although others it are more*

However, the modified adjective still behaves as an IL predicate.

(46) a. Firefighters are extremely brave (Universal reading, IL).
 b. *Cada vez que Juan es extremadamente guapo...
 when ever that Juan isser extremely beautiful...

Thus, this approach also has problems, as the rest of those we have reviewed in these few pages. Keeping all these problems and alternatives in mind, let us move to the next section, where we will discuss the empirical behaviour of IL and SL predicates.

2. Other phenomena involving the IL / SL distinction in Spanish

2.1.Readings of the subject

The IL / SL distinction determines crucial aspects of the interpretation of subjects inside copulative sentences. The first is due to Milsark (1974). Nominal constituents introduced by quantifiers sometimes allow two interpretations, as in the example (47): the cardinal or weak one, in which they simply say that there exist five children and they entered, and the strong, quantificational or presuppositional, where they presuppose that there is a specific group in context and only five of the members of that group of it entered the room. As can be understood from the explanation, weak nominals are non-specific, and strong nominals are specific.

(47) Cinco chicos entraron en la habituación. *some children entered in the room*

The two readings can be tested through the interaction with negation. Weak indefinites are under the scope of negative inductors, while strong ones escape. (48) can mean that it is not true that five children entered the room (weak reading) or that out of a bigger group, there were five children that stayed outside (strong reading).

(48) Cinco chicos no entraron en la habitación. *five children not entered in the room*

Milsark notes that what became to be IL predicates force the strong interpretation of this kind of subjects (49). (49a) means roughly the same as (49b). However, SL predicates allow both readings, and (50a) has a weak reading which (50b) does not allow. Indefinites that favour the weak reading (51) are difficult to combine with IL predicates, unless they can be interpreted as denoting specific kinds of entities, as in (51a).

- (49) a. Algunos chicos son altos. some children are tall
 b. Algunos de los chicos son altos.
 - *some of the children are tall* a. Algunos chicos están enfermos.
- (50) a. Algunos chicos están enfermos. some children are sick
 - b. Algunos de los chicos están enfermos. *some of the children are sick*
- (51) a. Un tigre tiene rayas.
 - a tiger has stripes
 - b. *Un chico cualquiera tiene los ojos verdes.
 - a child whatsoever has the eyes green

In relation with the kind interpretation allowed by (51a), Carlson (1977) notes that IL predicates force generic readings of bare noun subjects (52a), while SL predicates also allow existential readings of the same kind of subjects (52b). The test is more difficult to implement in Spanish, because the language does not generally allow bare nominals as preverbal subjects of copulative sentences, but, as seen in (53), the generic reading of a noun phrase is the only interpretation available for an IL predicate (53a). The generic reading is not salient in (53b) – 'Politicians are, in general, available'–, but it is available, and it is indeed salient with some temporal restrictor that can be interpreted as a habitual (*de nueve a cinco* 'from nine to five'). The most salient reading of the subject is as a definite and particular group of politicians.

- (52) a. Politicians are stupid.
 - b. Politicians are available.
- (53) a. Los políticos son tontos. *the politicians are_{ser} stupid*b. Los políticos están disponibles. *the politicians are_{estar} available*

With singular indefinites, the pattern is perhaps even clearer in Spanish: only IL predicates license *per se* the generic reading (54a), while SL predicates trigger an

existential reading, and it is not easy to obtain a generic one (54b), unless temporal quantifiers are added, such as *de nueve a cinco* 'from nine to five'.

(54) a. Un político es tonto. *a politician is_{ser} stupid*'A politician is (generally) stupid'
b. Un político está disponible. *a politician is_{estar} available*'A (specific) politician is available'.

2.2. Availability as adjunct predicates

There is a number of contexts where IL predicates cannot appear. In general, when the constituent behaves as an adjunct secondary predicate inside a bigger structure, only SL predicates can participate. There are many different syntactic manifestations of this. First, as 'integrated' adjunct secondary predicates oriented to the subject (55) or to the object (56); the property has been observed since Bresnan (1982).

- (55) Juan volvió de la fiesta {harto / *español}. Juan returned from the party {fed.up / Spanish}
 (56) Llevaba {sucia / *de seda}] la camisa.
- wore.he {dirty / of silk} the shirt

In the previous sentences, the adjunct is not selected by the main predicate, but other predicates are generally analysed as selecting a small clause, and in such cases the secondary predicate is syntactically necessary. However, when the secondary predicate is selected by the main predicate, there are also preferences for one of the two classes. Verbs of propositional attitude, like *considerar* 'consider' or *juzgar* 'judge', which prefer IL predicates (Fernald 1999, Marín 2000, 2010).

(57) a. Considero a María {descortés / *desnuda} consider.I ACC María {rude / naked}
b. Juzgo a Juan {culpable / *enfermo}. judge.I ACC Juan {guilty / mistaken}

With other cases, such as the depictives in perception verbs –which are not strictly compulsory for the verb, but when they appear shift perception from an individual to an eventuality– generally only SL predicates are accepted.

(58) Vi a María {enferma / *inteligente}. saw.I ACC María {sick / intelligent}

However, McNally (1994) shows cases where an IL predicate can appear as a depictive adjunct in secondary predicates.

(59) Mi padre nació obsesivo-compulsivo, y morirá obsesivo-compulsivo. *Mi father was.born obsessive-compulsive, and will-die obsessive-compulsive*

The account is based on her proposal that IL predicates are understood as temporally persistent. The availability of IL predicates as depictives depends on how informative they are. We normally do not assume that the political affiliation of

someone remains completely stable over his or her whole life span, so it is informative to say that this property has never changed. One can think that in such cases, the inference that the IL predicate holds indefinitely is not met, given the pragmatic context of the sentence, that suggests the possibility that this kind of behaviour could have been lost at some point. Note also that the interval that the two main predicates use define –ranging the whole life span of an individual– is long, and in this context it is easy to conceive that the information that the property did not change at all is informative.

Lacking these conditions, IL predicates are not available as depictives because what they state is trivially inferred without further need for stating it, given the strong implication of temporal persistence that comes with them (remember §1.3): example (55) is out with an IL because the property of being Spanish is not expected to change in the short interval defined by the event of coming back from the party, or during the interval defined by the party itself. Other cases, however, seem to require other analysis, such as the one in (60).

(60) Juan toma descafeinado el café. Juan takes decaffeinated the coffee

In such cases, the availability of the IL predicate does not seem to be explainable through the same principle, as the coffee will still be decaffeinated when Juan is not drinking it, so the statement should be trivial. One could think that what licenses a construction like this in this pragmatic theory could be claimed to be the fact that coffee appears in different versions, and only one of them is decaffeinated, so the presence of the depictive restricts the set of situations to those where the coffee – taken as a general kind– has some particular property –which defines a subkind–. This might be supported by the fact that some classificative adjectives are allowed in this construction (61). However, this does not mean that all classificative adjectives allow it (62), which suggests that there is more to be said for cases like those in (60). Another adjective that allows the construction is *redondo* 'round', in (63).

- (61) *Juan toma delicioso el café. Juan takes delicious the coffee
- (62) *Juan toma arábigo el café. Juan takes Arabic the coffee
 (63) Juan dibujó redondas las caras de los personajes.
- Juan drew round the faces of the characters

What do *descafeinado* and *redondo* have in common that *arábigo* and *delicioso* don't? The answer, at least to us, is not immediately clear. Some descriptive grammars, like the *Nueva Gramática de la Lengua Española*, describes a class of adjectives called 'descriptive' (§13.2i-j), which [my translation] "are classificative without being properly relational". These adjectives do not derive from nouns, and accept –when the context is set right– degree modification that relational adjectives do not allow unless used as qualitative adjectives, but still describe [my translation] "allegedly objective classifications of humans and objects". Other members of the class are *recto* 'straight', *perfecto* 'perfect' and other adjectives expressing shapes, all of which can be used as adjunct predicates. In addition to showing that descriptive adjectives are different from relationals, this shows that much more needs to be studied with respect to object oriented depictives.

The SL restriction also applies to parenthetical contexts.

(64) María, {desnuda / *española}, bajó las escaleras. María, {naked / Spanish }, went.down the stairs

Adjunct predicational structures introduced by a preposition, such as (65), also must contain an SL predicate.

(65) [Con [María {desnuda / *española }]], no pudimos trabajar. with María {naked / Spanish} , not could.we work

One question is whether it is possible to make a generalisation here along the lines of 'adjunct secondary predicates must be SL', while those that somehow are integrated in the predicational structure of the verb –either because they are selected or because of other reasons– can be SL or IL.

In order to do so, we need some independent evidence that depictives oriented to an internal argument are not properly adjuncts, but are somehow part of the predicate. Some evidence has already been provided of this (Demonte 1988): depictives that take as subject some argument that at some stage in the syntactic derivation is internal allow for subextraction (66): the PP complement of an adjective can be extracted out of the VP. In contrast, real adjuncts do not allow this kind of operations (67).

(66) a. María volvió harta de Pedro. María returned fed.up with Pedro
b. ¿De quién volvió harta María? of whom returned fed.up María
(67) a. Luis vendrá si los profesores le

(67)	a. Luis vendrá	si los p	profesores	le	dan	permiso.
	Luis will.come	if the t	teachers	him.dat	give.they	permision
	b. *¿Quién-es ver	ndrá	Luis si	le	dan	permiso?
	who-pl will	Luis if	him.dat give permision?			

There are, therefore, some chances that the previous generalisation is right, and the SL restriction is present only on those predicates that are adjuncts.

2.3. Restriction of temporal quantifiers

Kratzer (1995), following observations by Diesing (1988), notes that IL predicates cannot be used as restrictors of a temporal quantifier, a property that she relates to their absence of a spatiotemporal variable that can be bound by the operator. This would be a case of vacuous quantification (Partee, Ter Meulen & Wall 1990: 140; Kratzer 1995: 131), that is, the principle that forces any quantifier Q to bind a variable x both in its restriction and its nuclear scope. In the sentence (68), the quantifier *cada vez* 'whenever' picks up sets of situations defined temporally, and the subordinate proposition *que llueve* 'that rains' restricts those situations to cases in which it is raining, so the sentence is true only if for every situation which is a raining situation it is true that Juan is sad.

(68) Cada vez que llueve, Juan está triste. whenever that rains, Juan is_{estar} sad The predicate *llover*, in any account, has a spatiotemporal variable that the quantifier can pick, but when an IL predicate is in the restrictor of the quantifier, we obtain ungrammaticality.

(69) *Cada vez que Juan es alto, compra pantalones nuevos. whenever that Juan is_{ser} tall, buys.3SG trousers new

An SL predicate has, in Kratzer's account, a variable, so it can restrict the quantifier.

(70) Cada vez que Juan está triste, compra pantalones nuevos. whenever that Juan is_{ser} sad, buys.3SG trousers new

If (71) is out because of vacuous quantification, then we expect that having the IL predicate in the nuclear scope of the clause would trigger ungrammaticality again, and this is confirmed by the data.

(71) Cada vez que llueve, Juan {está triste / *es alérgico}. whenever that it.rains, Juan {is_{estar} sad / is_{ser} allergic}

This same restriction also can help understand why unselective quantifiers –those that make do with any variable, independently of its sortal interpretation– give bad results with IL predicates when there are no other expression that contains a possible variable. Contrast (72a) and (72b); in (72b) presumably the variable is provided by the definite article (see Elbourne 2005), which the proper name lacks in (72a). (72c) shows that SL predicates do not have the same restriction.

(72) a. *Juan nunca es rubio. Juan never is_{ser} blonde
b. Los orientales nunca son rubios. the orientals never are_{ser} blonde
c. Juan nunca está triste. Juan never is_{estar} sad

2.4. Syntax below the word level

Finally, word formation –which we assume to be part of syntax– also displays some effects where it is visible that IL and SL play a distinctive role. For instance, consider the adjectival compounds including an (inherently possessed) noun as the first element and an adjective as the second one.

(73) a. pel-i-rrojo hair-LE-red 'red-haired'
b. brac-i-corto arm-LE-short 'short-armed'
c. piern-i-largo leg-LE-long 'long-legged' When the compound has a compositional meaning and both members have to be interpreted as part of the semantics of the whole word, SL predicates are out. In other words, the word in (74) cannot be interpreted as 'with broken hands'.

(74) #man-i-rroto hand-LE-broken 'big-spender'

An apparent exception is the form in (75), which means 'with a broken leg', but here the analysis must be different. It is the participial form of a compound verb, *pern-i-quebrar* 'leg-break', so its structure corresponds roughly to [[*pern-i-quebra*]do], not [[*pern-i*] [*quebrado*]],

(75) pern-i-quebra-do *leg-LE-beak-part.* 'leg-broken'

When there is no special non-compositional meaning for the word and the structure is the relevant one, the adjective is impossible.

(76) *tors-i-desnudo chest-LE-naked

What consequence can we infer from this? Perhaps what this suggests is that inside the structure of this kind of structures there is no place for the syntactic elements that define a predicate as SL, either because the SL nature of a predicate is not licensed or because a functional projection that defines something as SL does not have any position inside the structure. Hence, *roto* 'broken' can only be inside the structure if it is not interpreted as an SL predicate, as it is the case in the non-compositional reading of manirroto 'big-spender'. The specific analysis of this deserves a paper of its own, where the internal structure of forms like *pelirrojo* is explored in detail, so, for the time being, we will leave them aside.

3. Severing IL / SL from ser and estar

The reader probably noticed already that in the previous list of phenomena there is no mention to the famous distinction between *ser* and *estar* in Spanish. The reason is that more and more empirical evidence has been piling up in the last years to question the general assumption that *ser* and *estar* reflect the IL / SL distinction. The origin of that assumption comes from examples like those in (77), where the interpretation of the adjective as IL or SL is marked exclusively through the alternation between the two copulae.

(77) a. Esta fruta es verde. *this fruit is_{ser} green (IL)*b. Esta fruta está verde. *this fruit is_{estar} green (SL)*

In (77a) the reading of the colour adjective has the properties of IL predicates –the two main ones used in different approaches–, as it characterises a particular fruit (say, an avocado) as being identifiable because it is green and it introduces a property that

is assumed to last as long as the fruit exists. In (77b), the colour adjective refers to a property that the fruit (say, a banana) can lose while still being that fruit, and which is expected to disappear during the 'lifetime' of the fruit. If we only consider these examples, the copulae seem to distribute on a par with the IL / SL distinction.

The correlation, surprisingly, was also assumed in some traditional grammars, although obviously without making reference to these terms. Salvá (1834: §15.8.1.4) proposes that the difference between *ser* and *estar* is that the first [my translation] "is used when the idea expressed by the following noun, adjective or participle does not involve the notion of a state", while the second is used when there is such idea. Salvá goes on to say that this is so independently of whether "the state is transitory or permanent". This notion of state, as opposed to property, is amazingly closed to what Milsark would say about the two classes of predicates more than 130 years later, but perhaps Salvá has something different from Milsark when defining what a state is, because he says that something can be a state independently of whether the idea expressed is "essential or accidental". Unfortunately, Salvá does not define what he understands by 'state'.

3.1. Mismatches between ser ~ estar and IL ~ SL

Intuitively what we just presented is the characterisation of the distinction between *ser* and *estar* that has had the most extension: their presence depends on the nature of the properties expressed by the attribute, corresponding to the divide between IL and SL. However, the situation is not so simple and there are a number of mismatches, summarised recently by Camacho (2012: 459-463).

Note first the so-called evidential uses of *estar*. Contrast (78a) with (78b).

(78) a. Juan está gordo. Juan is_{estar} fat
b. Esta lasaña está estupenda. this lasagna is_{estar} wonderful

In (78a) we have the core ingredients of an SL predication, in the sense that the statement introduces a property that the speaker does not consider characteristic of Juan and, at the same time, one that is assumed to be non-persistent. However, in (78b) it seems that the property characterises that particular lasagna and the speaker does not expect the property to change during the time he eats the food, consuming it. (78b) is an evidential use, where the subjective perception of a set of properties is presented, and the use of *estar* marks that the property is introduced from the subjective perspective of the speaker. This use of *estar* as a marker of evidentiality verb is frequent in many contexts, where it can be seen that substituting it for *ser* does not change the nature of the property introduced, but loses this viewpoint nuance. In (79), in fact, the statement is presented as a suposedly objective claim independent of the opinion of the speaker.

(79) Esta lasaña es estupenda. *this lasagna is_{ser} wonderful*

Perhaps it would be possible to unify the two uses of *estar* in (78), at least to the extent that *estar* in (78a) also presents something close to a perception subject to some specific and subjective standards. In fact, according to some theories about the distinction between *ser* and *estar* (most significantly Falk 1979), they have nothing to

do with the IL vs. SL contrast, but are explained because *ser* introduces an evaluation according to some general norm and *estar* introduces an evaluation that depends on a more specific norm, relative to the individual the judgement is made about. Slightly modifying this theory to allow that the specific norm is relative also to the speaker's assumptions about reality, the use of *estar* in perception cases can be perhaps accounted for.

A second case noted by Camacho where *estar* is used with IL predicates is statements about the location of some entities (see also Roby 2009: 16). Contrast (80a) and (80b).

(80) a. Juan está en su casa. Juan is_{estar} in his house
b. España está al sur de Francia. Spain is_{estar} to-the south of France

(80a) presents an SL property, but (80b) seems to be an IL predicate, at least from the perspective of temporal persistency. It is clear that this location is presented as temporally persistent, but at the same time, it seems that it characterises the country described. As countries are themselves places, changing location would mean being a different country. However, *estar* is used also in this context, as it is used in general in contexts where objects are located. Note also that in English, sentences such as (80a) can have existential subjects (*Students are in the room*), but those like (80b) do not allow for an existential interpretation of their subjects: *Cities are in the south of the country* is interpreted as 'all cities (of the country) are in the south', not as 'there are cities in the south'.

Pavón & Morimoto (2007: 38) present, in a different context, another case where *estar* is used with an IL predicate, at least in European Spanish.

(81) Juan está loco. Juan is_{estar} crazy

As far as we can see, madness is a temporaly persistent property, and, moreover, it seems to be characteristic of an individual; if Van Gogh loses the property of being crazy, he is no longer the Van Gogh we know, for instance.

Conversely, nouns, independently of their meaning, combine with *ser*. Due to this reason, whenever they denote transitory properties that might not be considered characteristic of an individual, still *ser* has to be used. Consider (82). This can be said about a student that is making a presentation during 45 minutes in the class. This does not change the properties that we need to define Juan in our world, that is, Juan is presumably the same individual the day of the class and the following day. It is true that in such cases *ser* is interpreted as *hacer de* 'act as', but the question is still why this verb is used in this context, allowing that reading.

(82) Hoy Juan es el profesor. today Juan is_{ser} the teacher

Note that in such a context, the past form used is the simple perfect and not the imperfective past, without any related lifetime effect (83).

(83) Ayer Juan fue el profesor. *yesterday Juan is_{ser}.perf the teacher*

This can be explained following lines defined in Arche (2006: 207). Following Demirdache & Uribe-Etxebarría (2000), perfective aspect –which corresponds to the Spanish indefinite tense *fue*– is defined through an ordering predicate AFTER, which places the topic time (TT) –the interval the assertion is about– after the interval the predicate extends over –event time, ET-(84).

This means that the individual has passed the time the predicate extends over, that is, the time during which it was true that he is the teacher. No lifetime effect is triggered because it is easy to conceive the scenario where the role played by Juan changed during his life.

The data seem to point out that semantic notions like perception or location and the grammatical category of the complement of the copula play a bigger role in the distribution of *ser* and *estar* than the IL / SL distinction. Naturally, this shifts the question now to the problem of how to characterise precisely the difference between *ser* and *estar*. In consequence, it seems that the *ser* / *estar* alternation is of a different nature from the IL / SL distinction, even though in some areas the two overlap.

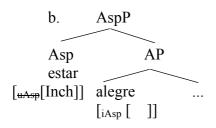
3.2. The copulae as aspectual markers

There are two main alternatives to the analysis that *ser* combines with IL predicates and *estar*, with SLs. The first is that the copulas reflect an aspectual difference, and the second is that they reflect different structures.

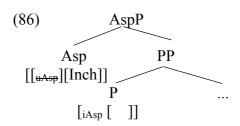
The proposal that *ser* and *estar* encode an aspectual difference can be tracked back to Bello (1847: §1087). It comes in different varieties, with the first of them being that *estar* is a perfective copula and *ser* an imperfective one (as Lujan 1981 proposed, in terms that suggest she is thinking about lexical aspect and not grammatical aspect). Fernández Leborans (1995) follows this line of analysis, which has the advantage that it explains why some grammatical categories only combine with one of them –this follows if particular grammatical categories are biunivocally associated to specific lexical types–. The copula *estar* would be special in that it requires a transition phase followed by some state, which in other words encodes that the state is related somehow to some event. Camacho, in contrast, notes that this specific analysis cannot cover the evidential cases reviewed above, where the condition seems to be only some link to another (expected) situation, and cannot easily cover cases where the interpretation is not resultative, as presumably a state following a transition should be interpreted as a result state.

Camacho's proposal is that *estar* is an aspectual head which has an uninterpretable [inchoative] feature. Its complement would then have to be a structure with interpretable aspect, although unvalued. This inchoative feature is a value that can be taken, by hypothesis, by several structures, including adjectives, participles and prepositional phrases. (85) shows the syntactic configuration, modified from Camacho (2012: 466), of the predicative use of *estar* (SC stands for 'small clause'). The adjective checks the non interpretable aspect feature, and the verb gives it a value.

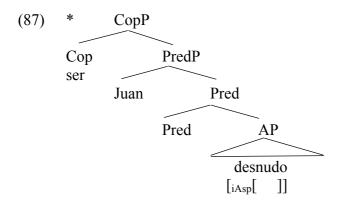
(85) a. Juan está desnudo Juan is_{estar} naked



Locative phrases are assumed by Camacho to contain always an unvalued aspectual feature, which forces them to combine with *estar* (Camacho 2012: 470, again slightly modified).

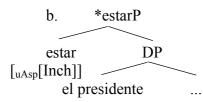


Adjectives that can occur with *ser* or *estar* are those that allow for two lexical versions, with a default one without aspectual information and a specified one that contains interpretable aspect which can check the feature of *estar* and copy the inchoative value. Adjectives that always occur with *estar* are those which lack the default version and thus must always get valued by *estar* (Camacho 2012: 466). PredP, which is not used in Camacho's analysis, stands here for Predication Phrase (Bowers 1993). Thus, *ser* is not the projection of aspect; Camacho gives it the label 'cop'.



There are two situations where *estar* is unable to appear, and they both follow from the impossibility of checking its uninterpretable feature. One is when the complement lacks an interpretable aspectual feature, which presumably would be the case with a DP (although Camacho suggests that the ungrammaticality of (88) could also be due to the absence of a predicational structure).

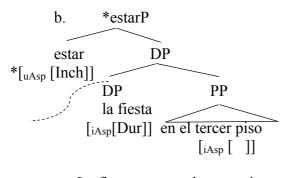
(88) a. *Juan está el presidente. Juan is_{estar} the president



It would be an empirical issue to determine which categories allow for [Inch], and then, presumably, some general semantic notion should be shared by all these categories.

The other situation would be when aspect is present, but something prevents the verb from checking the feature. This would be the case with locative uses of event nouns; on the assumption that these objects contain an aspectual feature [+durative], being higher than the aspect information that has to be valued below and being different from the information required by the predicate, this would be a standard case of relativised minimality where two goals with aspectual information compete for one single probe. Camacho (2012) suggests that locatives are adjuncts and therefore the subject and the locative are not in the same agree domain, while with normal adjectives they are complements and the subject and the predicate belong to the same agreement domain, so they are equidistant. Therefore, in locative cases with an eventive subject *ser* has to be used (89c).

(89) a. *La fiesta está en el tercer piso. the party is_{estar} in the third floor



c. La fiesta es en el tercer piso. *the party is_{ser} in the third floor*

Obviously, one crucial question in thi analysis is what the rationale is for the presence of an uninterpretable feature inside the structure of *estar*. Is there any explanation of why a language would need this? Perhaps the answer, as it is frequently the case with uninterpretable features and the feature endowment of syntactic heads, is, trivially, that this has to be arbitrarily decided by the lexicon of each language and is an irreductible fact inside a particular language.

3.3. The internal decomposition of ser-estar

An alternative to the idea that *estar* contains aspectual information is to propose that its structure (not just its feature endowment) is different from *ser*. This is the proposal argued for in Gallego & Uriagereka (2009). Their idea stems from the generalisation that every predicate that combines with *ser* can also combine with *estar*, if the context is set right, but there are some *estar*-predicates that cannot be interpreted with *ser*.

(90) Ronaldinho es * {emocionado/ilusionado/agotado}.*Ronaldinho is_{ser} {thrilled / hopeful / exhausted}*

From here they conclude that *ser* contains less information that *estar*, so that any predicate accepted by *ser* will allow *estar* if that information is added, but not every predicate combined with *estar* would allow the information to be removed, as it could be part of their lexical specification. Hence, they propose a variation of Uriagereka (2001), where it was argued that *estar* is the spell out of a structure including *ser* and an incorporated preposition.

If one assumes that predicates that combine with *estar* are those that contain a preposition inherently –that is, participles and some adjectives must be prepositional–, big parts of the data follow.

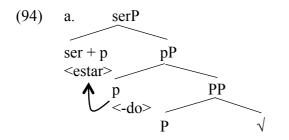
According to Gallego & Uriagereka, if *estar* contains more information than *ser*, it follows that in a rigid hierarchy of auxiliaries it will be higher than *ser*.

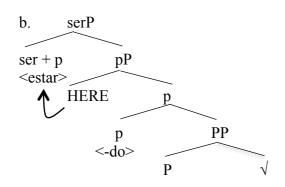
(92) a. Juan está siendo amable. Juan is_{estar} is_{ser}-ing nice
b. *Juan es estado ovacionando. Juan is_{ser} is_{estar}-ed ovationing

Given these information, Gallego & Uriagereka propose, following Hale & Keyser (2002), that all adjectives are prepositional, but only some of them contain a second prepositional layer with a perfective meaning, a terminal-coincidence preposition. Their claim is that, in general, IL predicates would lack this external layer, and SL predicates would always have it.

(93) a. *alto* (with *ser*) [PP P_{central} [$\sqrt{}$]] b. Participle (with *estar*) [[pP p_{terminal} [PP P_{central} [$\sqrt{}$]]]

The central P is spelled out as null and the terminal p is, for instance, spelled out as the participle morphology. Obviously, the question at this point is the following: if the p is part of the entry of participles (and of other objects that combine with *estar*, like locative prepositional phrases), the p has to be spelled out twice, once as part of the verb and once as part of the participle (or prepositional structure, etc.). Gallego & Uriagereka do not provide a complete answer, but suggest two possibilities: the two copies have to be spelled out or the p comes with a double in its specifier, which spells out as part of the verb *estar*. In the first case, we would have the structure shown in (94a); in the second, the one in (94b).





3.4. An integrated version of the two accounts: estar as a marked version of ser

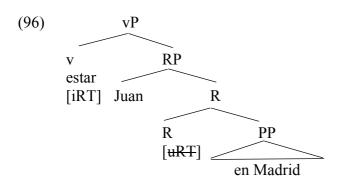
Gallego and Uriagereka's (2009) account seems fit to account for the distribution of the two verbs in the locative uses, but has the potential problem of how lexicalisation takes place. In their account, there is a preposition that has to be spelled out twice, and the solutions proposed by these authors, ultimately, are not backed by independent evidence.

Camacho's analysis has two potential problems which become clear when we compare this analysis to the similar one in Brucart (2010). The first problem is that it forces treating ser and estar as the manifestation of distinct heads: one is a copula, which we might interpret as a semantically weak verb, while the second is a projection of aspect. Intuitively it seems that both units should be categorially closer. The second is the idea that localisation sentences must always have some aspectual value, generally an inchoative value: a location does not necessarily presuppose a change of state or any event at all. In fact, Brucart (2010: 128-133) addresses these two problems -the first implicitly- in a different analysis which characterises estar as a marked element that licenses a terminal coincidence relation in contexts where no other constituent can license it. Both ser and estar are verbs, but estar is a marked version of *ser* because it contains information about a terminal preposition. Following Hale & Keyser (2002), Brucart analyses a terminal preposition as one that establishes a non-inclusion relationship between a figure and a ground that is conceptualised as external to the figure -therefore, it does not need to express a change of location or a trajectory-. Consequently, (95a) is the entry of ser and (95b) is the entry of estar.

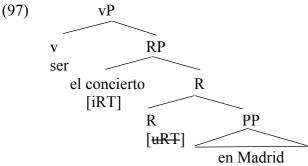
(95) a. $\begin{bmatrix} vP & estar [iRT] \end{bmatrix}$ b. $\begin{bmatrix} vP & ser \end{bmatrix}$

Predication involves the presence of a relational head R (which perhaps is equivalent to Bower's PredP); with some adjectives, and crucially with every location, this R has a non interpretable terminal coincidence feature that has to be checked. This is necessary to license the interpretation that the ground of the relation is conceptualised as a property external to the figure.

Now, the argument goes as follows: *estar* will be introduced in all cases that the non interpretable feature has to be licensed. Whenever there is not that feature, or it has been licensed by another element, *ser* is introduced. Consider first the location of an object (we use the notation 'u' to mark a feature as uninterpretable, instead of '-i' as Brucart does).



The location of an event is also unproblematic. In such contexts *ser* appears because the subject of the relation contains interpretable aspectual information, which checks the uninterpretable RT in R, so *estar* is unnecessary here –and therefore impossible–.



We believe that the following is the crucial piece of data in favour of Brucart's analysis: when the located object is not an event, but the location has a 'trajectory' reading, the verb has to be *ser*. By trajectory reading Brucart means that the ground is necessarily a location situated at the end point of a particular journey. Moreover, the entity located tends not to be simply an individual, but is generally interpreted as a place where a particular activity takes place (Brucart 2010: 144). Still, the existence of a trajectory is still more important, as it is visible in cases where the subject does not clearly imply an activity (70c; Rafael Marín p.c.).

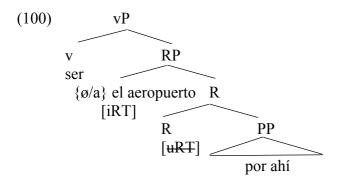
(98) a. El aeropuerto es por ahí. the airport is_{ser} through there
b. La parada de taxis es en la próxima esquina. the stop of taxis is_{ser} in the next corner [Brucart 2010: ex. 52]
c. Mi casa es por aquí. my house is_{ser} through here
'My house is over here'

Actually, the located entities in such sentences can be marked by a preposition indicating the terminal point of a trajectory.

(99) Al aeropuerto es por ahí. *to-the airport is_{ser} through there*

Brucart proposes that the entities located in such cases are not projections of DP, but of a locative structure that contains an interpretable feature. As a consequence,

this subject licenses the uninterpretable feature of the relational structure and *estar* is unnecessary, and thus impossible.



One of the advantages of Brucart's analysis is that, through the role of the preposition, it subsumes the prepositional account of Gallego & Uriagereka and the aspectual account of Camacho. Given that prepositions act as abstract relators that are productively used to build aspect (see Hale 1984, Klein 1994 and Mateu 2002), by associating their distribution to the presence of a terminal preposition, Brucart is in practice explaining with one single device the core uses of *estar* and its unexpected uses in permanent location structures.

3.5. Ser and estar as allomorphs of one single head

Roy (2006: 241) treats the two copulae as distinct morphophonological materialisations of the same head. The alternation is sensitive to the categorial status of the complement of the verb. In a sense, this could be another way of putting what Arche (2006) argues: *ser* is used to classify individuals into classes, but *estar* is used to relate the subject to a concrete situation. If we take that nouns are the predicates that denote classes of entities, we can realise that the two approaches are very similar in their spirit.

(101) a. *Ser* takes nominal complements.b. *Estar* takes everything else.

Roy uses a late insertion system where the exponents of heads are selected once the syntactic structure is completed, and therefore, the syntactic context is available to regulate the alternation. She proposes that there is only one copula in Spanish, which is semantically empty and is inserted in T^0 once the structure has been built in order to support tense morphology, and, even though she does not give specific lexical entries for the alternation, perhaps without distorting her proposal we could assume those in (102).

(102) a. ser $\langle --\rangle [[__T^0] ...[NP]]$ b. estar $\langle --\rangle$ elsewhere

The main claim of Roy's analysis is that *ser* always combines with nouns. Thus she treats all forms with *ser* as nominals, even when otherwise they can be projected as adjectives. Then she divides nominal predicates in Spanish into several classes. Those in (103) are those expressing affiliations to nationalities, social groups and some physical and psychological qualities, all of them homophonous with nouns (Roy 2006: 131-133).

(103) francés 'French', católico 'catholic', liberal 'liberal', adulto 'adult', ciego 'blind'

These adjectives are homophonous with nouns because they allow the indefinite *un* 'a', but the second class are the regular adjectives which are not homophonous with a noun, and only combine with the form *uno* 'one', which she treats as anaphoric proform.

(104) importante 'important', mojado 'wet', contento 'glad', recto 'straight'

She analyses the structure of these predicates in cooccurrence with *ser* as follows: the first class are nominalised adjectives (105a), while the second are pure adjectives combined with an empty nominal form, which in contexts with *ser* is a *pro* form (105b).

(105) a. un $[_{NP} [Nom(A)]]$ b. uno $[_{NP} [ø_N] Adj]$

When an 'adjective' of the first class appears with *ser*, it is actually an NP, projected by the predicate itself.

(106) ...es [_{NP} católico] is catholic

When a real adjective (that is, one of those in the second class) appears with *ser*, it is actually modifying a null pronoun, which is the head of the predicate.

(107) [_{NP} [pro] importante]

This *pro* is licensed via agreement with the copula in this context. It moves to NumP, so the resulting structure is the one in (108).

(108) ... ser [$_{NumP}$ [$_{Num}$ pro_k] [$_{NP}$ [t_k] [$_{AP}$ importante]]]

From the highest position in its projection, the pro is identified by the subject of the copula –perhaps via agreement with the copula itself–, getting thus the interpretation. Roy extends this analysis also to prepositional complements that characterise individuals.

(109) ... ser $[NumP [Num pro_k] [NP [t_k] [PP de Barcelona]]]$ from Barcelona

It is not clear, however, how this approach explains the alternations with locatives that imply that if the subject is an event denoting element, the copula has to be *ser*. In such cases it seems stipulative to say that the prepositional phrase is nominalised; more specifically, what would force, only in such cases, the presence of a pro-form?

3.6. Ser and estar and a theory of sectivity

Romero (2009), inspired by unpublished ideas by Salvador Fernández Ramírez, proposes an account of the contrast which is based on the intersective / subsective

distinction. An intersective adjective is the one which, combined with a noun, produces a meaning where the set of objects denoted are those that belong both to the set defined by the noun and the one defined by the adjective. (110) is a case of intersective adjectival predication: the whole DP denotes the set of objects that are houses and that are red. Intersective adjectives divide the objects of the world in two classes: those that have the property and those that do not, irrespective of what kind of entities they are.

(110) las casas rojas the houses red

Subsective adjectives denote properties that are evaluated relative to a standard value set by the class of objects that the modified noun denotes. A small skyscraper is, still, a quite big object; the objects that are denoted by (111) are not the intersection of the set of objects that are skyscrapers and the set of objects that are big –because then, (111) should refer to all skyscrapers. Subsective adjectives select a subset inside the set of objects denoted by the noun. Their interpretation is, thus, different depending on the noun they modify.

(111) los rascacielos pequeños the skyscrapers small

Romero notes that the difference in sectivity has some morphological correspondence in some languages. Siegel (1976) related this contrast with the long and short forms of the adjective in Russian, noting that the long form is subsective, and the short one is intersective.

(112) a. Studentka umn-a student intelligent_{short}
'The student is an intelligent person'
b. Studentka umn-aja student intelligent_{long}
'The student, as a student, is intelligent'

The proposal is that *estar* is the long form of the copula in Spanish, while *ser* is the short one, and they express a contrast similar to the two adjectival forms in Russian. Let as see one example.

(113) a. La casa es blanca. *the house is_{ser} white*'The house is a white object'

> b. La casa está blanca. *the house is_{estar} white*'The house is white with respect to what it uses to be'

In (113a), we classify the house among the white objects in our universe; in (113b), we presuppose another state of the house where it was not white, that is, we evaluate its whiteness with respect to the standard set by the normal state of afairs of the house.

The idea that *estar* is used to compare two states of the individual is reminiscent of the approaches where *estar* links the property denoted by the adjective with an external situation. It also makes an important prediction: the nature of the subject of the predication should play a role in the availability of the two readings. They must be entities that can change the state the adjective talks about. This prediction is confirmed (Romero 2009: 208).

(114) a. {La niña / la casa} es pequeña. {the girl / the house} is_{ser} small
b. {La niña / *la casa} está pequeña. the girl / the house is_{estar} small

Crucial here is the notion of animate entity. Animate entities can change their size, in this case, according to their age, so (114b) is fine with an animate subject; inanimate entities do not have this property, so with an inanimate (114b) is out.

The distinction is not based on conceptual properties, but derives from the formal features that each subject carries. Propositional subjects and mass nouns reject the subsective readings with an attribute like *limpio* 'clean', while inanimate subjects reject the intersective readings with the same adjective (115). Romero's suggestion is that the crucial difference is that propositional subjects are abstract (mass) nouns, while the inanimate subjects in (115b) are count. We can add to this that animate count nouns can combine with both, in different readings (115c).

- (115) a. {hablar / el juego / el vino / el agua} {es / *está} {limpio / limpia} {talking / the game / the wine / the water} {isser/isestar} clean
 - b. {el coche / el espejo / el suelo / el cielo} {está / *es} limpio {*the car / the mirror / the floor / the sky*} {*is_{estar}/is_{ser}*} *clean*
 - c. {Juan / el niño / el gato / el cartero} {es / está} limpio {Juan / the child / the cat / the postman} {is_{ser}/is_{estar}} clean [adapted from Romero 2009: 209]

The features would determine the combination, irrespectively of the world knowledge. As Romero puts it, even if we conceive of a table that can change size because it can be folded, we cannot use size adjectives with *estar*, and this is so because the table is not animate. The following hierarchy, taken from Uriagereka (1996), is the one that determines the combination of the subject with the copula.

(116) property > mass > shape > animacity

Although the interaction is not discussed in detail, it seems that with an adjective like *limpio* nouns that carry only 'property' and 'mass' –propositional nouns, among others– tend to combine with *ser*; those that also have a shape, and therefore are bounded –count– tend to combine with *estar*, and finally, if they are also animates, they can combine with both.

Three things could be expanded in this analysis: (a) how does the hierarchy in (116) interact with different kinds of adjectives? Size adjectives require animacity in order to allow *estar*, it would seem, while adjectives like *limpio* and those denoting other physical states do not; (b) how rigid is this hierarchy? How do we accomodate what seems to be a mass animate noun, like *gente* 'people'?; (c) How does this

explain other uses of the two copulae, such as the evaluative use, or the locative? In any case, let's move on.

4. Categories that show the IL / SL distinction

Let us now go back to the IL / SL distinction properly and examine the next question, which is whether the distinction arises in all word classes or not. We have seen that adjectives show this distinction, but many authors have assumed that the distinction can be manifested also in other classes.

It is general to accept that verbs and prepositional phrases also are subject to this distinction. In the case of verbs, Diesing (1988) and Kratzer (1995) assume that most verbs are SL, in the sense that they do not express sets of properties needed for a characterisation of the individual, and that only some verbs express IL properties. All verbs that can be considered IL are stative non-dynamic verbs, but there are also some stative verbs that are SL. Contrast, for instance, the following pairs, which show an IL verb in the first sentence and a SL verb in the second.

- (117) a. *Cada vez que María sabe francés, aprueba el examen.
 whenever that M. knows French, passes.she the exam
 b. Cada vez que María tiene fiebre, va al médico.
 - whenever that M. has fever, goes.she to.the doctor
- (118) a. *Cada vez que María teme la muerte, se esconde en su cuarto. whenever that M. fears the death, SE hides in her room
 - b. Cada vez que María tiene miedo de la muerte, se esconde en su cuarto. *whenever that M. has fear of the death, SE hides in her room*
- (119) a. *Cada vez que María ama a Juan, van juntos al cine. whenever that M. loves ACC Juan, go.they together to-the movies
 - b. Cada vez que María siente amor por Juan, van juntos al cine. whenever that M. feels love for Juan, go.they together to-the movies

Stative predicates are generally treated as non-dynamic verbs. One partial exception is Gawron (2009), who discusses the stative version of change of state verbs –such as *La carretera se ensancha en el kilómetro 45*, 'The road widens at kilometer 45'–, and notes that they denote a change of state in the spatial dimension: if we consider the whole physical extension of the road, at some point the width increases. This spatial dimension is the one that allows him to consider these verbs dynamic, if dynamicity is defined as change on some dimension. Still, the verb is stative in the temporal dimension, because through time the road does not experience any change. As expected, such sentences cannot be used as restrictors of temporal quantifiers.

Stative verbs that have the experiencer materialised as the subject of the verb tend to be IL predicates, while those whose experiencer is the direct object act as SLs. Contrast (118a) with (120).

(120) Cada vez que la muerte asusta a Juan, se esconde en su cuarto. when ever that the death scares ACC Juan, SE hides in his room

In the case of prepositions, it seems that prepositional phrases formed by a preposition and a bare noun can be classified into SL or IL according to their semantics, but in general single prepositions do not correspond biunivocally to IL or

SL, unlike what happens with some verbs and some adjectives. The following pair shows that with the same P, different nouns give different results.

(121) a. *Cada vez que Juan es de Madrid... whenever that Juan is_{ser} from Madrid...
b. Cada vez que Juan está de vacaciones... whenever that Juan is_{estar} of holidays...

'Whenever Juan is on vacation ... '

Perhaps some individual prepositions show a behaviour that is linked tightly to one type. To the best of our knowledge, the preposition *con* 'with', typically produces non-characteristic properties that are subject to change, and as such is always licensed as an adjunct depictive. Perhaps not by chance, it is the prototypical terminal coincidence preposition in Hale & Keyser (2002).

(122) Juan volvió {con María / con barba / con miedo / con gafas}. Juan returned with M. with beard with fear with glasses

In the case of the prepositions that exhibit variable behaviour, the alternative to the idea that the crucial notion is the semantic class denoted by each P+N combination – thus, the reading of the whole phrase– is to propose that the semantic type of the noun is the relevant parameter. However, it seems that this is not so –except to the extent that the meaning of the noun determines the kinds of semantics that its combination with a P can produce, as when nouns denoting substances tend to produce IL PPs because they can be interpreted as the material with which an object is made, or when nouns denoting jobs and occupations produce SL PPs because they can be interpreted as a role played occassionally by the subject–.

This is obviously not true of place names, that can produce ILs or SLs depending on the characteristics of the subject, but it seems false also of psychological state nouns, to give just one example. In (123a) the PP behaves as an IL predicate that characterises a particular atmosphere, and in (123b) the PP behaves as an SL predicate that denotes a temporary state of the subject.

(123) a. #Cada vez que esta atmósfera es de miedo... whenever that this atmosphere is_{ser} of fear...
b. Cada vez que este chico está con miedo... whenever that this boy is_{estar} with fear...

In such cases, the type of the subject seem crucial; if the subject is one that expresses a kind and the sentence can be interpreted as classificative, the predicate seems to be an IL, as in (123a), and the quantification is possible because different types of atmosphere are considered, even if each one of them has stable properties. The same PP behaves also as an IL predicate –without expressing a class, but a subjective property presented from the point of view of the speaker– if the subject does not denote a kind (124). It can denote an SL predicate if the subject is a sentient being that can experience these psychological states, as in (123b).

(124) *Cada vez que estas gambas están de miedo... whenever that these shrimps are_{estar} of fear...
'Whenever these shrips are excellent...'

With respect to nouns, there is more controversy with respect to whether they can denote SL predicates in addition to ILs, because of the general idea that bare NPs denote kinds where entities are classified. Two lines of research have been opened here. The first one is presented in Sanromán (2005), where it is argued that emotion nouns (roughly, psychological state nouns) come in two varieties, depending on whether the triggerer of the emotion can be internal (125a) or must be an external entity (125b).

(125) a. respeto 'respect', amor 'love', aversión 'repulsion', fascinación 'fascination'

b. asombro 'amazement', ira 'wrath', desesperación 'desperation'

The externally caused (EC) nouns in the second group display some properties of SL predicates as shown by their hability to be temporally restricted (126), and in the plural they can refer to intervals of time -that is, the plural number seems to be able to quantify over a temporal variable- (127a), while those in (125a) cannot denote temporal intervals in the plural (127b).

- (126) en un momento de {ira / asombro / desesperación / *respeto / *amor...} in a moment of *{wrath amazement desperation respect* love}
- (127) a. Comprendía que todas las desesperaciones eran momentos de tensión understood.he that all the desperations were_{ser} moments of tension transitoria. transitory

[apud Sanromán 2005: ex. 5]

b. ??Sus amores eran momentos de fascinación transitoria. were moments of fascination transitory his loves

In combination with verbs, the two classes also show some differences. Some verbs expressing ownership can only combine with the internally caused (IC) nouns in (125a), while some verbs denoting movement or location can only combine with the EC ones (125b).

(128) a. Conserva su {respeto / odio / amor / rencor}. keeps.he his {respect hate love grudge} b. Cayó en una {desesperación / depresión} fell into a { desperation / depression}

These contrasts show for Sanromán that the IC nouns (*amor*) are IL predicates that are possessed as stable properties by the subject, while EC nouns (asombro) are SL predicates.

A second line of research has to do with whether deadjectival nouns keep in their structure the IL / SL distinction of the base adjectives. Martin (in press) argues that some derived nouns can display two SL readings, whose availability depends on a variety of pragmatic and semantic factors. One is the event reading -shown by the compatibility with a predicate like *take place* (129b)-, and another one is the stative reading (129c). The examples in (129) are from French.

(129) a. La chatte a commis une méchanceté. the cat has committed a malicious-TE 'The cat has committed a malicious act'

b. La méchanceté a eu lieu... *the malicious-TE has had place*'The malicious act has taken place...'
c. Sa discrétion de ce matin m'a beaucoup étonné.

His discretion of this morning me has a-lot surprised

Other derived nouns do not have the SL reading, and thus cannot be restricted temporally.

(130) *son intelligence de ce matin... his intelligence of this morning...

Two further facts are worth noting. In general, the availability of the SL reading in the derived noun is dependent on the availability of the same reading for the base adjective, but not all the adjectives that have an SL reading can keep it under the nominalisation. For instance, French *intelligent* 'intelligent' has an SL reading (131) but its nominalisation does not (130).

(131) Pierre a joué avec la sourdine. Il a été intelligent. Pierre has played with the soft-pedal. He has been intelligent (in doing so)

This takes us to the second fact, which is that there seem to be language-specific tendencies to associate the IL or SL reading of the base adjective to distinct nominalising suffixes. Martin notes that there is a tendency that nouns ending in *-isme* 'ism' express permanent properties, and those ending in *-erie* '-ery' denote (insider her sample) exclusively SL properties.

These facts seem to suggest three things: (a) nouns keep in their denotation substantial parts of the semantics of the base; (b) in those adjectives that allow an SL reading which is not transferred to the nominalisation, perhaps that reading is derived by some additional procedure and the base adjective is, in itself, only IL and (c) the IL / SL distinction, or at least the part of it having to do with temporal persistence, is grammatically relevant at least for affix selection.

Adverbs are in themselves a problematic class to define, but if we make a divide between referential adverbs (*here, there, now*, etc.) and qualitative adverbs (*wonderfully, easily,* etc.), it seems clear that both classes allow for IL and SL readings. Locative adverbs, again depending on their subject, can express transient or permanent properties (132), and qualitative adverbs can under the same circumstances express properties of the two kinds (133).

- (132) {Juan / Cabo Norte} está allí. Juan / Cape North is_{estar} there
- (133) {Juan / Esta sopa} está estupendamente. Juan this soup is_{estar} wonderfully

Relative clauses –which also denote properties of individuals– can also be both SL and IL predicates. Most of them are IL (at least as witnessed by their unavailability as adjunct depictives), but some seem to be SL judging from this property.

(134) Juan volvió {que se tiraba de los pelos / *que estudiaba inglés}.
Juan returned {that SE pulled from his hair / that studied English}
'Juan returned in a stage such that he felt like pulling his hair off'

5. What can change the IL / SL status of a predicate?

Let us now consider now what factors can modify the IL or SL status of a predicate.

5.1. Argument structure

First of all, the argument structure of the predicate seems to be relevant for the distinction. The following adjectives expressing emotional states allow for two readings: a 'passive' one, where the subject is the entity experiencing the state, and an 'active' one, where the same subject is an entity producing the state.

(135) triste 'sad', alegre 'cheerful', aburrido 'boring / bored', cansado 'tiring / tired'

While the passive reading has all the prototypical properties of SL predicates, the active one has characteristics of ILs. For instance, we can say that Juan is boring and that Juan is bored (136), but as a depictive adjunct only the passive reading is allowed (137).

(136) a. Juan es aburrido. Juan is_{ser} boring
b. Juan está aburrido. Juan is_{estar} bored
(137) Juan volvió aburrido.

Juan returned {bored /*boring}

As far as we can see, this behaviour is general for all adjectives with an active meaning, that is, those that denote the property of being able to trigger a particular state. In (101b) we state that Juan is in a particular state; in (101a), in contrast, we state that it is capable of putting others in a state of boredom. Similarly, we have contrasts between *El libro es triste* 'The book is_{ser} sad' –meaning 'the book is able to cause sadness' – and *Juan está triste* 'Juan is_{estar} sad' –meaning 'Juan is in a state of sadness' –, *La película es entretenida* 'The movie is_{ser} entertaining' vs. *El niño está entretenido* 'The child is_{estar} entertained', etc. Many adjectives derived with *-ífico* have this causative meaning –'to produce X'–, and they systematically combine with *ser: calorífico* 'calorific', *frigorífico* 'cooling', *odorífico* 'odorific', *sudorífico* 'sudorífico 'terrifying'.

Perhaps one reason for this generalisation is that these adjectives express states that individuals can experience for a while, but when they are used to express the property of causing such a state, they are interpreted as characteristing properties that something or someone has by virtue of its properties. It would, of course, be better to find either the deep conceptual reason for this, or alternatively a structural account differentiating the two argument structures. In this second line of reasoning, perhaps – following the spirit of Brucart's proposal– the causation component is codified as a syntactic layer which contains aspectual information that makes the use of *estar* impossible, in the same way that the presence of an eventive subject or certain prepositional structures do.

5.2. Superlative degree

Secondly, degree modification seems to be also relevant, and more in particular the different ways to express the superlative seem to play a role in licensing as adjunct depictives some adjectives that are marginal in their positive degree. Consider for instance the contrast in (138).

(138) María volvió {hermos-ísima / más hermosa que ninguna / ?? hermosa} *M. returned beautiful-supp more beautiful than nobody / beautiful*

We can perhaps venture a semantic explanation that has some intuitive plausibility. Being beautiful is generally considered a characteristic property, but being the most beautiful inside a group is not so if the group considered changes with the situation. Given a group such as the girls attending the party, being the most beautiful of them all is not a characteristic property of someone, because that will depend on the set of people considered. Even though this group is not present in the absolute superlative with *-isimo*, this form contrasts with the positive degree in that it denotes an extreme value that is different from the interval above the standard of comparison expressed by hermosa 'beautiful'. Even if an individual is characterised by having a degree of beauty somewhere above that standard, it does not follow that the degree is an extreme value.

5.3. Coercion

Finally, it has been noticed repeatedly that grammatical marks –such as the presence of the copula *estar*– and different conditions in the context can allow predicates generally interpreted as IL predicates to denote SL properties (but not always the other way round, as mentioned in §3). Escandell & Leonetti (2002) discuss such cases, which are exemplified in (139).

(139) Juan no es inteligente, pero hoy ha estado inteligente. Juan not is_{ser} intelligent, but today has been_{estar} intelligent

Escandell & Leonetti, who interpret ILs as those which have a classificatory role – ascribing the subject into the class that the predicate denotes, independently from temporal extension– explain this case as coercion. The copula *estar* acts as a syntactic trigger that shifts the type of the predicate it c-commands from an IL to an SL by virtue of its syntactic selection: it requires a temporally restricted complement, and, according to them, this is obtained through the addition of a temporal variable (2002: 169).

The interpretation of these adjectives when used as SLs is generally some 'behavioural' notion, but other interpretations can emerge in order to accomodate the predicate, such as a directly perceived property or a result from a previous change. When predicated of humans, adjectives denoting permanent characteristics of individuals can be recategorised as so-called evaluative adjectives, that express properties in as much as they are exhibited while acting in some way. In fact, sometimes the treatment of these adjectives as SLs involves turning a predicate that expresses a class of entities –such as some relational adjectives– into one that denotes a particular behaviour.

(140) Juan no es español, pero hoy está muy español.
 Juan not is_{ser} Spanish, but today is_{estar} very Spanish
 'Juan is not Spanish, but today he is acting like a Spaniard'

These changes are more restricted when the subjects are not humans that can act in some way, but sometimes they are possible. Indeed, in Escandell and Leonetti's analysis, the coercions in (139) and (140) are due to the fact that the predication presents the properties as situation-dependent, something that unifies the behavioural use of *estar* with its evidential use discussed in §3.1 (141), and other perceptions of inferred change like those in (142).

- (141) Esta sopa está estupenda. this soup is_{estar} wonderful
- (142) a. La carretera está ancha. the road is_{ser} wide
 b. El día está frío. The day is cold
 c. El pescado está caro. the fish is_{estar} expensive

The examples have in common that they all create a situational dependency –the objects are compared to some implicit standard specific for that situation– and present as accidental properties that could characterise a road, a day and some fish. It is, indeed, easy to interpret the sentences in (142) as potentially subject to some change, either in time (142b, 142c) or in space (142a, where we are saying that a particular track of the road is wide, while the rest is narrower). See also Maienborn (2005), where a similar point (which we believe goes back to Falk 1979) is made.

Still, not all IL predicates can be coerced into an SL reading. Those that take propositional subjects are not coercible. Escandell & Leonetti note that Ignacio Bosque pointed out to them the following examples:

(143) {Es / *está} {necesario / posible / obligatorio / verdadero / falso}. *is_{ser} / is_{estar} necessary / possible / compulsory / true / false*

All these adjectives express notions having to do with truth and mood, and as such can only be predicated of propositions. Escandell & Leonetti (2002) suggest that propositions cannot be the object of perceptions, and as such they would be outside of the contexts where the coercion is possible.

6. IL / SL: are the classes primitive?

The contrast between IL and SL is not easy to define, as we have seen in the previous sections. Of course, this is not a welcome result in linguistics, and it has to be solved somehow. One solution that almost suggests itself is that what we call IL and SL is not a distinction based on one single property, but on a constellation of properties. The primitives of linguistic analysis would not be IL or SL, but each one of the properties that, in combination, define something as belonging to one of the classes. Thus, saying that something is IL actually means 'something has properties X and Y, but not Z'. The goal of a linguistic analysis is to

understand X, Y and Z, how they cluster with each other, and what predicates carry them. Fernald (1994) or Jäger (2001: 99-103) propose this kind of solution.

The other option is, of course, that these classes do not really exist, and the behaviour that predicates display actually are the manifestation of aggregations of disconnected properties, some of which have been taken as central in order to define a predicate as IL or SL.

Ultimately, chosing between these two hypothesis implies studying borderline cases which do not show all the properties of either class, and whether these intermediate cases form classes that can be ordered in a monotonic scale such as that whenever they have property A, property B follows. If the properties of the cases that do not conform to the IL / SL divide are not amenable to this kind of 'embedding' classification, one can think that the IL / SL distinction is not really part of the grammar, but a descriptive tool; in contrast, if they can be ordered, one would be more inclined to derive one of the two groups from the other, with intermediate classes that emerge as properties keep piling up over the same structure.

Let us briefly summarise the main properties that have been noted to fundament the IL / SL distinction:

- (i) ILs express properties necessary to identify an individual; SLs express properties that can be lost or acquired without losing the identity
- (ii) ILs are interpreted as temporally persistent; SLs are not
- (iii) ILs do not accept temporal restrictors; modifiers cannot be interpreted as denoting time frames restricting the situations where the property applies
- (iv) ILs force the presuppositional reading of indefinites
- (v) ILs force the generic reading of certain noun phrases
- (vi) ILs cannot be adjunct depictives
- (vii) ILs cannot restrict or be on the scope of temporal quantifiers
- (viii) SLs do not produce adjectival compounds of the shape [N]-i-[A]

A prototypical IL predicate such as *intelligente* 'intelligent' and a prototypical SL like *desnudo* 'naked' follow these properties without exception. But, of course, reality is more complex and facts are stubborn.

One of the most interesting exceptions are so-called evaluative adjectives, which describe the characteristic behaviour of humans. These adjetives (144) have been noted to have mixed properties, for instance, in Arche (2006), where they are treated as activities –not states–.

(144) amable 'nice', generoso 'generous', agressivo 'aggressive', cruel 'cruel'...

They seem to express properties necessary to define an entity, and we assume that a cruel person is cruel –that is, in his state-of-mind he is cruel– even when he is not displaying a cruel behaviour, so the property seems to be persistent and independent of specific situations. However, it allows temporal (and spatial) modification (145a), and can be the restrictor or nuclear scope of a temporal quantifier (145b, 145c). It forces the presuppositional reading of indefinites (145d), and the generic readings of the relevant noun phrases (145e). They can occur as parentheticals (145f), they are not accepted easily inside with-predicational structures (145g) and are possible as adjunct secondary predicates, although interpreted in a manner close to manner adverbs (145h); we ignore the morphological derivation here because these adjectives do not apply to body parts, and the class of compounds considered in the test only allows body parts in the compositional cases.

(145) a. Juan siempre es cruel. Juan always is_{ser} cruel b. Cada vez que Juan es cruel, María se va de casa. whenever that Juan is_{ser} cruel, María SE leaves from house c. Cada vez que visita a sus padres, Juan es cruel. whenever that he.visits ACC his parents, Juan is_{ser} cruel d. Cinco chicos son crueles. five boys is_{ser} cruel 'Five boys from certain group are cruel' e. Un político es cruel. a politician is_{ser} cruel 'Politicians are cruel' f. Juan, cruel, insultó a María. Juan, cruel, insulted ACC María g. *Con Juan cruel no pudimos disfrutar de la fiesta. with Juan cruel not we-could enjoy of the party h. Debíamos haberlo pensado -observó amable el policía-. *we.should have-it thought – noted kind* the policeman [*Tiempo de Silencio*, Luis Martín Santos]

Evaluative adjectives have other puzzling properties, most significantly that they are -to the best of our knowledge- the only adjectives that license a progressive form.

(146) Juan está s-iendo cruel. Juan is_{ser} be_{ser}-ing cruel 'Juan is being cruel'

All in all, something that seems clear judging from their behaviour is that evaluative adjectives introduce a temporal variable which is still available to bind, despite their semantic interpretation as ILs. This means that not every predicate with some IL properties are characterisable as Kratzer or Chierchia proposed.

Another interesting class are absolute adjectives, those that denote gradable properties which, by default, are interpreted in the maximal degree of a scale, such as *limpio* 'clean' or *cierto* 'true'. Some of these adjectives behave in a systematic way for an IL predicate (see *transparente* 'transparent' as IL) or an SL (*borracho* 'drunk'), but some of these, among them *diferente* 'different', *igual* 'same', *normal* 'ordinary' and *raro* 'odd' display a mixed behaviour. They seem to express characteristic properties, and are generally interpreted as persistent. They are marginally acceptable as temporal modifiers, or as restrictors of temporal quantifiers, and they impose a cardinality reading to indefinites. They force a presuppositional reading of the quantifier (147d), but prefer an existential reading of the indefinite singular (147e), and cannot be used inside with-predication. If they do not modify the internal argument, they cannot be used as depictives. They are marginally allowed as parentheticals.

(147) a. ?Juan siempre es diferente a María. Juan always is_{ser} different from María

- b. ?Cada vez que Juan es diferente a María, ella se enfada. whenever that Juan is_{ser} different from M., she SE gets.angry
- c. ?Cada vez que visita a sus padres, Juan es diferente a María. *whenever that he.visits ACC his parents, Juan is_{ser} different from María*
- d. Cinco chicos son diferentes a Juan.
- five boys isser different from Juan
- 'Five boys from certain group are different from Juan'
- e. Un político es diferente a Juan.

a politician is_{ser} different from Juan 'There is a politician who is different from Juan'

f. *Juan, diferente a María, insultó a Ana.

Juan, different, insulted ACC María

- g. *Con Juan diferente no pudimos disfrutar de la fiesta. with Juan different not we-could enjoy of the party
- h. *Juan paseó diferente a María.
 - Juan took.a-walk different from María

Then we have elative adjectives describing the subjective judgement that a speaker has about some entity, like *delicioso* 'delicious', *estupendo* 'wonderful', *excelente* 'excellent' and *espantoso* 'horrid'. Again, these adjectives seem to express IL properties with temporal persistence and inherent to that entity. Surprisingly, they display the expected behaviour of an entity with a temporal variable. They act as IL predicates in forcing the presuppositonal reading of indefinites (148d), in not allowing to be used as adjunct depictives –unless they are parentheticals– and in not licensing the presuppositional reading of indefinites, but as SL predicates in preferring an existential reading of an indefinite (148e).

- (148) a. Juan fue estupendo ayer en la fiesta. Juan was_{ser} wonderful yesterday at the party
 - b. Cada vez que Juan es estupendo, María se enamora de él. whenever that Juan is_{ser} wonderful, María SE falls.in.love with him
 - c. Cada vez que visita a sus padres, Juan es estupendo. whenever that he.visits ACC his parents, Juan is_{ser} wonderful
 - d. Cinco chicos son estupendos.
 - *five boys is*_{ser} *wonderful*
 - 'Five boys from certain group are wonderful'
 - e. Un político es estupendo.
 - a politician is_{ser} wonderful
 - 'A particular politician is wonderful'
 - f. Juan, estupendo, protegió a María.
 - Juan, wonderful, protected ACC María
 - g. *Con Juan estupendo pudimos disfrutar de la fiesta. with Juan wonderful could. 1PL enjoy of the party
 - h. *Juan paseó estupendo.
 - Juan walked wonderful

If we group these results in a table, we obtain the following, where X amounts to 'behaves like SL' and \checkmark , to 'behaves like IL':

Table 1. IL or SL properties				
	<i>cruel</i> -class	wonderful-class	different-class	
No Temporal	Х	Х	\checkmark	
modifier				
No restrictor of	Х	X	\checkmark	
whenever				
No scope of	Х	Х	\checkmark	
whenever				
Compulsory	\checkmark	\checkmark	\checkmark	
presuppositional				
reading of				
indefinite				
Compulsory	\checkmark	Х	Х	
generic reading of				
an indefinite				
No parenthetical	Х	X	\checkmark	
No with-pred	\checkmark	\checkmark	\checkmark	
No secondary	Х	\checkmark	\checkmark	
predicate				

 Table 1. IL or SL properties

Two things seem clear here: no value in one row implies any value in another row, so it does not look promising to cluster the IL vs. SL properties in one unitary hierarchy. The classes of adjectives themselves cannot be ordered either; although the picture is more uniform if we compare one column to the other, there are still mismatches that imply that there is no monotonicity. For instance, evaluative adjectives behave like IL with respect to the interpretation of the subject and as SL with respect to temporal modification, but the class of *different* behaves exactly the opposite. The table, even with only three adjectives considered, does not allow for a monotonic organisation.

However, see what happens if we divide it in three. In the first table we have only those properties that can be considered as a direct result of having a temporal variable that allows for modification and can interact with temporal quantifiers; the second is about the interpretation of the subject, and the third about their role as adjunct predicates.

	cruel-class	wonderful-class	different-class
No Temporal	Х	X	\checkmark
modifier			
No restrictor of	Х	Х	\checkmark
whenever			
No scope of	Х	Х	\checkmark
whenever			

Table 2. Adjective classes with respect to temporal variables

	<i>cruel</i> -class	wonderful-class	different-class
Compulsory presuppositional reading of indefinite	√	√	√
Compulsory generic reading of an indefinite	\checkmark	X	Х

Table 3. Adjective classes and interpretation of the subject

Table 4. Adjective classes as predicates in adjunct contexts				
	<i>cruel</i> -class	wonderful-class	different-class	
No with-pred	\checkmark	\checkmark	\checkmark	
No secondary	Х	\checkmark	\checkmark	
predicate				
No parenthetical	Х	Х	\checkmark	

Table 4. Adjective classes as predicates in adjunct contexts

Suddenly, the tables are monotonic. This is precisely what we expect if IL vs. SL are not primitive notions, but are built up by accumulation of at least three distinct properties, which are independent of whether the notion is conceptualised or not as inherent to an individual.

The first table suggests –pending an examination of bigger samples– that a predicate either has or does not have a temporal variable, but that this property is independent of whether the predicate is assumed to express a characteristic property of the individual: the three adjectives examined denote inherent properties, and yet two of them seem to have a temporal variable.

The second table suggests that the interpretation of the subject is independent of the previous property, as the pluses and minuses do not match one-to-one any value of the previous table (see the *wonderful*-class), but also that not licensing the presuppositional reading of a plural indefinite is independent of allowing the generic reading of a singular indefinite. If these interpretations depend on cover quantifiers, as it is frequently assumed, then these data seem to indicate that the readings require different quantifiers and that the cooccurrence of these predicates with them is subject to more variation than standardly assume.

In the third table, again we can conclude that the availability of predicates as adjuncts is independent of whether they have a temporal variable or not –casting doubt on analysis where depictive adjuncts are licensed by the same kind of functional element that licenses their cooccurrence with temporal operators–. Moreover, it indicates that the three constructions considered are not equally restrictive, with parentheticals being the most permisive and *with*-constructions being the most restrictive.

To conclude this section, it seems that pure IL and pure SL predicates are obtained by the accumulation of four in principle independent properties, which we list here:

- a) The semantic interpretation of the predicate, whether it denotes a characteristic or accidental property, which is in turn associated to an implication of temporal persistence or not.
- b) The presence or absence of a temporal variable
- c) The cooccurrence with different kinds of quantifiers
- d) The availability or not as adjunct depictives in a variety of constructions

Perhaps the distinctions are not due to the class to which the adjective belongs, but to properties of single adjectives and when we examine bigger samples of members of each class and tests, other contrasts emerge. But at the very least, this shows that at a minimum this four things have to be differentiated.

7. How is the IL / SL distinction codified in the grammar?

Even if IL and SL are labels that we use to refer to separate sets of properties that can appear independently of each other, we can ask ourselves the question of how these sets of properties are codified in the grammar. Three initial possibilities suggest themselves:

- a) The distinction is codified lexically, that is, specific items come endowed with relevant properties that define them as IL or SL
- b) The distinction is obtained structurally, that is, through the combination of different constituents and the configuration that results from them
- c) The distinction is not properly presented in the grammar, but is entirely due to the conceptual semantics and world knowledge associated to the linguistic utterances

After the review we have made, we have a nice set of data to make a provisional evaluation of how well each one of these approaches fare with respect to the data.

The lexical theory would require that each lexical item has an entry, as an item, which specifies some property which is determinant for whether it behaves as an IL or as an SL, such as a temporal variable or some other ingredient. We have already data that cast doubt on this approach. First, the fact that some adjectives can be both IL and SL predicates suggests that this is not the right approach. Note that in theories such as Camacho (2012) an adjective such as *triste* 'sad' must have two entries, one with an aspectual feature that is checked by *estar* and another one without this feature. The question is, of course, whether this forces for duplication of entries in the lexicon or we can view the extra features as something that can be assigned to a head under some yet to be specified conditions.

Note that a potential solution could be to propose that the temporal variable is added by the copulative verb *estar*, but this would take us away from the lexical theory into the structural approach where it is the combinations of units, and not the units themselves, what determines if something behaves as an IL or as an SL. We will go back to this issue later.

A second piece of data –perhaps even stronger than the first– that casts doubt on the lexical approach is the behaviour of prepositional phrases. We have seen that the whole P+N constituent is the one that can be classified either as IL or SL, as –with perhaps the exception of *con* 'with'– single prepositions can produce ILs and SLs and classes of nouns produce also both types of predicates.

Let us see now the conceptual proposal, where notions like IL and SL are grammatically undefined and it is world knowledge and context what determines if something acts as a permanent property or not. This issue is more difficult to settle, mainly because here the different ingredients of what makes a predicate IL or SL could behave in different ways, but also because this question has to be approached individually for each language, as arguably some languages grammaticalise notions that other leave for conceptual knowledge (as, perhaps, the distinction between masculine and feminine). If these ingredients are taken as a block, the conclusion would seem that the IL / SL distinction cannot be a product of the conceptual semantics of items or structures, because of the interpretation of indefinites. The data noted by Milsark (1974), showing that the existential reading of an indefinite is available only with predicates such as *available* and *naked* are a robust counterexample to this approach. In the context it might be clear that we want to speak about particular groups of firemen, but that does not allow us to use (149a) in that sense.

(149) a. Los bomberos son valientes. *the firemen are_{ser} brave*b. Los bomberos están disponibles. *the firemen are_{estar} available*

This shows that the interpretation of the subject cannot be left to conceptual semantics, but it does not say anything about the other properties that in principle we have diagnosed as independent of this in the previous section. In fact, a contrast like the one in (150) could be an argument that the characteristic / accidental property contrast is conceptual in nature.

- (150) a. Cada vez que Juan está en el sur de Europa... whenever that Juan is_{estar} in the south of Europe...
 - b. *Cada vez que España está en el sur de Europa... whenever that Spain is_{estar} in the south of Europe...

If there is a temporal variable in (150a), either in the copulative verb or somewhere in the locative PP, the same variable should in principle be also in (150b), but this second structure does not seem possible. Both subjects are proper names and on the surface both structures are identical. A structural approach would have to find some fine-grained difference between the two examples to justify that the variable is missing in (150b). The conceptual approach, in contrast, would say that the sentence is grammatical but describes a situation that does not fit our assumptions about the world. Imagine we entertain the superstition that the world has been created several times, and in only some of them Spain is in the south of Europe: then the sentence in (150b) is perfectly fine.

If we consider, finally, the availability as adjunct predicates, we also see evidence in favour of the conceptual approach advocated in McNally (1994), where this depends on whether the adjunct can in some informative way restrict the denotation of the main predicate. This general approach seems to us compatible with the variable acceptability of predicates in three contexts, as parentheticals, as adjunct depictives and inside *with*-clauses. The least restrictive seems to be the parenthetical contexts perhaps precisely because it does not integrate with the structure of the main predicate, and –provided it expresses some property that the speaker might perceive in the subject during the time he or she fulfills the eventuality expressed by the main predicate, and possibily restricted to that time-period– accepts any kind of predicate. The most restrictive is the *with*-construction, maybe because it imposes extra conditions to its predicate related with the obligation of interpreting its internal predicate as containing verbal aspect –so that gerunds and participles (including short forms, like *harto* 'fed up' or *roto* 'broken') are fine in the structure, but not adjectives–. In the next sections we will consider the possibility of giving the IL / SL distinction a structural analysis.

7.1. Representing ILs and SLs

One first question is whether the temporal variable is introduced by the predicate or by the structure above it. We have already argued that putting it as a feature contained in the adjective is not a good option, as the same adjective might give different results inside a temporally quantified structure. Let us see if it is possible to argue that the temporal variable is in the copulative verb *estar*.

(151) Cada vez que Juan {está / *es} gordo... when ever that Juan is_{estar}/ is_{ser} fat...

(151) would suggest so, *prima facie*, but imagine what we would have to say about a sentence like (152), with an evaluative adjective.

(152) Cada vez que Juan es cruel... when ever that Juan is_{ser} cruel...

Here we would have to say that the temporal variable is contained somewhere in the structure of the adjective, something that might be possible but that would cause two kinds of trouble. One has to do with the parsimony of the analysis: if the temporal variable can be grammaticalised in the adjective, why would a language grammaticalise also in the copulative verbs (or viceversa)? The second has to do with a general observation about how stative verbs differ from adjectives (Rothstein 2004): adjectives do not allow for (eventuality) quantification, but stative verbs do. The sentence in (153a) is ambiguous: the witch might have given you three different spells making you know English (*three times > make > know*) or one single spell cursing you to know English once, forget it, know English again, forget it, etc. (*make > three times > know*). In contrast, only the first reading is available in (153b), showing that the interpretation **make > three times > happy* is out. In other words: the quantifier cannot directly modify the adjective happy.

- (153) a. The witch made John know English three times.
 - b. The witch made John happy three times.

A contrast like (153) suggests that adjectives should not, per se, contain temporal variables of the same kind as verbs.

More in general, the problem of analysing this set of data comes from the observation that we have three distinct issues here. The first one is the observation that the alternation *ser / estar* is partially overlapping, but distinct, from the IL / SL contrast (\S 3). The second is the observation that temporal persistence is partially independent of whether the property is characteristic or not. Several pieces of data show this (cf. Arche 2006), and we will shortly repeat some of them here. First, the fact that it is possible to temporally quantify over a predicate that expresses a seemingly characteristic property of an individual, if it is done through an evaluative adjective. This suggests that, at least to the extent that the properties are manifested in specific times, the property here is not conceived as temporally persistent.

(154) Cada vez que Juan es cruel... whenever that Juan is_{ser} cruel

Secondly, the fact that in some uses of *estar* the property is temporary to the extent that it is perceived in a particular situation by a particular speaker (remember Escandell & Leonetti 2002), but characterises an individual.

(155) Esta sopa está estupenda. this soup is_{estar} wonderful

More in general, the fact that a theory of IL and SL has to address is that a characterising property does not need to be perceived or manifested as such, and that the distinction is not marked always by a stable distribution of *ser* and *estar*.

If we move our attention to locatives, we have two problems that an analysis should also address. One is that some locations are introduced with *ser* –if the subject is eventive–.

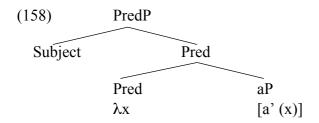
(156) La fiesta es en el tercer piso. the party is_{ser} in the third floor

The second is that with *estar* a location can be temporally persistent and characterise an individual (157).

(157) España está en el sur de Europa. Spain is_{estar} in the south of Europe

A global theory of IL and SL should be able to explain all these mismatches. What we will propose is a theory which owes a great deal to the theories where the crucial aspect of an SL predicate is its association to an external situation, following ideas of Higginbotham & Ramchand (1996), Arche (2006) and, perhaps not stretching too much her proposal, Kratzer (1995).

We believe that the first step –as Brucart (2010) does– is to profit from observations done by Bowers (1993, 2000, 2010), Hale & Keyser (2002) and Baker (2002), arguing that adjectives are argumentally defective and need to combine with a functional projection that turns them into predicates, licensing its subject. Let us call this projection Pred(ication)P, and assign to it a lambda-abstraction kind of semantics.

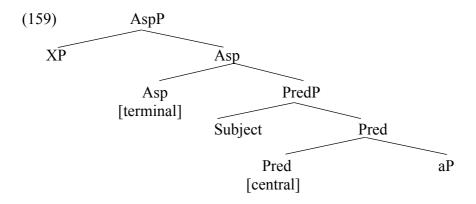


In principle, this projection has to be stative in nature, and nothing in it says that it should express temporary properties. Indeed, following Hale & Keyser (2002) we assume that this Pred head is an instantiation of a central coincidence relation which forces, in other words, that the property expressed by the adjective is coextensive with the subject –that is, the subject is included or contained in the denotation of the property–.

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We must find a source for temporal non-persistence that is independent of the adjective, and as far as we can see two options open up at this point. The first one is that this PredP can contain different values for aspect, that is, to treat it as the equivalent in the non-verbal domain of the projections that introduce internal aspect in the verbal domain. The different Pred heads could be viewed as different flavours of a stative predicative head –just like Harley (1995) proposed flavours of v, each one denoting a different primitive notion–, and an adjective like *gordo* would be temporally persistent or not depending on which one of them is used.

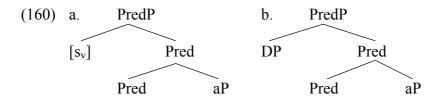
Perhaps more parsimoniously, we could propose –à la Borer (1994)– an aspectual phrase selecting PredP which is only projected when the property is temporally restricted and can have definite boundaries. Let us go for this second approach which, implying different structures, would make the strongest predictions. (158) would be the structure of a predicate such as *verdadero* 'true' which has an implicature of temporal persistence, but (159) would be the structure of a predicate such as *desnudo* 'naked', which is not temporally persistent. Note that, although here we represent [terminal] as if it were already interpretable in Asp, we will assume Brucart's proposal that it is checked by *estar*.



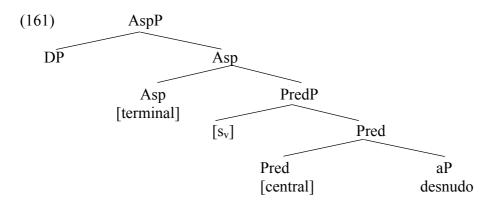
This aspectual node is an instantiation of the projection that marks terminal coincidence (Hale & Keyser 2002), that is, contact –but not inclusion– between two entities. The two entities can be of several kinds, and here –where the terminal coincidence preposition is instantiated as aspect– we will assume that they can be instantiated as an individual or as a second situation with which the predication is related. It has been known that in prototypical SL predicates the second situation is actually interpreted as an event from which the properties emerge as a result (a change-event), but other possibilities are open and as such we will keep the information of the head and the specifier underspecified in the general case. Its aspectual contribution is to restrict the denotation of the stative head PredP to cases where there is some kind of relation with another situation such as that it is not inferred that the property is persistent, but is associated to the subject only in as much as related to another eventuality.

The data argue in favour of separating temporal persistence from the characteristic / accidental divide (and of course, *ser / estar*), so we need a different strategy to capture each one of these parts. Predicates could contrast with respect to what object they merge as the subject of the predication phrase. In the case of IL predicates, it would be an individual; in the case of an SL predicate, it would be a spatiotemporal variable related to the individual. According to this proposal, which tries to reflect compositionally in the syntax the semantics of each type of predicate, (160a) would be the structure of an adjective denoting a characteristic property, and (160b) another

one denoting a property of a situation related to an individual (s_v stands for situational variable). In other words, we are treating temporal variables as

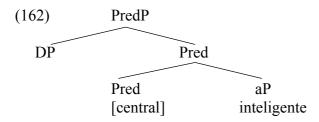


With this we can already explain some cases. The structure in (161) would be the one of an adjective like *desnudo* 'naked', which is both temporary and non-characteristic.



Its structure is read as follows: there is a property (*desnudo*) which is predicated (Pred) not of an individual, but of a slice of it (s_v) –being thus accidental– and that property is not persistent of the subject DP because it is related to the predication through a terminal coincidence head (that is, the subject and the predication are not coextensive, but just in contact in some point).

An adjective like *inteligente*, which is temporally persistent and characteristic, would have the one in (162).

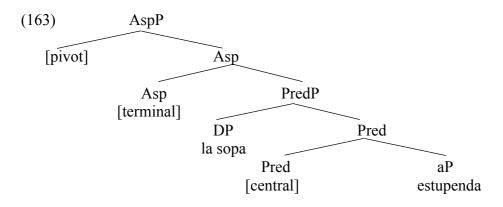


This is read as follows: the property of intelligence is predicated of an individual (therefore, it is characteristic) and the property is completely coextensive with the subject (the subject is contained in the abstract space defined by the property, because the predication is always central).

But at the same time –specially if the aspectual value is not introduced by the same head that introduces the subject– we expect to find cases where AspP selects a PredP whose subject is an individual. We suggest that (163) is the appropriate representation of the evidential-kind of use of *estar* in (155). Here, even though the property is predicated directly from an individual, the property has a temporary flavour because there is an aspectual [terminal] head that relates the predication to a pivot, which corresponds to the entity perceiving that characteristic property. We take the notion of

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'pivot' from Sells (1987), and define it as the entity with respect to whose perspective the content of a proposition is true. PredP assigns a set of properties to a subjec, 'the soup'. This assignment of properties is done in a particular situation, denoted by AspP. The situation is defined as follows: there is a pivot which evaluates the properties of the soup, and according to his or her perception, the soup has those properties. The assignment of properties, thus, is strictly related to the personal perception of the pivot.



Let as mention briefly one technical issue: the notion of pivot is tightly related to a speech act, and obviously PredP does not denote a proposition. However, we assume that [pivot] will have to check some of its features with the CP domain of the utterance when the whole derivation of the sentence is completed by merging T and C. At that point [pivot] will be interpreted as restricting a proposition, which will correspond to his or her set of beliefs.

In (163), there is no temporal variable directly encoding a perception event, but the notion that the properties are presented as the result of some perception is derived from two configurational ingredients: (a) the presence of a pivot introducing perceptive subjectivity and (b) the terminal head, which indicates that the pivot evaluates the property in a particular point not coextensive with the property itself. Such a sentence with the evidential use of *estar* contrasts with one where the perception event is overt, and thus there is a situational variable.

(164) a. *Cada vez que esta sopa está estupenda, el cocinero se alegra.

- whenever that this soup is_{estar} wonderful, the cook SE cheers.up
- b. Cada vez que alguien encuentra estupenda esta sopa, el cocinero se alegra. whenever that someone finds wonderful this soup, the cook SE cheers.up

Are there cases where the property is temporally persistent, but non-characteristic? To the best of our knowledge, such cases do not exist. If it is confirmed by further research that this animal does not exist in our woods, a plausible reason could be found in our proposed structure: the situational variable might need some terminal coincidence head in order to be licensed as a slice of a particular individual, so whenever it is present, AspP is projected and the property is interpreted as temporary. However, this suggestion has to be taken with the grain of salt inherent to any hypothesis that relies in the possible non-existence of a particular case, and such cases might exist if, for instance, the situational variable can be licensed through other means.

Consider now the cases of evaluative adjectives (like *cruel*), which express characteristic properties of an individual, but can be quantified over and -

incidentally– are introduced by *ser*. Perhaps more problematically, they are the only adjectives that license the progressive form of the copula, so they must have something different from the other classes somewhere in their structure. It is true that with most temporary predicates the copula is *estar* and, in consequence, we could think that the ungrammaticality of (165a) is due to some ban on two consecutive co-occurring forms of *estar*. Note that, in contrast, (165b) is possible.

(165) a. *Juan está estando gordo. Juan isser beingestar fat
b. Juan sigue estando gordo. Juan stays beingestar fat
'Juan is still fat'

However, note that the temporal variable that licenses temporal quantification with some predicates without the copula *estar* does not license the progressive periphrasis –that is, the absence of the progressive form for some predicates that act as SL cannot be reduced to a ban on the co-occurrence of two consecutive *estar* forms. The sentence in (166a) in its stative reading –where the causer of the emotion is not volitionally producing a change of state– licenses the temporal quantification. Whenever John is aware of the threat of getting cancer, something happens. However, in the same reading the progressive form is out (166b). Other verbs, like *obsesionar* 'obsess', allow the progressive form, however.

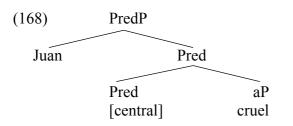
- (166) a. Cada vez que el cáncer asusta a Juan... whenever that the cancer frightens ACC Juan...
 - b. *El cáncer está asustando a Juan. *the cancer is frightening ACC Juan*
 - c. Cada vez que el cáncer obsessiona a Juan... whenever that the cancer obsesses ACC Juan...
 - d. El cáncer está obsesionando a Juan. the cancer is obsessing ACC Juan

Examples like (166d) indicate that, plausibly, there is a morphophonological effect banning **estar estando*, but there must be something additional in the structure to explain why (166b) is out. If we examine the interpretation of a sentence like (167a) or (167b), we see that there is an implicit event which is manifesting a property otherwise characteristic of Juan.

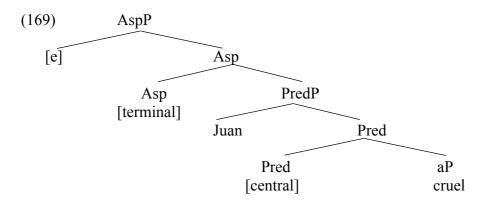
(167) a. Cada vez que Juan es cruel... whenever that Juan is_{ser} cruel...
b. Juan está siendo cruel. Juan is_{estar} being_{ser} cruel

In other words, these sentences do not say that Juan loses and gets the property of being cruel in different temporal intervals, or that during some interval he was cruel, but rather that there are actions characterised by Juan's cruelty that take place in some cases or are ongoing. Our proposal implements a suggestion by Stowell (1991), Arche (2006) and Martin (2008) –among many others–, which involves differentiating two distinct readings of evaluative adjectives: the state-of-mind one, which does not involve any action, and the behaviour one, which expresses that the characteristic

properties of Juan are exhibited in particular actions. It is only the second reading that can be used in the progressive form. In our proposal, the state-of-mind reading of *cruel* would be represented as in (168): we just say that there is a temporally persistent and characteristic property of Juan.



The behaviour-reading of Juan involves the same predication relation, but now it is considered in the extent that, in a temporary situation, it was presented inside an event. Our proposal is to simply represent this event in the structure, as the specifier of the aspectual phrase. This element is an eventive situational variable, so it licenses the temporal quantification and, in addition to this, the progressive form.



This, of course, does not exhaust what should be said about evaluative adjectives; for instance, it is necessary to know to what extent individual adjectives can take part in the configuration of (169), and what the event information of the [e] argument is in terms of duration, telicity and dynamicity. However, for the time being we leave the analysis of these adjectives here.

Let us briefly consider now the case of *diferente* 'different', which marginally allows a reading as a temporal quantifier, and *estupendo* 'wonderful', which allows it without any problem. If we look at their semantics, we see some similarities with the evaluative adjectives in this use. To the extent that it is acceptable with temporal quantification, *diferente* refers to single occassions in which someone is exhibiting a behaviour different from someone else. Two pieces are crucial here. The first is that the entities compared have to be human or entities that can experience change during a time period: if they are non humans the adjective is not available, such as the case with two statues (170).

(170) *Cada vez que el David es diferente al Moisés... when ever that the David is_{ser} different to-the Moses...

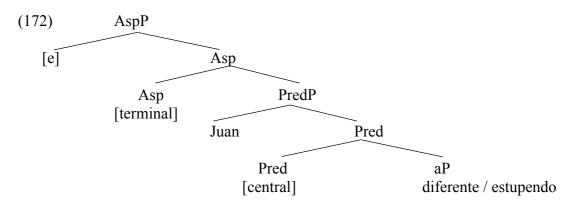
Relatedly, what is different in the acceptable contexts are not the inherent and characteristic properties of an entity, but the behaviour it displays or the external

manifestation of them through other means. In the case of *estupendo* the interpretation is the same, and the conditions too.

This is similar to what we find in the behavioural reading of evaluative adjectives, and in fact *diferente* and *estupendo*, in the relevant readings, allow for the progressive form (171). The following examples are taken from Google.

(171) a. ¿Por qué está siendo diferente el País Vasco en esta crisis? *for what is_{estar} being different the Country Basque in this crisis?*'Why is the Basque Country being different in this crisis?'
b. Lo cierto es que abril está siendo estupendo para mí. *the true is_{ser} that April is_{estar} being wonderful for me*'The truth is that April is being wonderful for me.'

What these speakers say is that the property is being manifested through different events, and this licenses the progressive form. Therefore, we propose the structure in (172) for these uses of these adjectives. As in the case of evaluative adjectives, the outer layer is not generally projected in the prototypical descriptive uses of the adjectives.



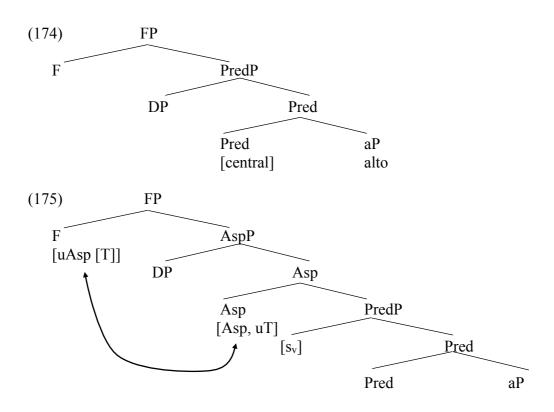
7.2. Ser and estar

Although to some extent orthogonal to the problem of IL vs. SL, let us take some time to analyse the repercusions that this analysis has for the distinction between *ser* and *estar*.

What do all predicates that take *estar* have in common? The answer to this question is extremely difficult, as there is a lot of variation, but following the suggestions in Brucart (2010), we will start with the hypothesis in (173) and see how far it can take us.

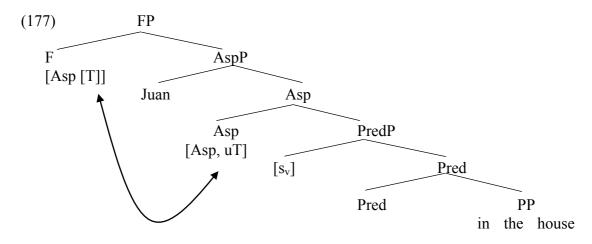
(173) *Estar* is a manifestation of [uAsp [T]]– where T stands for 'terminal relation'– and checks the terminal preposition if nothing else has done it.

The following projections show why prototypical ILs combine with *ser* and prototypical SLs combine with *estar*. This is just a variation of Brucart's analysis: in (174), *ser* is used because there is no terminal preposition to check. In (175), *estar* is needed to check the aspectual value T.

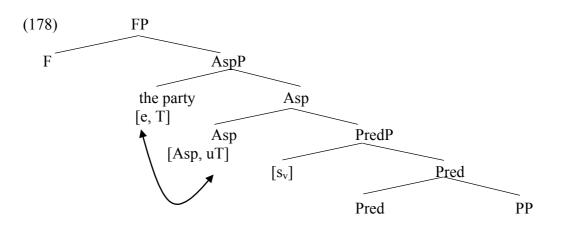


Note that on the previous trees, we are treating *ser* and *estar* as the projection of a functional head F, whose status is not clear. In the case of *estar* it seems to correspond to some value for aspect; in the case of *ser*, it is difficult to tell. One thing is relatively clear: *ser* and *estar* are not easily treated like verbs (thus, projections of v). They do not show a theme vowel (ThV), which is, in general, a morphological property of verbs in Spanish. Compare (176a) with (176b) and (176c); in the first it is easy to isolate a theme vowel in the structure, but this is impossible in (176b). In (176c), despite appearances, the *-a-* does not have the morphophonological properties of the theme vowel in (176a): note the position of the stress in the second person singular and third person plural.

With the temporary locations; the same checking applies (177).



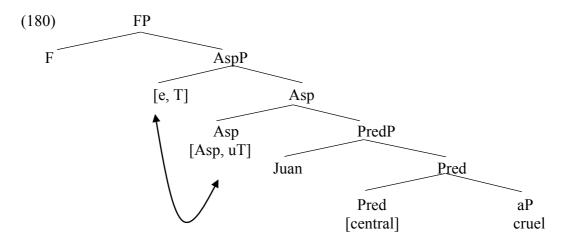
The spirity of Brucart's story can also be adopted to explain why when the subject denotes an event, *estar* is impossible (178): the event checks the terminal feature, so insertion of *estar* is impossible, because now Asp is inactive and would not be able to check *estar*'s extra features.



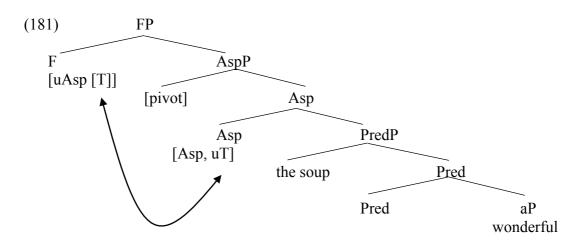
Note that the same strategy explains in our analysis why the evaluative adjectives, even in the temporary behaviour reading, combine with *ser*. These structures are a version of (179), only that the eventive specifier in Asp is now non-overt. In fact, the location of an event also allows the progressive form:

(179) La fiesta está siendo en el piso de arriba. *the party is*_{estar} *being in the floor of above* 'The party is taking place in the floor above.'

Although we have admitted that this eventive specifier still has to be examined, specially in what refers to its aspectual properties, it suffices to block presence of *estar* that it denotes some dynamic eventuality, and indeed the interpretation of such sentences includes some dynamicity.

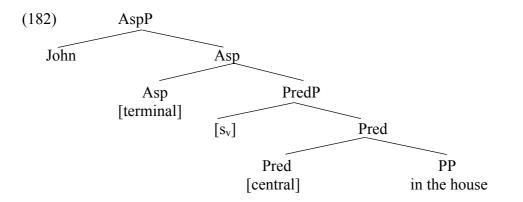


The evaluative uses of *estar* are not problematic either (181): nothing else licenses the T feature of the Asp that introduces the pivot, so this marked verb has to be used.

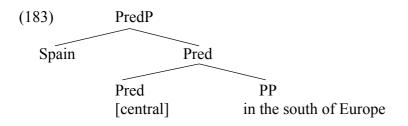


We are perhaps ready at this point to address the case of the locatives. There is one problematic case: characterising locations like those in *Spain is in the south of Europe*. Such cases would be expected to make the copula *ser* emerge, but whenever the located entity is not eventive, *estar* surfaces. Why?

Let us see first a strictly structural account of this distinction, and then we will say what it needs to change here so that the proposal works. If temporal persistence depends on the presence vs. absence of the Asp node, we could argue that in a sentence like the equivalent of 'John is in the house', the structure would be the one in (182): the location is predicated of a situation associated to John only temporarily.

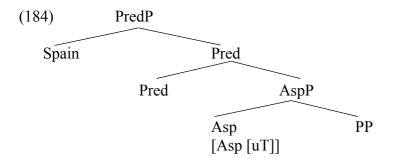


In contrast, 'Spain is in the south of Europe' would describe a property of Spain without which it would not be Spain. Here it is clear that the location characterises the country.



Only in the first case there is a situational variable that can be taken by quantifiers, accordingly with the data. But if (183) does not have a terminal aspectual node above, then *estar* would not emerge. Here we can again profit from an idea in Brucart's analysis: locations always involve a terminal component. If this is so, and the terminal node projects then the example can be captured in the proposal. Note that the terminal

feature would be below AspP in this case, as it would be triggered by the presence of the locative preposition.

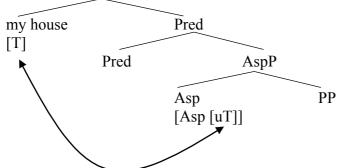


In order for the account to be complete, we would need to say what semantic contribution the projection of aspect makes here with the location, as it is interpreted as temporally persistent anyways. One possibility would be that, even when characterising an entity, human experience views locations as properties that are not central to individuals, even when they are directly predicated of them.

Note that this approach could actually help us understand why adverbs combine with *estar*. If adverbs share with prepositional phrases significant aspects of their structure (as suggested, for instance, in Larson 1985), perhaps what makes them special with respect to the IL / SL behaviour is that they contain an aspectual layer as in (184), dominating their lexical structure. More should be said, but the connection seems suggestive.

The trajectory reading of locatives, which takes *ser*, falls in this account basically as Brucart argues, but building from the structure in (184), as the location is characteristic: the only difference is that the subject is covertly a locative which is dominated by a terminal preposition.

(185) a. (A) mi casa es a la derecha. to my house is_{ser} to the right
b. PredP



As the subject of the predication has the relevant feature, *estar* is not inserted. Unlike other locations, there is no temporal variable, so we predict that these trajectory uses will not be subject to temporal quantification, a prediction which is borne out.

(186) *Cada vez que mi casa es a la derecha... whenever that my house is to the right... Thus the approach to the IL and SL, combined with Brucart's analysis of *ser* and *estar* accounts for a big part of the data. Let us, however, examine two potential problems.

In §3.2, where we presented Camacho's (2012) analysis, we noted that he proposes that locations with copulative verbs are actually adjuncts. The reason is to avoid that a noun with event meaning triggers in a sentence like (187) the effect of checking the terminal feature of Asp, as it did in (178). If the event noun always produced the same kind of intervention, then we would expect that every sentence with an eventive subject would use *ser*, counterfactually.

(187) La fiesta {está / *es} acabada. the party {is_{estar} / is_{ser}} finished

If we have understood Camacho's proposal correctly, he wants to enforce that in locative structures the locative and the subject of the copulative verb are in different agreement domains, while in non-locative sentences they belong to the same domain, and are thus equidistant. Abstracting away from specific technical implementations, the question is why locatives are special yet again. We are not in a position to give an answer to this question, but let us shortly list the options that we can imagine:

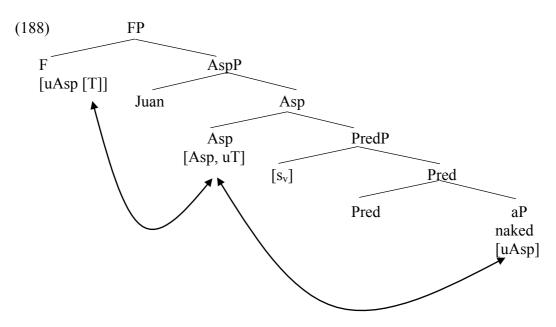
- As Camacho proposes, that locatives are adjuncts and adjectives are not.
- Some difference in how locatives vs. the rest of elements combine with the subject of these verbs. Locatives could establish a tighter connection to the subject than the other predicates. Indeed, locatives involve prepositional phrases, which are defined in several configurational approaches to grammatical categories, like Hale & Keyser (2002), as strictly relational heads. This would mean that for the locative to be licensed, the entity located has to be checked, while adjectives, nouns and others would not need –per se– to check that entity. Perhaps the satisfaction of the terminal feature by the noun piggybacks on the independent checking operation that the preposition has to perform on the figure.
- Alternatively, perhaps the subject in the case of locatives starts in a different structural position from the subject of adjectival phrases and other predicates. From that different position, only the subject of locatives would intervene.

We leave the issue here, because we want to move to the second problem, which is perhaps more central. There is a nagging question that we have not addressed, and that to the best of our knowledge none of the proposals discussed in this article addresses: why should Spanish have two distinct copulae when other typologically close languages do not? As we have presented it here, the answer seems to be that this is an accident resulting from the particular choice of features that are lexicalised with distinct items in Spanish. English and French, for instance, would make the same kind of conceptual distinctions, but for idiosyncratic reasons have not lexicalised the presence versus absence of aspectual information in the copula as two different lexical items. It would be desirable, though, to relate the existence of the two copulae with some other properties that differentiate Spanish from languages that lack the distinction, and work a predictive approach where having two copulae differentiated as in Spanish has implications from other properties of the aspectual or predicational system.

7.3. Variability

Another important issue is to explore to what extent a particular adjective or, in general, predicate can be combined with the structures associated to IL or SL. It has been repeatedly noted (remember Escandell & Vidal 2002, Arche 2006, Roy 2006, Romero 2009, Gallego & Uriagereka 2009, among many others) that most predicates can be used both as IL or SL. Specially when predicated from a human –as Escandell & Leonetti (2002) also note– almost any property can be presented as characteristic or accidental, as temporally persistent or not. This is straightforwardly explained in our proposal, where the same adjective can in principle combine with structures containing all the relevant ingredients –with the potential independent constraints emerging from the combination of these primitives–.

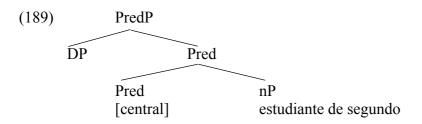
The cases that we have to explain are those where one predicate is always characterising or always temporary. Let us start with the second case; predicates like *desnudo* 'naked', *descalzo* 'barefoot' or *harto* 'fed up' are difficult to conceive as temporally persistent, and cannot be built with *ser*. Why? What we want to enforce is that they combine always with the aspectual head that triggers insertion of *estar* (188).



Ultimately, what this means is that the adjectives themselves come from the lexicon with a feature that forces combination with AspP. As noted by Bosque (1990), many of these adjectives are historically related to verbs; they are short participial forms –"participios truncos"– that in some cases could even be used as part of the verb's paradigm in earlier stages of the language. For instance, *desnudo* is introduced in the 12th Century as a substitute of *nudo*, due to the influence of the Latin verb *denudare*. The relation with verbs is sometimes clearer –as in *roto* 'broken', from *romper* 'break'–, but sometimes it is much less clear, arguably non-existent. The second situation takes place with the case of adjectives like *atónito* 'astonished' or *perplejo* 'perplexed', which do not have equivalent verbs in contemporary Spanish (**atonir*, **atonitar*, **perplejar*...). They come from the participles of the Latin verbs tonare 'to hit with lightning' and *plectere* 'to entangle', but even then, they took

prefixes which were not clearly carried by the verbal version. In such cases, the relation is too remote to expect any influence in the speaker's perception of these forms. Ultimately, the feature endowment is lexical and no systematic relation with a verb seems to be established.

The opposite situation are noun phrases, which cannot combine with *estar*. In this case, the absence of the combination cannot be due to some feature incompatibility, as absence of an aspectual feature would not imply that a projection with aspectual information should not dominate it. Rather the answer seems to be that, when used as predicates, bare nouns produce classificative sentences where the subject is included in a particular set of entities (among many others, Arche 2006, Roy 2006, Romero 2009). This is forced by the semantics of noun phrases vs. adjectives, that denote kinds rather than properties, and kinds are inherently objects where individuals (not stages of those individuals) fall.



Once the subject is related to the kind via a central coincidence head, it has an implication of temporal persistence, so the only way of conceiving it as a temporary notion would be through the evidential use of *estar*, but the inclusion inside a kind is not an evaluative notion, so the pivot cannot play a role here. Therefore, AspP is out.

7.4. Phenomena that lie outside the scope of this analysis

Here we have concentrated on the properties that could be considered part of the definition of what an IL or an SL is, and we have not made any attempt to account for two properties that in §6 have been shown to be independent of this characterisation: the interpretation of indefinites and the use of these elements as adjuncts. The justification for this is that different predicates have different acceptability to these phenomena without a one-to-one correspondence to their IL or SL properties. Thus, independent elements are required anyways to explain these other properties.

Let us however make a short overview of how these explanations could be presented in a way compatible to our theory.

a) The availability of predicates as adjuncts was shown to be variable in §6, with parentheticals being less restrictive and *with*-clauses being the most selective. Ultimately, this could be due to the kind of projection that dominates the predicational structure in each case, with each structure requiring a different specification or aspect (or being sensitive to different ingredients contained in the aspectual head), or requiring other entities. Pérez Jiménez (2007: 249 and folls.) shows that parentheticals contain aspectual phrases and –because they are dominated by a TP and a CP nodes–, different values of aspect are allowed inside them: Neutral, Perfect (both experiential and resultative) and Perfective / Aorist. It seems plausible to think that depictive adjunct modifiers are introduced as the projection of some kind of aspect –as they have to integrate in the predicational structure of the main predicate–, and this seems to impose additional constraints on what aspect is allowed. With respect to *with*-clauses, perhaps the structure they require is even more impoverished and the

adjective per se -that is, without aspectual projections that might combine with it- has to satisfy some property.

b) With respect to the interpretation of indefinites, this property has to be independent of the IL or SL status and presumably due to the interaction of these indefinites with different quantifiers that are placed in designated structural positions (in line with Beghelli & Stowell 1997). However, there is one aspect of Kratzer's (1995) explanation that we must necessarily address.

Diesing (1988) and Kratzer (1995) make a point that is in principle incompatible with our theory: SL predicates have the individual projected inside the structure of the adjective, because the external argument position is occupied by the spatiotemporal variable. In contrast, as ILs lack a spatiotemporal variable, the individual that acts as their subject can be base-merged in the subject position, outside the structure of the adjective. Kratzer (1995) does not provide with any tree representation, but she gives the following data in favour of her proposal. In German, all SL predicates allow for quantifier split marking the base position of the subject next to the predicate, but some IL predicates (those that are not unaccusatives) do not allow it (190a); this contrasts with SL predicates, that do (190b).

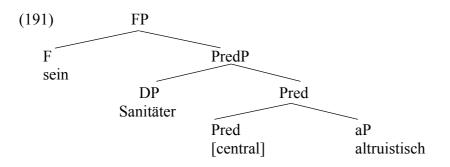
- (190) a. *Sanitäter sind viele altruistisch. paramedics are many altruistic
 - b. Lehrer haben uns viele geholfen. teachers have us many helped

Diesing (1988) uses Huang's (1982) Condition on Extraction Domains: if the subject of the IL in (112) is in IP (TP), movement out of the NP would leave an ungoverned trace in the base position; if the subject of the SL in (112b) is internal to the VP, movement leaves a governed copy.

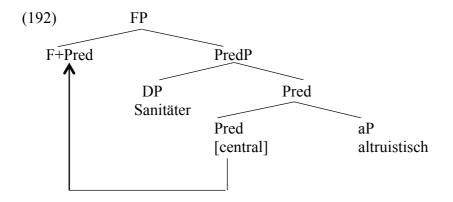
Following this assumption, Diesing (1988) also explains the different interpretation of bare plurals in English through her theory of existential closure of nuclear scope. She argues (see also Diesing 1992) that material internal to the VP is mapped into the nuclear scope of an existential quantifier. Now, given this proposal, *Firemen are altruistic* allows for an existential reading because the predicate is SL and the subject originates inside the VP, so if it is reconstructed it falls under the scope of the existential quantifier. The subject of *Firemen are altruistic* does not get this existential reading because the subject does not originate inside VP, so it cannot reconstruct to a position in the nuclear scope of the quantifier.

Which parts of the Diesing / Kratzer analysis can we keep in our analysis and how can we explain the differences with respect to quantifier split noted in German? The examples of IL predicates that we have noted have, invariably, the subject internal to the VP, and actually lower than the SL subject, which is typically introduced in the aspectual phrase, so it seems that our approach cannot capture these data.

The solution, we believe, appears through banning the specifier of the PredP as a reconstruction position with the prototypical cases of IL. Remember that, once the VP is built, this is the structure of an IL predicate.

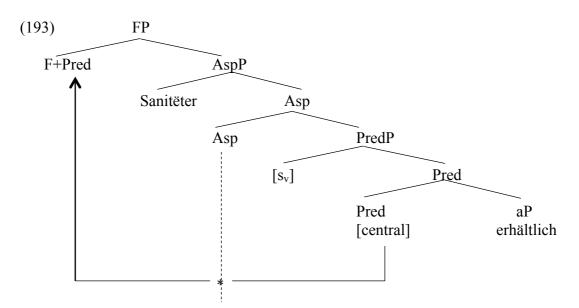


Crucially, in this configuration the verb is *be*. Den Dikken (2006) has presented the proposal that the copula (not only when manifested as a verb) acts as a linker that allows incorporation of a relator (the predicative head). When this incorporation takes place, the specifier of the incorporated head counts as a specifier of the linker, because both heads have been reanalysed as only one entity. This allows for a number of operations explored in Den Dikken (2006: 143 and folls.).



For all intents and purposes, DP is a specifier of vP now, that is, it is not ccommanded by v now, and outside from its scope. Therefore, the specifier of Pred is now not a distinct position for reconstruction, and the capacity of this subject to be interpreted in the scope of v is gone. If quantifier split requires that the position where the quantifier is left without the noun is c-commanded by v for some reason, then the other property also follows.

This incorporation would never happen in the case of an SL predicate, because AspP would be between the linker and the relator (and head movement cannot skip any intermediate heads). Therefore, the specifier of AspP would never get lost as a position of reconstruction below vP, quantifier split will be allowed and the existential reading of the subject would be available in general.



See also Jäger (2001) for a criticism of the Kratzer / Diesing observation.

8. Conclusions: we know just enough to go on

It is the time to wrap up. In this article we have reviewed the main proposals about the IL / SL contrast, emphasising that some concentrate on different argument structures while others give more importance to their temporal properties. As the topic is related to *ser* and *estar* in Spanish, we have also reviewed these different proposals. After addressing other elements of the IL / SL alternation, such as their variation and empirical impact, we have put forward a provisional proposal that –we have shown– is compatible with Brucart's characterisation of the *ser / estar* distinction. In this final section, we will highlight what, in our opinion, are the main open issues here.

- a) What makes a concept be presented as an IL or an SL property? In our account, from here it follows the kind of subject that the predicate takes, and it seems that there are three kinds of entities: those that must take individuals as subject, those that must take spatiotemporal variables and those that can choose between them. Is this due to conceptual properties or can it be reduced to the presence of different predicative heads?
- The connection between grammatical categories and the IL / SL b) distinction -also ser / estar- is not clear or well understood, and as a result of that, for instance, there are different options to understand why nouns do not combine with estar and seemingly produce only characteristic properties, but none of them is (to the best of our knowledge) developped to the point in which it can be integrated with the role of that category in other constructions. At an intuitive level, it seems acceptable to assume that nouns cannot combine with aspect, but we know that some nouns -even some that are underived, like *fiesta* 'party' or enfado 'anger'- have aspectual information at some level. Then the restriction cannot be so simple. What are exactly the conditions under which nouns can take aspect, and why they are such that they never combine with estar? Note also that, as observed by Escandell & Leonetti (2002: §6), nominals can be coerced to express SL properties with the indefinite article (un inspirado Ronaldo 'an inspired Ronaldo'), but still they do not combine with estar.

- c) In general, this line of research implies exploring how the category of aspect is instantiated in different grammatical categories, which ultimately involves exploring the primitives that bundle to produce nouns, verbs, adjectives or prepositions.
- d) Locatives stand out in any analysis of *ser / estar* and IL / SL. This might be caused by their prepositional nature, as prepositions (Klein 1994) are related to time and aspect, but still this intuition has to be developed and many aspects of it have to be refined. What is the exact role of terminal prepositions with events? Are there different kinds of terminal prepositions, corresponding to different aspectual meanings, or at least how do these emerge from combination with other prepositional heads? What other roles do prepositions play in the analysis of non verbal predicates?
- e) Evaluative adjectives are singled out, and other non-evaluative adjectives seem to allow behavioural uses which license different temporal variables, etc. Are there subclasses of adjectives in this role? Intuitively, *cruel* and *different*, in their behavioural use, have some differences, with *cruel* being more agentive and *different* not being so clearly agentive. Is this distinction, and others similar, captured through structural means or through conceptual means? Also, what other classes of adjectives should be singled out? Is it appropriate to classify them into groups or is it more accurate to treat adjectives separately, as perhaps not all evaluative or descriptive adjectives have the same values?
- f) Ultimately, one question that emerges from our proposal is whether an accidental property, predicated from a spatiotemporal variable, can be temporally persistent. How would that look? Would it be the kind of thing that languages grammaticalise?
- g) Specifically in the case of Spanish, there are other issues to consider. The first of them is what happens with so-called pseudo-copulative verbs (or semi-copulative verbs), such as *volverse, quedarse* or *ponerse* 'become' with nominal predicates. What kinds of distinctions do they reflect? They cannot be identical to the *ser / estar* contrast, as they do not match it in a perfect way.
- h) What is the distribution of the copulative verbs with constructions that seem passive, as (194)? It is true that *ser* is used in passive constructions when an event is expressed by the verb, but *estar* is used to denote the states resulting from those actions? If so, could it be that the eventive argument of the verb licenses the terminal preposition in the first case, but is not present there to license it in the second, so *estar* has to be introduced?
- (194) a. La carta fue firmada por la canciller alemana. *the letter was_{ser} signed by the chancellor German* 'The letter was signed by the German Chancellor' b. La carta está firmada por la canciller alemana. *the letter is_{estar} signed by the chancellor German* 'The letter is (now) signed by the German Chancellor'

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