

***Ser* and *estar*: Outstanding questions**

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1. *Ser/Estar*: preliminaries

The existence of two copular verbs in Spanish —*ser* ‘be_{SER}’ and *estar* ‘be_{ESTAR}’— has long attracted the interest of scholars, as it is one of the most intriguing features of Spanish grammar. From a theoretical point of view, it raises important questions concerning, among other central issues, (a) the interplay among lexical, syntactic, semantic and pragmatic factors in explaining the properties of copular sentences (in connection with other auxiliary uses of *ser* and *estar* in passives, progressive periphrases, etc.) (b) the diachronic development of these constructions, and (c) the process by which copular sentences are acquired in both L1 and L2 contexts, including Spanish as a heritage language.¹

¹ Many of these topics were addressed in the contributions presented at the *International Workshop ‘ser & estar’ at the interfaces*, held at the Universidad de Alcalá (Alcalá de Henares, Madrid) on October 18-19, 2012, (<http://serestar2012.weebly.com>), and organized by the research group *Lingüística Teórica – UAH*. This volume gathers together a selection of such contributions and some additional papers that were not presented at the workshop —the chapters by K. L. Geeslin & A.Y. Long; S. Gumiel-Molina, N. Moreno-Quibén & I.

The basic data about the linguistic differences between *ser* and *estar* sentences are well known and have been thoroughly described in grammars and various papers (among them, Porroche, 1988, 1990; Leonetti, 1994; Fernández Leborans, 1999; Marín, 2004; Arche, 2006; RAE-ASALE, 2009; Silvagni, 2013). Most of these data will be reviewed in the following chapters. Rather than offering what would prove to be a redundant summary here in the introduction, we feel that it would be more enlightening at this point to provide an overview of the ‘big questions’ raised by the *ser/estar* distinction and the corresponding perspectives for future research.

There are several reasons to believe that it is time to take stock of the progress in our understanding of the distinction. On the one hand, a number of notions and concepts that have revealed themselves to be quite productive in grammatical theory in the last three or four decades, such as the *Individual Level/Stage Level* distinction (IL/SL), *Aktionsart* distinctions, functional structure, the semantics of gradability and evidentiality have a role that can now be evaluated more clearly, thus providing us with sharper tools to apply to specific linguistic issues. On the other hand, we can rely on a much more precise view of the Semantics/Pragmatics distinction—the distinction between encoded and inferred components of meaning—which allows us to tease apart the contribution of the grammatical system to

interpretation from other aspects of meaning that are pragmatically inferred in the interpretive process; this should help us to avoid confusions that were common in traditional grammatical descriptions. Briefly, recent advances in linguistic theory must have a clarifying effect on the assessment of the situation and bring us a novel perspective of the system of copular verbs in Spanish. In fact, we believe that some progress has been made, from both descriptive and theoretical points of view, and the contributions to this volume provide good evidence of this, as we will try to show in what follows.

2. One single account

To review the problems that *ser* and *estar* pose for grammatical theory, it is worth going back to the more basic issues and then proceeding towards more specific questions and their possible answers.

A good starting point is the idea that one single principle should ideally be able to account for the whole range of data (this idea is explicitly dealt with in Romeu, this volume and Zagona, this volume; Marco & Marín, this volume, also claim that there is a single notion at the core of the diachronic development of the different uses of *ser* and *estar*). It is customary to assume that the two copular verbs are the same items in all constructions, i.e. both in their uses as copulas and in their uses as

auxiliaries (though this was by no means a standard assumption in traditional grammars). If this is correct, there is only one *ser* and only one *estar*, and no lexical ambiguities need be invoked in the analysis. It is important to notice that this stance is perfectly legitimate and reasonable, provided one accepts that the data can only be explained through the interaction of the single principle chosen and a multiplicity of lexical, morphological, syntactic and pragmatic factors that cannot be ignored (see Geeslin and Long, this volume, on this issue). In a few words, there is a single difference between *ser* and *estar*, but there are multiple factors to consider if the task to be undertaken is explaining how the two verbs are used and under what conditions they may appear.

Once the uniqueness of the relevant principle is established, one might wonder whether or not such a principle underlies other grammatical phenomena in Spanish and other languages. If this principle is the well-known IL/SL distinction, as a number of authors assume (see below), with *ser* a copula for IL predication and *estar* a copula for SL predication, then it is obvious that *ser* and *estar* are just one manifestation of a general semantic contrast that has cross-linguistic consequences and explains many apparently unrelated facts in different languages. This raises one of the central questions for a linguist interested in Spanish copular verbs: to what extent is the existence of the two copulas related to the IL/SL distinction? The issue has not yet been clarified (see Camacho, 2012 and Fábregas, 2012 for a complete discussion). Working against a straightforward identification

of the two distinctions is the fact that there is no strict correlation between *ser/estar* on one hand and permanent properties/episodic states on the other, as often noted. However, the discussion is often flawed by problematic assumptions. One of them is precisely the old idea that IL/SL necessarily equals the permanent/transitory contrast; this contrast actually looks more like something typically associated with the distinction but not like its linguistic core (see below). Another source of confusion is the belief that all classical tests for IL/SL point toward the same semantic contrast: they seem to bring to light different aspects of the meaning of lexical predicates, but not a unique, homogeneous semantic distinction. As Fábregas (2012, p. 46) suggests, IL and SL may be “labels that we use to refer to separate sets of properties that can appear independently of each other”. Thus, if the linguistic nature of the IL/SL distinction is still quite difficult to grasp, a full answer to the question regarding its materialization in copulas remains a distant goal. In any case, it is reasonable to assume that the principle underlying the *ser/estar* contrast, whatever it is, must be connected to a variety of phenomena in different languages (for instance, case marking patterns in predicative adjectives in Russian, as argued for, on different grounds, in Geist, 2006 and Roy, 2013). We will deal with the IL/SL distinction again below.

3. The nature of the distinction

So exactly what is the nature of the *ser/estar* distinction? In order to view the theoretical options available, we could break this question into two independent issues:

1. Is the distinction syntactic or semantic?
2. Is it rooted in the specific properties of the two copulas, or is it rather a reflection of some difference at the level of non-verbal predicates?

The first dilemma gives rise to two possible answers. If the distinction is syntactic in nature, this implies that the two copulas are endowed with different formal features (Zagona, 2012; Camacho, 2012), or that they are inserted in two different syntactic structures (Raposo & Uriagereka, 1995; Camacho, this volume; Romeu, this volume). One reason to explore such possibilities is the difficulty of finding a valid generalization based on a unitary semantic factor.

Karen Zagona's paper "Location and the *estar/ser* alternation" is a representative example of a syntactic approach to Spanish copulas. The author analyses the *ser/estar* distinction as a syntactic process that gives rise to the spell-out of a functional verb BE as either *ser* or *estar*. There are no meaning differences between the two verbs. In her proposal, *estar* is symptomatic of the presence of a Locative constituent, whereas *ser* is the elsewhere copula. In other words, BE is realized as *estar* when it agrees with a LOC feature, where Locative is taken as an abstract category that can lead to either spatial or temporal interpretations. Zagona claims that the

distinction is syntactic, not semantic, and assumes a unified account for the uses of *estar* in copular and auxiliary contexts. Under this view, the temporal properties of each construction —*estar* plus adjective phrases, prepositional phrases or gerunds— are determined by the complement, not by *estar*. When *estar* behaves as an aspectual auxiliary, it takes as complement a Locative Phrase that introduces a Reference time, which is in turn ordered relative to event time: the ordering relation specifies in each case a different aspectual value for the construction (perfect, progressive or prospective). When *estar* behaves as a copula and combines with adjectives, the temporal effects that are associated with *estar* follow from two factors, according to Zagona: the IL/SL distinction, which is encoded in the adjective phrase, and perfective aspect, which links the stages of the adjectival predicate to the Reference time of the clause. This implies that adjectives in copular environments can appear in two different structures: SL adjectives are embedded within an Aspect Phrase and a Locative construed as a temporal location (Reference time), whereas IL adjectives cannot appear in the context of Locative-Aspect structure (notice that this entails that adjectives are always structurally ambiguous in languages that do not display two copulas). In Spanish, BE is spelled out as *estar* as a consequence of Locative agreement. In the absence of a Locative context, BE is always spelled out as *ser*.

This syntactic account is extended to cover the combinations of copulas with prepositional phrases: Locative agreement is possible when

estar is followed by locational PPs, whereas it is blocked with directional PPs, since their more complex internal configuration—in particular, the Path component—intervenes between BE and the Locative phrase; the same holds for the incompatibility of *estar* and eventive nominals as subjects, due to the presence of a Path component in eventive nouns. The central idea is that “the apparent aspectual difference between the two copulas is not due to a semantic feature of the copulas themselves, but follows indirectly from the properties of the categories they merge with”.

A different way to approach the distinction in syntactic terms is shown in Romeu (this volume), and will be summarized below. However, it is far more common to find proposals that are cast in semantic terms, mostly based on aspectual notions (Geeslin and Long, this volume, precisely analyze the different semantic properties that learners of Spanish as a second language are sensitive to in their use of copular sentences).

The second question above—*Is the distinction rooted in the specific properties of the two copulas, or is it rather a reflection of some difference at the level of non-verbal predicates?*—is not actually dependent on the first one concerning syntactic and semantic accounts, but rather crosscuts it and gives rise to three basic options: (a) the distinction concerns the copulas exclusively; (b) the distinction concerns non-verbal predicates, with *ser* and *estar* as the spell-out of properties of the different kinds of predicates they co-occur with (as in Zagona’s approach); and (c) the distinction concerns both the copulas and the lexical predicates, and some sort of matching

between them is required for well-formedness. Each of these options can be viewed from either a syntactic or a semantic perspective. The situation becomes simpler once we leave out option (a), just because it is hard to account for the distributional facts by putting the blame exclusively on copulas, without relying on some basic classification of lexical predicates. Thus, we are left with options (b) and (c). The main difference between them concerns the grammatical role of the copulas (assuming that one and the same account holds for both verbs): do they simply materialize a distinction that is encoded in lexical predicates but is not a property of copulas *per se* (Demonte, 1979; Gallego & Uriagereka, 2009; Romero, 2009; Zagana, 2012; Gumiel-Molina & Pérez-Jiménez, 2012; Fábregas, 2012, 2014 and Roy, 2013), or are they able to select for different classes of lexical predicates as complements (among others, Luján, 1981; Clements, 1988; Fernández Leborans, 1999; Escandell-Vidal & Leonetti, 2002; Marín, 2004, 2010; Camacho, 2012)? This is a widely debated issue that has been the focus of several recent works. Some of the papers in this volume provide arguments that could tip the scales toward one option or the other. Let us review a couple of proposals that, in principle, favour the idea of locating the difference both in the copulas and in non-verbal predicates.

In “*Ser, estar* and two different modifiers”, Juan Romeu claims that the core semantic difference between the verbs *ser* and *estar* is that *estar* expresses a state necessarily linked to another one (which can be a previous, subsequent or potential although non-actual state) whereas *ser* expresses an

unrelated state. Thus, in this proposal, *estar* is semantically more complex than *ser*. Within a Nanosyntactic-like model, this semantic difference is encoded in the syntax via the presence of two different modifiers of the node *Stat*, which introduces the *state* in the structure, namely *Disjoint* and *Conjoint*. The syntactic chunk formed by the node *Stat* and the modifier *Disjoint* is lexicalized/spelled out as *estar*; the chunk consisting of *Stat* and the modifier *Conjoint* is lexicalized/spelled out as *ser* (although *ser* can also lexicalize the node *Stat* alone, which would be the case in identificational copular sentences, for example). The hypothesis, based on the crucial role of the modifiers *Disjoint* and *Conjoint*, is not ad hoc, since *Disjoint* and *Conjoint* are also claimed to be present in spatial structures, thus accounting for the differences between the prepositions *a* and *en* in Spanish. It assumes that *ser* and *estar* are distinct elements both syntactically and semantically.

According to Romeu, the aforementioned contrast explains in a unified way the distinct syntactic behaviour of these two verbs in copular sentences (with adjectival and PP complements) and also in so-called auxiliary contexts (*estar* is the verb used in the progressive and *ser* is the verb used in verbal passives). It is also at the basis of many of the observed differences between the two verbs in copular sentences, such as the expression of properties of individuals (*ser*) vs. properties of stages of individuals (*estar*), the expression of permanent (*ser*) vs. temporary (*estar*) properties, the ‘change of state’ or ‘inception of a state’ interpretation obtained with *estar* in some contexts (i.e. perfectiveness), and the evidential

uses of *estar*. The author argues for a proposal where a matching relation needs to be established between *ser/estar* as copulas and their complements, so that the complements fulfil the semantic requirements of the copulas (i.e. of the modifiers Conjoint and Disjoint + Stat). This proposal, together with the analysis of adjectives as relational (prepositional-like) elements, syntactically lexicalizing a RelP (a basic relational projection) plus a NP, opens the way to explore the possibility that the modifiers Conjoint and Disjoint, attached to RelP, could distinguish between SL-perfective adjectives expressing the result state of an event, and adjectives not encoding such a meaning component.

Also inspired by a semantic difference encoded in the copulas is the study of the interaction of the *ser/estar* distinction with word order patterns, in particular with the VSX order, in “On word order in Spanish copular sentences”, by Manuel Leonetti. The rationale behind the paper is the desire to determine what this interaction tells us about the nature of the distinction.

The discussion focusses on two basic facts. One is the way *ser* predication constrains focus structure: it tends to exclude wide focus —i.e.thetic— readings, which seems to be a particular case of the well-known incompatibility between IL predicates and theticity. The other one is the way VSX constrains focus structure in Spanish: VSX happens to be systematically associated with wide focus or thetic readings, since its hallmark is the absence of an aboutness topic. These two facts together give rise to a ban against VSX with *ser* in spoken, conversational Spanish. VSX

with *estar*, on the other hand, is usually acceptable, because *estar* predication licensesthetic interpretations quite naturally.

In order to deal with this asymmetry, the author relies on the proposal in Maienborn (2005). According to Maienborn (2005), *estar* requires the predication to be dependent on a topical situation. Such a topical situation counts as the stage topic that is needed for athetic reading, and this is why copular clauses with *estar* are compatible with the VSX pattern. As the predication with *ser* is not linked to a topical situation, the connection with a stage topic is not available, andthetic readings are thus excluded: as a consequence, copular clauses with *ser* are hardly compatible with VSX (except in written Spanish and in stylistically marked registers). Word order data, then, provide empirical support for Maienborn's approach to the *ser/estar* distinction. However, the situation is complicated by two kinds of problems. First, a small set of examples with *estar* is anomalous in VSX: this is true, for instance, of locative predicates with a reading of stable location, since the predication is not linked to a topical situation in this case. Second, and quite unexpectedly, under certain conditions *ser* is acceptable in VSX, even in the spoken language: such instances share a typical exclamative, mirative, emphatic interpretation. This case raises the question of how an IL predication can be the basis for athetic statement. The author argues for a pragmatic account of the facts: the mirative/emphatic interpretation emerges as the result of an inferential strategy by which the hearer assumes that the speaker's attitude is a reaction to a new piece of

information linked to a particular circumstance. This circumstance counts as the stage topic required by the VSX order, and the mismatch produced by the combination of a stage topic with an IL predication is resolved, since it is the speaker's attitude that is linked to the circumstance, not the predication. Exclamation and surprise in reaction to some new information are components of this interpretive strategy, which seems to be the only path of resolution for the conflict between *ser* predication and VSX.

Two ideas that play a major role in both Romeu's and Leonetti's papers are that copular verbs have inherent properties determining their selectional restrictions (if the context dependence of *estar* is treated as a semantic requirement), and that *estar*, being characterized by its ability to introduce a state that is necessarily linked to another situation, is the marked member of the contrast—a classic insight in the literature on Spanish copulas. Other chapters in this volume are compatible with the opposing view, according to which *ser* and *estar* are simply spell-outs of some syntactic or semantic property of their complement: this is the approach taken in the papers by Zagona, Camacho and Gumiel-Molina, Moreno-Quibén and Pérez-Jiménez (see summaries below). A preference for one view or the other—either the copulas have selection restrictions as part of their meaning, or they simply materialize some distinction in lexical predicates—may depend on technical aspects of one's favourite syntactic representation, on general assumptions about the nature of copular clauses or on a variety of empirical facts. Here we would just point out that if some

role is to be given to ‘reinterpretation’ processes to account for the compatibility between copulas and predicates —i.e. inferential processes by which speakers adjust the interpretation of lexical predicates on the basis of contextual requirements, including coercion and modulation— as in Escandell-Vidal and Leonetti (2002), Escandell-Vidal and Leonetti (2011) and Escandell-Vidal (2015), then a view of the copulas as elements that impose their specific conditions on lexical predicates must be preferred; otherwise, there would be no item responsible for triggering reinterpretation processes.

4. Aspect, in some sense

The discussion up to now raises several questions that still call for an answer but at the same time lead to a simple, basic conclusion: whatever the analysis of the copulas may be, and wherever the locus of the distinction may be situated, it seems clear that some classification of non-verbal predicates is needed, whether it be formulated in syntactic or semantic terms. Let us assume that, in any case, such classification must ultimately be based on semantic factors. Most accounts of the *ser/estar* distinction share the assumption that the underlying factor is aspectual. However, while aspect may well be recognized as the central factor, there are different ways to flesh this intuition out, and thus a new question arises: what does it mean

to claim that the distinction is aspectual? Reviewing possible answers offers a way to understand how the contributions to this volume fit into the panorama of research.

There are two main ways to answer our question on the role of aspect. One, inspired by intuitive remarks in different traditional grammars, is to understand *aspect* in the sense of *perfectivity* or some related notion in the domain of grammatical aspect (Luján, 1981; Fernández Leborans, 1995; Roby, 2009; to mention just a few representative works). The idea is that the distinction between the copulas reflects the classical *imperfective/perfective* contrast, with *estar* as the perfective, aspectually marked member of the pair. A second way of relying on aspectual notions, mainly inspired by Carlson (1977) and subsequent work, is to understand *aspect* in the sense of *Aktionsart* or lexical aspect, and more precisely by resorting to the IL/SL distinction, as already mentioned (Leonetti, 1994; Lema, 1996; Escandell-Vidal & Leonetti, 2002; Marín, 2004, 2010; Arche, 2006, 2012 —with a critical position towards the alleged aspectual nature of IL/SL; see also Camacho, 2012 and Gumiel-Molina & Pérez-Jiménez, 2012 for discussion). This second view has been predominant, even when Carlson's distinction is not explicitly mentioned. It is worth noting that it can be split in two versions, as indicated in Fábregas (2012): sometimes the basic distinguishing criterion is whether the predication holds with respect to an individual or with respect to a stage of an individual (in a situation in which the individual is found), and sometimes the criterion is temporal

boundedness —whether the property is temporally persistent or episodic and subject to changes. Temporal boundedness was considered the essence of the distinction in several traditional grammars. Predication on individuals or stages, on the other hand, has received special attention in the last four decades (see, among others, Crespo, 1946; Bolinger, 1947; Roldán, 1974; Falk, 1979; Franco & Steinmetz, 1983, 1986; Porroche, 1990; Gumiel-Molina, Moreno-Quibén & Pérez-Jiménez 2015, this volume). When the focus is on the discourse dependence of *estar* (as in Clements, 1988; Maienborn, 2003, 2005; Schmitt, 2005; Schmitt & Miller, 2007, and others; see also Leonetti, this volume, and Romeu, this volume), the perspective is compatible with both criteria: if the predication is linked to a specific situation, then it is naturally inferred that it holds with respect to a stage of an individual, and that the state is probably episodic.

With all these elements as background, the importance of the contributions to this volume can now be better evaluated. Some of them provide data and arguments that can give some support to a view of *ser* and *estar* in terms of the IL/SL distinction; others cast doubt on the possibility of establishing a direct link between the two distinctions.

“Sentences as predicates: the Spanish construction <*ser muy de* + infinitive>”, by María Jesús Fernández Leborans and Cristina Sánchez López, explores the properties of <*muy de* + infinitive> lit. ‘very of + infinitive’ predicates in Spanish, which, in copular structures, are only compatible with *ser*. This is the first study devoted entirely to this

construction. The authors show that <*muy de* + infinitive> predicates exhibit all the properties characterizing IL predicates in that copular sentences with this construction as predicate cannot appear in the progressive and have subjects with a specific or generic reading (i.e. a non-existential reading). Specifically, the authors claim that the structure <*muy de* + infinitive> in copular sentences denotes a characterizing property of the subject. The non-finite sentence is interpreted as a habit and ascribed to the subject as a characterizing predicate expressing a gradable property. The degree word expresses the degree to which the subject of the copular sentence makes a good member of the set of individuals who have the habit designated by the non-finite clause.

The characterizing reading of <*muy de* + infinitive> predicates arises from the imperfective aspect of the infinitive, which receives a habitual reading, understood as *actualized habituality* or *gnomic habituality*. Actualized habituality arises in sentences with animate subjects as a generalization from a specific occurrence of a kind of situation/event in which the subject is involved (*Juan es muy de marearse en los barcos* ‘Juan is very prone to feeling seasick on boats’); this explains why deictic expressions or perfect auxiliaries are banned in the infinitival clause in these cases. Gnostic habituality has a passive and modal (deontic) flavour and arises in sentences with non-animate/human subjects; it is obtained as the result of a deduction process based on inherent properties of the subject (*Tu ayuda es muy de agradecer* ‘We are very grateful for your help’). The

authors argue that the two habitual readings of the non-finite clause are linked to two different syntactic structures.

The non-finite clause is mapped into a predicate via a functional relational projection p that allows the PP headed by *de* (a preposition encoding *+possession*, *+belonging*) to be interpreted as a gradable (characterizing) property and to be predicated of another constituent.

Considering that *estar* is completely excluded in the construction, this analysis of the *< muy de + infinitive >* construction favours a treatment of *ser* and *estar* as IL/SL copulas, i.e. copulas that select IL and SL predicates respectively. Notice that aspectual notions play a main role in the argumentation.

The paper by Cristina Marco and Rafael Marín, “Origins and development of adjectival passives in Spanish: a corpus study”, offers an analysis of passive constructions with *estar* from a diachronic perspective. They investigate how adjectival passives with *estar* emerge in Spanish and how they extend their usage over *ser*. As is well known, Spanish, unlike English, formally distinguishes between adjectival and verbal passives by means of the usage of *ser* for verbal passives and *estar* for adjectival ones. By contrast, in earlier centuries, *ser* was the only verb used for both the adjectival and the verbal passive. However, around the 13th century, *estar* was introduced in the formation of passives, usually for adjectival passives, but sometimes also for verbal ones. Thus, the two verbs coexisted in the domain of passives for some time.

Marco and Marín argue that the development of the adjectival passives was driven by the analogical relations established between participles appearing with *estar* and locative prepositional phrases. Notice that the combination with locatives was the first stage in the development of *estar* as a copula: the idea is that this is what determined how its use was extended to participles.

The authors claim that the development of *estar* + participle as adjectival passive in Spanish took place in three stages. First, the meaning of *estar* shifted from conceptual to grammatical. Later, in a second phase, it began to be combined with past participles. And finally, the use of past participles in combination with *estar* spread to eventually become the only expression of adjectival passives. According to Marco and Marín, the specific steps in this transition were as follows. At some point *estar* (primarily an intransitive verb) required combination with other elements, such as locative prepositional phrases. Over time *estar* lost its original locative meaning and started being used in both copular and passive constructions. Soon after this, past participles semantically close to locative prepositional phrases began to combine with *estar*, without the further requirement of a prepositional phrase. Finally, over time *estar* + participle became the only expression of adjectival passives, at the expense of *ser* + participle. The main mechanism to explain this change is analogy. The connection between locatives and past participles is based on the analogy underlying locations and resulting states —i.e. states that result from some

change of state: to reach a resulting state is analogous to being at a certain location. Resulting states are typically SL states. Thus, the aspectual properties of *estar* can be explained on the basis of its locative origin.

The authors provide corpus evidence supporting the hypothesis from a large diachronic corpus of Spanish that contains documents from the 12th to the 20th century. The data confirm that *estar* was reanalyzed as a light verb, that its combination with past participles became the only expression for adjectival passives, and that this change took place first with some classes of verbs and later with others, namely, first locatum and location verbs, then object experiencer psychological predicates, then change of state verbs, and lastly degree achievements. This pattern of extension of *estar* to adjectival passives shows that the process was driven by the presence of a locative component in verbal semantics: the verbs with meanings that were more closely related to those of locatives were the ones that more readily combined with *estar* in adjectival passives. Thus, analogical relations based on similarities between locative prepositional phrases and participles explain why *estar* became the only verb used in adjectival passives in Spanish. Its use with SL adjectives is just one more step in the diachronic expansion of *estar*.

The paper by Marco and Marín has interesting implications for a characterization of Spanish copulas: on one hand, it supports an aspectual approach, and more specifically, an approach that relies on the IL/SL

distinction; on the other, it shows that there is a diachronic link between expressing locative relations and becoming a “stage-level copula”.

Also related to the IL/SL distinction, but without assuming that Spanish copulas encode this distinction, as mentioned above, is the paper by José Camacho, “What do Spanish copulas have in common with Tibetan evidentials?” It offers brand-new data to explore the connection between evidentiality and stage-level-hood, comparing the behaviour of the Spanish copula *estar* (which gives rise to a certain evidentiality effect in examples like *Este jamón está fenomenal* ‘This ham is wonderful’) and the Tibetan marker of direct evidentiality ‘*dug*. Camacho claims that evidentiality is a default by-product of the aspectual meaning of the predication in both languages, since both *estar* and ‘*dug* show SL properties such as presupposing an event that leads to a result (*lingering effect*) and being incompatible with DP complements.

Camacho argues for the hypothesis that the two properties, SL-hood and evidentiality, are derived from the notion of *comparison*. After reviewing some arguments against the analysis of *estar* as SL copula, the author assumes the proposal in Gumiel-Molina, Moreno-Quibén and Pérez-Jiménez (2015) that *estar* predications with adjectival complements, where absolute adjectives appear, express within-individual comparisons (*El vaso está lleno* ‘The glass is full’), whereas *ser* predications, where relative adjectives appear, express between-individual comparisons (*Juan es alto* ‘Juan is tall’). In the first case, the standard of comparison needed to

evaluate the property is established with respect to the same individual, i.e. the individual the adjective is predicated of; in the second case, the standard of comparison is established with respect to variation between individuals. This semantic difference is, in the author's proposal, linked to a structural difference based on different scope relations between the subject and the predicate.

Therefore, in *<estar + A>* structures, the class of comparison for the adjective is formed by individual/property-slice pairs, while for *ser* the class of comparison contains individuals. In the case of *estar* sentences, the situation involves a comparison that applies to a single individual so that in order to elucidate whether the property obtains, the individual/property-slice pairs need to be (pragmatically) individuated, since these pairs do not have existential import by themselves (vs. individuals) —individuation is a basic operation of anchoring to a given location/time. Because within-individual comparisons require individuation through location, evidentiality has a dedicated path to become potentially salient.

By contrast, between-individual comparisons can be established without any further operation. Individuation through location is not needed. As a consequence, there are no evidential uses of the copula *ser*.

With respect to '*dug*, Camacho claims that events can be individuated via either a between-individuals comparison or a within-individual comparison. '*Dug*, thus, induces a within-individual comparison in the verbal domain (with respect to events). The fact that both *estar* and

'dug express a within-individual comparison explains their parallel behaviour with respect to *lingering effects* and their rejection of DPs as complements.

To sum up, gradability in lexical predicates is the origin of the SL properties of *estar* predication and, indirectly, of evidential readings with *estar*. In this approach, then, there is a link between SL-hood and evidentiality, but it is not due to any intrinsic SL feature in the copula (see Escandell-Vidal, 2015 for a different perspective on the source of evidentiality).

The status of the IL/SL distinction with respect to Spanish copular clauses is also investigated by Silvia Gumiel-Molina, Norberto Moreno-Quibén and Isabel Pérez-Jiménez in “The inference of temporal persistence and the individual/stage level distinction: the case of *ser* vs. *estar* in Spanish”. They analyze the different behaviour of *ser* and *estar* predications a) in sentences expressing quantification over situations (*El perro {#es/está} delgado a menudo* ‘The dog is_{SER/ESTAR} often thin’), b) in combination with locative/temporal modifiers (*Juan {#era/estaba} tranquilo {en el jardín/ayer}* ‘Juan was_{SER/ESTAR} calm {in the garden/yesterday}’) and c) with respect to the triggering of lifetime effects (*Juan era inteligente* ‘John was_{SER} intelligent’ vs. *Juan estaba enfermo* ‘John was_{ESTAR} ill’) and argue for the idea that these differences, traditionally associated with the IL/SL distinction, can be explained without arguing that *ser* and *estar* sentences have different aspectual properties. Specifically, the authors claim that the

aforementioned empirical differences derive from the fact that *ser* predications —IL predications— give rise to a pragmatic inference of temporal persistence which states that *if the property expressed holds at time t, it also holds at any past or future time t' if no information is given to the contrary* (McNally, 1994, p. 9). The temporal persistence associated with IL predication covers by default the different times and event locations referred to by frequency adverbs and locative/temporal modifiers, hence the infelicity/pragmatic-ill-formedness of the examples presented.

The authors propose that the inference of temporal persistence in *ser* predications (more generally, in IL predications) arises from the notion of *comparison class*. Following Gumiel-Molina, Moreno-Quibén and Pérez-Jiménez (2015), they assume that the differences between *ser* (IL) and *estar* (SL) predications with adjectival complements (expressing gradable properties) are ultimately linked to the different comparison class needed to evaluate the truthful applicability of the adjective in each case. *Estar* predications, where *absolute* adjectives appear, express within-individual comparisons: the property is evaluated with respect to one individual (the subject of predication), i.e. with respect to a set of counterparts or stages of this individual. On the other hand, *ser* predications, where *relative* adjectives appear, express between-individuals comparisons: the property is evaluated with respect to a set of individuals including the subject. Necessarily, then, in *estar* sentences there is a change regarding the degree to which the individual in question holds the property in different indices.

Therefore, the inference of temporal persistence is not obtained. On the other hand, in *ser* sentences relative adjectives express the degree to which an entity has a specific property as compared to other entities. Therefore, the inference of temporal persistence arises as a default inference, since in the domain of the discourse in which the sentence is evaluated, stages of the subject are not found, but only different individuals instantiating different degrees of the property in question.

The paper considers the possibility that, in the context of gradable adjectives, the IL/SL distinction is only a by-product of more basic semantic properties of these predicates: the conclusion follows that the IL/SL distinction is, in fact, a conglomerate of different kinds of properties, as suggested in Fábregas (2012).

Also clearly related to the role of aspect in copular structures is the paper by Luis García Fernández and Diana López Vázquez, “More than a copula: complex predicates with *estar* and the clitic *se*”. It analyzes the syntactico-semantic differences between the verb *estar* in copular structures selecting adjectives as complement and the verb *estar* followed by a clitic with Case and person features (*me, te, se, nos, os, se*) [henceforth *estarse*] in the same syntactic environment. The paper also explores the reasons why the copula *ser* cannot combine with such clitics, and offers interesting new data on an under-explored paradigm related to copular sentences in Spanish.

The authors claim, following Camacho (2012), that *estar* denotes a canonical state with an inchoative aspectual component (hence a non-

dynamic eventuality, its subject having the thematic role of *theme*). If the clitic is inserted, it modifies this event structure allowing the formation of a complex event that consists of an achievement (change of state) followed by a result state. The result state is thus related to a previous event that allows its inception; accordingly, the thematic role of the subject of *estarse* predications is that of *agent*. This proposal explains that only animate/volitional entities, preferably human, can be subjects of *estarse* predications. It also explains the differences between *estar* predications and *estarse* predications with respect to their combination with perfective and imperfective grammatical aspect in *when* clauses, their acceptability as complement of perception verbs, their compatibility with imperative mood, etc.

Since the clitic operates on the aspectual component of the copula *estar* (which expresses an inchoative aspectual component), it is incompatible with *ser*, which is analyzed as an aspectually unmarked copula lacking any internal temporal-aspectual structure. This obviously supports an aspectual approach to the *ser/estar* distinction.

The authors complete their discussion by dealing with a couple of additional problems. First, they note that only a restricted set of adjectives can appear in <*estarse* + Adjective> structures, such as *quieto* ‘still’, *callado* ‘quiet’, *preparado* ‘ready’, *tumbado* ‘laid down’ and others with similar meanings, but not adjectives such as *inteligente* ‘intelligent’, *alto* ‘tall’, etc., nor *endo-actional* adjectives like *agradable* ‘nice’, *generoso* ‘generous’, etc.

This paradigm is explained on the basis of the specific selectional restrictions that *estarse* predicates impose on their subjects, which must be agentive entities that can exert control/volition over the situation. The question that arises, then, is in what sense adjectives like *quieto* ‘still’ can encode an agentive component absent in the other kinds of adjectives. Second, the authors also claim that the same aspectual/eventive and thematic effect of the clitic is also observed in non-stative contexts, with verbs of consumption (*comer* ‘eat’ vs. *comerse* ‘eat.CL, i.e. eat up’) and movement verbs (*salir* vs. *salirse* ‘leave’).

The contribution by Elena Valenzuela, Michael Iverson, Jason Rothman, Kristina Borg, Diego Pascual y Cabo and Manuela Pinto, “Eventive and stative passives and copula selection in Canadian and American Heritage Speaker Spanish”, deals with the problem of stative and eventive—or adjectival and verbal—passives, like the paper by Marco and Marín, but from the perspective of Second Language Acquisition, by examining knowledge of the two kinds of passives in Spanish as a heritage language. Here the role of aspectual features is stressed again, as the authors assume that the contrast in Spanish copulas is inherently aspectual.

The basic question is whether or not there may be differences in the use and interpretation of passives among groups of Spanish heritage speakers (and with respect to native speakers) depending on linguistic and extra-linguistic variables idiosyncratic to a given context. In order to investigate this issue, Valenzuela et al. compared two sets of Spanish

heritage speakers from the USA and Canada by examining their knowledge of stative and eventive passive structures in Spanish and the copulas they select respectively. The relevant difference between the two groups of subjects was that, unlike the US subjects, the Canadian subjects had grown up in a multilingual (French/English) environment.

Since both English and French have only one copula and thus do not mark the eventive vs. stative passive distinction like Spanish does, one could suspect that a possible influence from these languages would result in less accurate knowledge of copula choice in this context. Assuming *ser* is the unmarked choice because it does not carry aspectual features, the expectation would be that properties relating to the copula *ser* will show less divergence from native controls than properties related to *estar*. Valenzuela et al. investigated whether the differences between the two groups of speakers might be related to two properties of the grammar of French that English lacks. First, French uses two different auxiliaries in periphrastic perfect verbal constructions: *être* 'to be' is used with inherently telic unaccusatives, while *avoir* 'to have' is used elsewhere. Second, similarly to Spanish, French grammaticalizes (i.e. morphologically instantiates) perfective aspect in its past tenses, with the imperfect/preterit distinction. The authors argue that this fact may give Canadian heritage speakers an advantage over the US group for copula selection with eventive and stative passives. Here the expectation would be that the Canadian group's performance should be closer to the behaviour of the control group. In short,

then, the question is whether knowledge of French will be facilitative for the Canadian heritage group in terms of this property.

Basing themselves on previous work (Bruhn de Garavito & Valenzuela, 2008), Valenzuela et al. assume that, in general, L2 learners perform differently than native speakers in that they overextend the domain of *estar*. L2 learners of Spanish are typically able to distinguish between the copulas with adjectival complements but show more difficulty with passive constructions.

The study included two tasks, an Acceptability Judgment Task and a Sentence Selection Task, that were devised to assess the use and interpretation of the copulas. The results show an asymmetry between the US group, on one hand, and the Canadian group and the native speakers on the other. The prediction that the Canadians would be the heritage speaker group more consistent with the control group is thus confirmed. Still to be explained is why knowledge of English in both groups does not lead to over-use of *estar* among the Canadians as it does in the US group, apparently due to the loss of aspectual features. If knowledge of aspect in French grammar makes Canadians more sensitive to retaining the *ser/estar* contrast in passives, this could indirectly support an aspectual analysis of Spanish copulas. However, further investigation of the possible variables determining the linguistic competence of heritage speakers in each case will be necessary.

Finally, the article by Kimberly L. Geeslin and Avizia Yim Long “The development and use of the Spanish copula with adjectives by Korean-speaking learners” addresses many of the topics mentioned above from a functional and variationist perspective. This paper analyzes the relative weight of different linguistic and sociolinguistic constraints on the use of *ser* and *estar* by Korean speakers of Spanish as a second language. Specifically, the paper reports the findings of a study conducted to explore the development and use of the Spanish copula with adjectives by learners whose native language typologically distinct from Spanish. The variationist approach adopted, which recognizes the importance of sociolinguistic competence in developing communicative competence, allows the authors to examine contexts in which both *ser* and *estar* are possible without reliance on an analysis of accuracy, which is inappropriate when native speakers also accept and produce both forms in these same contexts. Specifically, the paper examined the range of forms produced by Korean-speaking learners to fulfill the attributive function in Spanish (i.e., to attribute the characteristics ascribed by an adjective to a given referent). The analysis also includes an account of the frequency with which those forms are produced, and the linguistic and social correlates of copula use to compare findings with those attested for English-speaking learners.

The findings of the study revealed that the range of nativelike forms produced by Korean-speaking learners is similar to that of English-speaking learners (e.g., forms of *ser*, *estar*, and *parecer*). It also reveals a slightly

different range of non-nativelike forms (e.g., forms of *hacer* and *poner*). However, a notable difference found in the study was the prevalence of developmental omission (i.e., failure to produce a copula in obligatory contexts) at early stages, which is identified as the result of a unique acquisitional challenge that appears to have its origins in first languages that do not use a copula to connect a referent with an adjective (as is the case in Korean). With regard to frequency of use, it was found that, in comparison to English-speaking learners, rates of developmental omission were much higher for Korean-speaking learners, *ser* appears to be overgeneralized once omission rates have subsided, and rates of *estar* were very low overall. Finally, learners do eventually use *estar* for [referent + adjective] combinations that are susceptible to change, in contexts that represent an individual frame of reference, and for adjectives of physical description. Another finding of the study is that learners who had studied Spanish in a formal setting for 3 years or more produced *estar* at a higher rate. Given the particularly low rate of occurrence of *estar* overall, this analysis was contextualized within an account of the distribution of types of potential contexts for a copular verb in the language produced as this is known to be task-dependent, and the production of fewer potential contexts may also yield important information about particular stages of second language development.

Perhaps the most significant implication of the present study at this juncture is that, in general, the path of development for the Spanish copula

contrast previously attested for English-speaking learners appears to be similar for Korean-speaking learners, i.e. omission, followed by high rates of use of *ser*, and the gradual increase in rates of use of *estar* over time. Additionally, learners gradually extend the range of contexts in which *estar* appears and, in general, are capable of developing sensitivity to the relevant linguistic constraints on use. Finally, individual variables related to experience with the target language show that increased experience leads to greater rates of use of *estar* and to greater sensitivity to relevant linguistic constraints on that use. One notable deviation for Korean-speaking learners that is uncovered, which is not evident for English-speaking learners, is a prolonged stage of omission. This further means that not only should we pay attention to the path of development of *estar* over time, but we must first direct our analysis to the path of development of copula use (primarily in the form of *ser*) and the consequent reduction in omission over time.

5. Epilogue

By addressing many of the aforementioned questions, the papers in this volume aim to enrich our theoretical understanding of the *ser/estar* alternation and also to contribute new empirical facts not previously analyzed in the literature. A comprehensive account of the problem is far from being achieved, and the proposals in the papers show that, after decades of research, there remain many controversial and unresolved issues,

which confirms the notion that the distinction represents a truly complex problem. However, it is beyond doubt that significant progress has been made over the last few decades, and we are now in a position to set out the main research questions on *ser* and *estar* for the future.

The crucial issue is, as in many other scientific domains, how to define a single principle that will enable us to derive all the facts in an elegant way. Getting closer to a satisfactory solution implies (a) taking all sorts of data into account (synchronic, diachronic, acquisitional and comparative) and (b) carefully distinguishing what is encoded by grammar and lexicon from what is contextually inferred. Among the specific research questions that should allow us to make progress in the future, we would like to highlight the following ones:

- How is lexical aspect represented in non-verbal categories (adjectives, nouns, prepositional phrases) across languages?
- Linked to the previous question is the following: What are the precise constraints on the compatibility between non-verbal predicates of different classes and (a) locative and temporal modifiers, (b) tense and grammatical aspect and (c) non-copular environments (secondary predication, absolute clauses, etc.)?
- What is the appropriate level to define the IL/SL distinction? Is it related to basic features of lexical meaning? Or is it just a pragmatic enrichment that builds on simple, primitive features of another (possibly non-aspectual) nature?

- What is the best way to capture the significant correlations between location and aspect, i.e. what is the link that connects locations and stages as metaphorical locations?
- What kind of phenomena show (in some sense) behaviour that is parallel to that exhibited by *ser* and *estar* (both in Spanish and cross-linguistically)?

Addressing questions like these will allow us to envisage possible solutions, and, more interestingly, to discover new puzzles. This opens fascinating perspectives for linguistic theory.

References

- Arche, M. J. (2012). On the aspectuality of the Individual-Level/Stage-Level dichotomy. *Borealis*, 1(2), 109-132.
- Arche, M. J. (2006). *Individuals in time: Tense, aspect and the individual/stage distinction*. Amsterdam, The Netherlands: John Benjamins.
- Bolinger, D. (1947). Still more on *ser* and *estar*. *Hispania*, 30, 361-366.
- Brucart, J. M. (2012). Copular alternations in Spanish and Catalan attributive sentences. *Linguística: Revista de Estudos Linguísticos da Universidade do Porto*, 7, 9-43.

- Brucart, J. M. (2010). La alternancia *ser* y *estar* y las construcciones atributivas de localización. In A. Avellana (Ed.), *Actas del V Encuentro de Gramática Generativa* (pp. 115-152). Neuquén, Argentina: Editorial Universitaria del Comahue.
- Bruhn de Garavito, J., & Valenzuela, E. (2008). Eventive and stative passives in Spanish L2 acquisition: A matter of aspect. *Bilingualism: Language and Cognition*, 11(3), 323-336.
- Camacho, J. (2012). *Ser* and *estar*: Individual/stage level predicates or aspect? In J. I. Hualde, A. Olarrea & E. O'Rourke (Eds.), *The handbook of hispanic linguistics (Blackwell Handbooks in Linguistics)* (pp. 453-476). Oxford, England: Wiley-Blackwell.
- Carlson, G. (1977). *Reference to kinds in English* (Doctoral Dissertation). Amherst, MA: University of Massachusetts Amherst.
- Clements, J. C. (1988). The semantics and pragmatics of Spanish <COPULA + ADJECTIVE> construction. *Linguistics*, 26, 779-822.
- Crespo, L. (1946). Los verbos *ser* y *estar* explicados por un nativo. *Hispania*, 29, 45-55.
- Demonte, V. (1979). Semántica y sintaxis de las construcciones con *ser* y *estar*. *Revista española de lingüística*, 9, 133-171.
- Escandell-Vidal, M. V. (2015). Evidentiality effects and the *ser/estar* distinction. *Journal of Pragmatics* (submitted).
- Escandell-Vidal, M. V., & Leonetti, M. (2011). On the rigidity of procedural meaning. In M. V. Escandell-Vidal, M. Leonetti & A.

- Ahern (Eds.), *Procedural meaning* (pp. 81-102). Bingley, England: Emerald.
- Escandell-Vidal, M. V., & Leonetti, M. (2002). Coercion and the stage/individual distinction. In J. Gutierrez-Rexach (Ed.), *From words to discourse: Trends in Spanish semantics and pragmatics* (pp. 159-179). Oxford, England: Elsevier Science.
- Fábregas, A. (2014) On the locative reading of dimensional adjectives and the internal syntax of *estar*. *Studies in Hispanic and Lusophone Linguistics*, 7(1), 3-31.
- Fábregas, A. (2012). A guide to IL and SL in Spanish: Properties, problems and proposals. *Borealis. An International Journal of Hispanic Linguistics*, 1(2), 1-71. doi: 10.7557/1.1.2.2296
- Falk, J. (1979). Visión de norma general vs. norma individual. Ensayo de explicación de la oposición *ser/estar* en unión con adjetivos que denotan belleza y corpulencia. *Studia Neophilologica*, 51, 275-293.
- Fernández Leborans, M. J. (1999). La predicación: las oraciones copulativas. In I. Bosque & V. Demonte (Dir.), *Gramática descriptiva de la lengua española* (pp. 2357-2460). Madrid, Spain: RAE/Espasa.
- Fernández Leborans, M. J. (1995). Las construcciones con el verbo *estar*: aspectos sintácticos y semánticos. *Verba*, 22, 253-284.
- Franco, F., & Steinmetz, D. (1986). Taming *ser* and *estar* with predicate adjectives. *Hispania*, 69, 379-386.

- Franco, F., & Steinmetz, D. (1983). *Ser y estar + adjetivo calificativo en español*. *Hispania*, 66, 176-184.
- Gallego, Á., & Uriagereka, J. (2011). The lexical syntax of *ser* and *estar* (Unpublished manuscript). Barcelona, Spain: Universitat Autònoma de Barcelona and College Park, MD: University of Maryland.
- Gallego, Á., & Uriagereka, J. (2009). *Estar = Ser + P*. Paper presented at the XIX Colloquium on Generative Grammar. Universidad del País Vasco, Vitoria-Gasteiz, Spain: April 1-3, 2009.
- Geist, L. (2006). Copular sentences in Russian vs Spanish at the syntax-semantics interface. In C. Ebert & C. Endriss (Eds.), *Proceedings of Sinn und Bedeutung 10. ZAS Papers in Linguistics*, 44, 99-110.
- Gumiel-Molina, S., Moreno-Quibén, N., & Pérez-Jiménez, I. (2015). Comparison classes and the relative/absolute distinction: A degree-based compositional account of the *ser/estar* alternation in Spanish. To appear in B. Gehrke & E. Castroviejo (Eds.), *Degree and manner modification across categories*, special volume of *Natural Language and Linguistic Theory*.
- Gumiel-Molina, S., & Pérez-Jiménez, I. (2012). Aspectual composition in <*ser/estar* + adjective> structures: Adjectival scalarity and verbal aspect in copular constructions. *Borealis: An International Journal of Hispanic Linguistics*, 1, 33-62. Retrieved from <http://septentrio.uit.no/index.php/borealis/article/view/2321/2166>

- Lema, J. (1996). Aspectual parametric effects in Spanish. In C. Parodi, C. Quicoli, M. Saltarelli & M. L. Zubizarreta (Eds.), *Aspects of Romance linguistics* (pp. 279-292). Washington D. C.: Georgetown University Press.
- Leonetti, M. (1994). *Ser y estar*: estado de la cuestión. *Barataria*, 1, 182-205.
- Luján, M. (1981). The Spanish copulas as aspectual indicators. *Lingua*, 54, 165-210.
- Maienborn, C. (2005). A discourse-based account of Spanish *ser/estar*. *Linguistics*, 43(1), 155-180.
- Marín, R. (2010). Spanish adjectives within bounds. In P. Cabredo-Hofherr & O. Matushansky (Eds.), *Adjectives: Formal analyses in syntax and semantics* (pp. 307-332). Amsterdam, The Netherlands: John Benjamins.
- Marín, R. (2004). *Entre ser y estar*. Madrid, Spain: Arco/Libros.
- McNally, L. (1994). Adjunct predicates and the individual/stage distinction. In E. Duncan, D. Farkas & P. Spaelti (Eds.), *The Proceedings of the Twelfth West Coast Conference on Formal Linguistics* (pp. 561-576). Stanford, CA: Center for the Study of Language and Information, Stanford University.
- Porroche, M. (1990). *Aspectos de la atribución en español*. Zaragoza, Spain: Pórtico.

- Porroche, M. (1988). *Ser, estar y verbos de cambio*. Madrid, Spain: Arco/Libros.
- RAE-ASALE (2009). *Nueva gramática de la lengua española*. Madrid, Spain: RAE/Espasa.
- Raposo, E., & Uriagereka, J. (1995). Two types of small clauses (toward a syntax of theme/rheme relations). In A. Cardinaletti & M. T. Guasti (Eds.), *Small clauses* (pp. 179-206). New York, NY: Academic Press.
- Roby, D. B. (2009). *Aspect and the categorization of states: The case of ser and estar in Spanish*. Amsterdam, The Netherlands: John Benjamins.
- Roldán, M. (1974). Toward a semantic characterization of *ser* and *estar*. *Hispania*, 57, 68-75.
- Romero, J. (2009). El sujeto en las construcciones copulativas. *Verba*, 36, 195-214.
- Roy, I. (2013). *Non-verbal predication. Copular sentences at the syntax- semantics interface*. Oxford, England: Oxford University Press.
- Silvagni, F. (2013). *¿Ser o estar? Un modelo didáctico*. Madrid, Spain: Arco/Libros.
- Zagona, K. (2012) *Ser and estar: Phrase structure and aspect*. In C. Nishida & C. Russi (Eds.), *Building a bridge between linguistic communities of the Old and the New World, Cahiers Chronos 25* (pp. 303-327). Amsterdam, The Netherlands and New York, NY: Rodopi.

