A discourse-based account of Spanish
ser / estar *

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Abstract

The study offers a discourse-based account of the Spanish copula forms ser *and* estar, *which are generally considered to be lexical exponents of the stage-level/individual-level contrast. It argues against the popular view that the distinction between SLPs and ILPs rests on a fundamental cognitive division of the world that is reflected in the grammar. As it happens, conceptual oppositions like "temporary vs. permanent" or "arbitrary vs. essential" provide only a preference for the interpretation of* estar *and* ser. *In addition, the evidence for an SLP/ILP impact on the grammar turns out to be far less conclusive than is currently assumed. The study argues against event-based accounts of the* ser/estar *contrast in particular, showing that* ser *and* estar *pattern alike in failing all of the standard eventuality tests. The discourse-based account proposed instead assumes that* ser *and* estar *both display the same lexical semantics (which is identical to the semantics of English* be, *German* sein, *etc.);* estar *differs from* ser *only in presupposing a relation to a specific discourse situation. By using* estar *a speaker restricts his or her claim to a specific discourse situation, whereas by using* ser, *the speaker makes no such restriction. The preference for interpreting* estar *predications as denoting temporary properties and* ser *predications as denoting permanent properties follows from economy principles driving the pragmatic legitimation of* estar's *discourse dependence. The analysis proposed in this article can also account for the observation that* ser *predications do not give rise to thetic judgments. The proposal is couched in terms of the framework of DRT.*

> *Estoy por creer que el verbo 'estar' es el anarquista más grande, que ha cruzado el Atlántico.*
> Crespo (1946: 45)

1.   Introduction

The past five decades have seen numerous attempts to explain the difference between Spanish *ser* and *estar* — attempts that have been largely unsuccessful in coping with the seemingly "anarchistic" nature of *estar*. Obvious oppositions that have been proposed in order to characterize these two copula forms include "temporary vs. permanent" and "accidental vs. essential". Although Hispanists have always emphasized that these oppositions cannot be but mere rules of thumb for selecting *ser* or *estar*, none of the alternative descriptions proposed has succeeded in gaining general acceptance.

In recent years, the *ser/estar* alternation has been increasingly perceived as the lexical reflex of a more pervasive linguistic phenomenon, viz. the stage-level/individual-level distinction.[1] According to this view, the distribution of *ser* and *estar* can be characterized as follows. The copula *ser* combines with individual-level predicates (ILPs), which express (more or less) permanent or essential properties, such as *rubia* 'blond' in (1a); while *estar* combines with stage-level predicates (SLPs), which, roughly speaking, express temporary or accidental properties, such as *cansada* 'tired' in (1b).[2]

(1)   a.   Maria es   rubia.
           Maria is-S blond.
      b.   Maria está cansada.
           Maria is-E tired.

The *ser/estar* alternation is then taken as a further piece of evidence for the STAGE-LEVEL/INDIVIDUAL-LEVEL HYPOTHESIS that the distinction of SLPs and ILPs rests on a fundamental conceptual opposition that is reflected in multiple ways in the grammatical system. The following quotation from Fernald (2000) is representative of this view:

Many languages display grammatical effects due to the two kinds of predicates, suggesting that this distinction is fundamental to the way humans think about the universe. (Fernald 2000: 4)

Given that the conceptual side of the coin is still rather mysterious,[3] most stage-level/individual-level advocates content themselves with investigating the grammatical side.[4] However, Spanish *ser/estar*, as lexical exponents of the stage-level/individual-level distinction, are promising candidates for further exploring the interpretative reflexes of the distinction. This is the aim of the present study. In particular, I will defend the following claims:

1. The grammatical system is NOT sensitive to any conceptual opposition like "temporary vs. permanent" or "accidental vs. essential."
2. Neither *ser* predications nor *estar* predications display an underlying eventuality argument.
3. Rather than mirroring a conceptual opposition, the *ser/estar* alternation is basically discourse-related: *estar* predications are linked to a specific discourse situation.
4. A discourse-based account offers a straightforward pragmatic explanation for the TENDENCY of *estar* and *ser* predications to be interpreted in terms of the dichotomy "temporary vs. permanent."

The article is organized as follows: Section 2 presents a preliminary set of data, which shows that a solution to the *ser/estar* puzzle cannot rely on a conceptual division of the world, however, this division might be drawn. Section 3 provides evidence against event-based accounts of *ser/estar*. *Ser* and *estar* predications will be shown to pattern alike in failing every standard eventuality test. On the basis of these observations, a discourse-based explanation for the *ser/estar* puzzle is proposed in Section 4, which makes use of a compositional version of DRT (Asher 1993) with a presuppositional component (van der Sandt 1992). In a nutshell, *ser* and *estar* both display the same lexical semantic properties (which are identical to those of English *be*, German *sein*, etc.), *estar* differing from *ser* only in presupposing a relation to a specific discourse situation. By using *estar* a speaker restricts his or her claim to a specific discourse situation, whereas by using *ser* the speaker makes no such restriction. The preference for interpreting *estar* predications as denoting temporary properties and *ser* predications as denoting permanent properties follows from pragmatic economy principles. The analysis to be proposed here can also account for the observation that *ser* predications do not give rise to thetic judgments. Finally, Section 5 summarizes the article and draws some conclusions about the nature of the stage-level/individual-level distinction.

2. *Ser/estar*: some data and observations

2.1. *The general picture*

Let us start by having a look at some Spanish data. In what follows, I will be concerned only with adjectival predicates because these are the most challenging cases for any theory of *ser* and *estar*.[5] (See Maienborn 2003 for an extension of the proposal developed here to prepositional and

nominal predicates.) The examples in (2)–(5) involve adjectives that may combine with either copula form. The (a) and the (b) sentences display a clear difference in meaning. Sentence (2a), for example, indicates that life as such is something difficult, whereas (2b) means that life right now is somewhat difficult.

(2)   a.   La vida es difícil.
           The life   is-S difficult.
      b.   La vida está difícil   (en estos días).
           The life   is-E difficult (in these days).

Similarly, sentence (3a) indicates that the trick is inherently dirty, whereas (3b) indicates that the car is not dirty by nature, but only temporarily dirty.

(3)   a.   Ese truco es   sucio.
           This trick is-S dirty.
      b.   Ese coche está sucio.
           This car   is-E dirty.

Sentence (4a) makes an assertion about the inherent color of his eyes, while (4b) indicates that his eyes have temporarily turned red.

(4)   a.   Sus ojos son   azules.
           His eyes are-S blue.
      b.   Sus ojos están rojos.
           His eyes are-E red.

Finally, (5a) makes an assertion about a sort that the apples belong to, whereas (5b) refers to the stage of their ripeness.

(5)   a.   Estas manzanas son   agrias
           These apples   are-S sour
           (porque así fueron cultivadas).
           (because this is how they were cultivated).
      b.   Estas manzanas están agrias
           These apples   are-E sour
           (porque todavía no están maduras).
           (because they are not ripe yet).

Besides adjectives that combine with either copula, there is a small class of adjectives that accept only *estar*. As the examples in (6) show, these *estar* adjectives typically denote temporary properties (see, e.g., Luján 1981: 172f.)

(6) *estar* adjectives:
     ausente (away), solo (alone), próximo (near), vacío (empty), lleno
     (full), descalzo (barefooted), harto de (fed up with), etc.

In contrast, adjectives that express permanent properties, like the ones
given in (7), show a strong preference for the copula *ser*. Yet, as Luján
(1981) notes, these adjectives always tolerate *estar* as long as the context
supports a temporary reading, as the examples in (8) show.

(7) *ser* adjectives:
     discreto (discreet), inteligente (intelligent), cortés (polite), sabio
     (wise), etc.
(8) a.   Enzo es   muy discreto.
          Enzo is-S very discreet.
     b.   ?Enzo está muy discreto.
          Enzo is-E very discreet.
     c.   Enzo es   bastante chismoso, pero ayer   estuvo discreto.
          Enzo is-S quite   gossipy   but yesterday was-E discreet.

The data presented so far are among those that have suggested that the
choice between *estar* and *ser* depends basically on whether the adjective
expresses a temporary/arbitrary property or a permanent/essential prop-
erty. This view can be found, minor differences and caveats aside, in tra-
ditional as well as modern descriptive grammars (e.g. Keniston 1937;
Ramsey 1956; and de Bruyne 2002 [1985]; Bosque and Demonte 1999, re-
spectively). It has also appeared in various theoretical and typological
studies, including Bolinger (1947, 1973), Comrie (1976: 104f.), Milsark
(1977: 13), Diesing (1992: 44), Klein (1994: 82f.), and Feuillet (1998:
724f., 747), to name just a few. This view has been summarized by Kuno
and Wongkhomthong (1981) as follows:

estar is used to represent a temporary state or condition that does not belong
inherently to the subject noun phrase, while *ser* is used to represent an essential
or characteristic quality of the subject (Kuno and Wongkhomthong 1981: 101f.).

2.2. *Shortcomings of the general picture*

What's wrong with this view? I will not go through all of the objections
that have been raised (see esp. Bull 1942; Crespo 1946; Luján 1981) or
discuss all of the adjustments to the general picture that have been made
to cope with these objections. Instead, I will present a single example,
which I find most instructive because it shows that any explanation of
the *ser/estar* puzzle that relies somehow on a division of the adjectives
into two conceptual categories is essentially wrong and cannot be rescued.

The example is taken from Querido (1976), who suggests the following experiment.

Let us assume that there is a botanist somewhere in the Amazon jungle who has just discovered a tree of a previously unknown species. The leaves of the tree are yellow. How should he report this finding in Spanish?

(9)   Las hojas de este árbol ?   amarillas.
      The leaves of this tree   are-? yellow.

Our botanist does not know whether being yellow is a temporary or an essential property of these leaves. If he uses *ser*, as in (9′a), he really commits himself to the assumption that the leaves are inherently yellow. So, is our botanist condemned to silence until he knows what's going on? No, Querido says. He may use *estar* because *estar* does not exclude essential properties in this context.

(9′)   a.   Las hojas de este árbol son   amarillas.
            The leaves of this tree   are-S yellow.
       b.   Las hojas de este árbol están amarillas.
            The leaves of this tree   are-E yellow.

Querido concludes that *estar* can be used to express predications that are based on immediate evidence: "*estar* is the appropriate copula to report a first sensorial experience" (Querido 1976: 354). A similar view is developed in Clements (1988). I will come back to this later.

Querido's example shows that the *ser/estar* alternation definitely cannot be reduced to any fundamental conceptual opposition like "temporary vs. permanent" or "accidental vs. essential," or whatever else.[6] The borderline between *ser* and *estar* predications apparently does not correspond to any fundamental split in "the way humans think about the universe." Rather, what seems to be at stake is the speaker's perspective on a predication in a particular discourse.

For the moment, we may summarize the crucial empirical observation relating to Querido's botanist scenario in the following way. If the speaker's claim is based on fresh evidence, *estar* may also be used to express essential properties. I will call this the DISCOVERY INTERPRETATION of *estar.* This observation will be the starting point for my own proposal in Section 4.

3.   Evidence against event-based accounts of *ser/estar*

The standard strategy of current stage-level/individual-level accounts is to trace the SLP/ILP contrast to a difference in underlying event arguments,

in the spirit of Davidson (1967).[7] Given that the Spanish copula forms are considered to be lexical exponents of the stage-level/individual-level distinction, such proposals have also been made for *ser/estar* (Schmitt 1992, 1996; Lema 1995; Becker 2000). There are various ways how to implement this basic idea, which all make the following predictions (a) *ser* and *estar* predications will produce different results in eventuality tests; and (b) *estar* predications will pattern with ordinary eventuality expressions.

(10) Stage-level/individual-level expectation:
  a. *ser ≠ estar*
  b. *estar* = eventuality expression

I have argued against a Davidsonian analysis of copula sentences in Maienborn (2003, 2004a, 2004b). My findings as regards the German copula *sein* 'be' were that *sein* predications failed all of the standard eventuality tests regardless of the kind of predicate *sein* was combined with. There was thus no motivation for postulating an underlying Davidsonian event argument — at least for German *sein*. What about Spanish *ser/estar*? I shall be addressing this question in what follows. Before I do so, however, it might be helpful to review the basic features of the Davidsonian notion of events.

3.1. *The Davidsonian paradigm*

On the received view, Davidsonian eventualities are spatiotemporal entities, consistent with the definition given in (11), which I will be adopting in the discussion to follow.

(11) Davidsonian eventualities:
  Davidsonian eventualities are spatiotemporal entities with functionally integrated participants.

Several ontological properties follow from this definition:

(12) Ontological properties of eventualities:
  a. Eventualities can be located in space and time.
  b. Eventualities can vary in the way that they are realized.
  c. Eventualities are perceptible.

These properties can, in turn, be used to derive the linguistic eventuality tests listed below.

(13)   Linguistic diagnostics for eventualities:
    a.   Eventuality expressions combine with locative and temporal modifiers.
    b.   Eventuality expressions combine with manner adverbials, instrumentals, comitatives, etc.
    c.   Eventuality expressions can serve as infinitival complements of perception verbs.

These assumptions about the Davidsonian notion of events are fairly standard. For our present purposes I will adopt (11)–(13) without further discussion (but see Maienborn [2003, 2004a, 2004b] for more detailed motivation).

The diagnostics in (13) provide a way of testing the predictions of event-based accounts of *ser/estar* within the stage-level/individual-level paradigm, as given in (10).

3.2.   *Combination with locative modifiers*

Let us first test the ability of *ser* and *estar* constructions to combine with locative modifiers. The behavior of regular eventuality expressions is illustrated in (14).

(14)   a.   Pablo estaba durmiendo debajo del árbol.
        Pablo AUX   sleeping   under the tree.
    b.   Los niños   jugaron fútbol en la calle.
        The children played football in the street.
    c.   Docenas de polacos hacen cola   ante   una
        Dozens of Poles   make queue in-front-of a
        lechería.   (de Bruyne 2002 [1985]: 318)
        milk shop.
        'Dozens of Poles are standing in line in front of a milk shop.'

Ser predications show the opposite behavior, in that they do not accept locative modifiers. This conforms to the stage-level/individual-level prediction spelled out in (10).[8]

(15)   a.   *El   juguete es   amarillo debajo del árbol.
        The toy   is-S yellow   under the tree.
    b.   *Pilar es   vanidosa delante   del espejo.
        Pilar is-S vain   in-front-of the mirror.

Yet, contrary to the prediction given in (10b), *estar* predications do not occur acceptably with locative modifiers, patterning in this respect

not with eventuality expressions, as given in (14), but with their *ser*-counterparts, as given in (15).

(16)   a.   *La   camisa está mojada sobre la   silla.
           The shirt   is-E wet   on   the chair.
       b.   *El   champán   está tibio en la   sala.
           The champagne is-E warm in   the living room.
       c.   *Carol está encinta   en su   dormitorio.
           Carol is-E pregnant in   her bedroom.

If *estar* + AP introduced an eventuality argument, we would expect a locative modifier expressing the location of this eventuality to be possible. That is, a sentence like (16a) should be able to indicate that there is a state of the shirt being wet and that this state is located on the chair. Yet there is no such interpretation for (16a). Even worse, (16a) is unacceptable.

    Note that when using locatives as eventuality diagnostics we have to make sure that we are checking for locative VP-MODIFIERS. These should not be confused with frame-setting locatives — the latter being SENTENTIAL MODIFIERS. Both *ser* and *estar* sentences combine regularly with frame-setting locatives, as illustrated in (17).

(17)   a.   En esta región las fresas   son/están baratas.
           In this region the strawberries   are   cheap.
       b.   En Italia, Maradona fue   adicto   a la cocaína.
           In Italy   Maradona was-S addicted to the cocaine.
       c.   En esa empresa, la   impuntualidad era   sacrílega.
           In this company the unpunctuality   was-S sacrilegious.
           (Vargas-Llosa, *La tía Julia y el escribidor*)

Frame-setting modifiers do not relate to an underlying eventuality argument, but instead provide a semantically underspecified domain restriction on the overall proposition. Depending on the context of utterance, frame-setting modifiers may be interpreted in several ways. For instance, the frame-setting locative in (17b) could be used to restrict the TOPIC TIME[9] of a sentence. This leads to a temporal/conditional interpretation which could be paraphrased as *When Maradona was in Italy, he was addicted to cocaine*. The locative frame can also receive an epistemic interpretation, though, paraphrasable as *According to people in Italy, Maradona was addicted to cocaine*. (For more details about the syntax and semantics of frame-setting locatives, see Maienborn 2001.)[10]

    The above remarks on frame-setting locatives shed some light on sentences such as the English pair in (18) and the Spanish pair in (19), which can be found at the top of any list of SLP/ILP contrasts[11] and which are

supposed to show "that SLPs differ from ILPs in the ability to be located in space" (Fernald 2000: 24).

(18) a.   Pedro Camacho was tired/drunk in his office.
      b.   ??Pedro Camacho was wise/blond in his office.
(19) a.   En su officina, Pedro Camacho estaba cansado/borracho.
            In his office   Pedro Camacho was-E tired   /drunk.
      b.   ??En su officina, Pedro Camacho era   sabio/rubio.
            In his office   Pedro Camacho was-S wise /blond.

On the view developed here, the differences observed in these examples do not involve a given predicate's ability to be located in space (via an underlying eventuality argument) but the acceptability of these sentences under the TEMPORAL READING OF A LOCATIVE FRAME. That is, what data such as (18) and (19) really show is this: among the potential readings of frame-setting modifiers, there appears to be one reading that excludes ILPs as main predicates. A temporal reading of the locative frame apparently forces us to interpret the main predicate as holding only temporarily. In Maienborn (2003, 2004c), I propose a pragmatic explanation of this "temporariness effect" within Blutner's (1998, 2000) framework of bidirectional optimality theory.

   The discussion of the data in (14)–(19) suggests the following conclusion. *Ser* and *estar* predications, though by hypothesis the exponents of ILPs and SLPs, respectively, do not show any grammatical difference with respect to locative modifiers. Both predications combine with frame-setting locatives and neither occurs with event-related locatives. That is, both fail to pass our first eventuality test. Despite what has commonly been claimed, then, the denotations of neither *ser* nor *estar* predications can be located in space.

3.3.   *Combination with manner adverbials and the like*

The same picture emerges with our second eventuality test: the ability to accept manner modification. Neither *ser* nor *estar* combines with manner adverbials, comitatives and the like, whereas regular eventuality expressions do, as (20) and (21) show.

(20) a.   Luis esperaba solo /sin   Carol/
            Luis waited   alone/without Carol/
            pacientemente/ansiosamente a   Dolores.
            patiently   /anxiously   for Dolores.

     b.   Luchito dormía tranquilamente/con su osito /sin
            Luchito slept   calmly   /with his teddy/without
            chupete.
            dummy.

(21) a.   *Las manzanas eran   /estaban dulces sabrosamente.
          The apples   were-S/were-E sweet deliciously.
     b.   *Dolores era   /estaba guapa elegantemente.
          Dolores was-S/was-E pretty elegantly.
     c.   *Luchito estaba cansado tranquilamente/con su osito /
          Luchito was-E tired   calmly   /with his teddy/
          sin   chupete.
          without dummy.

Sentences like (22) might, at first sight, be taken to provide counterevidence.

(22) a. La ventana estaba abierta de par en par.
         The windows was-E open   widely.
     b. La caja estaba cerrada fuertemente.
         The box was-E closed   tightly.
     c. Dolores estaba vestida muy elegantemente.
         Dolores was-E dressed very elegantly.

Yet, upon closer inspection, these cases turn out to be well analyzed as noncompositional reinterpretations which are triggered by a sortal conflict between the modifier and the copula construction (see the discussion in Maienborn 2003, 2004a, 2004b). Note, for example, that sentence (22a) becomes odd as soon as we replace *ventana* 'window' with *cueva* 'cave' as in (22′a).

(22′) a. ??La cueva estaba abierta de par en par.
           The cave   was-E open   widely.

That is, *widely* apparently does not modify a state of the window being open but (roughly speaking) the resultant object of an opening EVENT (cf. Geuder 2000). Caves, having natural openings, do not lend themselves to such an eventive reinterpretation. Thus, we may conclude that the semantic structure of *ser* and *estar* sentences does not provide a suitable anchor to which manner adverbials could be linked up compositionally.

3.4. *Infinitival complements of perception verbs*

Let us turn to our last eventuality test. As has been pointed out by Higginbotham (1983) in particular, perception verbs take eventuality expressions as their infinitival complements. This is illustrated in (23).

(23) a. Yo ví a Carol esperar frente   a la casa.
          I   saw Carol wait   in-front-of the house.
      b. Yo ví a Carol dormir en la   hamaca.
          I   saw Carol sleep   in the hammock.
      c. Yo oí a   Rosario hablar con Margarita.
          I   heard Rosario speak with Margarita.

Significantly, neither *ser* nor *estar* predications display this behavior:

(24) a. ??Yo ví a Carol ser   /estar guapa.
             I   saw Carol be-S/be-E beautiful.
      b. ??Yo oí a   la Callas ser   /estar ronca.
             I   heard the Callas be-S/be-E hoarse.
      c. ??Yo ví   al coche ser   amarillo.
             I   saw the car   be-S yellow.
      d. ??Yo ví   a la   escultura estar rota.
             I   saw   the sculpture be-E broken.

These sentences seem to improve when the context supports an agentive reinterpretation, as in (25). Consider, for example, (25a), which is adapted from Schmitt (1996: 371). Apparently, the perceived entity in (25a) is not a state of Maria being cruel but rather some of Maria's ACTIVITIES that suggest that she is indeed cruel (see Schmitt 1996 for further discussion).[12]

(25) a. Yo ví a Maria ser   cruel (con los gatos).
          I   saw Maria be-S cruel (with the cats).
      b. Yo oí   al ministro estar encantado con los resultados
          I   heard the minister be-E delighted with the results
          del   programa.
          of the program.

What is crucial for our purposes is that no such additional contextual support would be required if copula (or at least *estar*) constructions did indeed introduce a Davidsonian eventuality argument; and also that eventive coercion is available as a last resort for both *ser* and *estar*. That is, *estar* predications are not more "eventive" than *ser* predications.

   In sum, *ser* and *estar* exhibit no grammatically significant differences according to standard eventuality tests — results which run counter to the predictions of the stage-level/individual-level paradigm. Rather than (10), the observed pattern is (26).

(26)   Attested behavior with respect to eventuality tests:
       a.   *ser* = *estar*
       b.   *estar* ≠ eventuality expression

In view of these findings, there is no good reason to adopt an event-based analysis for *ser/estar*; and we can conclude that the Spanish copula forms do not differ from their German or English counterparts in this respect. This means that there is no obvious Davidsonian solution to the *ser/estar* puzzle.

4.   A discourse-based alternative

Let me recapitulate what we have seen so far and what an adequate theory of *ser/estar* should account for.

1.   In uttering a *ser* or *estar* sentence, the speaker claims (for a certain topic time) that the subject referent has the property expressed by the AP predicate.
2.   In the case of *estar* predications, the speaker's claim is based on immediate evidence.
3.   If there is no evidence to the contrary, there is a tendency to correlate *ser* predications with permanent properties and *estar* predications with temporary properties.

My proposal for the analysis of *ser/estar* has three parts, which fall within the purview of lexical semantics, compositional semantics, and pragmatics, respectively.

4.1.   *Lexical semantics*

As regards the lexical semantic part of my analysis, I assume that *ser* and *estar* have basically the same meaning, which is identical to that of English *be*, German *sein*, and their counterparts in many other languages. *Estar* differs only insofar as it carries an additional presupposition linking the predication to a specific discourse situation.

  This part of my analysis can be seen as an implementation of Clements' (1988) idea that the distinction between *ser* and *estar* can be captured in terms of the distinctive semantic feature [±NEXUS]. Clements describes this feature as follows:

The basic semantic distinction between *ser* and *estar* is seen in terms of whether a connection to a locus or another situation is presupposed or not. It is argued that *estar* presupposes such a connection ([+NEXUS]) while *ser* does not ([−NEXUS]). Clements (1988: 779)

While Clements introduces [±NEXUS] as only one among several features, which have a status and which interact in ways that are not totally clear

to me, I will try to clarify the notion of a "nexus" at least as it pertains to *estar* in the theoretical framework adopted here.

I propose the following lexical entries for *ser* and *estar*:[13]

(27)   *ser*: $\lambda P \, \lambda x \, \lambda z \, [z \approx [P(x)]]$ (= English *be*, German *sein*, etc.)
(28)   *estar*: $\lambda P \, \lambda x \, \lambda z \, [z \approx [P(x)] \, / \, [s_i \mid R \, (z, s_i)]]$

In order to give a better idea of what (27) and (28) tell us, I will briefly introduce some background assumptions motivated by the copula analysis given in Maienborn (2003, 2004a, 2004b).

The previous section has shown that copula forms like *ser* and *estar* do not introduce an underlying Davidsonian eventuality. Based on evidence from temporal modification and anaphora, I have argued that copula constructions refer instead to what I call a "Kimian state" (or "K-state"). K-states combine Kim's (1969, 1976) notion of temporally bounded property exemplifications[14] with Asher's (1993, 2000) conception of abstract objects as mentally constructed entities.[15] Let us assume the following definition of K-states:

(29)   K-states:
       K-states are abstract objects for the exemplification of a property P
       for a holder x at a time t.

With this bit of background information we can turn back to the lexical entries for *ser* and *estar* in (27) and (28) and see that these expressions both introduce a referential argument z for a K-state that is characterized by the predicate P applying to the individual x. *Estar* carries the additional presupposition that the referential argument z is related (via a free variable R) to a specific discourse situation s_i.[16]

Before turning to the compositional part of my analysis, I would like to point out some attractive features of treating the distinction between *ser* and *estar* essentially in terms of the lexical differences spelled out in (27)–(28). First, such a treatment is quite parsimonious, since *ser* and *estar* accordingly display only minimal differences from each other and from copula forms in other languages, including English and German. Next, *ser* is treated as the basic copula and *estar* as the marked variant, which fits well with what we know about their diachronic development.[17]

Finally, no selectional restrictions are imposed on either *ser* or *estar*, and the two copula forms do not differ in argument structure. That is, in principle, both *ser* and *estar* can combine with any predicate whatsoever. Given this, we do not expect *ser* and *estar* to display any major differences with respect to combinatorial machinery. And in fact, the eventuality tests in Section 3 have revealed that *ser* and *estar* have the same distribution in all relevant respects.

4.2.   *Compositional semantics*

Let us turn now to the compositional semantic component of the analysis. The basic idea is that in the course of meaning composition, the presupposition introduced by *estar* can be resolved within its local structural environment.

I assume that the functional category aspect introduces a contextually determined TOPIC TIME (Klein 1994) or, more generally speaking, a TOPIC SITUATION s*. The topic situation of a sentence (where "situation" is understood as a partial world) is the relevant discourse situation to which a speaker restricts his or her claim, the speaker being able to relate this claim to specific as well as nonspecific/arbitrary topic situations (see Klein 1994: 38f.). The topic situation turns out to be a good antecedent for the specific discourse referent presupposed by *estar*. Thus, putting together the lexical and the compositional part of my proposal, the difference between *ser* and *estar* amounts to the following:

(30)   *Ser/estar* hypothesis:
       By using *estar* speakers restrict their claims to a particular topic situation they have in mind; by using *ser* speakers remain neutral as to the specificity of the topic situation.

In order to develop this basic idea, it is necessary to describe the category of aspect in more detail. According to Klein (1994), the semantic contribution of aspect consists in its establishing a temporal relation between the VP referent (here: the K-state z) and the topic situation s*. For our purposes, the following simplified picture will suffice: aspectual operators are introduced compositionally by a functional head Asp; and imperfect aspect (IMPERF) indicates that the topic time $\tau(s^*)$ falls completely within the K-state time $\tau(z)$, whereas perfect aspect (PERF) indicates that the K-state time $\tau(z)$ falls completely within the topic time $\tau(s^*)$ (where τ maps K-states and situations onto their temporal extensions). The DRSs for aspectual operators are given in (31).[18]

(31)   a.   IMPERF: $\lambda Q\ \lambda s^*\ [z \mid \tau(s^*) \subset \tau(z),\ Q(z)]$
       b.   PERF: $\lambda Q\ \lambda s^*\ [z \mid \tau(z) \subset \tau(s^*),\ Q(z)]$

The corresponding derivation of an imperfective *ser* construction is illustrated in (32).

(32)   *Carol era guapa* ('Carol was pretty')   (*ser*, IMPERF)
       a.   *Carol*: $[v \mid carol\ (v)]$
       b.   *guapa*: $\lambda y\ [pretty\ (y)]$
       c.   *ser*: $\lambda P\ \lambda x\ \lambda z\ [z \approx [P(x)]]$

   d.   IMPERF: $\lambda Q \, \lambda s^* \, [z \mid \tau(s^*) \subset \tau(z), Q(z)]$

   e.   [ser guapa]: $\lambda P \, \lambda x \, \lambda z \, [z \approx [P(x)]] \, (\lambda y \, [\text{pretty } (y)])$
$$\equiv \lambda x \, \lambda z \, [z \approx [\text{pretty } (x)]]$$

   f. $[_{\text{VP}}$ Carol ser guapa]: $\lambda x \, \lambda z \, [z \approx [\text{pretty } (x)]] \, ([v \mid \text{carol } (v)])$
$$\equiv \lambda z \, [v \mid z \approx [\text{pretty } (v)], \text{carol } (v)]$$

   g. $[_{\text{AspP}}$ Carol era guapa]:
$$\lambda Q \, \lambda s^* \, [z \mid \tau(s^*) \subset \tau(z), Q(z)] \, (\lambda z \, [v \mid z \approx [\text{pretty } (v)], \\ \text{carol } (v)])$$
$$\equiv \lambda s^* \, [z, v \mid \tau(s^*) \subset \tau(z), z \approx [\text{pretty } (v)], \text{carol } (v)]$$

For the sake of simplicity, I will assume (33) as the semantic contribution of the tense operator PAST. That is, PAST introduces discourse referents for the utterance time t^0 and for s^* and locates the topic time before the utterance time.

(33)   PAST: $\lambda Q \, [t^0, s^* \mid \tau(s^*) < t^0, Q(s^*)]$

Applying PAST to (32g) (and leaving aside the semantic impact of further functional projections for the sake of simplicity) yields the DRS in (34) for our sentence (32).

(34)   DRS for an imperfective *ser* sentence:
$$[t^0, s^*, z, v \mid \tau(s^*) < t^0, \tau(s^*) \subset \tau(z), z \approx [\text{pretty } (v)], \text{carol } (v)]$$

The sentence is true (issues of intentionality aside) if there is a state of Carol being pretty, whose temporal extension includes a contextually fixed topic time that precedes the utterance time.

   What happens in the case of *estar*? Meaning composition proceeds as in (32). After the aspectual operator IMPERF applies, the resulting DRS is identical to (32g) except for the additional presupposition associated with *estar*.

(35)   *Carol estaba guapa* ('Carol was pretty')   (*estar*, IMPERF)
   $[_{\text{AspP}}$ Carol estaba guapa]:
$$\lambda s^* \, [z, v \mid \tau(s^*) \subset \tau(z), z \approx [\text{pretty } (v)], \text{carol } (v) \, / \, [s_i \mid R \, (z, s_i)]]$$

This DRS configuration permits the resolution of the presupposition (a) by identifying the presupposed specific discourse situation s_i with the topic situation s^* already introduced ($s_i = s^*$); and (b) by taking the aspectual relation IMPERF as the value of the relational variable R.[19] Presupposition resolution thus yields (35′).

(35′) $[_{\text{AspP}}$ Carol estaba guapa]:
$$\lambda s^* \, [s_i, z, v \mid s_i = s^*, \tau(s^*) \subset \tau(z), z \approx [\text{pretty } (v)], \text{carol } (v)]$$

The subsequent composition proceeds as in the case of *ser*. The resulting DRS for sentence (35) is given in (36).

(36)   DRS for an imperfective estar sentence:
       $[t^0, s^*, s_i, z, v \mid \tau(s^*) < t^0, s_i = s^*, \tau(s^*) \subset \tau(z), z \approx [\text{pretty (v)}], \text{carol}$ $(v)]$

The truth conditions are identical to those of the *ser* configuration in (34), except that the contextually supplied topic situation is required to be specific — that is, the speaker restricts his or her claim to a particular discourse situation already in mind.

The *ser/estar* alternation has often been argued to be an ASPECTUAL PHENOMENON. For instance, Luján (1981) proposes a *ser/estar* analysis in terms of (im)perfectivity; and Schmitt (1992, 1996) analyzes *estar* as a stative phase verb. Other proposals that treat the *ser/estar* distinction in aspectual terms include those of Hengeveld (1986) and Lema (1995). In a sense, my analysis follows this aspectual approach to the *ser/estar* distinction. Yet, rather than claiming that this distinction is aspectual, I take (any) aspect to be the source of the topic situation, which, for independent reasons, turns out to be a suitable antecedent for *estar*'s specificity presupposition.

4.3. *Pragmatics*

Let me now turn finally to the pragmatic component of my proposal, the task of which is to explain how an *estar* predication comes to be restricted to a specific topic situation. What does it mean for such a predication to be linked to a particular discourse setting that the speaker has in mind? Consider, for example, sentences (37) and (38): 'The road is wide' can be expressed with either *ser* or *estar*.

(37)   La carretera es   ancha.
       The road   is-S wide.

(38)   La carretera está ancha.
       The road   is-E wide.

Let us assume as a discourse setting for (37)–(38) a journalist's reporting on the Panamericana — say, near Lima. Now, when does it make sense for a speaker to restrict his or her claim to this particular setting by using *estar*?

Such a restriction makes sense only if there are alternatives to s* in which the predication need not apply. That is, the use of *estar* is pragmatically legitimated only if the context supports some TOPIC SITUATION CONTRAST (s* contrast). There are at least three dimensions along which an s* contrast can be established.

(39)   Potential s* contrasts:
  a. Temporal dimension:
     The current topic situation contrasts with previous or later top-
     ic situations in which the predicate does not apply to the sub-
     ject referent.
     [This corresponds to Klein's (1994) "topic time contrast" and
     gives rise to the interpretation that the predicate holds only
     temporarily.]
  b. Spatial dimension:
     The current topic situation contrasts with differently localized
     topic situations in which the predicate does not apply to the
     subject referent.
     [This leads to a spatial restriction. In the above scenario, the
     speaker restricts his or her claim that the Panamericana is
     wide to the region near Lima, acknowledging that there might
     be other parts where this road is not wide.]
  c. Epistemic dimension:
     The current topic situation contrasts with topic situations that
     do not allow us to decide whether the predicate applies to the
     subject referent or not.
     [This leads to the DISCOVERY INTERPRETATION of *estar*. Such an
     interpretation would be available for (38) if we assume, for ex-
     ample, that the sentence was uttered by Pizarro when he set
     out to conquer Peru and came across the roads of the Incas.]

So, there are various ways to legitimate the restriction to a specific topic
situation imposed by *estar*, depending on the kind of alternative topic sit-
uations that are under consideration in the current discourse. Only one
option — (39a) — implies that the predication holds only temporarily.

We may now ask how the discourse-based approach developed so far
relates to the "temporary vs. permanent" dichotomy. How does this con-
ceptual opposition turn up as a pragmatic tendency for the interpretation
of *ser* and *estar*?

Let us turn first to the PREFERENCE OF *estar* FOR TEMPORARY INTERPRETA-
TIONS. Assuming that the property expressed by an *estar* predication holds
only temporarily is a less costly way of making sense of the s* contrast
enforced by *estar*.

Given its requirement that tense and aspect values be specified, the
grammar already forces a speaker to choose a topic situation among tem-
poral alternatives. As such, an s* contrast along the temporal dimension
is already present, and can easily be activated if the predicate denotes a
temporary property or a resultant state (see Note 6). Licensing the use of

estar by an s* contrast along the spatial or epistemic dimension, though, requires additional assumptions about the relevant context. In the case of (38), for example, the shared knowledge of speaker and hearer must include (if necessary via accommodation) the recognition that a different location for s* could have an impact on the speaker's claim; such knowledge might even need to support a whole discovery scenario. No such additional contextual assumptions, however, are needed in the case of temporal s* contrasts. Therefore, a temporary interpretation for *estar* predications will always be preferred as long as the context does not push us in another direction.

What needs to be explained next is the BLOCKING OF TEMPORARY INTERPRETATIONS FOR *ser*. Note that the lexical semantics of *ser*, as described in (27)/(30), does not presuppose a nonspecific discourse situation but remains neutral on this issue.[20] Rather, what we find here is, I suggest, a typical instance of a PRAGMATIC DIVISION OF LABOR: *ser*, being the more general term, functions as the complement of *estar*.

If a speaker chooses *ser*, the hearer may infer on the basis of pragmatic economy principles (Atlas and Levinson 1981; Horn 1984; Levinson 2000) that the speaker's claim is not restricted to a specific topic situation — otherwise the speaker would have used *estar*. Thus, *ser* predications are interpreted as applying to the subject referent in ARBITRARY TOPIC SITUATIONS. This excludes temporary properties.[21]

This may also explain why *ser*, although it has the same lexical meaning as English *be* and German *sein*, is more restricted in its application than these forms are. The co-existence of *estar* prevents the expansion of *ser*'s meaning potential.

As for the small group of adjectives that combine exclusively with *estar* (see [6]), it seems quite plausible that their lexical content is biased in a particular way to specific discourse situations and therefore that their ability to combine with *ser* is ruled out. For instance, adjectives like *presente* 'present,' *ausente* 'absent,' and *lejo* 'far away,' as given in (40), obviously involve some spatial parameter that needs to be anchored in the discourse.

(40)   *El   artista es   presente/ausente/lejo.
       The artist   is-S present/ absent/ far away.

It remains to be seen whether this carries over to adjectives like *descalzo* 'barefooted,' *vacío* 'empty,' or *harto (de)* 'fed up (with)' and how such a lexical bias towards a specific discourse situation is implemented.

Let me mention, at least briefly, one further co-occurrence restriction that Spanish *ser* is subject to. As has been observed in the literature, the *ser/estar* alternation is sensitive to the THETIC/CATEGORIAL DISTINCTION

(Mejías-Bikandi 1993; Raposo and Uriagereka 1995). The crucial observation is that while *estar* predications are compatible with both categorial and thetic judgments, *ser* predications are compatible with only the former.[22] This is illustrated in (41)–(42) (where small capitals indicate primary accent):

(41)   *What about Pablo?*   (categorial judgment)
    a.   PABLO está ENFERMO.
           Pablo is-E ill.
    b.   PABLO es (un) ENFERMO.
           Pablo is-S (an) ill.

(42)   *What's up?*   (thetic judgment)
    a.   PABLO está enfermo.
           PABLO is-E ill.
    b.   *PABLO es (un) enfermo.
           Pablo is-S (an) ill.

On the discourse-based approach advocated here, this behavior of *ser/estar* is expected. Following Lambrecht (1994) and Erteschik-Shir (1997), I assume that thetic judgments are not really topic-less but "about" the actual discourse situation. Given that *ser* predications cannot be linked to a specific discourse situation, they do not fit into the pattern of thetic judgments. *Estar* predications, in contrast, do. In assertions about the actual discourse situation, the specificity presupposition of *estar* is obviously satisfied.

5. Conclusion

What did the study of *ser* and *estar* reveal about the meaning side of the stage-level/individual-level distinction? Did we gain a clearer understanding of the real sources of the observed meaning effects?

In this article, we have seen good reasons to reject a view of the stage-level/individual-level distinction as a GRAMMATICAL PHENOMENON with a CONCEPTUAL FOUNDATION. Taking *ser/estar* as a litmus test, we ruled out the possibility that the difference at issue was grounded in a fundamental cognitive division of the world. And we saw no conclusive evidence of an SLP/ILP impact on the grammatical system (registered, e.g., by a difference in argument structure).

Rather, what turned out to be at the heart of the *ser/estar* alternation was a specificity presupposition on the topic situation. In short, *estar* is the DISCOURSE-DEPENDENT VARIANT of *ser*. This discourse dependency

is LEXICALLY triggered by *estar*, STRUCTURALLY resolved by means of the functional category of aspect, and finally, PRAGMATICALLY licensed through some kind of topic situation contrast.

Thus, the stage-level/individual-level distinction is basically a PRAG-MATIC PHENOMENON — even in a language like Spanish. This should (if possible) be even truer of English or German, which do not even have an explicit lexical trigger for the specificity presupposition.

Perhaps most importantly, the present study has offered a pragmatic solution to a persistent problem in the literature: that of relating the *ser/estar* alternation somehow to the "temporary vs. permanent" opposition. A hearer's interpretation of *estar* and *ser* predications as expressing temporary and permanent properties, respectively, appears to be the "cheapest" strategy for fulfilling their respective requirements for linkage to specific and arbitrary topic situations. Alternative strategies involve greater contextual support but are also still available — all of which suggests that *ser* and *estar* are not so "anarchistic" after all.

Notes

1.   The stage-level/individual-level distinction goes back to Carlson (1977) (building on earlier work by Milsark [1974, 1977]) and has been given an event semantic treatment by Kratzer (1995). On this treatment, stage-level predicates are assumed to have an additional eventuality argument, while individual-level predicates lack such an argument. See Maienborn (2003, 2004a) for an overview of further developments based on Kratzer (1995).
2.   Throughout this article, *ser* and *estar* will be glossed as "be-S" and "be-E," respectively.
3.   See, for example, Fernald (2000: 4): "whatever sense of permanence is crucial to this distinction, it must be a very weak notion."
4.   See, for example, Higginbotham and Ramchand (1997: 53): "whatever the grounds for this distinction, there is no doubt of its force." An overview of the linguistic

phenomena that have been associated with the stage-level/individual-level distinction can be found in Higginbotham and Ramchand (1997), Fernald (2000), and Jäger (2001); see Maienborn (2003, 2004a, 2004b) for a critical discussion.

5. AP predicates have always been at the center of the *ser/estar* discussion; see Fernández-Leborans (1999) for a recent overview. Moreover, it is with respect to AP predicates that Spanish and Portuguese largely coincide in choosing *ser* or *estar*; cf. Querido (1976), Schmitt (1996), Feuillet (1998).

6. Our botanist scenario for sentence (9) also provides evidence against the accounts of Bull (1942) and Demonte (1979), who take *estar* predications to denote RESULTANT STATES. According to Bull and Demonte, *estar* predications should always presuppose a preceding change of state. This prediction is falsified by cases like (9).

7. In this article, I use the term "event" as a cover term for events proper (i.e. accomplishments and achievements in Vendler's [1967] terms), processes (Vendler's activities), and (certain) states; cf. Bach's (1986) notion "eventuality." See Maienborn (2003, 2004a, 2004b) for qualifications concerning the borderline category of states.

8. When used in the progressive, *ser* has a so-called "active *be*" reading (e.g. Carlson 1977; Partee 1977; Rothstein 1999). Examples such as (i) suggest that these constructions behave like eventuality (more specifically, activity) expressions. Sentence (i) is thus interpreted as indicating that Pilar is acting in a coquettish way or as if she were coquettish and that this activity takes place in front of the mirror. (In Maienborn [2003], I analyze "active *be*" sentences as grammatically ill-formed expressions that may be pragmatically "rescued" via event coercion.)

(i)   ?Pilar está siendo   coqueta   delante   del espejo.
      Pilar aux is-S-prog coquettish in-front-of the mirror.
      'Pilar is being coquettish in front of the mirror.'

Schmitt (1996) points out that *estar* never has an "active *be*" reading; cf. (ii).

(ii)   *Pilar está estando   XP.
       Pilar aux is-S-prog XP.

9. I adopt Klein's (1994) notion of "topic time" as the time for which a speaker intends to make a claim. I will have to say more about the topic time of a sentence in Section 4.

10. Note that frame-setting modifiers, as sentential modifiers, tend to surface sentence-initially but they do not need to. In (i) (taken from Raposo and Uriagereka [1995: 201]) there is a sentence-final locative frame, which most naturally receives a temporal interpretation: namely, 'With respect to the time when Bobby Fisher was in Yugoslavia, the speaker claims that Bobby Fisher was not brilliant.'

(i)   ?Bobby Fisher es   genial,   pero no estuvo genial   en Yugoslavia.
      Bobby Fisher is-S brilliant, but not was-E brilliant in Yugoslavia

11. See, for example, Kratzer (1995), Chierchia (1995), Higginbotham and Ramchand (1997), McNally (1998). In this study, I will have nothing to say about subject effects, which are another favorite topic in the stage-level/individual-level debate; but see Glasbey (1997) for a pragmatic approach.

12. Thanks to Kay-Eduardo Gonzalez-Vilbazo for discussing these perception reports with me.

13. The following representations are developed within the framework of discourse representation theory (DRT) (e.g. Kamp 1981; Kamp and Reyle 1993). See Asher (1993) for the compositional DRT variant with λ-abstraction employed here. I use a flat notation for DRSs, in which discourse referents are separated from DRS conditions by a

straight line. The presuppositional component (see below) follows after the slash. The general format of a DRS is given in (i).

(i)   Notation: $\lambda y \, \lambda x \ldots$ [discourse referents | DRS conditions/presupposed DRSs]

Variables are sorted as follows. x, y, v: individuals; z: K-states (see below); s: situations (i.e. partial worlds); t: times; P, Q, R: first-order predicates.

14. While Kim understood his proposal as an alternative to Davidson's approach, I think of K-states as supplementing Davidsonian eventualities.

15. According to Asher, abstract objects (facts, propositions, etc.) are introduced for efficient natural language processing and other cognitive operations but do not exist independently of them. Roughly speaking, abstract objects exist only because we talk and think about them. Asher (1993: 145f.) defines "$\approx$" as relating a discourse referent for an abstract object to a DRS that characterizes this discourse referent.

16. For the purposes of this study, I adopt the pretheoretical characterization of SPECIFIC-ITY as the "certainty of the speaker about the identity of the referent" (von Heusinger 2002: 245). There are of course many open questions concerning the implementation of this notion both in general terms and in the way it is used here, which I will leave for future work. For the time being, I will indicate specific referents with an index i.

17. For the diachronic development of *ser/estar* see, for example, Querido (1976), Pountain (1982), Vañó-Cerdá (1982), Clements (1988), Devitt (1990), and Fernández-Leborans (1999: 2421ff.).

18. Note that in (31) IMPERF and PERF introduce a discourse referent z for the referential argument of the VP. This corresponds to the operation of existential closure in other frameworks. As it stands, (31) is suited only for VPs that denote K-states. See Maienborn (2003) for a more general version that also accounts for eventive VPs.

19. Van der Sandt (1992) takes presuppositions to be anaphors that are either bound, if there is an available antecedent, or otherwise accommodated. Binding of presuppositions takes place as locally as possible, whereas accommodation is carried out as globally as possible; see Blutner (2000) for an optimality-theoretic account of this preference. In the case of *estar*, the presupposition is always resolved via local binding. With s*, IMPERF introduces a suitable antecedent for s_i. For some technical details of the implementation chosen here, see Jäger (2000).

20. This departs from Clements (1988), who assumes for *ser* an opposite feature specification [−NEXUS]; see the remarks in Section 4.1.

21. In Maienborn (2003) the pragmatic division of labor between *ser* and *estar* is implemented (among other pragmatic effects on the interpretation of copula constructions) within Blutner's framework of bidirectional optimality theory.

22. This observation regarding the sensitivity of SLPs and ILPs to the thetic/categorial distinction has also been made — without reference to *ser/estar* — by Ladusaw (1994), Erteschik-Shir (1997), McNally (1998), and Jäger (2000, 2001). Hence, once again, *ser* and *estar* prove to be reliable lexical exponents of the stage-level/individual-level distinction.

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