

Varying circumstances of evaluation and the *ser/estar* distinction in Spanish

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Introduction: Previous work on the distributional profiles of the Spanish copulas *ser* and *estar* has demonstrated that appeal to conceptual distinctions such as temporary/non-essential vs. permanent/essential properties does not capture the full range of data. Alternative analyses have sought instead to capture the distribution in terms of the stage-level/individual-level contrast (Arché 2006, Fernald 2000), an aspectual (im)perfectivity-based contrast (Luján 1981, Roby 2007), and more recently, a specificity contrast (Maienborn 2005). On this last analysis, which is the semantically most explicit one available, *estar* is endowed with a **specificity presupposition**: the state introduced by *estar* must be related to a specific discourse situation. Notably, the implementation of the presupposition is said to have a pragmatic effect such that *estar* sentences often give rise to “quasi-exhaustive” inferences in context – as restricted claims that may not hold in temporally, spatially, or epistemically different situations. Although it crucially relies on the notion of a specific discourse situation, Maienborn’s work offers no formalization of the notion nor clarification about how specific discourse situations are accessed. In this paper, we offer an explicit formal analysis for *estar* that associates with it a presupposition regarding varying circumstances of evaluation. Specifically, *estar* presupposes that the embedded proposition is false at at least some evaluation indices that are **accessible** (in a way to be made precise) from the given circumstance of evaluation at which the proposition is asserted to hold. *ser* remains neutral on this issue.

Observations: The standard generalizations are that *estar* is overwhelmingly used with locative predicates (1-a), *ser* with nominal predicates (1-b). Adjectival predicates, sometimes, but not always, may combine with either copula, and this gives rise to differing interpretations (1-c-d). Further, individual-level adjectives such as those in (1-e-f) typically appear with *ser*. Native speakers, when presented with these in combination with *estar* in isolation, find them unacceptable.

- (1) a. La silla *#es/está* en la cocina. ‘The chair **#ser/estar** in the kitchen.’
b. El joven *es/*está* (un) arquitecto. ‘The young man **ser/*estar** an architect.’
c. Juan *es/está* guapo/avispado. ‘Juan **ser/estar** (*is/is looking*) handsome/quick-witted.’
d. El reportero *es/está* sucio. ‘The reporter **ser/estar** is dirty-minded/dirty.’
e. La carretera *es/#está* ancha. The road **ser/#estar** wide.
f. Las escaleras *son/#están* peligrosas. The stairs **ser/#estar** dangerous.

In addition to these basic generalizations, it has been noted (Maienborn, Clements) that the use of *estar* with individual-level predicates becomes acceptable when the speaker wishes to convey that a property (whose incidence in an individual might ordinarily be considered temporally stable) holds of an individual in a restricted way – in either a temporal sense (2) or a spatial sense (3).

- (2) a. **Context:** Pedro went on a diet for six months. I just saw him yesterday.
b. *El está delgado.* ‘He **estar** skinny’ [now].
- (3) a. **Context:** A journalist reporting on the Panamericana has now arrived near Lima.
b. *La carretera está ancha.* (Maienborn 2005) ‘The road **estar** wide’ [here].

The use of *estar* is also felicitous with individual-level predicates when reporting sensorial experiences and subjective evaluations (4). Its use in such contexts often suggests that the speaker thinks that the degree to which a gradable property is exhibited in the entity is unexpectedly high.

- (4) a. **Context:** I have just come back from the market.
b. *He comprado unas mandarinas que están riquísimas!* (Clements 2006:188)

‘I have just bought some mandarins that **estar** delicious’.

Another use of *estar*, not noted in previous literature, is to signal that the speaker “is allowing” for an entity to be in the positive extension of a gradable predicate by lowering the contextual standard.

- (5) a. **Context:** Juan is from Madrid and used to seeing really tall skyscrapers. He visits Segovia where the buildings are not as tall. His host points to building after building to determine what “counts” as tall for Juan. For one building that is taller than the others but not as tall as a Madrid skyscraper, John concedes:
 b. Vale, ese edificio *esta* alto. ‘OK, this building **estar** tall.’

We propose that what unifies all the various uses of *estar* is that each of these uses exhibits sensitivity to *some* parameter of the *evaluation index* (= Kaplanian circumstance of evaluation). The *ser/estar* puzzle is then solved by formally modeling this parametrized sensitivity for *estar*.

Analysis: Let an evaluation index i be a tuple $\langle t, w, l, c \rangle$, where t is an interval, w is a world, l is a location, and c is a contextual-standard function which assigns to every gradable predicate P a standard that determines the positive extension of P . Both *ser* and *estar* combine with a property denoting expression P and an individual denoting argument x and assert that $\llbracket x \rrbracket^i \in \llbracket P \rrbracket^i$. We say that a proposition of the form $P(x)$ holds **contingently** at an index i whenever there is an i' accessible from i , varying *only* along one contextually-determined parameter, such that $P(x)$ is false at i' . Such minimally different pairs in the accessibility relation are written as $R_p(i, i')$, with contingency for the different parameters p defined in (6). *time*, *location* etc. are functions that apply to an index and return the value for the relevant parameter for that index.

- (6) a. $\forall i, i' : R_t(i, i') \leftrightarrow \text{time}(i) \supset \subset \text{time}(i')$
 An index $i' (\langle t', w, l, c \rangle)$ is **temporally** accessible from $i (\langle t, w, l, c \rangle)$ iff the temporal interval t' of i' abuts the temporal interval t of i (t' is immediately before or after t).
 b. $\forall i, i' : R_l(i, i') \leftrightarrow \text{location}(i) \supset \subset \text{location}(i')$
 An index $i' (\langle t, w, l', c \rangle)$ is **spatially** accessible from $i (\langle t, w, l, c \rangle)$ iff the location l of i' abuts the location l' of i . (l' is spatially adjacent to l .)
 c. $\forall i, i' : R_w(i, i') \leftrightarrow \text{world}(i') \in \text{Sim}(\text{world}(i))$
 An index $i' (\langle t, w', l, c \rangle)$ is **modally** accessible from $i (\langle t, w, l, c \rangle)$ iff the world parameter w' of i' is among the most *Similar* worlds to the world w of i .
 d. $\forall i, i' : R_c(i, i') \leftrightarrow \forall P_{\text{grad}} : c'(P_{\text{grad}}) > c(P_{\text{grad}})$
 An index $i' (\langle t, w, l, c' \rangle)$ is **contextual-standard-wise** accessible from $i (\langle t, w, l, c \rangle)$ iff for all gradable predicates P_{grad} , c' of i' yields a higher standard than c of i (i.e. c allows more entities to be included in the positive extension of any P_{grad} than c' .)

estar presupposes that the embedded proposition holds contingently while *ser* remains neutral.

- (7) a. $\llbracket \text{estar} \rrbracket = \lambda P_{\langle s, et \rangle} \lambda x_{\langle s, e \rangle} \lambda i_s : \exists i' [R_p(i, i') \wedge \llbracket P(x) \rrbracket^{i'} = 0]. \llbracket P(x) \rrbracket^i = 1$
 b. $\llbracket \text{ser} \rrbracket = P_{\langle s, et \rangle} \lambda x_{\langle s, e \rangle} \lambda i_s. \llbracket P(x) \rrbracket^i = 1$

Application: *estar* is used with locative predicates as in (1a) because for any i at which the locative predication holds, there is a *modally* accessible index i' (with a w' that is among worlds most similar to w) s.t. the predication is false at i' – this satisfies *estar*’s presupposition. It is used with stage-level predicates (1c-d) and to make temporally restricted claims (2a) because for any i at which the relevant predications hold, there are *temporally* accessible indices i' s.t. the predications are false at i' . The use of *estar* in the spatial cases (e.g. 3a) is licensed by the presence of a *spatially* accessible index at which the predication is false. The use of *estar* to report sensorial experiences and extreme subjective evaluations (4) is licensed by the existence of *modally* accessible indices (with a w' compatible with the pre-experiential doxastic state of the speaker, for instance) at which

the predication is false (i.e. where the property may not hold of the subject referent to as high a degree as observed at the actual index). Finally, *estar* is licensed in cases like (5), because there is a *standard-wise* accessible index i' (with a higher standard c') at which the predication is false.