Decomposing the VP: Aspect, argument structure and the instrumental-subject alternation
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Aims of this paper. This paper focuses on the Aktionsart class of stative causative (StC) verbs in Spanish and proposes that their aspectual and argument-structure differences with change-of-state (CoS) verbs follow from the different structural configurations they instantiate. I also distinguish two main groups of StCs: control-type verbs and surround-type verbs. The latter undergo the instrument-subject (I-S) alternation like CoS verbs, but in their case an aspectual alternation is also involved. I derive these differences from the different L-syntax of surround-type verbs and CoS verbs. This paper is thus meant to be a contribution to the research program that aims to characterize syntactically, as well as constrain, the possible argument structure configurations and the aspectual interpretations that these deliver (cf. Hale & Keyser 2002; Ramchand 2008, a.o.).

Setting the stage. In addition to the classic Vendlerian event types–CoS, activities and simple states–there is a less well-studied aspectual class, StCs, which, despite its stativity, has a causative component that simple states lack. The main lexical classes identified as StCs are: (i) object-experiencer psychological verbs (1a) (Pesetsky 1995); (ii) surround-type verbs (1b) (Kratzer 2000; Rothmayr 2009); (iii) control-type verbs (1c) (García-Pardo to appear). I focus on (ii) and (iii).

(1) a. Storms frighten John.    b. The mountains surround the valley.  c. The army controls the city.

Tests for StCs. The tests for StCs are three: (a) the ability to form APass, unlike activities and simple states (cf. (2)) (Kratzer 2000 for German, García-Pardo to appear for Spanish); (b) the impossibility to drop the internal argument, unlike activities and like CoS verbs (cf. (3)) (Levin & Rappaport 1995 for activities); (c) the impossibility to undergo the (anti-)causative alternation, unlike activities and CoS verbs (cf. (4)). Tests (b) and (c) are novel for StCs. I will not say more about (a) and (b), only that I believe it is the resultative component that StCs and CoS verbs share that explain these facts (see Kratzer 2000; García-Pardo 2014 for an account of APass along these lines and Levin & Rappaport 1995 for the unavailability of result verbs to drop the object).

(2) a. La ciudad está destruida.     (CoS)  b. El museo está vigilado.     (StC)
the city is destroyed                     the museum is surveilled

(3) a. La policía protegió *(el tesoro) (StC)  b. Pedro escribió (varias cartas) (Activity)
the police protected the treasure    Pedro wrote several letters

(4) a. *El tesoro (se) protegió. (StC)  b. El vaso se rompió. (CoS)
the treasure se protected                      the glass broke

Surround-verbs and the I-S alternation. I also observe a split within StC verbs: those that allow the I-S alternation (the surround-type, cf. (5a)), and those that do not (the control-type, cf. (5b)).

(5) a. controlar ‘control’, proteger ‘protect’, gobernar ‘govern’, supervisar ‘supervise’…

The I-S alternation is an argument structure alternation by which a transitive VP can either appear with an agent subject plus an optional instrumental-PP or an instrumental subject with an absent agent, the instrument-subject being interpreted as a causer. There are two types of verbs that undergo the I-S alternation: CoS verbs (cf. (6)) (Dudchuck 2007; Beavers & Koontz-Garboden 2012) and surround-type verbs (cf. (7)) (Rothmayr 2009). Activities and control-verbs can have PP-instruments but no I-S counterpart (cf. (8) and (9)). Simple states do not accept any instruments.

(6) a. Ana rompió la ventana con el balón. (7) a. Pedro cubrió el sofá con una sábana.
   Ana broke the window with a ball.       Perdo covered the sofa with a sheet
   b. El balón rompió la ventana.          b. La sábana cubre el sofá.
A crucial distinction between CoS verbs and surround-verbs in the I-S alternation is that the latter also involve an aspectual alternation: the agent-subject version is dynamic (i.e. it denotes a change of location, cf. (7a)) and the instrumental-subject version is a StC (it does not involve a change of location, cf. (7b)) (Rothmayr 2009). CoS verbs do not alternate aspectually in the I-S alternation: both the agent-subject (cf. (6a)) and the instrument-subject (cf. (6b)) versions are CoS predicates.

**The analysis.** I argue that StCs have a bi-partite VP-structure, with a higher stative VP introducing the external argument, and a lower stative VP introducing the internal argument. The syntactic configuration allows these two states to be read off as causative-resultative (in the spirit of H&K). CoS VPs, on the other hand, are formed by 3 VPs (à la Ramchand 2008): a causative VP, a dynamic VP and a result VP, also interpreted configurationally. I provide examples in (10) for StCs and in (11) for CoS verbs, where $V_{ST}$ is a stative verbal head and $V_{EV}$ is a dynamic verbal head.

(10) a. The army controls the city. (StC) b. $[VP \text{ the city } V_{ST} \sqrt{\text{CONTROL}}]$

(11) a. The army invaded the city. (CoS) b. $[VP \text{ the city } V_{ST} [VP V_{EV} \sqrt{\text{INVADE}}]]$

I assume that the distinction between agents and instrument-causers (i.e. instruments that are interpreted as causes when they are subject) in the I-S alternation is syntactic (Dudchuck 2007): For CoS verbs, agents are introduced by the higher causative $V_{ST}$P and instruments are introduced by the intermediate $V_{EV}$P. The I-S version is then a bare $V_{EV}$P that does not project a high $V_{ST}$P, so it is an anti-causative of sorts whose Aktionsart remains unchanged in the alternation. Let us now look at surround-verbs. I argue that they are articulated by means of a locative PP, which relates a Figure in (Spec,PP) to a Ground complement of P (I thus build their locative meaning in their syntactic structure). This PP can be of central coincidence ([+co]), which is stative and merely relates a Figure and a Ground in space, or of terminal coincidence ([co]), which is eventive and denotes spatial movement of a Figure towards a Ground (cf. Hale & Keyser 2002). Then the causative VP is merged and we will have a change-of-location verb in the case of a PP([co]) (12a) and a StC with a PP([co]) (12b). The Instrumental is in both cases a Figure in (Spec,PP).

(12) a. $[VP \text{ Pedro } V_{ST} [PP \text{ la sábana } [P_{P_{[co]}]} [DP \text{ el sofá }]]]$ (Structure of (9a)) → Agent-subject

b. $[VP \text{ la sábana } V_{ST} [PP \text{ la sábana } [P_{P_{[co]}]} [DP \text{ el sofá }]]]$, (Structure of (9b)) → Instrumental-subject

**Predictions.** This L-syntax structure correctly predicts that the I-S alternation with surround-verbs involves an aspectual alternation: the causative $V_{ST}$P cannot be dropped because the root needs to be verbalized, i.e. we cannot have a bare PP_{[co]}. This account of the I-S alternation also explains why activities and control-verbs do not undergo it: their syntax is not complex enough to host an agent, an instrument/causer and a theme. Crucially, I also predict why StCs never undergo the anti-causative alternation (cf. (4a)): the external-argument introducing head is critically involved in building a StC predicate, by adding a causing state to the event-decomposition, so it must project.