

Degree Cognate Objects with Unaccusative Verbs in English and Spanish

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GOALS: The main goal of this talk is to provide an analysis of cognate objects (CO) with unaccusative verbs in English of the type in (1a) in the light of an as yet unnoticed correlation between these structures and the Spanish construction *V todo lo Vble* in (1b).

- (1) a. The tree grew a century's growth within only ten years. (Kuno and Takami 2004)
b. El árbol creció todo lo crecible.

the tree grow-3sgPast all LO grow-ble (*The tree grew up to the highest possible extent*)

Such unaccusative CO constructions are especially problematic, given the well-established generalization that only unergatives can take a CO (e.g. Keyser & Roeper 1984), and that COs syntactically behave as true objects, even if they semantically appear as adjuncts. I present evidence against previous analyses of the English construction that regard it as an example of a standard cognate object structure, either argumental or adverbial, and suggest a joint treatment of *a century's growth* and *todo lo crecible* as degree phrases.

CLAIM: The verb's event structure, together with the specific type of CO, is crucial to explain these striking data. Specifically, I identify a new type of cognate construction by showing that the cognate phrases in (1) instantiate the (otherwise implicit) degree argument of a gradable predicate, which determines the telicity of the sentence (Kratzer 2002).

ENGLISH UNACCUSATIVE COS: Kuno & Takami (2004) use (1a) to argue against the *Unergative Restriction on the CO Construction*, and suggest a *Functional Constraint on the CO Construction*, which states that (i) only activities or processes can take a CO, and that (ii) the CO must be a possible resultant state of that activity or process. That is, they treat (1a) on a par with standard argumental COs, such as *He smiled a beautiful smile*. Nakajima (2006) analyzes (1a) as an adverbial CO, and assumes that the contrast in (2) is due to the fact that verbs like *grow* may have the potential to assign (pseudo-)accusative case to an adverbial cognate object, which verbs like *occur* lack.

- (2) a. The tree grew a century's growth within only ten years.
b. *The coup d'état occurred a sudden occurrence in the Middle East.

There are a number of problems with these proposals, both theoretical and empirical. Kuno & Takami's constraint does not seem to follow from any more general property of the grammar nor does it establish any relationship between its two subparts. Nakajima's proposal based on Case assignment runs against serious difficulties related to the well-known Burzio's generalization, and misses another pervasive generalization: the use of accusative Case for measure, degree or extent phrases in different languages (Latin, Greek, German, or Finnish). Among the empirical problems, neither proposal accounts for the fact that unaccusative COs of the type in (1a) can only and always be an answer to the very specific *how much* (3), whereas all other COs can be questioned using *what* or *how* (4). According to Pereltsvaig (1999), adverbial COs always express manner and cannot affect the telicity of the event denoted by the main predicate. The examples in (3b) and (5) clearly show that unaccusative COs do not share these properties.

- (3) a. The tree grew a century's growth within only ten years. (Kuno and Takami 2004:116)
b. *What/*How/✓How much did the tree grow?
(4) a. The resting girl dreamed a secret dream. ✓What/*How did the resting girl dream?
b. Harry lived an uneventful life. ✓What/✓How did he live? (Jones 1988:89)
(5) a. The stock market slid in one day / for one day.
b. The stock market slid a surprising 2% slide in one day / *for one day.

SPANISH UNACCUSATIVE COS: There is in Spanish a pleonastic construction *V todo lo Vble*, not previously analyzed in the literature, where, given the right context – and subject to speakers' variability – almost any verb can appear, even prototypical telic unaccusative verbs (6), or degree achievements in (1b).

- (6) En esa familia ocurrió todo lo ocurrible.
in that family occur-3sgPast all LO occur-ble

The interpretation of *V todo lo Vble* varies depending on the type and subtype of verb. *Crece*-type unaccusative verbs in (7) are ambiguous: the cognate phrase can have either a referential denotation, so that it denotes the set of all objects *that can grow* in (7a); or it can express the maximum possible extent or degree to which the event named by the verb takes place in (7b).

(7) Creció todo lo crecible.

- a. *It grew everything that could grow: plants, trees, grass ...*
- b. *Something grew up to the highest possible extent / as much as possible.*

With *ocurrir*-type unaccusative verbs in (6), they can only have a list reading (*It happened everything that could happen, e.g. a puncture, an accident, a delay ...*), but not a degree interpretation (**Something happened a lot (= as much as possible) in that family*).

CROSS-LINGUISTIC COMPARISON: Both languages have an underlying CO configuration that is interpreted as a degree, measure or extent with the same subset of unaccusative degree achievement verbs, which differs from standard CO constructions (Massam 1990; Macfarland 1995), as well as from adverbial COs (Perelstvaig 1999; Rodríguez Ramalle 2003). With these verbs, the presence of quantification is crucial for the grammaticality of the CO (*The stock market slid a surprising *(2%) slide today; El árbol creció *(todo) lo crecible*).

If what we have is a degree cognate phrase, three immediate questions arise: first, the nature of this DegP with verbal predicates; second, where this DegP is realized, whether as an argument or as an adverbial adjunct; and third, how we can account for its cognate nature. Other key questions have to do with the internal structure of the DegP (especially the different realization of the cognate element in the two languages) or accusative Case assignment.

PROPOSAL: Unaccusatives do not license standard COs. The cognate element in (1) essentially correspond to the overt materialization of the otherwise implicit abstract scale with these verbs (Piñón 2000, Kratzer 2002, Rappaport Hovav 2008) that is used to evaluate its progress (Tenny 1994), so that the event can establish a relation of measurement with its theme argument, by assigning some value to it on that scale (e.g. Kennedy 1999; Kennedy and McNally 1999; Kennedy and McNally 2005). The function of this DegP is similar to Kennedy and Levin's (2008) proposal that an explicit extent phrase with degree achievements plays the role of an incremental theme in that it determines the telicity of the predicate. This is possible when the root is unbounded and so it corresponds to an open or non-finite scale, on which the quantifier (Sp. *todo* or Eng. *a century's, a 2%*, etc) can set a terminus. Since quantification happens on an explicit basic scale denoted by the event, we obtain a pleonastic structure. The two languages differ with respect to the nature of the degree variable, overtly realized by a *quantitative lo* (Bosque & Moreno 1990) that ranges over degrees –over entities in the case of *individuable lo* in the referential interpretation–, and is restricted by a modalized adjective in Spanish; sometimes overt (e.g. the superlative in *The stock market dropped its largest drop in three years today*), sometimes non-overtly realized (e.g. (1a)) in English. Equating this degree phrase with an incremental theme explains that no other scale can be introduced in the predication, e.g. **El árbol creció dos centímetros todo lo crecible* 'the tree grew two centimeters all lo grow-ble'; it also predicts that the presence of an incremental theme in object position should prevent its appearance, e.g. **Paula la comió todo lo comible, la cena* 'Paula ate it all lo eat-ble, the dinner'. Additional predictions related to transitive verbs with variable telicity (Kratzer 2002:13) will also be presented. Finally, I will entertain the possibility of a joint treatment of the examples in (1) with Wechsler's (2005) analysis of resultative phrases as denoting degrees along a scale.

References: Kuno & Takami (2004). *Functional Constraints in Grammar. On the Unergative-Unaccusative Distinction*. John Benjamins. / Nakajima (2006). Adverbial Cognate Objects. *LI* 37:674-684. / Perelstvaig, A. (1999). Two Classes of Cognate Objects. *17th WCCFL*, 537-551.