

Cognate Objects and Unaccusative Predicates

It has recently been noted that cognate objects (COs) may occur with unaccusative verbs (Jones 1988; Kuno & Takami 2004; Nakajima 2006), but not all unaccusatives can license COs (de Swart 2007; Oltra Massuet 2011). This paper argues that only unaccusative verbs with *obligatory degree modification* license COs, while *result* unaccusatives do not. This pattern is due to the different functions of the roots underlying these unaccusative verbs: unaccusatives with COs are built from roots that necessarily modify the degree or path of the action, while unaccusatives without COs are built from change-of-state roots. The obligatory degree may be instantiated as a CO, as a *by*-phrase (*drop by 250 points*) or as a complement (*drop 250 points*). This generalization feeds in to the literature on COs in particular and on argument structure in general.

The claim presented here is that COs are nothing but the logical result of different argument structure configurations. This continues a line of work in morphosyntax which attributes differences in interpretation to the interaction of rigid syntactic structure and idiosyncratic root semantics (Harley 2005; Schäfer 2008; Marantz 2009).

The following examples present three kinds of unaccusative verbs: result/change-of-state (1), achievement (2) and motion/activity (3). Only the latter can license COs.

- (1) a. * The candle burned [a thorough burn/burning].
b. * The vase broke [a shattering break/breaking/breakage].
- (2) a. * The train arrived [a punctual arrival].
b. * Three men appeared [a sudden appearance].
- (3) a. The apples fell [just a short fall to the lower deck].
b. The stock market dropped [its largest drop in three years]. (Kuno & Takami 2004:116)

In her recent discussion of unaccusative COs, Oltra Massuet (2011) tried to solve part of this puzzle. For her, achievements as in (2) cannot take Degree Phrases as complements whereas activities like (3) can (*fall three feet, drop 250 points*). However, this only tells part of the story since result verbs as in (1) can also be modified by a DegreeP. In other words, The availability of degree modification in (4-6) does not pattern with the availability of a CO in (1-3):

- (4) The rope burned (by) [three inches / a little bit].
- (5) * The train arrived (by) [three hours].
- (6) The apples fell (by) [three feet].

In the morphosyntactic analyses mentioned above, the root imposes semantic restrictions on the syntactic structure. The reason (1) is ungrammatical is that the verb has one complement, $\sqrt{\text{BURN}}$, and cannot take another (the cognate object). $\sqrt{\text{BREAK}}$ is, in addition, an achievement describing the end state; since the root specifies the end state it cannot also measure the event (cf. the discussion of simultaneous manner and result verbs, as in Beavers and Koontz-Garboden 2012). If we consider the role of the root more closely we find the solution to our puzzle: $\sqrt{\text{ARRIVE}}$ and $\sqrt{\text{APPEAR}}$ describe the end state of the event, but say nothing about its *path* (much like *break*). The nominal forms *arrival*, *appearance* make no claims about the degree, only the result. Hence no degree modification is possible and COs are ruled out as well. In contrast, a *fall* and a *drop* do specify the degree, since in *fall* and *drop* the root is already associated with the path. Spelling out a degree or path is virtually obligatory (7) and this can be done with a CO (8) or with another DegreeP (9).

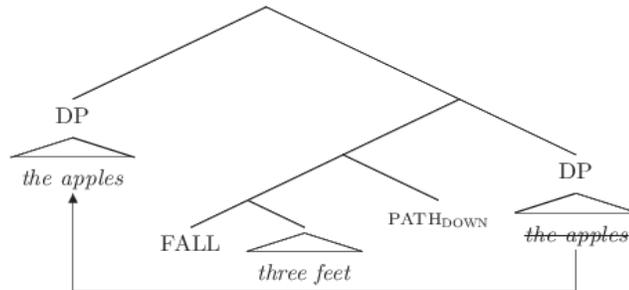
- (7) ? The stock market dropped.
- (8) The stock market dropped [a 250 point drop]. (Nakajima 2006:676)
- (9) The stock market dropped (by) [250 points].

This DegreeP is not required nor does it exist for the achievement unaccusatives in (2), as they imply a *place* rather than a *path* (Irwin 2012):

- (10) The train arrived.
 (11) Three men appeared.

The conclusion is that this kind of CO is simply another DegreeP. Since the DegreeP is a licensed complement but not a canonical direct object (Jones 1988; Nakajima 2006), we treat it here as a complement to the underlying object.

(12) Schematically:



Other DegreeP and PathP structures have also been proposed (e.g. Folli & Harley 2006; Ramchand 2008), and we do not argue here for a specific implementation. The point is simply that the CO is a side effect of these configurations: an interaction of roots and their complements. Cross-linguistically, COs should be available for unaccusative predicates to the extent that the latter mark paths, but independent factors may influence availability of Cos in the language in general.

References

- Beavers, John and Andrew Koontz-Garboden (2012) Manner and Result in the Roots of Verbal Meaning. *Linguistic Inquiry* 43(3):331–369.
- Folli, Raffaella and Heidi Harley (2006) On the licensing of causatives of directed motion: Waltzing Matilda all over. *Studia Linguistica* 60(2): 121–155.
- Harley, Heidi (2005) How do verbs get their names? Denominal verbs, manner incorporation, and the ontology of verb roots in English. In *The Syntax of Aspect*, Nomi Ertschik-Shir and Tova Rapoport (eds.) Oxford: Oxford University Press, 42–64.
- Irwin, Patricia (2012) Presentational unaccusativity: Argument structure and information status. In *Information Structure and Discourse: In Memory of Ellen F. Prince*. LSA Annual Meeting.
- Jones, Michael Allan (1988) Cognate Objects and the Case-filter. *Journal of Linguistics* 24(1):89–110.
- Kuno, Susumu and Ken-ichi Takami (2004) *Functional constraints in grammar: On the unergative-unaccusative distinction*. Amsterdam: John Benjamins.
- Marantz, Alec (2009) Resultatives and Re-Resultatives: Direct Objects may Construct Events by Themselves. *Penn Linguistics Colloquium*.
- Mittwoch, Anita (1998) Cognate objects as reflections of Davidsonian event arguments. In Susan Rothstein (ed.), *Events and Grammar*, Dordrecht: Kluwer, 309–332.
- Nakajima, Heizo (2006) Adverbial Cognate Objects. *Linguistic Inquiry* 37(4): 674–684.
- Oltra Massuet, Isabel (2011) Degree Cognate Objects with Unaccusative Verbs in English and Spanish. *GLOW 34*, Vienna.
- Ramchand, Gillian (2008) *Verb Meaning and the Lexicon: A First Phase Syntax*. Cambridge Studies in Linguistics, Cambridge: Cambridge University Press.
- Real Puigdollers, Cristina (2008) The nature of cognate objects. *ConSOLE 16*, Paris, 157–178.
- Schäfer, Florian (2008) *The Syntax of (Anti-)Causatives*. Amsterdam/Philadelphia: John Benjamins.
- de Swart, Peter (2007) *Cross-linguistic Variation in Object Marking*. Ph.D. thesis, Radboud Universiteit Nijmegen.