

Introduction: It is known that certain predicates are apparently robustly transitive, and strongly resist intransitive or null-object usages: (1a). At the same time, obligatory objects like amount argument above can be made to be obligatorily absent in certain contexts: (1b).

- (1) a. The Iron Man sequel **grossed** *(\$625million).
 b. Each Marvel sequel has **out-grossed** (*\$625million) **its predecessor** (*\$625million).

(1) is representative of a general pattern that we call *out-PRED*, whose hallmark properties are the addition of an *out-* prefix, and the apparent suppression of PRED’s internal argument(s). This talk aims to answer the following: **What licenses this internal argument suppression, and what are its syntactic limits?**

New Generalizations: There are four generalizations that can be made about out-PRED:

- (2) **Gen.1** Whatever irregular forms PRED has, out-PRED inherits those same forms.
Gen.2 out-PRED can always be passivized, even if PRED cannot be.
Gen.3 None of PRED’s internal argument(s) can surface with out-PRED.
Gen.4 If PRED depends on an internal argument to receive proper interpretation, out-PRED is impossible.

Gen.1, exemplified in (3), implicates that out-PREDS cannot be entirely separate listemes in the lexicon (Keyser and Roeper 1984), and must be (morphosyntactically) built upon PRED.

- (3) a. outrun + -ed = *outran*, **outrunned*
 b. outdo + -s = *out[dʌz]*, **out[duz]*

This is perhaps surprising, as out-PRED has a radically different argument structure than PRED – cf. **Gen.2**. While *number* cannot passivize, *out-number* can:

- (4) a. By mid-September, they **numbered** 10,000.
 b. *By mid-September, 10,000 were **numbered** by them.
 (5) a. By mid-September, they **out-numbered** us.
 b. By mid-September, **we** were **out-numbered** by them.

Thus PRED is morphologically active, (3), but not syntactically active ‘enough’ to determine passivizability, (5). Another putative lexical property of a PRED is its internal argument. Recall that internal arguments of PRED are obligatorily absent in out-PRED – **Gen.3**. This is true for transitives, (1), and unergatives and ditransitives, (6)–(7).

- (6) a. Mike **danced** (a good dance).
 b. Mike **out-danced** (*a good dance) **Janet** (*a good dance).
 (7) a. Jackie **donated money to museums**.
 b. Jackie **out-donated** (*money) (*to museums) **Lisa** (*money) (*to museums).

At the same time, there are limits as to which predicates an occur as the PRED for an out-PRED. Consider *cook* with an idiomatic usage or a change-of-state (CoS) unaccusative usage:

- (8) a. i. Julie **cooks meals** better than Lee. (literal transitive)
 ii. Julie **out-cooks Lee**.
 b. i. Julie **cooked the books** better than Lee. (idiomatic reading)
 ii. # Julie **out-cooked Lee**.
 c. i. **Tofu cooks** better than tempeh. (CoS unaccusatives)
 ii. * **Tofu out-cooks tempeh**.

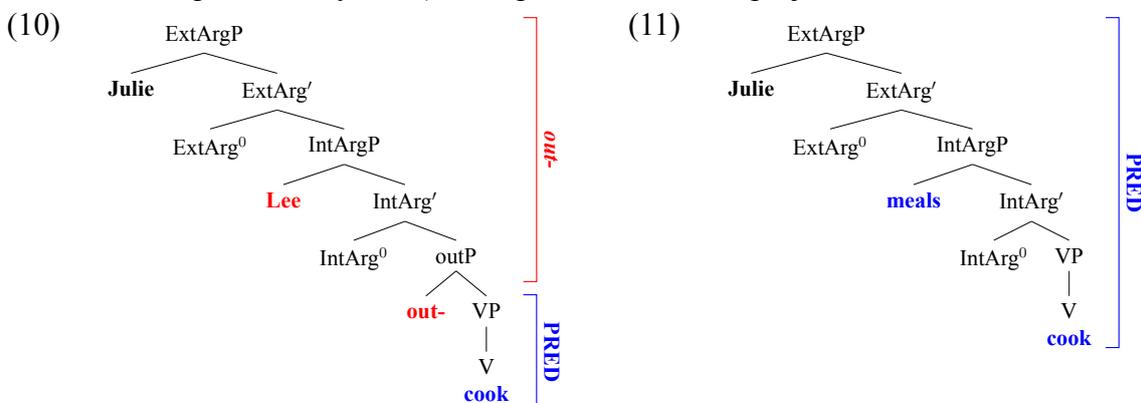
The idiom *cook the books* (‘keep false financial records’) requires *books* as an internal argument. (It may later move; cf. *The books were cooked*, which preserves the idiomatic reading.) The lack of idiomatic reading in (8b.ii) suggests that *the books* is completely absent from the derivation of (8b.ii). On the other hand, (8c.ii) is more challenging, especially in light of the fact that out-PRED can occur with an unaccusative PRED, with the internal argument of the PRED as the

subject of out-PRED:

- (9) Basketballs out-bounce baseballs. [Keyser and Roeper 1984]

Analysis: Together the **Gen.s** in (2) show that, while PRED is active in the derivation of out-PRED, the internal argument is missing. In this way, we can see *out-* prefixation is a case of morphosyntactically controlled “argument suppression” (similar to passives/middles/unaccusatives). This type of syntactic “suppression” of an argument has been modeled as failure to merge the head that introduces that argument. In cases of a missing external argument (e.g., unaccusatives), the external-argument introducing head is simply not merged (e.g., Chomsky 1995). This is made possible by the fact that external arguments are introduced by a head that is separate from the lexical predicate (e.g. Hale and Keyser 1993, Kratzer 1996, Pyllkkänen 2002, Harley 2013).

The structure in (10) accounts for missing internal arguments similarly: PRED’s structure is truncated (compared to transitive cases), missing the XP in the extended projection in which an internal argument would be merged, which is crucially not the VP itself (see also Borer 2005, Alexiadou 2014; *pace* Harley 2014). Compare the extended projections of *out-* and PRED:



Instead, the syntactically present arguments are introduced in the extended projection of *out-*. This is why all out-PRED verbs are passivizable (**Gen.2**): passivization is sensitive to argument structure, and the argument structure of out-PRED is governed by *out-* and not by PRED.

Returning now to **Gen.4**: we can understand this as a constraint on interpreting heads and their complements together:

- (12) For CoS predicates (Rappaport Hovav 2008) or Verb+Object idioms (Marantz 1997), the predicate and its internal argument must be interpreted together.

The domain of interpretation for semantics is determined with respect to syntax and locality: this domain for a predicate includes any internal arguments it projects in its argument structure (Borer 2013, Harley 2014b). Given that PRED essentially lacks argument structure, it must not include the internal argument of out-PRED. In this way, *cook* in (8b) is not interpreted with *the books*, and *cook* is not interpreted with *tempeh* in (8c), violating (12). Non-CoS unaccusatives do not need to adhere to constraints like (12), allowing for *out-* prefixation as in (9).

Conclusions: The generalizations outlined here implicate that **internal arguments are regularly merged outside of the syntactic projection that includes the lexical predicate** (extending earlier findings on CoS predicates’ internal arguments; e.g., Cuervo 2003). This predicts such arguments to be ‘suppressable’ (i.e. not merged) in the same way as external arguments – English out-PRED exemplifies this. Most broadly, this suggests that syntactic argument structure is more transparently neo-Davidsonian, in that each (apparent) argument of a lexical predicate is in fact introduced by unique functional heads (cf. Lohndal 2012).

Selected Ref.s: [Borer 2013] The syntactic domain of content. In *Generative linguistics and acquisition*. [Harley 2014] On the identity of roots. *Theoretical Linguistics* 40. [Keyser&Roeper 1984] On the middle and ergative constructions in English. *LI* 15. [Lohndal 2012] Without specifiers: Phrase structure and events. PhD thesis.