

## Word order in resultatives

This paper puts forward a theory of basic word order in resultative constructions, such as English *pound the cutlet flat*.

Across languages there are two sorts of variation in the relative position of the direct object O (*the cutlet*), the predicate M that describes the means of causation (*pound*), and the predicate R that describes its result (*flat*), in the basic surface word order. Among VO languages, some have O between M and R, while others have O following the sequence of both predicates. Among OV languages, some have M following R in the basic order, while others have the reverse.

Based on a broad survey of languages—including English, German, Japanese, Malayalam, Paamese, Ambae, Igbo, Edo, Ijò, Vietnamese, Mandarin, Shanghainese, and Nosu Yi, among others—I conclude that both choices are decided by the size of R, head or phrase. When R is constrained to be a lexical head, the basic order is MRO in VO languages and OMR in OV languages. When R is a phrase, free to contain modifiers, the basic order order is MOR in VO languages and ORM in OV languages. Contrary to some suggestions in the literature (e.g. Washio 1997, Nishiyama 1998, Carstens 2002), the distributional category of R, verbal or otherwise, seems to be irrelevant.

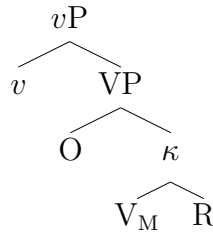
This pattern is best explained, I then argue, given three assumptions. First, as is often supposed, resultatives have an underlying syntax roughly like (1). The direct object is outside the complex predicate, *c*-commanding the lowest node  $\kappa$  that dominates both M and R, and M comprises just the lexical means verb. Second, the least embedded zero-level head in VP necessarily raises to *v*. When R is phrasal, this will be just the means verb  $V_M$ . But when R is a head, it will be the complex predicate  $\kappa$ , since  $\kappa$  will then be a zero-level category itself. Third, when M and R do form a single complex head, this head is linearized with M preceding R, universally.

The observed pattern then follows, given that *v* precedes VP in a VO language and follows it in an OV language. MOR and MRO orders in a VO language have the same derivation as ORM and OMR orders in an OV language, respectively. And unattested orders (e.g. MOR order when R is not phrasal) are ruled out by perfectly general principles of locality in head movement: an  $X_o$  can't raise out of a complex  $X_o$  that contains it.

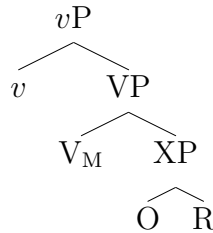
Alternative assumptions fail to explain the pattern with equal simplicity. In particular, if we assume not (1) but the “Small Clause” syntax in (2) (Kayne 1985, Hoekstra 1988, Kratzer 2004), the data require fantastically ad hoc restrictions on head movement.

In concluding I observe that the explanatory success of the ‘external object’ syntax in (1) strongly supports an ‘external patient’ semantics for resultatives, like (3). Here the object is assigned a thematic relation to the event of the complex predicate, independently of any relation to the events of its components, as argued recently in e.g. Goldberg and Jackendoff 2004, Pietroski 2005, and Williams 2005. This runs counter to the conventional semantics (e.g. Dowty 1972, Levin and Rappaport 1995), where the object has thematic relations only to event of R, and possibly to that of M. Consequently the pattern of word order in resultatives supports the antilexicalist claim that thematic relations need not be introduced lexically by a verb, but may be introduced by syntactic structure (Carlson 1984, Schein 1993, Goldberg 1995, Kratzer 1996, Borer 2003).

(1)



(2) \*



(3)  $\llbracket [ O [ M R ] ] \rrbracket$   
 $= \mathcal{R}(e, e_m, e_r) \wedge \text{Patient}(e) = \llbracket O \rrbracket \wedge \llbracket M \rrbracket(e_m) \dots \wedge \llbracket R \rrbracket(e_r) \dots$

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