

Focus effects on particle placement in English and the left periphery of PP (General Conference)

This paper examines topic and focus effects on variation between particle-object (“continuous”) and object-particle (“discontinuous”) word orders in English particle verb constructions, as in (1). Several authors have reported that given objects in English favor the discontinuous order, while objects with new information focus favor the continuous order (Bolinger 1971, Svenonius 1996, Kayne 1998, Dehé 2000, 2002). Svenonius (1996), for instance, reports that, as an answer to the object wh-question in (2a), the continuous order is preferred and the discontinuous order dispreferred for many speakers. In contrast, as an answer to the question in (2b) where the object is given, speakers often prefer the discontinuous order.

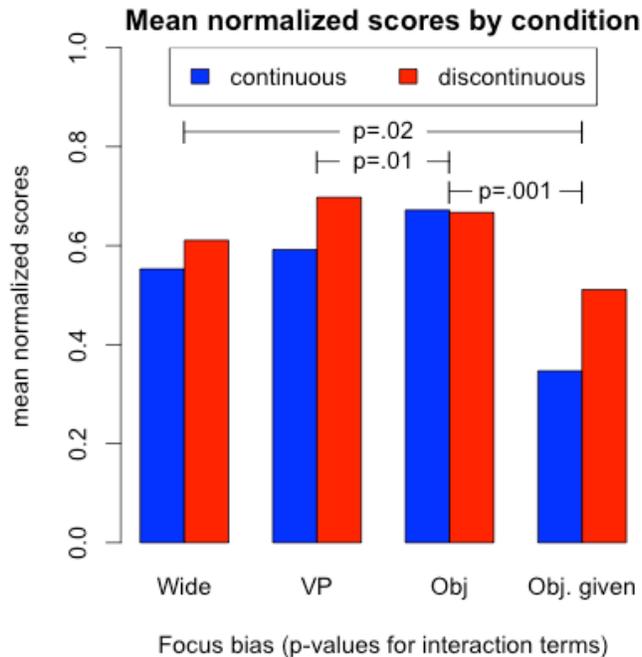
- (1) a. She turned off the light. (continuous order) b. She turned the light off. (discontinuous order)
(2) a. Q: Who will you pick up? A: I’ll pick (?the girls) up (the girls).
 b. Q: How are Turid and Ingrid going to get here? A: I’ll pick (the girls) up (?the girls).

Three main approaches to these facts have been proposed in the literature. Svenonius (1996) suggests that the effects in (2) are “stylistic and extragrammatical”, an approach relatable in spirit to processing-based accounts of given vs. new-information effects on the dative alternation (Arnold et al. 2000, Bresnan and Ford 2010). Kayne (1998) proposes a Focus head above VP to which focused objects are attracted. Remnant movement of the VP containing the verb+particle produces the discontinuous order; the discontinuous order is derived by extraction of the particle to a position below Focus before VP raising. (Kayne does not spell out an account of the deviance of the latter order.) The third and most extensive treatment of the effects in (2) is by Dehé (2002) who proposes that the continuous order is the “neutral” order in that it is derivationally prior and corresponds to a sentence-wide focus interpretation. Dehé’s generalization is that objects must only appear in the discontinuous order when they are defocused and within a syntactic domain bearing focus (as in (2b) where a given object is inside a focused VP); the continuous order will be preferred otherwise. (Dehé’s explains this effect in terms of a focus feature “binding” constraint, details of which we omit here.) In support of the above generalization, Dehé reports on two experiments, one testing word order preferences in contexts without topic/focus interpretation biases, and another examining pitch ranges for objects in different word order conditions. As Svenonius (2005) notes, however, neither set of results illuminates the effect of focus on word order, since topic/focus interpretation is not biased directly, or is confounded with word order.

We report on a judgment experiment that tests focus effects on particle placement by biasing new vs. old information interpretations directly. Subjects were 125 undergraduates at a U.S. university, native speakers of American English. The experiment crossed two factors: word order (continuous vs. discontinuous) and focused constituent. We biased focus readings with a preceding wh-question focusing four kinds of constituents with non-idiomatic verbs, as in (3)-(6). 32 lexicalizations were created for each of these 8 conditions, blocked and assigned to lists by Latin square; subjects saw each condition 4 times. Subjects, assigned randomly to lists, judged 32 experimental sentences and 32 fillers on an 11-point scale.

- (3) Q: What happened? A: Ann cut (the tree) down (the tree). (Sentence-wide focus)
(4) Q: What did Ann cut down? A: Ann cut (the tree) down (the tree). (Obj. focus)
(5) Q: What did Ann do? A: Ann cut (the tree) down (the tree). (VP focus)
(6) Q: What happened to the tree? A: Ann cut (the tree) down (the tree). (Wide focus, Obj. given)

The results revealed no support for Dehé’s claim that continuous orders are preferred in “neutral” sentence-wide focus and VP-focus contexts. Subjects showed no preference in the former case ($p=.19$); for the latter, the opposite effect reached significance ($p=.002$). In addition, the results revealed significant order*focus interactions comparing VP-focus with narrow object focus sentences ($p=.01$), wide focus with given-object sentences ($p=.02$), and given-object with object focus sentences ($p=.001$, see figure, all other interaction p ’s $>.1$). The first of these interactions is unexplained by Dehé’s approach, which predicts interactions only with the given-object condition. Similarly, Kayne’s (1998) low Focus approach leaves unexplained the dispreference for continuous orders with given objects.



The results indeed align with “focus-last” processing approaches (Arnold et al. 2000). We propose, however, that these effects are rather grammatical in nature, relating to topic and focus effects on word order in other syntactic domains. Specifically, we assume that gradience and cross-speaker variation in these judgements reflects competition between two different representations for particle verb structures (Kroch 1989), one (Grammar 1) where topic and focus are marked prosodically, with no effect on particle placement, and a second (Grammar 2) with Topic and Focus heads atop the extended projection of P attracting topic- and focus-marked constituents. (See Rizzi 1997, Belletti 2004 and Aboh et al. 2010 on Topic/Focus layers in CP, vP and DP respectively.)

Following Svenonius (2004, 2007), we assume that in both grammars, the object is

introduced as the specifier of a case-deficient p head that takes a PP complement, and attracts P in a way parallel to V-to-v movement. The availability of both continuous and discontinuous orders in wide-focus and VP-focus contexts indicates that the object-particle word order variation is partly independent of contrasting topic/focus values on the object and particle. We propose that this variation is related to optional incorporation of P-p to a C-place head as in (7) (den Dikken 2010), a process plausibly related to the deficiency of p as a case assigner in particle verb constructions (Levinson 2011).

(7) [_{C-placeP} (down-p)-C [_{pP} the tree [_{p'} (down)-p [_{PP} <down>]]]]

The figure shows a slight preference for discontinuous orders in VP- and wide focus contexts where the object and particle share the same topic/focus values. In given-object and object focus sentences, this preference will be affected by competition with Grammar 2, which will differ from Grammar 1 in having Topic and Focus heads merged atop the structure in (7). In Grammar 2, in a given-object sentence like (6), the [FOC]-bearing preposition moves to FocP, and the [TOP]-bearing object raises to the higher TopP, yielding the particle-object order, as in (8). In sentences with narrow object focus, the object raises to FocP and the defocused particle raises to TopP as in (9). In sentences with VP- or sentence-wide focus, C-placeP containing the object and particle will bear [FOC] and this constituent will raise to FocP, with its contents ordered object-particle or particle-object depending on p/P-incorporation, as in (7).

(8) cut [_{TopP} the tree_[TOP] [_{Top'} Top [_{FocP} down_[FOC] [_{Foc'} Foc [_{C-placeP} <the tree down>]]]]] (Object given)

(9) cut [_{TopP} down_[TOP] [_{Top'} Top [_{FocP} the tree_[FOC] [_{Foc'} Foc [_{C-placeP} <the tree down>]]]]] (Object focus)

(10) cut [_{FocP} [_{C-placeP}(down) the tree (down)_[FOC] [_{Foc'} Foc <(down) the tree (down)>]]] (Wide/VP focus)

The data therefore support an analysis suggesting that recently proposed structural parallelisms between the extended projection of P and those of V and N (Svenonius 2007, den Dikken 2010, Levinson 2011) may also extend to left-peripheral discourse functional projections.

Selected references: Dehé, N. 2002. *Particle Verbs in English: Syntax, Information Structure, and Intonation*. Amsterdam: Benjamins. Kayne, R.S. 1998. Overt versus Covert Movement. *Syntax* 1, 128-191. Levinson, L. 2011. Possessive WITH in Germanic: HAVE and the role of P. *Syntax* 14, 355-393. Svenonius, P. 1996. The optionality of particle shift. *Working Papers in Scandinavian Syntax* 57: 47-75.