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In West Germanic languages such as German, Dutch, Frisian, Afrikaans, and Yiddish, separable-prefix constructions like those in (1-2) are relatively common (Yiddish, from Talmy 1987, German, from Zeller 1999):

- (1) a. Ix hob arayn-geschtoxn a dorn in ferd
  - I have R.in-stuck a thorn in the horse
  - b. Ix hob ayn-geschtoxn dos ferd mit a dorn

    I have in-stuck the horse with a thorn
- (2) a. Er lädt die Koffer ab. he loads the suitcases off
  - b. Er lädt den Gepäckwagen ab. he loads the baggage.cart off

he loads the baggage.cart off
In basic thematic terms, the 'thorn' or the 'suitcases' is the Theme or Figure of the prefix/particle P, while the 'horse' or the 'baggage cart' is the Location or Ground (the thorn goes in the horse, the suitcases go off the cart).

While verb-particle constructions of the type in (1a)/(2a) are freely formed, the type represented by (1b)/(2b) is far rarer in North Germanic languages such as Swedish, Danish, Norwegian, Icelandic, and Faroese, and is also highly restricted in English. In (3-4) this is illustrated using English and Norwegian.

- (3) a. I have stuck a thorn in.
  - b. \* I have stuck the horse in.
- (4) a. Han laster koffertene av. he loads the suitcases off
  - b. \* Han laster bagasjevognen av. he loads the baggage.cart off

The parameter cuts across the historical WG/NG divide since English patterns with the NG languages; it cuts across the VO/OV division since Yiddish patterns with the OV languages; and it cuts across the m-case/no m-case parameter since German and Icelandic have m-case, but differ on this score, while Dutch and Mainland Scandinavian lack m-case, and similarly differ. For convenience I will refer to the two groups as WG-E and NG+E.

I analyze this and other variation in the verb-particle/separable prefix construction in terms of the functional properties of the extended projection of P. In brief, what separates the languages in (1-2) from those in (3-4) is the degree to which the extended projection of P licenses a DP: NG+E has a licensing possibility which WG-E lacks. Though licensing manifests itself in the form of case, I assume that licensing is not purely formal, but is reflected in the thematic/aspectual interpretation of a DP. The case-licensed DP is then thematically independent and can, for example, be A-bar moved (preposition stranding). In WG-E, on the other hand, case-licensing is not available in the lowest projection of PP, but only higher up; but the resulting structure creates an island for DP extraction (cf. (5c) below), so that A-bar movement is impossible. This leads to the wellknown situation in which A-bar movement is mediated by R-pronouns in WG-E. What happens in (1b)/(2b), I argue, is that the DP enters the V domain for its thematic interpretation, and is then interpreted as an argument of the verb, with the syntax of a direct object. This parameter also leads to postpositional structures in WG-E. Since Case is linked to thematic/aspectual interpretation on this account, there are no purely uninterpretable features.

More specifically: Following recent work by Borer and others, certain thematic entailments which were formerly analyzed as inherent in the verb have been deconstructed into functional structure above the verb. Thus, for example, the measuring-

out effect observed with an incremental theme comes from a licensing head dominating VP and contributing aspectual information: a DP in the licensing domain of Asp<sub>E</sub>P is interpreted as a measure, in the sense that the event introduced by V is mapped onto some salient property of that DP (Krifka 1992, Ramchand 1995); and that DP gets accusative case.

I extend this view to the rich microparametric variation in the Germanic P system: the locative versus directional interpretations of prepositions and particles, as well as various other primitive aspects of the meaning of PPs in Germanic, are mediated by functional structure above P: a DP in the licensing domain of PlaceP is interpreted as a Location, in the sense that the spatial relation introduced by P is fixed with that DP or some salient property of it as its Ground (in Talmy's sense); when this happens, that DP gets Dative case.

Consider the following partial paradigm for PathPs (cf. van Riemsdijk 1990, Koopman 2000):

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(5) a. Ice. [P_{\text{PathP}} \text{ inn } [P_{\text{PlaceP}} \text{ i húsið}]] -- no movement --> [P_{\text{PathP}} \text{ inn } [P_{\text{PlaceP}} \text{ i húsið}]] b. Eng. [P_{\text{PathP}} \text{ to } [P_{\text{PlaceP}} \text{ in the house }]] -- [P_{\text{AthP}} \text{ in } [P_{\text{PlaceP}} \text{ in die huis }]] -- [P_{\text{AthP}} \text{ in } [P_{\text{PlaceP}} \text{ in die huis }]] represent --> [P_{\text{PathP}} \text{ in die huis }] in [P_{\text{PlaceP}} \text{ in die huis }] represent --> [P_{\text{PathP}} \text{ in die huis }] represent --> [P_{\text{PathP}} \text{ in die huis }] represent --> [P_{\text{PlaceP}} \text{ in die huis }]
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In Icelandic, PlaceP is licensed and interpreted in situ, as it is in English (with head movement), but in Afrikaans, PlaceP must move to a higher specifier position. Following Koopman 2000, movement of PlaceP is regular in WG-E, though the fact that Path° is often empty obscures this. To simply claim a strong ("EPP") feature to force movement would fail to capture the other differences between WG-E and NG+E. Instead, I propose that this movement is forced by the need for a thematic/aspectual interpretation for DP (case licensing); PlaceP provides this in NG+E, not in WG-E; thus, in the latter, the DP must raise into a higher licensing domain; since this movement is driven by interpretation, and since the PlaceP (not the DP) is the terminus of the Path, PlaceP is pied-piped.

Null Place° with recoverable interpretive content (e.g. when Place° moves to Path°) leads to a postposition, in WG-E. If Place° has too little content, then DP will need to move into the domain of V for thematic/aspectual interpretation, as it does in (1b)/(2b). Movement of Place° to Path° (cf. (5b) above) often obscures the distinction between them, especially when one or the other is null, but when the two heads can be distinguished it is the Path head which appears in the Ground-type separable prefix construction (cf. (1)).

This account handles a numerous points of narrow parametric variation within the Germanic languages, including the fact that Norwegian, Icelandic, and English have optional particle shift, as does Dutch following Taraldsen 2000 (although the shifted particle only appears to the left of the auxiliary there because the direct object is higher), whereas Danish and Afrikaans do not, and Swedish has obligatory particle shift (the crucial data is more difficult for German, Yiddish, and Faroese). This is handled in terms of a resultative functional head above the extended projection of P but below V, into which P may move (cf. Folli & Ramchand 2001).

Borer 2000 treats thematic-type information as compositionally contributed by different atoms of the functional structure, which interact during the course of the derivation. This departs from e.g. Chomsky 2001, where thematic interpretation is systematically different from other aspects of interpretation, in being contributed only by Pure Merge and not by Remerge or Move. The proposal laid out here resembles Borer's, since it allows, for example, the DP in (3a) to simultaneously be 'an argument' of *in* and of *stuck*, a long-standing issue for small clause analyses of verb-particle and resultative constructions (cf. e.g. Hoekstra 1984). However, the account here is not equivalent to one in which the same DP can receive multiple theta roles (as in Jackendoff 1972, or in a different context, Hornstein 2000). This is because the notion of thematic role is decomposed into component parts (cf. Krifka 1992).