

A Unified Account of English Double Complement Constructions: In Defense of an Alternative Projection Approach

Masumi Iwai and Masaki Yasuhara

English double complement constructions have two variants:

- (1) a. John gave Mary a book.
- b. John gave a book to Mary.

The variant in (1a) is called a double object (henceforth DO) variant, and that in (1b) a prepositional dative (henceforth PD) variant.

There are two very distinct sides to the analysis of double complement constructions, the transform approach and the alternative projection approach (Harley (2002)). The transform approach, following the Uniformity of Theta Assignment Hypothesis (Baker (1988)), assumes a derivational relation between the two variants (e.g. Dryer (1986), Larson (1988, 1990), Aoun and Li (1989), Oba (1993, 2002), Baker (1997), Takano (1998), Kaga (2007), Ogawa (2008)). Larson (1988), for example, argues that the DO variant (e.g. (1a)) is derived from the PD variant (e.g. (1b)). This approach, if successful, is significantly elegant because it provides a unified account of the two distinct variants of double complement constructions. Unfortunately, the derivational relation between the two variants is not tenable in the Minimalist Program; regardless of the orders of derivations, in (1), the preposition *to* has to be added or deleted in the course of computation, a clear violation of the Inclusiveness Condition (Chomsky (1995)). The alternative projection approach, on the other hand, does not assume a derivational relation between the two variants, stating that each is associated with a distinct syntactic structure (e.g. Pinker (1989), Goldberg (1995), Pesetsky (1995), Harley (1996, 2002), Beck and Johnson (2004), Rappaport and Levin (2008), Bruening (2010), Janke and Neeleman (2012)). Consequently, no violation of the Inclusiveness Condition results, at the risk of giving up a unified analysis.

The purpose of this paper is to support the alternative projection approach without resorting to distinct syntactic analyses of double complement constructions. We argue that it is correct in that there is no derivational relation between a DO variant and a PD variant, with each associated with a distinct syntactic structure. We believe that the aim of this paper is successfully achieved by identifying the same syntactic derivation that underlies the two variants of double complement constructions and that does not refer to the derivational relation between them. More precisely, assuming the split vP analysis, we argue that the preceding

complements of the two variants (i.e. *Mary* in (1a) and *a book* in (1b)) are base-generated in the specifier position of VP, and the following complements (i.e. *a book* in (1a) and *Mary* in (1b)) in the complement position of V. The preceding complements and the following complements occur in the DP₂ position and the XP position in (2), respectively.

$$(2) \quad [_{\text{VP}} \text{DP}_1 [_{\text{v}} \text{v} [_{\text{VP}} \text{DP}_2 [_{\text{v}} \text{V XP}]]]]$$

Our analysis provides a unified account of the two variants of double complement constructions, because their base-structures share the same syntactic structure. It is in conformity with the alternative projection approach, as the two variants are not in a derivational relation. The base-structures of the two variants are as follows:

$$(3) \quad \begin{array}{ll} \text{a.} & [_{\text{VP}} \text{DP}_1 [_{\text{v}} \text{v} [_{\text{VP}} \text{DP}_2 [_{\text{v}} \text{V DP}_3]]]] \quad (\text{DO variants}) \\ \text{b.} & [_{\text{VP}} \text{DP}_1 [_{\text{v}} \text{v} [_{\text{VP}} \text{DP}_2 [_{\text{v}} \text{V PP}]]]] \quad (\text{PD variants}) \end{array}$$

Our analysis is in clear contrast to the small clause analyses of double complement constructions (or DO variants) in the alternative projection approach (e.g. Pesetsky (1995), Harley (2002), Beck and Johnson (2004)). Although the details are different, it is fair to say that the analyses of these researchers make the same predictions about double object constructions. In the following discussion, we take up Beck and Johnson's (2004) analysis for convenience. They propose that a DO variant is associated with a split vP shell with a small clause (i.e. (4a)), whereas a PD variant has a split vP shell without a small clause (i.e. (4b)).

$$(4) \quad \begin{array}{ll} \text{a.} & [_{\text{VP}} \text{DP}_1 [_{\text{v}} \text{v} [_{\text{VP}} \text{V} [_{\text{XP}} \text{DP}_2 [_{\text{X}} \text{X DP}_3]]]]] \quad (\text{DO variants}) \\ \text{b.} & [_{\text{VP}} \text{DP}_1 [_{\text{v}} \text{v} [_{\text{VP}} \text{DP}_2 [_{\text{v}} \text{V PP}]]]] \quad (\text{PD variants}) \end{array}$$

They state that the small clause head X is the source of the meaning of possession.

As is evident from the comparison between (3) and (4), our analysis and Beck and Johnson's (2004) small clause analysis are crucially different in the treatment of DO variants; the former gives a split vP analysis of DO variants without assuming a small clause, providing a unified account of double complement constructions, whereas the latter assumes a split vP analysis in combination with a small clause, giving a non-unified account of them. Accordingly, our analysis and Beck and Johnson's analysis make distinct predictions about the syntactic and semantic properties of DO variants. Specifically, our analysis predicts symmetric properties

between the two variants, while Beck and Johnson's analysis expects asymmetry. In the rest of this paper, we show that the two variants in fact show symmetric properties, which point to the inadequacy of the small clause analysis, and to the conclusion that a single derivational mechanism (i.e. (2)) underlies the two variants of double complements constructions, in favor of our analysis.

Firstly, Beck and Johnson (2004) predict that the DO variants (but not the PD variants) entail successful transfer of possession, which is assumed to come from the small clause head. However, this is not the case. The presence or absence of this entailment is crucially determined by the types of verbs; verbs that lexically express possession exhibit the successful transfer entailment regardless of whether they occur in the DO variants or in the PD variants (Rappaport and Levin (2008:146)).

- (5) # My aunt { gave / lent / loaned } some money to my brother for new skis, but he never got it.
- (6) # My aunt { gave / lent / loaned } my brother some money for new skis, but he never got it.
- (7) a. Max offered help to the victims, but they refused his offer.
b. Sarah promised her old car to Catherine, but then gave it to her son instead.
- (8) a. Max offered the victims help, but they refused his offer.
b. Sarah promised Catherine her old car, but then gave it to her son instead.

The verbs *give*, *lend* and *loan* lexically include possession, regardless of whether they occur in the PD variants (5) or in the DO variants (6); denying the successful transfer of possession results in the oddness of the sentences. In the cases of the verbs *offer* and *promise*, which do not lexicalize possession, this interpretation can be denied, whether they appear in the PD variants (7) or in the DO variants (8). Note that our analysis does not encode the possession meaning in the syntax; the absence of this entailment in (7) as well as (8) naturally follows.

The second prediction is relevant to island effects. The subject of a small clause is known to constitute an island for extraction. Accordingly, Beck and Johnson's analysis predicts that the indirect object of a DO variant also constitutes an island, as shown (Beck and Johnson (2004:102)):

- (9) a. What did you send [a book about] [to my friend]?
b. * Who did you send [a friend of] [a book]?

The unacceptability of (9b), however, seems to be due to the difficulty of processing

the sentence (Amano (1998:413)). This observation allows us to say that the apparent island effect does not support the small clause analysis of DO variants. Further, Hudson (1992:258) reports that the following sentence is licit:

- (10) Which book shall we give [the author of] [a prize]?

The data suggest the symmetry between the two variants (9a) and (10).

The last prediction is concerned with the presence or absence of the syntactic encoding of possession. It has been observed that there is an animacy restriction on the indirect object of DO variants (Beck and Johnson (2004:103)).

- (11) a. Satoshi sent the Damron Guide to Tübingen
b. # Satoshi sent Tübingen the Damron Guide

According to Beck and Johnson, the DP *Tübingen*, which refers to a location, can occur in the indirect object position of the PD variant, but cannot occupy the indirect object position of the DO variant. They argue that this apparent asymmetry follows from the different syntactic analyses of the PD variants and the DO variants; because a possessor is restricted to an animate object, the DP *Tübingen* cannot occur in the specifier position of the small clause. This apparent asymmetry, however, seems not to be correct. Levin (1993:48) states that an inanimate object may occur in the indirect object position of DO variants if it can refer to people via metonymy. Consequently, there is no asymmetry between the two variants in terms of the animacy restriction on the indirect object. The animacy restriction on the indirect object is shared by both the PD variants and the DO variants:

- (12) a. * John sent the book to an uninhabited island.
b. * John sent an un-inhabited island the book.

The DP *an uninhabited island*, which cannot refer to people, may not appear in the indirect object position in both the PD variant (12a) and the DO variant (12b). The data seem to suggest the symmetric properties between the two variants. However, one might argue that the direct object of the DO variant that metonymically refers to people has the animate status, not constituting an appropriate counterargument. We leave this matter for future research.

All of the three observations point to the conclusion that there is symmetry between the PD variants and the DO variants, in favor of a unified analysis of double complement constructions under the alternative projection approach.