Double Object Constructions and Prepositional Dative Constructions are Distinct: A Reply to Ormazabal and Romero

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Abstract

Ormazabal and Romero (2012) take issue with the arguments in Bruening (2010b) that certain instances of prepositional datives are actually double object constructions. I show that none of their criticisms are valid, and their alternative explanation for the facts fails. The arguments presented in Bruening (2010b) are correct, and certain instances of apparent prepositional datives are actually double object constructions. Double object constructions are distinct syntactically and semantically from prepositional dative constructions, and the two cannot be derived from the same source.

Keywords: Ditransitives, double object constructions, quantifier scope, locative inversion, weak crossover

1 Introduction

An important issue in the literature on ditransitive constructions is whether double object constructions (1a) and prepositional dative constructions (1b) should be derived from the same source.

(1) a.   Ronald gave his sister a frog. (*double object construction*)
     b.   Ronald gave a frog to his sister. (*prepositional dative construction*)

Those who argue that they are distinct and should not be derivationally related frequently point to semantic differences between the two constructions to motivate their position (e.g., Green 1974, Oehrle 1976, Gropen *et al.* 1989). For instance, the double object construction requires that the first object be a recipient or possessor, while the prepositional dative construction permits an endpoint of motion interpretation:

(2) a.   I kicked {her/*the goal line} the ball. (recipient or possessor)
     b.   I kicked the ball to {her/the goal line}. (endpoint of motion)
(3) a.   I took {him/*the windowsill} a cup of coffee. (recipient or possessor)
     b.   I took a cup of coffee to {him/the windowsill}. (endpoint of motion)

Similarly, certain choices of NPs are said to only be allowed in the double object construction, and not in the prepositional dative:

(4) a.   That smell gave Bill a headache.
     b.   * That smell gave a headache to Bill.

In addition, there are some non-alternating verbs like *deny*:

(5) a.   The boss denied George his pay.
     b.   * The boss denied his pay to George.

Recently, however, these claims have been contested. Several works have argued that double object constructions and prepositional dative constructions are not distinct (Bresnan 2007, Bresnan *et al.* 2007, Bresnan and Nikitina 2009, Rappaport Hovav and Levin 2008). Some of this literature points out that sentences corresponding to (4b) and (5b) are actually attested:[1]

(6) . . . a stench or smell is diffused over the ship that would give a headache to the most athletic constitution. (Bresnan and Nikitina 2009, 165–166, (15))

(7) Who could deny something to someone so dedicated to the causes of international friendship and collaboration? (Bresnan and Nikitina 2009, 167, (22))

In Bruening (2010b), I argued that such instances of apparent prepositional dative constructions are actually double object constructions. The idea is that *give a headache* (for instance) can only be a double object construction, and can never be a prepositional dative construction. Attested examples that appear to be prepositional datives, like (6–7), are actually double object constructions, but with the first object projected on the right, rather than the left. I referred to this rightward projection as "R-Dative Shift." R-Dative Shift is permitted just when the first object is extracted, for instance by heavy shift, as in these examples where the recipient is a complex NP and quite heavy. The evidence that I presented for the existence of R-Dative Shift included scope interactions and locative inversion. In scope possibilities and in interaction with locative inversion, examples like those in (6) and (7) pattern not with prepositional dative constructions, but with double object constructions.

Ormazabal and Romero 2012 (henceforth "O&R") take issue with this R-Dative Shift account, claiming that a simpler explanation is available. Their reply is couched within the viewpoint that double object constructions and prepositional dative constructions should be derived from the same source (see their other work, in particular Ormazabal and Romero 2010). If their reply were successful, they would have bolstered the claim that double object constructions and prepositional dative constructions are not distinct semantically. This would pave the way toward an analysis that relates the two derivationally, as in their own account (Ormazabal and Romero 2010, based on the preposition incorporation analysis of Baker 1988).

Unfortunately, O&R's reply is not successful. They neither dispute the facts nor provide a new way of deriving them. Instead, they propose an analysis of the facts presented in Bruening (2010b) that simply fails: it does not even derive the basic contrasts that motivated the R-Dative Shift analysis in the first place. I show this here, and also answer all of their criticisms of the R-Dative Shift analysis, all of which are off the mark. Only R-Dative Shift can account for all of the facts.

I begin by explaining the R-Dative Shift analysis and O&R's alternative (section 2). This section also shows that their alternative does not actually account for the facts. I then go through their other criticisms of the R-Dative Shift account, involving locative inversion (section 3), structural asymmetries (section 4), pair-list readings with idiomatic phrases (section 5), and semantics and cross-linguistic facts (section 6).

The significance of the R-Dative Shift analysis being the only successful one proposed so far should be clear: If it is correct, it indicates that double object constructions and prepositional dative constructions are derivationally and semantically distinct. The failure of O&R's alternative is indicative of a broader failure: the view that the two are not distinct, and should be derivationally related, cannot account for the empirical facts. Section 6 discusses the issue of semantics in detail, and also brings in some cross-linguistic facts. It is to be hoped that this note, beyond simply responding to O&R, also brings some clarity to the issues and facts concerning ditransitive constructions.
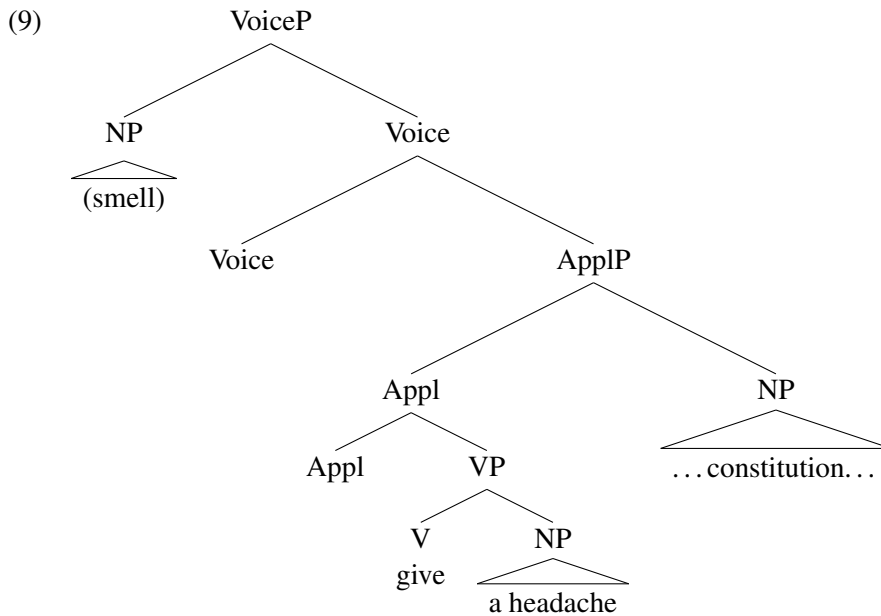
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[1]Note that similar examples involving idioms were presented as early as Larson (1988); Larson's examples, like those from Bresnan *et al.*, seem to involve heavy shift and so are amenable to the R-Dative Shift analysis.

2 The R-Dative Shift Analysis and Ormazabal and Romero's Alternative

In Bruening (2010b), I argued that instances of apparent prepositional dative constructions like those in (6), repeated below, are actually double object constructions.

(8)   . . . a stench or smell is diffused over the ship that would give a headache to the most athletic constitution. (Bresnan and Nikitina 2009, 165–166, (15))

The idea is that *give a headache* (for instance) can only be a double object construction, and can never be a prepositional dative construction. Attested examples that appear to be prepositional datives, like (6), are actually double object constructions, but with the first object projected on the right, rather than the left. The structure I proposed was the following (to be revised slightly below):

(9)

```
                    VoiceP
                   /      \
                 NP        Voice
                /  \      /      \
              (smell)  Voice      ApplP
                              /          \
                           Appl           NP
                          /    \         /    \
                       Appl     VP    . . . constitution. . .
                               /  \
                              V    NP
                            give  /    \
                                a headache
```

In the double object construction, the indirect object is projected by an Appl(icative) head, as first proposed by Marantz (1993). Usually the specifier of Appl is projected on the left, but in examples like (6) it is on the right (and I return below to the presence of the preposition just when it is on the right).[2]

In a real prepositional dative construction, in contrast, the PP is projected by the verb (see Bruening 2010a):[3]
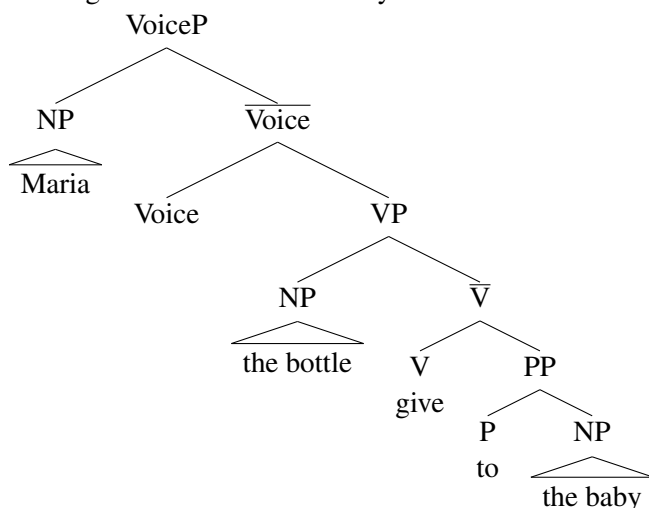
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[2] Note that there is cross-linguistic precedent for distinguishing prepositional dative constructions from double object constructions that are marked with a preposition: Anagnostopoulou (2005) argues that certain apparent prepositional dative constructions in Greek, and possibly also French and Spanish, actually have properties of double object constructions and must be distinguished from prepositional datives.

[3] In this work I continue to use the structure from Bruening (2010a). However, given the findings regarding c-command in Bruening (2014), discussed in section 4, an alternative is the following:

(i)
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         VP
        /    \
       V      PP
      /  \
     V    NP
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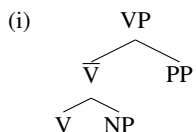
The structure in (i) is consistent with all of the binding facts, and seems to be more compatible with constituency tests than the one in the text.

(10) Maria gave the bottle to the baby.

```
                    VoiceP
              ┌───────┴───────┐
             NP             Voice
             │          ┌─────┴─────┐
           Maria      Voice         VP
                              ┌──────┴──────┐
                             NP             V̄
                             │         ┌─────┴─────┐
                        the bottle     V           PP
                                      give     ┌────┴────┐
                                               P         NP
                                               to     the baby
```

(The verb generally moves through any projections to Voice, both in the prepositional dative construction and the double object construction.)

The rightward projection of the specifier of Appl in (9) must not be freely available, otherwise examples like (4b) would always be acceptable. I therefore proposed the following restriction on rightward projection (Bruening 2010b, (9)):

(11) The Extraction Constraint on Rightward Specifiers:
      The specifier of ApplP may only be ordered to the right of its sister if the NP that occupies it undergoes A-bar extraction.

A-bar extraction includes wh-movement, relativization, and, most crucially, heavy shift to the right. Heavy shift is what licenses the order in (6). The phrase *to the most athletic constitution* undergoes A-bar movement to the right, following its initial projection in a rightward specifier of Appl (below I will spell out where heavy shift moves the phrase to).[4] Since (4b) does not involve a heavy NP, heavy shift is not licensed, and (4b) violates the Extraction Constraint on Rightward Specifiers.[5]

In Bruening (2010b), I referred to the rightward projection of the specifier of Appl as "R-Dative Shift." The arguments that I presented for the existence of R-Dative Shift included locative inversion and scope interactions. For instance, a sentence where R-Dative Shift has applied patterns not with a standard prepositional dative construction in scope possibilities, but with a double object construction. Consider the following, using the typically non-alternating verb *spare* (Bruening 2010b, (17)):[6]

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[4]There must be both rightward initial projection of Spec-ApplP, *and* A-bar extraction, because wh-movement can strand *to* on the right: *How many people did this stench give a headache to?* See Bruening (2010b).

[5]At this point the Extraction Constraint on Rightward Specifiers is simply a stipulation. However, it is possible to relate it to more general facts about English and the workings of syntax. Below I will present an analysis of locative inversion that also has an NP in a rightward specifier. This rightward specifier also requires special licensing and is not freely available (see Bruening 2010c). It therefore appears that it is a fact about English that projecting a specifier on the left is the default, and projecting it on the right is sometimes permitted but requires special licensing. It is probable that this relates to some of the facts that have been taken to motivate the antisymmetry approach to syntax (Kayne 1994), although I do not subscribe to any of the tenets of antisymmetry. There are numerous facts, though, which indicate that syntax is not symmetric the way classical X-Bar Theory predicts, and the hope is that the special licensing that is required for rightward specifiers in English will be explained by whatever explains this cross-linguistic lack of symmetry.

[6]Note that I use the indefinite *some X or other* in all of these examples. This indefinite typically brings out the distributive reading quite readily. This helps to ensure that where the distributive reading fails, it has to be due to the syntax, and not to some pragmatic difference between the examples, since they are minimally different. Note also that it is not the case that the first object in the double object construction must be topical and therefore a specific indefinite. A subject quantifier can distribute over the first
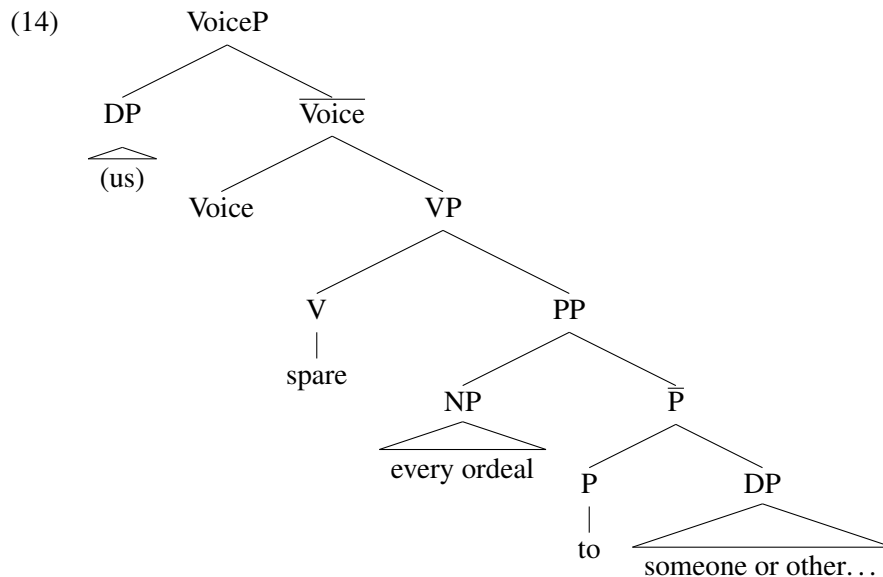
(12)   a.   Let's spare everyone some ordeal or other. (every > some)

b.   Let's spare someone or other every ordeal. (*every > some)

c.   Let's spare some ordeal or other to every prisoner that comes before us. (every > some)

d.   Let's spare every ordeal to someone or other (who comes before us today). (*every > some)

The shifted variants in (12c–d) pattern like the double object constructions in (12a–b). Surprisingly, the scope reading that would correspond to the linear order of the quantifiers is unavailable in (12d), just as the same scope reading is unavailable in (12b). The latter, by hypothesis, has the same structure as (12d). In contrast, a simple prepositional dative construction allows the surface scope reading, of course:

(13)   Let's give every toy to some child or other. (every > some)

In Bruening (2010b) and Bruening (2001), I explained frozen scope in double object constructions through the existence of the Appl projection. In (9), the two NPs are in different projections. The higher one, in Spec-ApplP, will always be closer to any higher scope position, and general economy principles will therefore rule out the lower one crossing over the higher one to take scope (see Bruening 2001 for details). In contrast, in (10), the NP and the PP are dominated by the same projection (VP), and so neither is closer than the other to any higher scope position. Economy principles therefore permit either to move first, resulting in scope ambiguity.[7]

O&R suggest instead that all examples of apparent prepositional dative constructions are such, with the following small clause structure (the inconsistency in DP and NP labels is theirs; this diagram is based on Ormazabal and Romero 2012, (14)):[8]

(14)

```
                    VoiceP
                   /      \
                 DP        Voicē
                 |        /     \
                (us)   Voice     VP
                            /        \
                           V          PP
                           |         /   \
                         spare     NP      P̄
                                  / \     /   \
                            every ordeal P     DP
                                         |    /  \
                                        to  someone or other...
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object quite easily:

(i)   Every judge spared someone or other that ordeal today. (every > some)

The first object clearly does not have to be interpreted with wide scope or as a specific indefinite. This means that there is not some reason other than the syntax that the second object could not take scope and distribute over the first.

A note on the judgments presented here: Every sentence in this paper has been checked with several native speakers of English, including anonymous journal reviewers. No one has disputed the judgments, and several have even remarked on how striking they are.

[7]Note that this way of describing locality or economy does not need to refer to c-command, but only to dominance. This becomes relevant in section 4.

[8]A series of arguments against small clause accounts of prepositional dative constructions can be found in Bruening (2010a, 522–525). These are further reasons to reject O&R's alternative.

The lack of a distributive reading in (12d) is due to heavy shift, which takes $\overline{\text{P}}$ and adjoins it to VoiceP on the right (Ormazabal and Romero 2012, (14)). According to O&R, this heavy shift fixes the scope of the shifted NP over the NP in Spec-PP.

There are a number of problems with this account of the scope facts. First, it leaves unexplained the very contrast that the proposal is supposed to explain; namely, the contrast between heavy shift with non-alternating verbs like *spare*, and an equally heavy NP in a real prepositional dative construction. Let us put the two side-by-side:

(15) a. Let's spare every ordeal to someone or other who comes before us today. (*every > some)

     b. Let's give every toy to someone or other who comes before us today. (every > some)

Only with *spare* is the distributive reading unavailable. With *give*, the distributive reading *is* available, even when the object of *to* is heavy. O&R have no account of this contrast: either heavy shift is obligatory, and the distributive reading should be unavailable with both verbs; or, it is not obligatory, and the distributive reading should be available with both verbs. O&R's account simply fails.

A second problem is that O&R's account relies on scope being fixed by heavy shift, but heavy shift does not generally fix scope. It is true that some instances of extraposition may fix scope high (in particular, extraposition from NP; see Guéron and May 1984, Fox and Nissenbaum 1999), but heavy shift of an argument NP or PP does not fix scope relative to another argument in the way that their analysis requires. Consider the following examples, both of which clearly do involve heavy shift of a PP:

(16) a. The nurse placed every scalpel yesterday on a different sterile tray. (every > a)

     b. Those boys put every part₁ without me noticing in a place where it₁ didn't belong. (every > a)

Heavy shift does not fix the scope of the indefinite above the non-shifted universal quantifier; note in particular the licit variable binding in (16b). (See also Johnson 2001 for some discussion of heavy shift and scope interactions in prepositional dative constructions.)

O&R's alternative account is simpler, then, but it does not actually account for the facts. If the choice is between a complicated analysis that captures the facts, and a simple account that does not, the choice has to be the complicated one. Simplicity only decides between alternative accounts that do not differ in their empirical coverage.

3 Locative Inversion

O&R's alternative also fails to account for locative inversion. In Bruening (2010b), I showed that ordinary prepositional dative constructions can undergo locative inversion when passivized, but sentences that involve R-Dative Shift cannot (Bruening 2010b, (27a–b)):

(17) a. To the generals that lost the battle were given helicopters.

     b. * To the generals that lost the battle were/was given hell.

In this R-Dative Shift patterns with double object constructions, which cannot participate in locative inversion (Postal 2004, 47; Bresnan 1994, 79, footnote 9):

(18) a. * At that time was/were given the generals who lost hell. (*double object construction*)

     b. * At that time was given to the generals who lost hell. (*R-Dative Shift*)

Double object constructions and prepositional datives contrast in this respect:[9]

(19) a. At that time was given to the Son of Man dominion and glory and the kingdom that all peoples, nations, and tongues should serve him.

   b. * At that time was given the Son of Man dominion and glory and the kingdom that all peoples, nations, and tongues should serve him.

(20) a. At that time was sent to the embattled forces the all-powerful demon Raktabija.

   b. * At that time was sent the embattled forces the all-powerful demon Raktabija.

Although I did not propose an account of the failure of locative inversion with double object constructions in Bruening (2010b), I did reduce the ungrammaticality of (17b) and (18b) to the same factor that rules out locative inversion with double object constructions (18a, 19b, 20b). Sentences with R-Dative Shift *are* double object constructions, in my analysis.

O&R also attempt to reduce the ungrammaticality of (17b) and (18b) to something else. They note that locative inversion often requires the passive, and passives are not allowed with VPs like those in (17b) and (18b):

(21) * Hell was given to the generals that lost the battle. (Ormazabal and Romero 2012, (8))

The problem here is that O&R's reduction is not a reduction at all. It instead introduces another mysterious fact that their analysis does not provide an explanation for. In their analysis, (21) is simply a prepositional dative construction. Prepositional dative constructions can undergo passivization. Showing that passivization is ungrammatical actually undermines their analysis, since their analysis has no account of (21) and predicts it to be grammatical.[10]

In contrast, the R-Dative Shift analysis explains why (21) is ungrammatical. It is ungrammatical for the same reason that the following is ungrammatical:

(22) * Hell was given the generals that lost the battle.

In many dialects of English, the second object of a double object construction cannot passivize across the first object, especially if the first object is a full NP and not a pronoun. In the R-Dative Shift analysis, (21) is also a double object construction, and so passivization of the lower object across the higher is not permitted (and since the higher NP has to be heavy to license the rightward specifier, it cannot be a pronoun).[11]

O&R's alternative, again, simply fails to account for the contrast between PPs that are the result of R-Dative Shift, and PPs that are actually prepositional dative constructions. The R-Dative Shift analysis explains why there is a contrast, and it is therefore superior.

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[9]Note that the account of the failure of locative inversion with double object constructions based on the subject-in-situ generalization described below predicts that locative inversion will become more acceptable if one of the NPs is heavy and undergoes heavy shift. Survey data bear this out (Bruening 2013). Examples like (19b) and (20b) might therefore be judged marginal rather than fully ungrammatical by some speakers, since the NP on the right is somewhat heavy.

[10]A reviewer suggests that bare Ns like *hell* do not undergo passivization easily. This is simply not true of numerous other bare Ns with *give* (i), and modifying *hell* makes the passive no better (ii):

(i) a. Consideration should be given to issuing a direction under Regulation 25.

   b. Preference at that time was given to a scale of 1:1.000.

   c. Credence was given to Magalotti's belief that...

(ii) a. They gave her a lot of hell for that.

   b. * A lot of hell was given to her for that.

It is therefore unlikely that the NP's status as a bare noun has anything to do with the failure of passivization.

[11]A reviewer points out that dialects that do allow passivization of the second object should permit examples like (21) (and 22). Unfortunately, I have not been able to locate speakers of the relevant dialects and so have been unable to check this.

In addition, the R-Dative Shift analysis can be combined with an existing account to *explain* why locative inversion is ungrammatical with double object constructions, including R-Dative-Shifted ones. First, note that locative inversion does not always require the passive; it is compatible with intransitive verbs as well:[12]

(23) a. Under the bridge was living a troll.

b. In the center of the elegant ballroom danced several couples.

c. On the siding puffed a little train engine.

Transitive versions of these same sentences are ungrammatical with locative inversion, regardless of the word order:

(24) a. * Under the bridge was living the good life a troll.

b. * In the center of the elegant ballroom danced a waltz several couples.

c. * On the siding puffed big puffs of steam a little train engine.

(25) a. * Under the bridge was living a troll the good life.

b. * In the center of the elegant ballroom danced several couples a waltz.

c. * On the siding puffed a little train engine big puffs of steam.

The generalization about locative inversion is that there can be only one NP argument in the sentence. This is what is wrong with locative inversion involving passive double object constructions, as in (18a, 19b): there are too many NP arguments. Intransitive clauses and passive clauses permit locative inversion because they have only one NP argument.

A theoretical account of this restriction has been proposed by Alexiadou and Anagnostopoulou (2001, 2007). Alexiadou and Anagnostopoulou motivate a generalization they call the *subject-in-situ generalization*, which says that no more than one NP that requires structural case may remain inside the VP (VoiceP in the analysis here). If the external argument remains in its base-generated position in Spec-VoiceP, then there may be no object inside the VoiceP at the same time.

To explain the facts of double object constructions, I will adopt the theoretical account of the subject-in-situ generalization proposed in Alexiadou and Anagnostopoulou (2007, section 5.2), modified to fit the structures here. In this account, case checking under Agree (Chomsky 2000) has to wait until Voice, the head that checks accusative case, Agrees with T, the head that checks nominative case. Once Voice Agrees with T, these two heads can proceed to Agree with NPs and check their case features. A problem arises, however, if there are two NPs and two case features: the grammar faces an indeterminacy or ambiguity problem, because it does not have clear instructions on which case to check first. The derivation crashes because of this indeterminacy. Now, if either the subject or object moved, this must have been accomplished by an EPP feature on either T or Voice. In Alexiadou and Anagnostopoulou's account, EPP features have the property of resolving the indeterminacy: an EPP feature on T tells the system to first check case by setting up an Agree relation between T and the NP attracted by T's EPP feature (the subject). An EPP feature on

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[12]Note that it is not the case that locative inversion is only grammatical with unaccusatives. The verbs in (23) in combination with the same PPs pass standard tests for unergatives: they can form pseudopassives (i), and resultatives are only grammatical with a fake reflexive (ii):

(i) a. This bridge is being lived under!

b. This elegant ballroom has been danced in on numerous occasions.

(ii) a. Many couples have danced *(themselves) breathless in this room.

b. The little train engine puffed *(itself) breathless on the siding.

This means that locative inversion is acceptable with both unaccusatives and unergatives. It is not the case that there can be no underlying subject when locative inversion takes place.
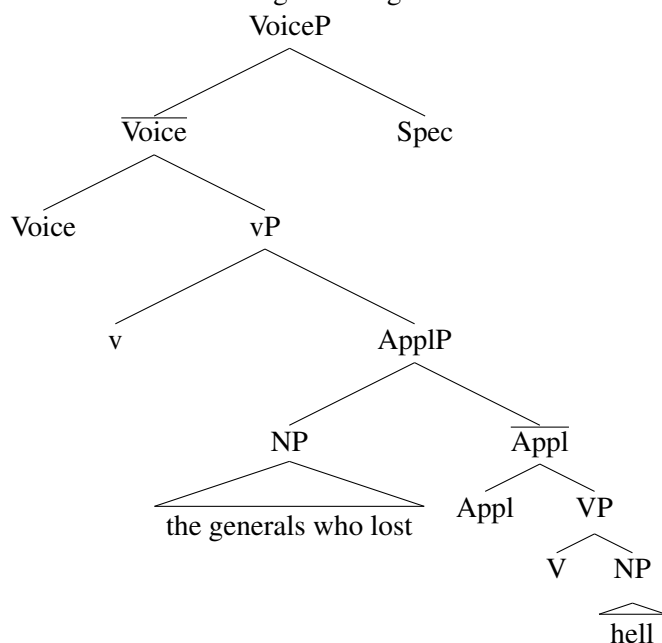
Voice tells the system to first check case by setting up an Agree relation between Voice and the NP attracted by Voice's EPP feature (the object). If both T and Voice have EPP features, then Agree proceeds strictly cyclically. The indeterminacy problem only arises if there are no EPP features, and hence neither the subject nor the object moves.

A natural question is how an active double object construction can be allowed in this system, since there are two objects, both of which seem to remain inside VoiceP in English. I propose that Alexiadou and Anagnostopoulou's indeterminacy problem only arises when there are two cases to be checked which are distinct. In the constructions where the problem arises, we have nominative case which is checked by T, and accusative case which is checked by Voice. In double object constructions, however, we have two objects which seem to receive the same case. I propose that active Voice, once it Agrees with T, is capable of checking more than one object case, in an instance of multiple Agree (e.g., Hiraiwa 2001). Since the two object cases are identical, indeterminacy is not a problem. The grammar can check them in either order. In the passive of a double object construction, however, the two cases will be distinct again: nominative Agreeing with T, and accusative Agreeing with Voice. The indeterminacy problem will arise again if neither object moves out of VoiceP.

In other work (Bruening 2010c), I proposed that in locative inversion, the NP that agrees with the finite verb is in a rightward specifier of VoiceP. If this NP was an underlying object, it moved to this position. If it was an underlying subject, as in the sentences with unergative verbs above, it was base-generated in this position. Either way, it is inside the VoiceP. The constraint that is behind the subject-in-situ generalization then forbids there to be an object NP inside the VoiceP as well.

To illustrate, take the case of (18a), the passive of a double object construction. This would have the following VoiceP (see section 4 on vP, which is irrelevant here):

(26)   * At that time was/were given the generals who lost hell.

```
                          VoiceP
                         /      \
                     Voice       Spec
                    /     \
                Voice      vP
                          /  \
                         v    ApplP
                             /     \
                           NP       Appl
                          / | \    /    \
                  the generals who lost  Appl   VP
                                               /  \
                                              V    NP
                                                   |
                                                  hell
```

One of the two NPs has to move to the empty specifier of VoiceP; given economy, it must be the higher one. I assume that in the passive, Voice always has an EPP feature. This is visible in the obligatory shift observed with expletive passives (the *thematization/extraction* rule of Chomsky 2001):

(27)   a.   There was a study done in 1979.
        b.   * There was done a study in 1979.

I propose that, since this EPP feature is a required property of the passive Voice head, it is not used as an instruction in Alexiadou and Anagnostopoulou's case checking algorithm presented above. It is simply a lexical property of passive Voice. Hence, only a second EPP feature on Voice in the passive is interpreted as an instruction on how to proceed with case checking (a second EPP feature would trigger movement of a lower object, as in, for instance, wh-movement).

So, in the tree above, *the generals who lost* will move to Spec-VoiceP. In locative inversion, this NP moves no further. The other object also does not move (so the word order derived would actually be **At that time was/were given hell the generals who lost*, which is also ungrammatical). The EPP feature on Voice in the passive is not an instruction for how to proceed with case checking, so the derivation crashes. T and Voice, having Agreed, now have two cases they need to check, but no instructions on how to do it.

Locative inversion with an active transitive verb would be similar, except that this time the NP in the rightward specifier of Voice would have been base-generated there. Again, it moves no further, nor does the object. Again indeterminacy of case checking results, and the derivation crashes (24–25).

This accounts for the failure of locative inversion with transitive verbs and with passives of double object verbs. What about R-Dative-Shifted double object verbs? They will also fall under the account, if the NP that is marked with *to* is actually an NP that requires structural case. This is an important part of the analysis based on the subject-in-situ generalization: it only governs NPs that require structural case. PPs are irrelevant. We are then led to conclude that the apparent *to* PP is not actually a PP, it is an NP that requires structural case, and *to* is perhaps a marker of this structural case, or is there to perform some other function. It is not a preposition that itself assigns case to its complement. The structure that underlies (18b), then, is exactly the same as (26), except that the specifier of ApplP is projected on the right, and the case marker *to* appears as part of the NP in Spec-ApplP. The derivation crashes for exactly the same reason that (26) did.

The R-Dative Shift analysis, then, is able to explain the failure of locative inversion with R-Dative Shift by appeal to an analysis that has been independently proposed. This analysis explains far more than just this fact (see Alexiadou and Anagnostopoulou 2001, 2007) and so is independently justified. We have also concluded something about the nature of the preposition *to* in R-Dative Shift: it is a case marker, not a full-fledged preposition.

In contrast, O&R's alternative explains nothing. Certain apparent prepositional dative constructions cannot undergo locative inversion, and they cannot undergo passivization, while others can do both. But O&R have no explanation for these two restrictions, both of which are completely unexpected in their analysis, and relating the two restrictions does nothing to help us understand them.

Let me now bring in some further data that O&R also bring up. In the R-Dative Shift analysis, apparent prepositional dative constructions actually divide into two types. There are real prepositional dative constructions, which can passivize and undergo locative inversion, and also admit scope ambiguities between the internal NP and PP arguments. Then there are R-Dative-Shifted double object constructions, which cannot passivize or undergo locative inversion, and exhibit frozen scope between the internal NP and PP. This is entirely consistent with the categorization of ditransitive idioms in Bruening (2010a), which O&R imply are inconsistent with the R-Dative Shift analysis. Those idioms that can undergo passivization and locative inversion are true prepositional dative constructions, most of which alternate with double object constructions; and those that cannot are limited to double object constructions, but can sometimes undergo R-Dative Shift. The two categories are given below:

(28) Idioms that can be true prepositional datives

     a.   throw NP a bone∼throw a bone to NP

     b.   read NP the riot act∼read the riot act to NP

     c.   lend NP a hand∼lend a hand to NP

     d.   lend NP a sympathetic ear∼lend a sympathetic ear to NP

     e.   give NP a wide berth∼give a wide berth to NP

     f.   give NP the cold shoulder~give the cold shoulder to NP

     g.   lend NP color~lend color to NP

(29)   Idioms that can only be double object constructions

     a.   give NP the boot

     b.   give NP the sack

     c.   give NP the creeps

     d.   give NP pause

     e.   give NP a piece of one's mind

     f.   give NP hell

     g.   promise NP the moon

To exemplify, *read the riot act to NP* can be passivized, as can *read NP the riot act*:

(30) a.   Essentially, the riot act was read to the tone-deaf Mormon church by prominent, influential interests in behalf of the faith and families of Jewish Holocaust victims... (http://exmormon.org/phorum/read.php?2,443418,443422#msg-443422)

      b.   The editors of these three papers were summoned to Downing Street and were read the riot act. (Geoffrey Morgan, *A Call to Arms*, page 117, accessed by Google Books)

In principle, *read the riot act to NP* ought to be able to undergo locative inversion, as well. My own intuition is that this is correct:

(31)   To anyone who disobeys these instructions will be read the proverbial riot act.

However, at least one speaker disagrees, finding the above bad. This is not surprising, though, as both idioms and locative inversion are known to be delicate.

    In contrast, as shown above, *give NP hell*, although it does sometimes appear as *give hell to NP*, cannot undergo passivization or locative inversion when it does. Similarly, although examples of *give the boot to NP* and *give the creeps to NP* occur on the internet, no examples of **the boot was given to NP* or **the creeps were given to NP* can be found, and native speakers judge them ungrammatical. Attempts at locative inversion also fail:

(32) a.   * To Bill was given the boot.

      b.   * To our intrepid explorers were given the creeps.

    The R-Dative Shift analysis explains why these two classes of apparent prepositional dative constructions— idiomatic (*give hell to NP*) or not (*give a headache to NP*)—pattern differently in passivization, locative inversion, and scope. O&R's alternative does not, since it analyzes them in the exact same way.

4   Structural Asymmetries

O&R also criticize the R-Dative Shift analysis on the basis of its predictions regarding structural asymmetries. In the R-Dative Shift analysis, the NP marked with *to* in an R-Dative-Shifted extended VP is structurally higher than the NP direct object (the theme), although it occurs to the right of that NP. According to O&R, this incorrectly predicts that phenomena like anaphor binding, variable binding and weak crossover, superiority, NPI licensing, and the *each... the other* construction should go backward, from right to left. This issue is not as simple as O&R make it out to be, since R-Dative Shift is always necessarily followed by A-bar movement, due to the extraction constraint on rightward specifiers. Nevertheless, weak crossover

with wh-movement makes the point nicely. Wh-movement licenses R-Dative Shift, so many instances of extraction out of a *to* PP should be ambiguous. Since the R-Dative Shift parse should be available, there should be no weak crossover, according to O&R, but this is false:

(33) a. Which check$_1$ did you send t_1 to its$_1$ owner?

   b. * Which worker$_1$ did you send his$_1$ check to t_1?

The sentence in (33b) should have a parse where the base position of *which worker* c-commands *his*, and so there should be no weak crossover, according to O&R.

   O&R follow most of the literature in assuming that c-command is the relevant structural notion for all of these asymmetries. However, this is false, as I and others have documented extensively in other work (Bruening 2014, Barker 2012, Hoeksema 2000). Precedence is actually of prime importance for all of these phenomena, and c-command is irrelevant. This is easy to show for weak crossover. Consider the following example, from Reinhart (1976). The lack of a Principle C effect here shows that the adjunct CP is high, outside the c-command domain of the object:

(34) So many people wrote to him$_1$ [$_{CP}$ that Brando$_1$ couldn't answer them all]. (Reinhart 1976, 47, (63))

This conclusion is further confirmed by the fact that this type of adjunct cannot be fronted along with the VP in VP fronting, but must be stranded:

(35) a. * . . . and write to Brando [that he couldn't answer them all], so many people did.

   b. . . . and write to Brando, so many people did [that he couldn't answer them all].

The adjunct in this construction is high, then, outside of VP, and definitely outside of the c-command domain of the object. If c-command were necessary to avoid weak crossover, we would expect a weak crossover violation in this construction when the object is an extracted wh-phrase, and we replace *Brando* with a pronoun to be bound by the wh-phrase. But this is false:

(36) Who$_1$ did so many people write to t_1 [$_{CP}$ that he$_1$ couldn't answer them all]?

Clearly, it is not necessary for the trace of a wh-phrase to c-command a pronoun in order for the wh-phrase to bind the pronoun.

   C-command is not relevant to weak crossover, then. Precedence is. In the above, the base position of the wh-phrase precedes the pronoun, and binding is licit. In all cases of weak crossover, the base position of the wh-phrase *follows* the pronoun:

(37) * Who$_1$ are [his$_1$ many fans] always writing to t_1?

   The conclusion is that c-command is irrelevant to weak crossover, but precedence is of prime importance. The base position of the wh-phrase must precede the pronoun to be bound. This means that O&R's criticism of the R-Dative Shift analysis is off the mark, because c-command is not relevant to any of the structural asymmetries they discuss. Precedence is what matters. Since the theme NP precedes the R-Dative-Shifted NP in the rightward specifier of ApplP, we see all of these asymmetries going left-to-right rather than right-to-left. The R-Dative Shift analysis in fact makes the correct predictions, once we understand the role of precedence and the irrelevance of c-command.

   Moreover, O&R's own analysis runs into a paradox, if c-command is the relevant notion, as they assume. As described above, they posit (apparently obligatory) heavy shift of the *to* PP in examples like the following:

(38)   The boss denied that position [to every employee who requested it].

This heavy shift puts the PP high, adjoined to VoiceP. It should therefore be outside the c-command domain of the theme, here *that position*. We should then expect that switching *that position* and the pronoun *it* should not lead to a Binding Principle C violation. This is false:

(39)   * The boss denied it$_1$ to every employee who requested that position$_1$.

O&R's own analysis makes the wrong prediction, then. It will also not do to say that heavy shift must reconstruct, for two reasons. First, this would rob O&R of their account of the scope facts (such as it was); and second, reconstruction does not seem to be possible in other cases of heavy shift:

(40)   * We gave to him$_1$ on Friday John$_1$'s brand new toy. (Takano 2003)

If reconstruction were possible in (40), there would be no Principle C violation, because there is none in the base position:

(41)   We gave John$_1$'s brand new toy to him$_1$ on Friday.

In contrast, the R-Dative Shift analysis, using precedence, gets the facts exactly right. First, although c-command is not involved in any syntactic phenomenon, there is an important structural relation that is involved in coreference in addition to precedence. This is a much coarser relation than c-command, which I call *phase-command*:[13]

(42)   Phase-Command: X phase-commands Y iff neither X nor Y dominates the other and there is no ZP, ZP a phasal node, such that ZP dominates X but does not dominate Y.

(43)   Phasal nodes: CP, VoiceP, NP

C-command is hypersensitivity to structure: every node counts. Phase-command says that only certain nodes count, the phasal nodes. Bruening (2014) shows that phase-command achieves much better empirical coverage than c-command.[14]

Importantly here, Binding Principle C is formulated in terms of phase-command and precedence:

(44)   Binding Principle C
       An R-expression may not be coindexed with an NP that precedes and phase-commands it.
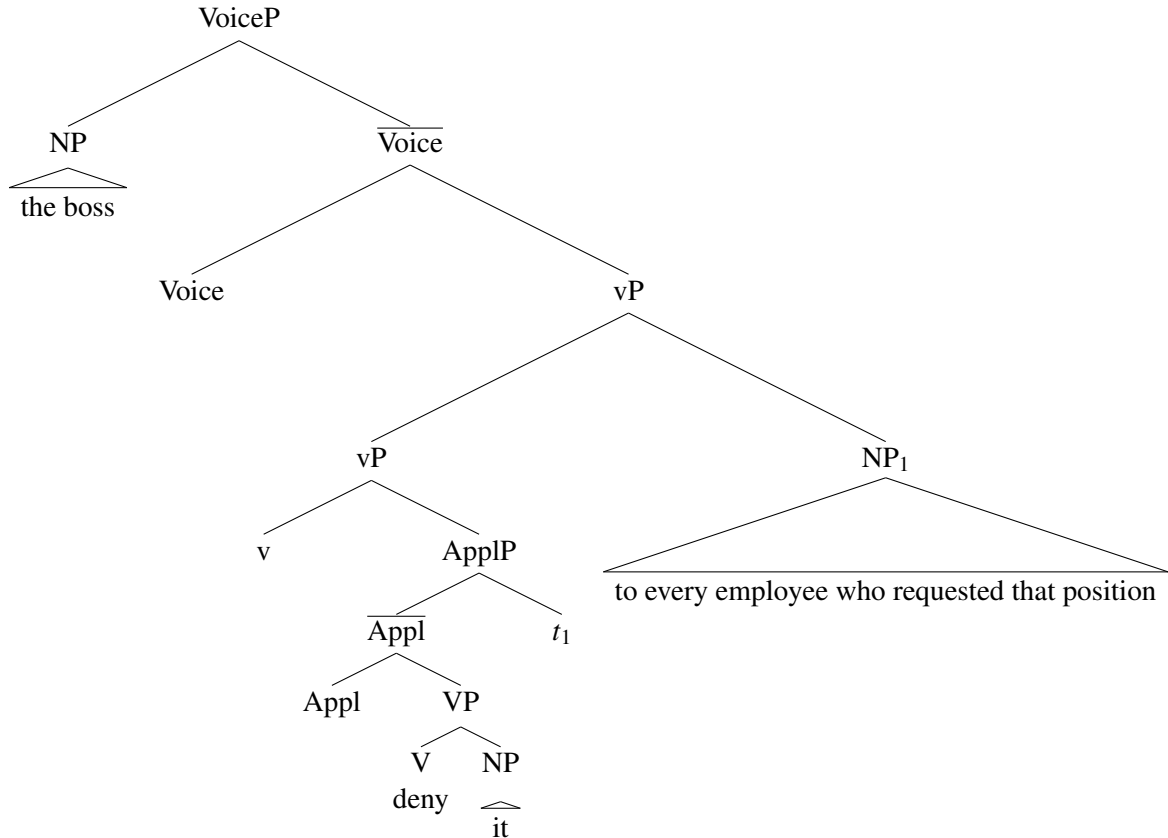
I update the analysis of double object constructions in Bruening (2010b) to that in Bruening (2010a), where there is an additional projection, vP, between ApplP and VoiceP. Heavy shift, I propose, moves the shifted NP (marked with the case marker *to*) from the rightward Spec-ApplP and adjoins it to vP:

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[13]In Bruening (2014), the maximal VP node is called vP. What the node is called makes no difference, so long as the phasal node is the maximal VP node, before any aspectual and tense projections. Here that node is VoiceP.

[14]Note that phasal nodes are very similar to the *cyclic nodes* of much earlier work (e.g., Langacker 1969); see Bruening 2014 for discussion.

(45)

```
                            VoiceP
                         /          \
                       NP          ‾Voice‾
                        |          /       \
                    the boss    Voice         vP
                                          /        \
                                        vP          NP₁
                                      /    \       /    \
                                     v     ApplP  to every employee who requested that position
                                          /    \
                                      ‾Appl‾     t₁
                                     /      \
                                  Appl       VP
                                            /   \
                                           V     NP
                                         deny    |
                                                 it
```

The pronoun *it* phase-commands the R-expression *that position* in this structure, because there is no phasal node that dominates *it* but does not dominate *that position*. The first phasal node that dominates *it* is VoiceP, which also dominates *that position*. Since *it* also precedes *that position*, Principle C is violated.

This theory also accounts for (40) versus (41). In (41), the pronoun does not precede the R-expression, but in (40), the pronoun precedes and phase-commands the R-expression (which is contained in a phrase adjoined to vP).

To summarize this section, the structural asymmetries that O&R bring up actually argue against their own analysis, if their assumptions are adopted. Once their assumptions are rejected, and we understand the role of precedence, we can see that these asymmetries are in no way problematic for the R-Dative Shift analysis.

5   Scope and Idioms

As described above, O&R try to account for fixed scope as an effect of heavy shift. However, they also go on to suggest a role for idiomatic interpretations in fixing scope, as revealed in pair-list readings in particular. For instance, they point out, correctly, that pair-list readings are not available in examples like the following (when they are interpreted idiomatically):

(46)   (Ormazabal and Romero 2012, (35a), (36a))
    a.   Who will these photographs bring everything home to? (*pair-list)
    b. (??) Whose mouth did the journalist put every word in? (*pair-list)

These examples do not involve potential double object constructions, so there is no way to say that they involve R-Dative Shift. This means that some other factor(s) besides R-Dative Shift can also fix scope.

O&R suggest that one such factor is idiomatic interpretations: many idiomatic expressions do not lend themselves to scope interactions. In this they are surely correct, and this is probably the right account of their examples in (46). However, they also appear to be suggesting that all of the data presented in Bruening (2010b) can be accounted for by this factor, given that many of the cases that I analyzed as R-Dative Shift involve idiomatic interpretations. In this they are far from correct, however. In presenting the scope facts, I deliberately avoided idiomatic expressions, precisely because they do not lend themselves to scopal interactions. In fact, *none* of the scope examples presented in Bruening (2010b) involved idiomatic interpretations. All of them are interpreted in a wholly literal way. I repeat all of the crucial examples here:

(47) a. This lighting gives every kind of headache to a different (type of) person. (*every > a)

 b. Let's spare every ordeal to someone or other (who comes before us today). (*every > a)

 c. The bosses denied every position to some applicant or other from within the bureau. (*every > a)

(48) a. # Let's make a list of who he denied every request to. (*pair-list)

 b. # Let's make a list of who this lighting gives every kind of headache to. (*pair-list)

As can be seen, none of these examples involve idiomatic interpretations. Rather, they are all non-alternating but literally interpreted phrases. One could perhaps argue that *give X a headache* has some special interpretation that might be relevant to scope, but there is a more general point to be made here, as well. This is that it is important to establish that the NPs involved *can in principle engage in scope interactions*. This point was in fact made in Bruening (2010b). Consider the first set of examples presented in Bruening (2010b, (14)), involving *give X a headache*:

(49) a. This lighting gives everyone a different kind of headache. (every > a)

 b. This lighting gives a different person every kind of headache. (*every > a)

 c. This lighting gives every kind of headache to a different (type of) person. (*every > a)

 d. This lighting gives a different kind of headache to everyone who enters the room. (every > a)

In (49a) and (49d), the indirect object can be a universal quantifier that can distribute over the direct object. There is simply no way to claim that one of these NPs is idiomatic in some way that prevents it from participating in distributive readings. The NPs clearly can interact in a distributive fashion. Note also that the direct object can be a universal quantifier that can distribute over something else, for instance an adjunct:[15]

(50) (Context: there are four types of headaches that I regularly suffer from: tension headaches, cluster headaches, sinus headaches, and migraine headaches.)

 a. I was given every kind of headache by a different electronic device.

 b. I was given every kind of headache at a different point during the day.

Clearly, then, there is nothing about the phrase *give X a headache* that stops a quantified version of *headache* from participating in scope interactions.

In contrast, the idiomatic expressions that O&R point to seem to be scopally inert (when interpreted idiomatically):

(51) a. These photographs brought everything home to a (#different) person. (no distributivity)

 b. The journalist put every word in a (#different) source's mouth. (no distributivity)

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[15]The examples might work better with *each* than with *every*, but that would make the point just as well.

(52) a. These photographs brought everything home to me at a (#different) point during the day.

b. The journalist put every word in that source's mouth at a (#different) point during the interview.

There is nothing at all similar between O&R's examples of idiomatic expressions, then, and the examples of fixed scope presented in Bruening (2010b). O&R's suggestion is, again, off the mark.

6 On Semantics, Verb Sensitivity, and Cross-Linguistic Confusion

A large body of work has argued against there being semantic differences between the double object construction and the prepositional dative construction (e.g., Rappaport Hovav and Levin 2008, Bresnan and Nikitina 2009), including some of O&R's other work (Ormazabal and Romero 2010). All of this work suggests that the two are simply two alternating syntactic expressions of the same semantics. Ormazabal and Romero (2010), in particular, argue that the double object construction is derived from the prepositional dative construction by a process of preposition incorporation.

It is important to note, however, that the only thing this literature has shown is that certain instances of the prepositional dative construction, with certain verbs (chief among them *give*), may have a semantics that is very similar to that of the double object construction. In particular, *give* has a meaning of caused possession even in the prepositional dative construction, and does not simply involve change of location, as some work has claimed (e.g., Harley 2002, Krifka 2004).

However, it is a large and unjustified leap from that small observation to the claim that double object constructions and prepositional dative constructions are *identical*. They are clearly not. What all of this literature downplays is the fact that the double object construction, in contrast with the prepositional dative construction, has a *completely uniform* semantics, regardless of the verbs involved (even when that meaning is negated, as with *spare* and other non-alternating verbs).[16] This is explicitly acknowledged in the following table from Rappaport Hovav and Levin (2008, 132, (6)):

(53)

	to Variant	Double Object Variant
give-type Verbs:	caused possession	caused possession
throw-type Verbs:	caused motion or caused possession	caused possession

This uniformity is unexpected in a theory like that of Ormazabal and Romero (2010), or any theory that derives one from the other. In a preposition incorporation theory, the double object construction should have exactly the same meaning as the prepositional dative construction that corresponds to it. This is obviously false, however. In the following examples (with Rappaport Hovav and Levin's "*throw*-type verbs"), the double object construction only has the meaning of (intended) caused possession, while the prepositional dative correspondent has other meanings available to it:

(54) a. I kicked {her/*the goal line} the ball.

b. I kicked the ball to {her/the goal line}. (endpoint of motion)

(55) a. I took {him/*the windowsill} a cup of coffee.

b. I took a cup of coffee to {him/the windowsill}. (endpoint of motion)

Semantic differences are even clearer when the preposition is not *to*, but *for* (not discussed in Rappaport Hovav and Levin 2008):

(56) a. Melinda melted me some ice cream.

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[16]I should qualify this statement: some dialects of English also permit benefactive or "dative of interest" interpretations of some double-object examples. I will not address this type of interpretation here.

b.   Melinda melted some ice cream for me.

(57)   a.   He brought me some beer.

         b.   He brought some beer for me.

The (a) examples here only have an intended caused possession meaning. In contrast, the (b) examples have (at least) two possible meanings: (1) a proxy reading, where the surface subject performs the action in place of the object of *for*; (2) a vague benefactive reading, where the object of *for* receives some benefit from the action. Reading (2) is compatible with caused possession, but I would argue that reading (2) is simply vague, and there is no distinct caused possession reading with *for*. The proxy reading is clearly distinct, because it disappears when the PP is fronted:

(58)   For me, she melted some ice cream.

I know of no context that teases apart caused possession and vague benefit. This suggests that *for* phrases simply have a vague benefactive meaning, which caused possession is compatible with.

    Additionally, where caused possession is not compatible with the meaning of the verbs and NPs involved, no double object variant is possible:

(59)   a.   She shoveled the sidewalk for me.

         b.   * She shoveled me the sidewalk.

(60)   a.   She answered the phone for me.

         b.   * She answered me the phone.

At the same time, the *for* phrase does not seem to differ in its semantics: it can have a proxy reading, or a vague benefit reading. I see no reason to think that the vague benefit reading with these verbs is in any way different from the vague benefit reading that we see with verbs that do permit the double object construction. If this is correct, then *for* phrases do not actually have a caused possession meaning, they only have a vague benefit meaning.

    In contrast, the double object variants *only* have a caused possession meaning. If I am correct that *for* phrases only have a vague benefit meaning, then the meaning of the double object construction is a meaning that the prepositional dative correspondent does not have.[17]

    All of the above raises two problems for a derivational approach: (1) how to explain the complete uniformity of the double object construction, when that construction is derived from something that does not exhibit this uniformity; and (2) how to derive a construction with one meaning from another construction that lacks that meaning. It might be possible to overcome the first problem, but the second is intractable.

    Yet another problem with such approaches is the existence of non-alternating verbs that only appear in the double object construction. Some examples are the following:

(61)   a.   That word lost me the fifth-grade spelling bee.

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[17]This raises the following question, as pointed out by a reviewer: Why do we not see R-Dative Shifted versions of double object constructions like *She melted me some ice cream* with the preposition *to*? The fact is that they do not seem to be acceptable:

(1)   a.   * Who did she melt some ice cream to?

       b.   * She melted some ice cream to every child on the little league team who had had teeth broken in the fight at the end of the game.

The reviewer suggests that *to* might still have some of its prepositional semantics even when it is being used as a case marker in R-Dative Shift, and so is not compatible with some verbs. Another possibility is that, since the caused possession meaning of the double object construction is compatible with the vague benefit meaning of *for*, using *for* is available and strongly preferred, enough so that speakers feel that *to* is unacceptable (although in this alternative it might actually be generated by the grammar).

  b. * That word lost the fifth-grade spelling bee to/for/at/(up)on me.

(62) a. I envy you your equanimity.

  b. * I envy your equanimity to/for/at/on you.

Most of these have a negative meaning, negating the caused possession. (For an analysis, see Bruening 2010a). The problem here is that there is no source for the double object construction, if double object constructions are all derived from prepositional dative constructions (but see Larson 1988 for a derivational analysis that attempts to grapple with such facts).

  These three problems seem to me to be deadly for a derivational theory, and I therefore reject derivational theories in the strongest possible terms.

  Moreover, even when a prepositional dative construction may have a caused possession meaning, there appear to be significant differences between this meaning and the caused possession meaning that double object constructions have. This is what is behind the frequently expressed intuition that certain phrases only permit the double object construction, like *give NP a headache*. Much of the work cited above, in particular Rappaport Hovav and Levin (2008) and Bresnan and Nikitina (2009), has tried to deny these differences, primarily by citing corpus data indicating that such phrases do in fact appear as an apparent prepositional dative. The significance of the facts that support an R-Dative Shift analysis is that they show that the intuition was correct after all, and apparent instances of prepositional datives with these expressions are actually double object constructions. In passivization, locative inversion, and scope interactions they pattern exactly like double object constructions, and do not pattern with real prepositional dative constructions.

  This means that Rappaport Hovav and Levin's table above is not quite accurate: the "caused possession" meaning that prepositional dative constructions may have is not the same as the "caused possession" meaning that double object constructions have. In Bruening (2010a), I tried to capture this by giving certain prepositional datives a "recipient" semantics, while the double object construction involves causation of a having eventuality, where the indirect object is a "possessor" in that eventuality (see also work by Harley on identifying a "have" component in double object constructions, e.g., Harley 1997, 2002). Of course, the success of this approach depends on having precise definitions of recipient and possessor roles, and independent ways of identifying and distinguishing them, but I leave that to future research (and there may well be better ways of capturing the difference). What is important here is that such differences are real and must be accounted for, and it is incorrect to view the two constructions as having the same semantics.

  Additionally, many English speakers have the intuition that R-Dative Shift is marked and requires special licensing, an intuition that I formalized as the Extraction Constraint on Rightward Specifiers. O&R claim that examples that I analyze as R-Dative Shift do not need special licensing, but their examples do not support this claim. One (their (18c)) involves heavy shift; the other, which I repeat here, requires heavy focal stress on the NP after *to*, and the context makes it contrastive:

(63) (Rappaport Hovav and Levin 2008, (66))

  A: It is very difficult to get an idea for a book simply from an interview.

  B: Well, interviewing Nixon gave an idea for a book to Mailer.

I contend that the special licensing that is required, plus the locative inversion, passivization, and scope facts, all indicate that R-Dative Shift is real. Certain verb phrases can *only* be expressed as double object constructions; when they appear to be prepositional datives, the NP in Spec-ApplP has actually been projected to the right and undergone A-bar extraction.

  Finally, O&R voice one other criticism of the R-Dative Shift analysis. This is that, according to them, a theory with two different structures cannot account for double object constructions in numerous other languages besides English. However, this criticism is based on a conflation of very different constructions. Much other work of mine and my colleagues (Bosse, Bruening, and Yamada 2012, Bosse and Bruening

2011, Bosse 2011; see also Cuervo 2003) has shown that there are several different types of applied arguments with very different properties that cannot be conflated, for instance benefactives versus affected experiencers versus ethical datives and so on. The syntactic and semantic properties of these different classes of applied argument are very different, and they are all different from the English-type caused possession applicative. O&R treat them as a single thing, a monolithic double object construction. This is a mistake.

To illustrate, consider examples like the following, discussed in Christian (1991), Webelhuth and Dannenberg (2006), Conroy (2007), Horn (2008), and Bosse, Bruening, and Yamada (2012):

(64)   Davy Crockett killed him a bear when he was only three.

Superficially, this is a double object construction: the first object is *him*, and the second object is *a bear*. According to O&R's logic, we should analyze this type of example in the same way as a caused possession double object construction. However, there are numerous differences between them. The semantics are entirely distinct (in 64, some kind of extra involvement or satisfaction/success on the part of the subject); there is no prepositional dative corresponding to (64); the first object is obligatorily co-referential with the subject in (64); nevertheless it typically takes the form of a pronoun, not a reflexive; the first object in (64) cannot be questioned and cannot be a quantifier (it is obligatorily a coreferential pronoun). Additionally, examples like (64) differ from caused possession double object constructions in ways that make it clear that the first object in (64) contributes its meaning as something like an implicature, and not as at-issue content (Horn 2008). For instance, the first object does not add a condition to a conditional:

(65)   (Bosse, Bruening, and Yamada 2012, 1223, (96))
    a.   If I sit me down in this here chair, will you give me some coffee?
    b.   If I sit down in this here chair, will you give me some coffee?

There is no difference between the two members of this pair in the conditions for receiving the coffee. So long as the speaker sits, he or she can expect some coffee (assuming the interlocutor agrees). The sentence with the additional pronoun only adds the implicature that the speaker will be more involved in, or get some kind of enjoyment out of, sitting, but that makes no difference to the conditional.

In contrast, the first object in a caused possession double object construction does add a condition in a conditional:

(66)   a.   If you melt me some ice cream, I'll give you a thousand dollars.
    b.   If you melt some ice cream, I'll give you a thousand dollars.

In (66a), if the addressee melts some ice cream, but this is not done with the intention of the speaker receiving it, they will not be entitled to the thousand dollars. In (66b), they will.

To give one more example, the additional meaning in sentences like (64) cannot be negated with sentential negation (Horn 2008):

(67)   #Davy Crockett killed a bear when he was only three, but he didn't kill him a bear when he was only three. (contradiction)

Sentential negation can only negate the at-issue content of the second clause in (67), which makes the entire sentence a contradiction. In contrast, sentential negation can target the caused possession meaning of a caused possession double object construction:

(68)   Davy Crockett whittled a flute, but he didn't whittle me a flute. (not a contradiction)

These differences, and numerous others (see especially Horn 2008), indicate that in a caused possession double object construction, the first object (and the meaning of caused possession) is part of the at-issue content of the sentence. In examples like (64), it is not, it is something like an implicature. Clearly, these two types of sentences, both of which are "double object constructions," are quite distinct, and should be analyzed in very different ways.

Though less dramatic, similar differences can be shown for benefactives, affected experiencers, ethical datives, and so on; see the works cited above. To the extent that such "double object constructions" can be shown to differ in significant ways, they should be analyzed differently. Making the mistake of conflating all of them is in no way an argument against a particular analysis of the English type of caused possession applicative. (But note that, if another language does have a caused possession applicative, it should be analyzed in the same way as the English one, unless significant differences indicate otherwise.)

7   Conclusion and Discussion

To conclude, O&R's criticisms of R-Dative Shift are off the mark, and their criticism does not address or account for the evidence in favor of such an analysis. There are two different argument structures for double object constructions and prepositional dative constructions, with different semantic interpretations. Apparent prepositional dative constructions divide into two types: real prepositional dative constructions, and R-Dative-Shifted double object constructions, which pattern in every way with double object constructions. They *are* double object constructions, in the R-Dative Shift analysis, and we have seen reasons to think that the *to* that appears with R-Dative Shift is not a preposition at all but some kind of case marker.

Additionally, the analysis that I have presented interacts with the right theory of command phenomena like weak crossover and coreference (Principle C) to predict exactly the right array of facts. The theoretical account of the subject-in-situ generalization (Alexiadou and Anagnostopoulou 2001, 2007) explains why R-Dative Shift is incompatible with locative inversion, on the assumption that the NP marked with *to* is an NP argument that requires structural case, exactly like the first object of a double object construction. All of this supports the conclusion that R-Dative Shift is a valid, internally consistent, and explanatory account of the data under analysis, while no other account comes close to its success.

The larger conclusion is that double object constructions and prepositional dative constructions have distinct underlying forms, and cannot be derivationally related. Theories that derive them from the same source are on the wrong track and should be abandoned.

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