Lingua 120 (2010) 2424–2443

Contents lists available at ScienceDirect

Lingua

journal homepage: www.elsevier.com/locate/lingua

Theme–goal ditransitives and theme passivisation in British English dialects

William Haddican *

Department of Language and Linguistic Science, University of York, Heslington, York YO10 5DD, United Kingdom

ARTICLE INFO

Article history:
Received 6 January 2009
Received in revised form 20 November 2009
Accepted 20 November 2009
Available online 11 June 2010

Keywords:
Double object constructions
Passivisation
Cliticisation
PF-interface
Object movement
Dialectal variation

ABSTRACT

This paper makes two main claims about theme–goal ditransitive constructions (e.g. *she gave it me*) available in some British English dialects. First, such sentences are derived from ordinary double object constructions. Across a range of diagnostics, theme–goal ditransitives behave like true double object constructions and are plausibly analysed as neither prepositional datives nor a third variant with the theme first merged above the goal. The inverted object order in such sentences is derived via movement of the theme to an outer specifier of the same head hosting the goal. Second, this short object movement also feeds theme passivisation in double object constructions. On this approach, theme passive double object constructions do not involve locality-violating passivisation of the theme from its first-merged position below the goal; rather the theme raises to subject position from its intermediate position (McGinnis, M., 1998. Locality in A-movement. Ph.D. Dissertation. MIT). A challenge for this (or any) unified approach to theme–goal ditransitives and theme passives is the fact that for many speakers, different pronominality restrictions apply to objects in these two constructions. These restrictions are explained as a consequence of the way that Chain Reduction feeds post-syntactic leaning operations and prosody.

1. Introduction

This paper focuses on some properties of theme–goal ditransitive constructions in British English dialects. Examples of such sentences—in which theme and goal arguments appear in the order theme–goal with no intervening preposition—are given in (1) and (2).

(1) She sent them me.

(2) I think he will carry this island home in his pocket, and give it his son for an apple.

(Shakespeare, *The Tempest*, II, i, 92–93)

This paper takes up two issues related to these constructions. The first is whether such sentences are derivationally akin to prepositional dative constructions or double object constructions (DOCs), or are rather some third variant. Data presented here suggest some variation across speakers in the way these sentences are represented; however, for most speakers in the dialect area focused on (Greater Manchester), sentences such as (1) and (2) behave like true double object constructions on standard diagnostics of double-object-hood. I argue that for these speakers, the inverted order of the objects in (1) and (2) is derived by movement of the theme to an outer specifier position of the same projection hosting the goal, vP.

* Fax: +44 (0) 1904 432673.
E-mail address: wh506@york.ac.uk.

0024-3841/$ – see front matter © 2009 Elsevier B.V. All rights reserved.
doi:10.1016/j.lingua.2009.11.003

A second issue addressed in this paper is the relationship of (1) and (2) to theme passives in double object constructions, as in (3). Sentences such as (3) have attracted attention in recent literature for the fact that they appear to involve locality-violating passive movement of the theme across the goal (Anagnostopoulou, 2003; Bissell-Doggett, 2004:95; McGinnis, 1998:146–149; 2001; Ura, 1996:169–176). Such sentences—like (1) and (2)—are available in some British English dialects, but often taken to be poor among speakers of American English (Baker, 1988; Bissell-Doggett, 2004; Woolford, 1993).[1]

(3) The ball was given my sister.

This paper develops a suggestion by Bissell-Doggett (2004:95 fn. 33) that theme passives (in this dialect at least) are underlyingly akin to active sentences such as (1) and (2). Following Ura (1996), McGinnis (1998, 2001) and Anagnostopoulou (2003), I propose that the theme does not passivise from its first-merged position below the goal, but rather from an intermediate position in the specifier of the same projection hosting the goal. On this approach, theme passives do not involve locality-violating passive movement of the theme past the goal.

A challenge for this unified approach to theme–goal ditransitives and theme passives concerns cross-speaker variation in restrictions on objects in these two constructions. In particular, speakers who accept theme-passives allow for both pronominal and full DP themes as derived subjects; many such speakers, however, accept theme–goal orders in active contexts only with pronominal themes (as in (1) and (2)). On the unified approach to theme–goal ditransitives and theme passives advocated here, these facts seem to indicate that, for this set of speakers, both full DPs and pronouns are happily spelled out in spec, TP as derived subjects, while only pronouns may be spelled out in the intermediate position. In the spirit of Bobaljik's (2002) analysis of Object Shift in Scandinavian, I propose that these facts are best explained as a consequence of the way Chain Reduction feeds/bleeds post-syntactic leaning operations and prosody (Adger, 2006). This approach, together with assumption of cross-dialectal variability in syntax-to-prosody mapping rules is shown to correctly account for the set of grammars observed.

The discussion is organized as follows. Section 2 of this paper discusses the data to be presented, which includes some controlled experimental results. Section 3 addresses the question of whether theme–goal ditransitives are true DOCs, prepositional datives or some third variant. Section 4 develops a unified account of theme–goal ditransitives and theme passives.

2. Data and method

Some of the data presented in this paper come from a controlled experimental study conducted in 2007. The subjects were 36 native speakers of Manchester English, a dialect in which theme–goal ditransitives and theme passives are used routinely in speech and readily accepted in judgment data (Hughes et al., 2006; Orton et al., 1978). The subjects were 18–30 years old, evenly divided by sex, and from a range of educational backgrounds. The participants were recruited through the personal contacts of a research assistant, who is a Manchester native.

Each subject completed a questionnaire, which asked them to represent the relative acceptability of different sentence types by shading in a bar in proportion to the perceived well-formedness of a stimulus sentence as in (4) (Bard et al., 1996; Fasold, 2005; McDaniel and Cowart, 1999).

(4) Sample questions

	Sounds bad to me	Sounds good to me
1.	Who are the students assuming helped Vicky with the taxes?	
2.	I've never visited Chester, but someday I'd like to.	
3.	My mother gave me it.	

To avoid burdening subjects with a long questionnaire, the experiment was broken into three different subdesigns, with a different set of subjects participating in each. Each subdesign focused on a different set of properties of these constructions: the first subdesign focused on verb class restrictions and differences in the behaviour of full DP and pronominal objects; the second subdesign examined cross-speaker correlations between theme–goal ditransitives, null prepositions under verbs of motion (see section 3) and passives; the third focused further on verb class restrictions, and animacy restrictions on goals with verbs of motion. Twelve subjects, evenly divided by sex, participated in each subdesign.

Each script consisted of: (i) a short description of the task followed by three training examples; (ii) the experimental materials and fillers (approximately 100 questions; this varied by subdesign); and (iii) a final set of questions asking for biographical details, including age, educational level, sex and neighbourhood of residence. The instructions explained that the questionnaire was intended to elicit "how natural the following sentences seem to [the subject] in [his/her] everyday English." Subjects were asked to answer questions one-by-one, without changing or looking back at previous answers along the way. The

[1] As Postal (2004, chapter 4) notes, theme passives may be more broadly available in American English than is sometimes acknowledged in the literature. Some American English speakers accept theme passives particularly with light goals (Larson, 1988) as in (i) and (ii).

(i) The ball was given 'em.

(ii) It is hardly fair to hang a 19-year-old boy for the philosophy that was taught him at the university. (American jurist Charles Darrow arguing against a death sentence in the Leopold and Loeb case (1924).)

In the following discussion, American English sentences of this kind are set aside.

research assistant distributed questionnaires and explained the procedure, but did not supervise or time the subjects as they completed the questionnaire. Subjects reported that the questionnaires took between ten and fifteen minutes to complete.

The ratio of fillers to experimental sentences was 1.5:1, for subdesign 1, and 2:1 for subdesigns 2 and 3. Experimental sentences and fillers were pseudorandomised and counterbalanced, with 3 blocks of experimental materials per script and three scripts per subdesign. Each subject judged each sentence type three times. Results from these experiments, together with some non-controlled data, are presented in the following sections.

3. The structure of theme–goal ditransitives

The availability of theme–goal ditransitives varies by dialect area. Sentences such as (1) are most readily accepted by speakers in North western and Western dialects of England from Lancashire through Gloucestershire, including parts of the midlands and West Yorkshire. They also are sometimes accepted by speakers in Wales and from dialects further South including London and Cornwall. Speakers of North eastern English dialects and Scots typically do not accept theme–goal ditransitives. Our results and previous literature suggest that all speakers who accept theme–goal ditransitives also accept both DOCs and prepositional datives (Siewierska and Hollmann, 2007; Hughes et al., 2006; Kirk, 1985; Orton et al., 1978).

As will be discussed in detail below, there is considerable cross-speaker variation in the kinds of objects that may participate in theme–goal ditransitives. As noted by Hughes et al. (2006), speakers most readily accept theme–goal ditransitives with two pronominal objects as in (5); a smaller set of speakers also accept theme–goal orders with a pronominal theme and full DP goal as in (6); and rarer still are speakers who accept theme–goal orders with a full DP theme as in (7) and (8).[2]

(5) She gave it him. (pro-pro)
(6) She gave it the boy. (pro-DP)
(7) She gave the ball him. (DP-pro)
(8) She gave the ball the boy. (DP-DP)

The remainder of this section will focus on the structure of theme–goal ditransitives in active contexts. In particular, we entertain three hypotheses about such sentences. One possibility is that theme–goal ditransitives are underlyingly double object constructions. On this approach, some movement operation—perhaps as in (9)—is presumably responsible for the inverted order of the objects.

(9) She gave it me <it>.

A second possibility is that such constructions are underlyingly prepositional dative constructions with a null (or deleted) *to* preposition.[3]

(10) She gave it TO me.

This second approach seems to be supported by the fact that many English dialects—including Northwest and Western English dialect speakers—variably permit a null/deleted *to* under verbs of motion as in (11).[4] On the assumption that the *to* of prepositional datives is the same *to* under verbs of motion, this second hypothesis would allow for a unified account of theme–goal ditransitives and sentences such as (11).

(11) I want to go __ Chessington.

A third hypothesis is that theme–goal ditransitives are underlyingly neither DOCs nor prepositional datives, but rather some third variant. One such alternative is Bissell-Doggett's (2004:94–96) suggestion that the theme may be first merged above the goal, as in (12). (Bissell-Doggett does not discuss what the first-merged position of the theme is.)

(12) She gave [it [me]].

The following sections present evidence from some standard diagnostics of double object-hood vs. prepositional dative-hood to theme–goal ditransitives in an effort to assess evidence for these different hypotheses. The data in fact

[2] The literature does not discuss definiteness restrictions on the availability of object orders in these dialects (cf. Holmberg and Platzack, 1995). This factor was not included in the present experimental design, however, non-controlled intuition data from native speakers suggests that definiteness does not bear on this variation.

[3] According to this approach theme–goal ditransitives, would resemble Romanian prepositional datives as analysed by Diaconescu and Rivero (2004) and Icelandic "inversion" constructions (Collins and Thráinsson, 1996; Holmberg and Platzack, 1995).

[4] In these dialects, infinitival *to* may not be null/deleted.
(i) *I want __eat sushi.

Fig. 1. Mean acceptability score by object types. (Subdesign 1 data. Wilcoxon signed-rank tests. For pro-pro (*She gave it me*) and pro-DP (*She gave it the boy*) sentence types: $W(n = 12) = 78$. For pro-DP (*She gave it the boy*) and DP-DP (*She gave the ball the boy*) sentence types: $W(n = 12) = 9$. For DP-DP (*She gave the ball the boy*) and DP-pro (*She gave the boy him*) sentence types: $W(n = 12) = 34$.)

suggest cross-speaker variation in representations of theme–goal orders: for most subjects in the study, theme–goal orders behave like DOCs on standard tests; for a smaller set of speakers theme–goal orders behave more like prepositional datives.

3.1. Pronouns vs. DPs

Fig. 1 shows mean acceptability scores for theme–goal sentence types with four different object configurations—pro-pro, pro-DP, DP-DP and DP-pro. The scores shown are on a 0–100 scale with 100 as the maximally natural score and 0 as the maximally unnatural score. The data are consistent with reports in previous literature that speakers find theme–goal ditransitives better with pronominal objects than full DP objects (Bissell-Doggett, 2004; Siewierska and Hollmann, 2007). Wilcoxon signed-rank tests for paired samples revealed significant differences between all four sentence types except between DP-DP (*She gave it me*) DP-pro (*She gave it the boy*) types.

These data suggest a first, theory-internal argument in favour of a DOC analysis of theme–goal ditransitives. In particular, on a standard view of prepositional datives—with the phrase headed by *to* merged as a complement of V and the theme merged in spec, VP, as in (13)—it is difficult to see why the status of the theme as a full DP or a pronoun should condition the availability of a null/deleted *to*.

(13) $[_{vP}$ *give* $[_{VP}$ *it* $[_{V}$ <*give*> $[_{PP}$ *to* $[_{DP}$ *me*]]]]]

By contrast, an analysis of theme–goal ditransitives as underlying DOCs suggests a more familiar understanding of these facts, namely that these sentences involve some kind of short object movement preferentially available to pronouns, akin to Romance clitic climbing, object shift in Germanic, English particle verb constructions, etc. An underlying DOC analysis of these facts, might therefore make use of independently needed principles of object movement—whatever these may be—in explaining these facts; from the perspective of theme–goal ditransitives as underlyingly prepositional datives, some other, more exotic account appears required.

The fact that pronominal goals favour theme–goal ditransitives is reminiscent of locality-obviating cliticisation in Greek discussed by Anagnostopoulou (2003). Anagnostopoulou observes that an overt full DP goal in Greek blocks passive movement, just as in English (14a). Nevertheless, when the goal is a clitic, or is doubled as in (14b), passivisation is licit.

(14) Adapted from Anagnostopoulou (2003:194)

a. *To vivlio charistike tis Marias apo ton Petro.
The book award-Pas the Maria-Gen from the Petros
*'The book was awarded Mary by Peter.'

b. To vivlio tis charistike (tis Marias)
The book Cl-Gen award-Pas the Maria-Gen
'The book was awarded to Mary.'

We return to these facts in section 4 which develops an analysis of English theme–goal ditransitives similar in spirit to Anagnostopoulou's analysis of these Greek facts.

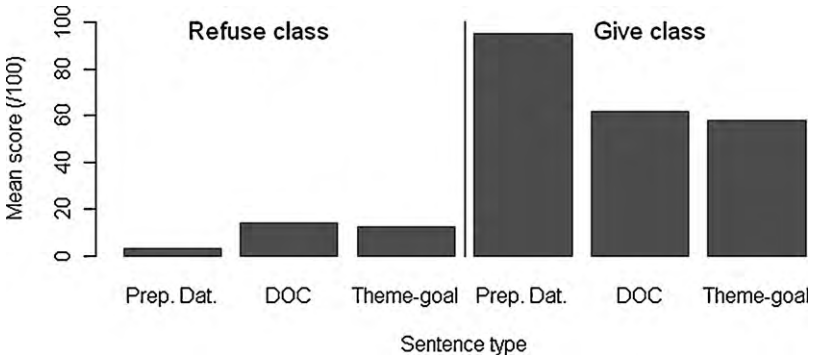

Fig. 2. Acceptability scores by sentence type and verb class.

3.2. Verb class restrictions

3.2.1. Refuse, envy-class verbs

For most speakers of English, a class of verbs, including "prevention of possession" verbs (*refuse*, *deny*) verbs, and a handful more (*issue*, *ask*, *envy*) are fine in DOCs, but poor in prepositional dative constructions (Levin, 1993).

(15) She refused me a favour.

(16) *She refused the favour to me.

These facts provide for a first argument structure diagnostic: if theme–goal ditransitives are underlyingly prepositional datives, then we expect them to be poor with these classes of verbs on a par with surface prepositional datives. If, on the other hand, theme–goal ditransitives are underlyingly DOCs we expect the effect of this verb class difference to be similar to that for DOCs. Bissell-Doggett's analysis makes no predictions about the behaviour of theme–goal ditransitives with this class of verbs.

Fig. 2 shows mean acceptability scores by frame for the two verb classes. The first, labelled the "Give class", consists of verbs typically acceptable to speakers in both prepositional dative and DOC frames (Levin, 1993).[5] The second, labelled the "Refuse class" here, consists of verbs with which prepositional datives are typically poor.[6]

Fig. 2 shows that all three frames are degraded with *refuse* class verbs, a fact which may be partly attributable to frequency and stylistic differences between these two verb classes. Wilcoxon signed-rank tests revealed significant differences for all three ditransitive types (for prepositional datives, $W(n = 12) = 78$, $p = .002$; DOCs, $W(n = 12) = 77$, $p = .003$; theme–goal orders $W(n = 12) = 45$, $p = .009$). More important for our purposes, however, is the fact that this verb class effect is much greater for prepositional datives than for theme–goal ditransitives and DOCs. To examine the interaction between verb class and ditransitive type, a Wilcoxon signed-rank test was performed on the difference in scores for each ditransitives type between the two verb classes. For the contrast between theme–goal constructions and prepositional datives, the verb class difference is significant ($W(n = 12) = 78, p = .025$). The verb class difference, however, is not significant for the contrast between theme–goal constructions and DOCs ($W(n = 12) = 38$, $p = .970$). For this set of subjects, DOCs and theme–goal ditransitives therefore behave similarly, and unlike prepositional datives, in terms of this verb class effect.

3.2.2. Whisper, haul and donate-class verbs

For certain latinate verbs (*donate*, *contribute*), "manner of communication" verbs (*shout*, *mutter*, *whisper*, *scream*) and verbs of "continuous imparting of force" (*push*, *haul*, *lift*, *pull*), the verb class effect is the opposite: these verb classes are typically degraded in DOCs but fine in prepositional dative constructions (Bresnan and Nikitina, 2003; Levin, 1993).

(17) She {*whispered/*donated/*hauled} me it.

(18) She {whispered/donated/hauled} it to me.

This contrast allows for a second test: if theme–goal ditransitives are underlyingly prepositional datives, we expect them be sensitive to these verb class restrictions in a way similar to (surface) prepositional datives; if they are DOCs or some third configuration, then we expect no such effect. Bissell-Doggett's proposal, again, makes no clear predictions.

[5] Subdesign 3 data. The verbs used were: *give*, *show*, *offer*, *lend*, *show*, *pass*, *bring*, *send*, *sell*, *take*.

[6] The verbs used were: *envy*, *refuse*, *ask*. Sentences with *deny* were included in the questionnaire, but have been excluded in the analysis because of the availability of an indirect speech interpretation.

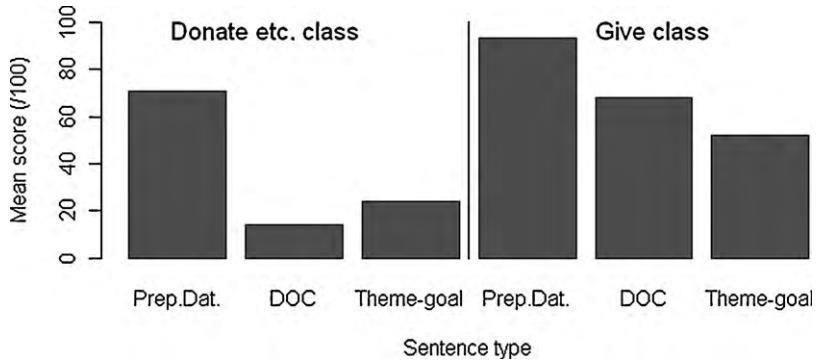

Fig. 3. Acceptability scores by sentence type and verb class. (Subdesign 2 data. The verbs used were *whisper*, *pull*, *lower*, *contribute*, *mutter*, *donate*, *haul*, *scream*, *lift*.)

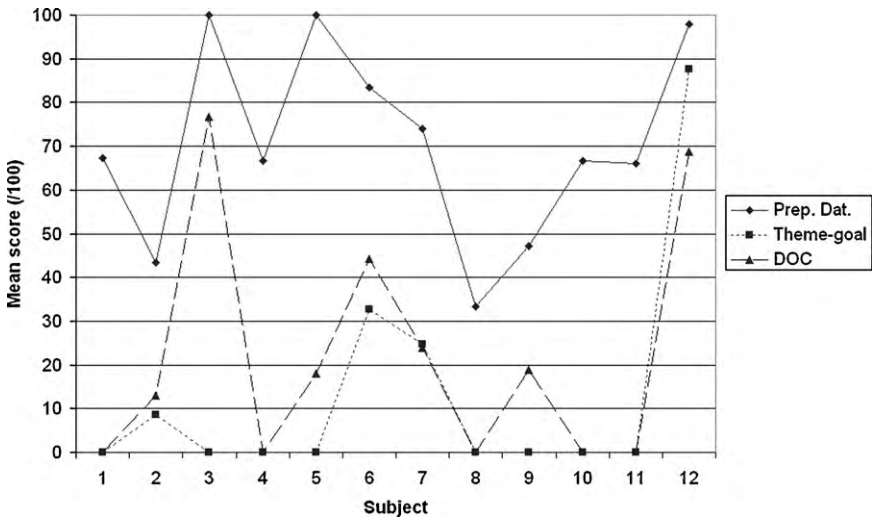

Fig. 4. Mean acceptability scores by speaker for three ditransitive frames with *whisper*, *haul* and *donate* class verbs.

Fig. 3 shows a verb class difference, which is significant for all three ditransitive types (prepositional datives, $W(n = 12) = 53$, $p = .010$; DOCs, $W(n = 12) = 64$, $p = .007$; theme–goal orders $W(n = 12) = 65$, $p = .005$). The interaction between verb class and frame, however, differs somewhat from that for the *refuse*-class data just discussed: DOCs show the sharpest difference between *give* class and *whisper*/*haul*/*donate*-class verbs, and prepositional datives the smallest; theme–goal ditransitives pattern in between DOCs and prepositional datives in terms of the verb class effect. To examine this interaction, a Wilcoxon signed-rank test was again performed on the difference in scores across ditransitive types between the two verb classes. For the contrast between theme–goal constructions and prepositional datives, the verb class difference is significant ($W(n = 12) = 78$, $p = .025$); for the contrast between theme–goal constructions and DOCs, however, this verb class difference is not significant ($W(n = 12) = 40$, $p = .970$).

The ambiguous behaviour of theme–goal ditransitives in Fig. 3 turns out to reflect cross-subject variation. Fig. 4 shows mean acceptability scores across subjects for each ditransitive frame with *whisper*/*haul*/*donate*-class verbs. The figure shows a strong cross-subject correlation in scores for DOCs and theme–goal ditransitives, with the exception of subjects three and twelve, for whom theme–goal ditransitives behave more like prepositional datives.

These data show that for most of the subjects in this subdesign, theme–goal constructions indeed behave like DOCs in terms of this verb class effect. One possible interpretation of the data for subjects three and twelve is that, for these speakers, theme–goal ditransitives are underlyingly prepositional datives with a null/deleted preposition. In the next sections, we discuss additional evidence suggesting cross-speaker variation in the grammar of theme–goal ditransitives.[7]

[7] A reviewer notes that a by-speaker summary of different diagnostics of double-object-hood would be helpful for evaluating the suggestion here (and below) that for some speakers, theme-goal orders are underlyingly prepositional datives. Because the different diagnostics are distributed across different subdesigns, each with a different set of speakers, this is unfortunately not possible.

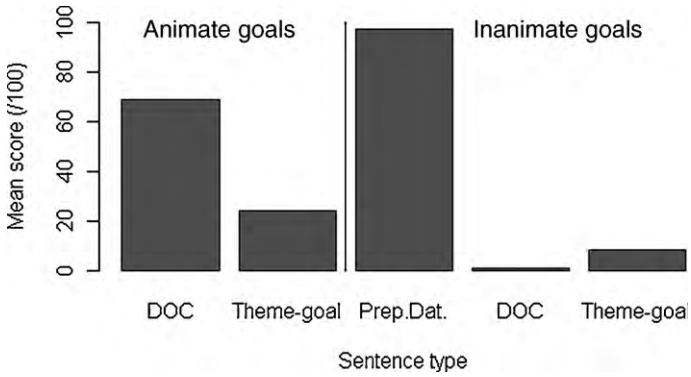

Fig. 5. Acceptability scores by sentence type and goal type.

3.3. Animacy restrictions on goals

A further property distinguishing DOCs and prepositional datives is that in the former, but not the latter, goals must be animate (Anagnostopoulou, 2003; Green, 1974; Harley, 2002). This is illustrated in (19)–(21).

(19) I sent Maria the letter.

(20) *I sent France the letter.

(21) I sent the letter to France.

These facts allow for a third test: if theme–goal ditransitives are underlyingly DOCs, then we expect them to be degraded with inanimate goals on a par with DOCs; if on the other hand, they are prepositional datives, we expect no such animacy effect.

To test these predictions, we compare mean acceptability scores for sentences with animate and inanimate full DP objects. These are given in Fig. 5.[8]

Fig. 5 shows that theme–goal ditransitives are indeed sharply degraded with inanimate goals, much like DOCs. Nevertheless, the animacy effect is greater for DOCs than for theme–goal orders. A Wilcoxon signed-rank test revealed that scores for DOCs with inanimate goals are significantly lower than those for theme–goal constructions ($W(n = 12) = 36$, $p = .014$).

The ambiguous behaviour of theme–goal ditransitives in Fig. 5 is reminiscent of the data for *whisper*/*haul*/*donate*-class verbs and again raises the possibility of cross-speaker variation in the representation of theme–goal ditransitives. To test this, we compare mean acceptability scores across subjects for theme–goal ditransitives with inanimate goals and sentences with a null/deleted *to* under verbs of motion as in (22). Again, if subjects represent theme–goal ditransitives as underlying prepositional datives with a null/deleted *to*, we expect them to accept sentences such as (22) with a null/deleted directional *to*.

(22) She went the pub.

Fig. 6 shows mean acceptability scores by subject for these two sentence types as well as theme–goal ditransitives with pronominal objects (e.g. *she gave it me*). The data in this figure show that subjects accept theme–goal ditransitives with full DP inanimate goals, only if they also accept null/deleted *to* sentences (and not vice-versa); all of the first five subjects, who marginally accept sentences such as (23), also accept (22) to an equal or greater extent.

(23) She sent John the pub.

Figs. 5 and 6 again suggest some cross-speaker variability in representations of theme–goal ditransitives. The data for subjects one through five suggests that, for these speakers, theme–goal ditransitives may (variably at least) be prepositional dative constructions with a null preposition. The fact that subjects six through twelve completely reject theme–goal ditransitives with inanimate goals plausibly indicates that, for these speakers, theme–goal ditransitives are true DOCs.

[8] Subdesign 1 data. Full DP goals were used since inanimate pronominal goals are odd even in prepositional dative contexts. For example, (i) is poor on an interpretation where *it*/*them* refers to one or more countries.
(i) *I sent the letter to it/them.
To further control for the effect of weight, full DP themes were also used.

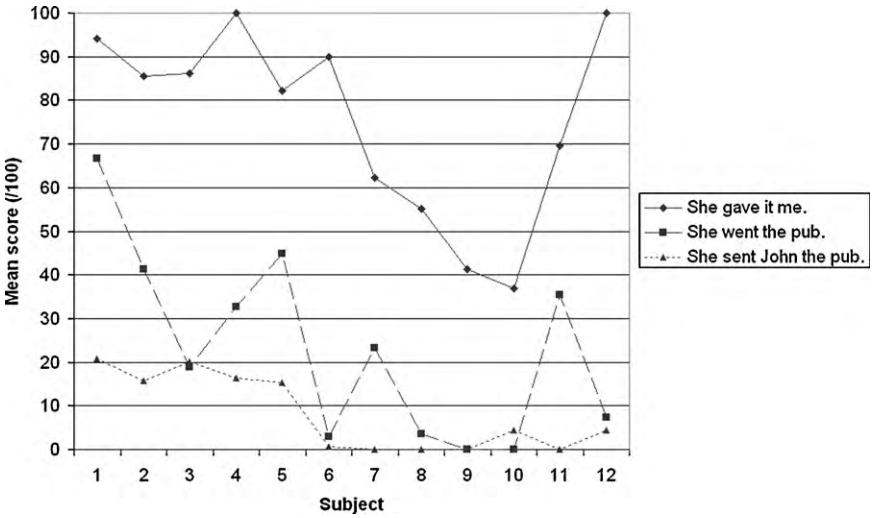

Fig. 6. Mean scores for three sentence types by subject.

3.4. Evidence from non-controlled judgment data

The above data show that for most of the participating subjects, theme–goal ditransitives behave like true DOCs on some standard tests. These facts are consistent with non-controlled judgment data for four additional diagnostics, which suggest that, for most speakers in and around Manchester, theme–goal ditransitives behave like true DOCs.

First, speakers from this dialect area typically report that theme–goal orders—like DOCs and unlike prepositional datives—are poor on benefactive interpretations (Beck and Johnson, 2005; Green, 1974; Pylkkänen, 2002). Consider a scenario in which an online shopper is stymied by an awkward webpage, and asks a more IT-savvy friend to place the order in his name (using the shopper's credit card, etc.). In such a context, the prepositional construction in (24) is fine, while both the DOC in (25) and the theme–goal construction in (26) are poor.

(24) She bought it for me. ('She ordered it for me.') (prepositional dative)
(25) *She bought me it. ('She ordered it for me.') (DOC)
(26) *She bought it me. ('She ordered it for me.') (theme–goal ditransitive)

Again, from the perspective of theme–goal orders as underlyingly prepositional datives, the unavailability of (26) is mysterious.

Second, theme–goal ditransitives behave like true DOCs, and unlike prepositional datives in being poor in nominalisations (Kayne, 1984).

(27) the giving of it to me (prepositional dative)
(28) *the giving of me it (DOC)
(29) *the giving of it me (theme–goal ditransitive)

Third, theme–goal ditransitives are like DOCs in that both objects may appear between the verb and particle in particle-verb constructions with *back*. This word order is unavailable with prepositional dative constructions (Johnson, 1991).

(30) *She gave it to me back. (prepositional dative)
(31) She gave me it back. (DOC)
(32) She gave it me back. (theme–goal ditransitive)

Finally, theme–goal ditransitives pattern with DOCs and diverge from prepositional datives in giving rise to Person Case Constraint (PCC) effects. Across English dialects, DOCs differ from prepositional datives in that, in the former, combinations of two weak object pronouns are degraded if the theme is first or second person (Anagnostopoulou, 2008; Bonet, 1991:185–186; Haspelmath, 2004). As Haspelmath (2004), notes, animacy also has an effect: in DOCs, speakers typically prefer inanimate themes to animate themes (see also Bresnan and Nikitina, 2003). The combined effects of these person and animacy restrictions are illustrated in (33) and (34).

(33) a. Tania showed it to her. (prepositional dative)
b. Tania showed him to her. (prepositional dative)
c. Tania showed me to her. (prepositional dative)

(34) a. Tania showed her it. (DOC)
'Tania showed it to her.'
b. ?Tania showed her him. (DOC)
'Tania showed him to her.'
c. ??/*Tania showed her me. (DOC)
'Tania showed me to her.'

Speakers of Northern and Western dialects report similar effects for prepositional dative constructions and DOCs.[9] These speakers also typically find that theme–goal orders are subject to the same person/animacy restrictions as DOCs, as shown in (35).

(35) a. Tania showed it her. (theme–goal ditransitive)
'Tania showed it to her.'
b. ?Tania showed him her. (theme–goal ditransitive)
'Tania showed him to her.'
b. ??/*Tania showed me her. (theme–goal ditransitive)
'Tania showed me to her.'

These data therefore show that theme–goal ditransitives behave like DOCs and unlike prepositional datives in terms of PCC effects. If PCC effects are a syntactic rather than a morphological phenomenon (Anagnostopoulou, 2003; Rezac, 2008), then these facts provide further evidence against a prepositional dative approach to theme–goal ditransitives.

Hence, for most speakers in these dialects, theme–goal ditransitives behave like double object constructions on standard tests.[10] The data on verb class restrictions and animacy restrictions on goals nevertheless suggest that for some speakers, theme–goal ditransitives are rather more akin to prepositional dative constructions. In the following discussion, we abstract away from this variation and focus on what appears to be the predominant pattern in these dialects whereby theme–goal orders behave like true DOCs.

3.5. Theme passives are DOCs, too

Theme passives in British English dialects raise similar worries. Previous literature has assumed that theme passives such as (3) (repeated here) are derived from DOCs, as suggested by the fact that such sentences have no overt *to* preposition.

(3) %The ball was given my sister.

Nevertheless, in view of the fact that many British speakers accept sentences with a null/deleted *to* under verbs of motion, we must consider the possibility that theme passives are derived from a prepositional dative construction with a null/deleted *to* preposition, as in (36).

(36) %The ball was given TO my sister.

Standard diagnostics suggest that theme-passives in this dialect do in fact behave like true DOCs. Speakers who accept theme passives typically report that such sentences are degraded with *whisper*, *haul* and *donate* class verbs. This is expected on a DOC analysis of theses sentences, and unexpected from a prepositional dative analysis.

(37) The ball was given the boy.
(38) ?The ball was carried the boy.

[9] As Haspelmath notes, some speakers do not find (34c) much degraded. These same speakers however do find (35c) considerably worse. These speakers, then, are reminiscent of Swiss German dialects discussed in Anagnostopoulou (2003, chapter 5) where PCC-effects are sensitive to object order.

[10] Note, finally, that theme–goal ditransitives appear to share with DOCs the property that goals cannot A-bar extract (Kayne, 1984; Larson, 1988). The fact that speakers who accept theme-goal ditransitives do not accept (ii), suggests the possibility that whatever is responsible for the inability of goals in DOCs to A-bar extract also applies to goals in theme-goal ditransitives.

(i) Who did she give it to <who>? (prepositional dative)
(ii) *<Who> did she give it? (DOC/theme-goal ditrans.)

Similarly, speakers who accept theme passives typically find them to be poor with inanimate goals as in (40) and on a benefactive interpretation as in (41) and (42).

(39) The letter was sent my mate.

(40) *The letter was sent France.

(41) *The toy was bought me. ('The toy was purchased on my behalf.')

(42) *The bag was held me. ('The bag was held for me.')

In view of these facts, we assume that theme passives in Greater Manchester are indeed derived from true double object constructions, like theme–goal ditransitives.

4. Short object movement and theme passivisation

The data presented in the previous section suggest that for most speakers in and around Manchester, theme–goal ditransitives and theme passives behave like DOCs on standard diagnostics. The remaining discussion proposes a unified approach to object movement in theme–goal ditransitives and theme passives.

4.1. Locality in A-movement: McGinnis (2001) and Anagnostopoulou (2003)

As a first approach to the object order facts discussed so far, let us consider McGinnis' (2001) high/low applicative analysis of theme passivisation. McGinnis proposes that a set of syntactic differences between applicative constructions cross-linguistically is relatable to a semantic difference, namely whether the applicative head denotes a relation between two individuals or rather a relation between an event and an individual. Following Pylkkänen (2002), McGinnis proposes that ditransitives of the former type involve a "low applicative" structure in which the applicative head takes the theme as its complement and the goal as its specifier. In the latter kind of ditransitives—"high applicatives"—the applicative head takes the goal as its specifier and VP as its complement. These two structures are illustrated in (43) and (44), respectively.

(43) $[_{vP}\ v\ [_{VP}\ V\ [_{ApplP\ (Phase)}\ GOAL\ [_{Appl'}\ Appl\ THEME]]]]$ Low applicative

(44) $[_{vP\ (Phase)}\ v\ [_{ApplP}\ GOAL\ [_{Appl'}\ Appl\ [_{VP}\ V\ THEME]]]]$ High applicative

McGinnis further proposes that phase-hood is determined by structure: in high applicatives, ApplP is a phase, while in low applicative structures, vP is a phase. These structural differences, together with the assumption of phase EPP features, have the consequence that extraction of the theme past the goal will be possible in the case of high but not low applicatives. In a high applicative, the theme may be attracted to the phase edge—spec, ApplP—by an EPP feature on Appl. From this position, the theme may raise to TP in passive contexts.

(45) $[_{vP}v\ [_{ApplP}\ THEME\ [_{ApplP}\ GOAL\ [_{Appl'}\ Appl\ [_{VP}\ V\ \langle THEME\rangle]]]]$

By contrast, in the case of low applicatives, EPP-driven movement to the phase edge will not be possible, since the theme will intervene between the EPP probe and the theme as in (46).

(46) $[_{vP}v\ [_{VP}\ V\ [_{ApplP}\ GOAL\ [_{Appl'}\ Appl\ THEME]]]]$

McGinnis' proposal is an appealing approach the English dialect theme–goal orders in both active and passive contexts. Three sets of facts, however, suggest that this approach will not be sufficient for accounting for the English dialect facts discussed so far. A first problem with the proposal illustrated in (45) is that there is no semantic motivation for an analysis of theme–goal ditransitives and theme passives as high applicatives in Pylkkänen's (2002) sense. As noted in section 3.4, theme–goal ditransitives like DOCs, require an interpretation where a possessive relation exists between the recipient and theme. Examples (47) and (48) show that English DOC's are unavailable with static verbs like *hold* and *eat*. From the perspective of Pylkkänen's analysis of English DOCs as low applicatives, this stands to reason since holding and eating events cannot plausibly result in a transfer of possession.

(47) *She held me it. ('She held it for me.') (Pylkkänen, 2002:23)

(48) *They ate her it. ('They ate it for her.') (Pylkkänen, 2002:23)

As shown in (49) and (50), counterpart *hold* and *eat* examples with the objects ordered theme–goal, are also poor.

(49) *She held it me. ('She held it for me.')
(50) *They ate it her. ('They ate it for her.')

Theme–goal orders with static verbs are likewise unavailable in passive contexts, as illustrated in (51) and (52).

(51) *The bag was held her. ('The bag was held for her.')
(52) *The sandwich was eaten her. ('The sandwich was eaten for her.')

In this way, English theme–goal ditransitives and theme passives differ from canonical high applicatives—such as the Luganda example in (53)—which are available with static verbs.

(53) Katonga ya-kwaant-i-dde Mukasa ensawo
Katonga PAST-hold-APPL-PAST Mukasa bag
'Katonga held the pot for Mukasa.' (Pylkkänen, 2002:25)

A second diagnostic proposed by Pylkkänen (2002:23) to distinguish high and low applicatives is unergative verbs. If low applicatives denote a relation between the direct and indirect objects, they should not be able to appear in unergative constructions, which lack a direct object. By contrast, high applicative constructions, which denote a relation between the applied object and an event, should be available with unergatives. (54) and (55) show that applied objects in Albanian and Luganda—high applicative languages—are fine with applied objects.

(54) I vrapova.
him(DAT.CL) ran.1sg
'I ran for him.' (Pylkkänen, 2002:25)
(55) Mukasa ya-tambu-le-dde Katonga.
Mukasa PAST-walk-APPL-PAST Katonga
'Mukasa walked for Katonga.' (Pylkkänen, 2002:25)

By contrast, counterpart sentences in English are ungrammatical, as illustrated in (56).

(56) *John ran her. ('John walked for her.')

The unavailability of (56) holds across dialects. The fact that speakers who accept theme–goal ditransitives do not accept (56) is unexpected if high applicative constructions are available in these dialects. This fact therefore suggests further reason for scepticism toward a high applicative analysis of theme–goal constructions in English.

A second challenge for the approach illustrated in (45) is posed by the grammar of speakers who accept full DP themes as derived subjects but not in active theme–goal ditransitives. Fig. 7 repeats data from Fig. 1 showing a sharp difference between DP-DP sequences and pronoun-DP sequences in theme–goal ditransitives ($W(n = 12) = 9$, $p = .037$). The literature reports no such restrictions for derived subjects in theme passives. Fig. 7, in fact, shows that pronominal derived subjects are somewhat better than full DPs but this difference is not significant ($W(n = 12) = 25$, $p = .075$).

In terms of McGinnis' proposal, these facts appear to indicate that, for many speakers, both pronouns and full DP themes are happily spelled out in TP as derived subjects, but only pronouns may be spelled out in the intermediate, ApplP position. To account for this dialect along lines advocated by McGinnis (2001), some additional assumptions appear required.

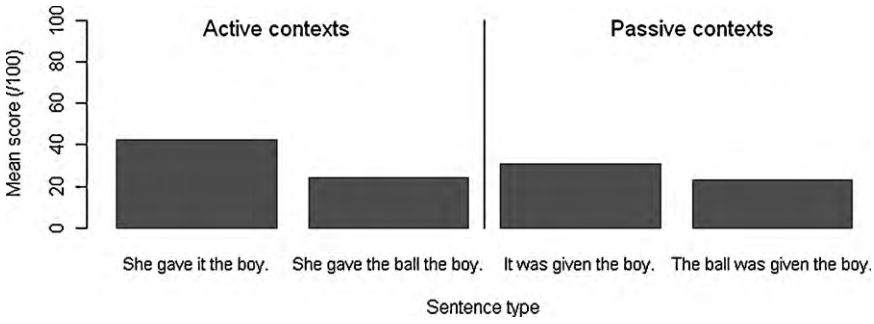

Fig. 7. Mean acceptability scores for theme–goal frames by theme type.

A final obstacle for the approach illustrated in (45) concerns cross-dialectal differences: many speakers of dialects outside the Northwest and West of England happily accept theme passives but do not accept theme–goal orders in active contexts at all. If theme passives are always and everywhere fed by the short object movement illustrated in (45), then the unavailability of (active) theme–goal ditransitives among speakers who accept theme passives is troubling. That is, this approach seems to require that for this set of speakers, the theme can undergo short object movement, only if it can subsequently move on to TP. On this view, theme passives in these dialects seem to belong to a family of phenomena discussed in detail by Richards (1997:127–162), where movement is licit only if it feeds a further movement step. How exactly this restriction might be expressed in formal terms, however, is unclear (Anagnostopoulou, 2003). In the analysis developed below, I suggest that this "look before you leap" problem, in the case of English dialects at least, is only apparent.

The pronoun vs. full DP contrast instead seems to recommend an approach closer to Anagnostopoulou's analysis of object shift and theme passives in mainland Scandinavian. As noted above, theme–goal ditransitives in British dialects are reminiscent of object shift (OS) in mainland Scandinavian in that they appear to involve short object movement available only to pronouns (for many speakers). (57) illustrates this phenomenon in Norwegian where, in verb raising environments, objects may raise to a position above the negative adverb *ikke* only when they are phonologically weak.

Object shift in Scandinavian:

(57) Hun sa (meg$_i$/*MEG$_i$/*[meg og deg] $_i$/*[ham pa sykkelen]) ikke t$_i$ (Norwegian)
she saw me ME me and you him on the bike not
'She didn't see me/me and you/him on the bike.' (Adapted from Thráinsson, 2001:150)

The comparison between Swedish and Norwegian OS and the English dialect facts discussed so far, however, extends further in two ways. The first concerns variation in object order. The base order for objects in Norwegian and Swedish double object constructions—as in English—is goal–theme, as illustrated in the following Swedish examples.

(58) Adapted from Holmberg and Platzack (1995:188).
a. Jag gav Johan en bok.
I gave Johan a book
'I gave John a book.'
b. *Jag gav en bok Johan.
I gave a book Johan
'*I gave a book John.'

As in English, the goal c-commands the theme: in (59a) the goal happily binds a reflexive theme, while in (59b), the theme fails to bind the pronoun inside the goal.

(59) Adapted from Holmberg and Platzack (1995:191).
a. Kann du inte ge Johan$_i$ sina$_i$ kläder?
Can you not give Johan his(REFL) clothes
'Can't you give John his clothes?'
b. *Kann du inte ge sin$_i$ rätta ägare tavlan$_i$?
Can you not give its rightful owner painting-the
'Can't you give its rightful owner the painting?'

In OS contexts, where both objects are pronominal, the most broadly accepted word order is goal–theme. However, as in the case of English dialects, some speakers also accept theme–goal orders particularly when the pronoun is reduced (Hellan and Platzack, 1999; Anagnostopoulou, 2003:125). One possible configuration is for the just the theme to raise above the VP-adverb, leaving the theme in situ, as in (60c and d).

(60) Swedish (from Hellan and Platzack, 1999; Anagnostopoulou, 2003:125)
a. Han visade henne inte den. (goal–theme)
b. Han visade 'na inte' en. (goal–theme)
He showed her not it.
'He did not show it to her.'
c. ?Han gav den inte henne. (theme–goal)
d. Han gave 'en inte 'na. (theme–goal)
He gave it not her
'He didn't give it to her.'

Alternatively, both the theme and goal may raise out of VP—"multiple OS"—as in (61).

(61) Swedish (from Anagnostopoulou, 2003:127)
a. Jag gav honom den inte (goal–theme)
I gave him it not.
'I didn't give it to him.'
b. Jag gav den honom inte (theme–goal)
I gave it him not
'I didn't give it to him.'

A second point of comparison with the English dialect facts discussed so far concerns variation in passives. As in British English, some speakers of both Norwegian and Swedish allow for both theme passivisation and goal passivisation in DOCs (Anagnostopoulou, 2003; Baker, 1988; Bissell-Doggett, 2004; Holmberg and Platzack, 1995; Woolford, 1993). Examples of theme and goal passivisation in Norwegian and Swedish are given in (62) and (63), respectively.

(62) Norwegian (from Holmberg and Platzack, 1995:217–218)
a. Jon ble gitt en bok.
John was given a book
'John was given a book.'
b. En bok ble gitt Jon.
A book was given John.
% 'A book was given John.'

(63) Swedish (from Holmberg and Platzack, 1995:217–218)
a. Johan förärades en medalj
Johan was-presented a medal
'John was presented a medal.'
b. Medaljen förärades Johan
The-medal was-presented Johan
%'The medal was presented John.'

Anagnostopoulou (2003) proposes a unified account of this object order variation similar in spirit to McGinnis' (2001) approach to high applicatives. Specifically, Anagnostopoulou argues that theme–goal orders in both passives and OS are fed by movement of the theme to an outer specifier of the same head hosting the goal, as in (64).

(64) $[_{\text{ApplP}}$ THEME $[_{\text{Appl'}}$ GOAL $[_{\text{Appl'}}$ vAPPL $[_{\text{VP}}$ V <THEME>]]]]

In passive contexts, the structure in (64) feeds theme passivisation, since the theme is the closest DP to T. If the theme does not raise to ApplP, T instead attracts the goal which is the higher of the two objects.

In OS contexts, Anagnostopoulou proposes that objects move to a higher vP where the external argument is introduced. Following Richards (1997), Anagnostopoulou assumes that movement of objects to the higher vP is order preserving. That is, by locality of agreement, the higher of the two objects will raise first, and the lower of the two will "tuck in" to a specifier position below the position targeted by the higher object. If the theme has previously raised out of VP, this movement will produce a theme–goal order for OS as in (65).

(65) theme–goal orders in OS
$[_{\text{ApplP}}$ THEME $[_{\text{Appl'}}$ GOAL $[_{\text{v'}}$ EA $[_{\text{v'}}$ v $[_{\text{ApplP}}$ <THEME> $[_{\text{Appl'}}$ <GOAL> $[_{\text{Appl'}}$ vAPPL $[_{\text{VP}}$ V <THEME>]]]]

If, on the other hand, the theme does not raise to ApplP, then the goal will raise first and the theme will tuck in below yielding a goal–theme order.

(66) goal–theme orders in OS
$[_{\text{ApplP}}$ GOAL $[_{\text{Appl'}}$ THEME $[_{\text{v'}}$ EA $[_{\text{v'}}$ v $[_{\text{ApplP}}$ <GOAL> $[_{\text{Appl'}}$ vAPPL $[_{\text{VP}}$ V <THEME>]]]]

With the further assumption that movement to the OS position is restricted to weak pronouns in Swedish/Norwegian, Anagnostopoulou's proposal is therefore able to account for the fact that while OS is restricted to pronouns, passivisation may apply to both lexical DPs and pronouns.[11]

The analysis of theme–goal orders in British dialects to be presented shortly will be similar in spirit to Anagnostopoulou's analysis of OS. I will nevertheless remain agnostic about whether the movement responsible for theme–goal orders in English dialects can be directly assimilated to OS. One obstacle to a unified approach to OS and theme raising in English dialects concerns the landing site of the movement. Again, the position targeted by OS must be above the position of negation and sentential adverbs, since OS raises objects above these. As Holmberg (1999:6) notes, the position of negation must be at least as high as the first-merged position of auxiliary verbs, since negation precedes the auxiliary's base position. This fact is visible in embedded clauses, which in Mainland Scandinavian, involve no verb movement. In non-finite clauses with an auxiliary such as (67), negation obligatorily precedes the auxiliary.

(67) (Swedish)

a. Det är möjligt [att Per inte har kysst henne].
It is possible that Peter not has kissed her
'It is possible that Peter hasn't kissed her.'

b. *Det är möjligt [att Per har inte kysst henne]. (Holmberg, 1999:6)

If one or both objects in English theme–goal constructions raise to the same position targeted by Mainland Scandinavian OS, then the main verb must also raise to a position above the first-merged position of the auxiliary, since the verb precedes both objects. One fact that makes this seem unlikely is the availability of theme–goal orders under auxiliaries in sentences such as (68).

(68) She should have given it me.

On standard assumptions, it is difficult to see how the verb and objects can have raised to a position above the first-merged position of *have* in (68). For this to be the case, *have* will need to have raised out of its first-merged position. Assuming that the main verb raises via successive head adjunction and is subject to the head movement constraint, then the main will have to wait to raise until after *have* has gotten out of the way.[12] In view of these non-trivial assumptions, I will set aside the possibility of a direct kinship between OS and English theme–goal constructions in the remaining discussion.

4.2. Against a phonological derivation

The similarity between Norwegian/Swedish OS and the English theme–goal constructions suggests an alternative to the syntactic accounts of theme–goal orders just discussed, namely a phonological derivation along lines proposed by Erteschik-Shir (2005) for OS. Erteschik-Shir (2005) proposes that in Scandinavian OS, the pronominal object prosodically incorporates into the verb at PF; the verb + object constituent derived from this operation then undergoes head raising of the normal sort to its surface position. (This analysis takes head movement to be a PF phenomenon.) With the additional assumption that only weak elements may incorporate in to the verb, this approach therefore straightforwardly accounts for the fact that only weak objects raise in OS. The proposal that the object(s) and verb raise as a constituent also accounts for the fact that OS only applies in verb-raising contexts.

Let us consider, then, the possibility of a similar approach to deriving theme–goal ditransitives from a base DOC structure. Let us assume, first, an underlying DOC structure in which the theme is merged below the verb and the goal is merged above it as in (70) (cf. Beck and Johnson, 2005; Harley, 2002). I assume this only for the sake of drawing a comparison with Erteshik-Shir's approach to OS. For the objections to this approach that I will raise shortly, it will not matter how exactly our DOC is assembled as long as the theme is first merged below the goal.

(69) $[_{XP}$ me $[_{X}$ give $[_{WP}$ it$]]]$

As in Erteshik-Shir's analysis for OS, assume that at PF, weak themes incorporate into the verb, and that this constituent subsequently undergoes verb movement to a position above the theme. This proposal is illustrated in (70).

(70) $[_{Y}$ give+it $[_{XP}$ me $[_{X}$ <give+it> $]]]$

[11] English theme-goal orders also share with OS the property of not licensing parasitic gaps. This is shown in the examples in (i) and (ii) from English dialects and Swedish, respectively.

(i) *I gave it her without reading.

(ii) *Jag kastade den inte innan jag hade last.
I threw it not before I had read.
'I didn't throw it away before I had read it.' (Holmberg and Platzack, 1995:146).

[12] Alternatively the verb and objects might raise as a constituent followed by head movement of *have* to a higher position.

This approach correctly derives the word order facts and also partially explains the pronoun/DP contrast: assuming that prosodic incorporation is restricted to weak elements, then the contrast in acceptability between pronominal and full DP themes in theme–goal orders is expected.

Such an approach, nevertheless, has at least two disadvantages, one empirical and one theoretical. A first, empirical problem with this approach is posed by the availability (for some speakers) of theme–goal orders with full DPs as in (8), repeated here.

(8) She gave the ball the boy.

Accounting for (8) on such a phonological approach would seem to require, implausibly, prosodic incorporation of the full DP theme into the verb. Moreover, some speakers who accept (8) also accept sentences such as (71), where a theme binds a pronoun in the goal to its right.

(71) % The bosses gave every payslip$_i$ its$_i$ owner.[13]

Without the assumption of some independent movement at LF, the availability of such sentences is unexplained on a phonological derivation of the kind sketched above. If the theme comes to precede the goal only at PF, then, on standard assumptions, where binding reflects a c-command relation at LF, the theme should not be able to bind into the goal.

A second, theory-internal disadvantage of a phonological derivation is that it allows for no unified account of theme–goal ditransitives and theme passives. If theme–goal object orders are derived by movement at PF movement, and if passivisation takes place in the narrow syntax, then a derivation such as that in (70) cannot feed theme passivisation. The locality problem posed by theme passives would therefore require an independent account.

For these reasons, I will instead pursue an approach by which theme–goal ditransitives are derived from DOCs in the narrow syntax.

4.3. Deriving the inventory of English dialects

The cross-dialectal differences in restrictions on objects in theme–goal ditransitives outlined above will require our account to express a fairly rich pattern of variation. In particular, the analysis will need to account for the four grammars summarised in (72). In the following discussion, I will abstract away from gradience in the availability of each grammar, which I take to reflect competition between different grammars (Boersma and Hayes, 2001; Hayes, 2000; Kroch, 1989).

(72) A grammar inventory

Grammar	theme–goal ditransitives	Theme passives
1	*	*
2	Pronouns, DPs both OK	OK
3	*	OK
4	Pronouns OK, *DPs	OK

Let us consider each of the grammars in (72) starting with Grammar 1.

Grammar 1. I assume a low applicative structure for English DOCs, as shown in (73) (Pylkkänen, 2002). None of the claims made here, however, will depend crucially on the assumption of a low applicative head approach to DOCs vs. most others on the market (Beck and Johnson, 2005; Harley, 2002; Kayne, 1984); rather, what will be crucial is that, in a DOC, the goal is first merged above the theme.

(73) $[_{vP}$ EA $[_{v'}$ v $[_{VP}$ V $[_{ApplP}$ GOAL $[_{Appl'}$ Appl THEME]]]]]

I assume that v is the locus of case for both the theme and the goal. In active contexts, phi-features on v will agree first with the goal and subsequently the theme, which will both stay in situ in this grammar, yielding the DOC order—goal–theme.

[13] Backwards binding is also available for some speakers as in (i):

(i) % The bosses gave his$_i$ payslip every worker$_i$.

These data are in keeping with the DOC analysis of theme-goal orders outlined above. However, they do not help in distinguishing a DOC analysis from an underlying prepositional dative analysis, since backwards binding in prepositional dative constructions is marginally available for many speakers, as in (ii) (Larson, 1988).

(ii) ? The bosses gave his$_i$ payslip to every worker$_i$.

These facts do, however, support scepticism toward an analysis in which the theme in theme-goal ditransitives is first-merged in a position asymmetrically c-commanding the goal (Bissell-Doggett, 2004).

I assume that the external argument is introduced in spec, vP, as in (73). Following Chomsky (1995), Anagnostopoulou (2003) and McGinnis (2001), I assume that movement to subject position in both active and passive contexts is driven by an EPP-feature on T. That is, when T is merged, it probes and attracts the structurally closest D feature in its c-command domain; the phi-feature content of the targeted element plays no role in this operation. In passive contexts, the goal argument will therefore raise to subject position, since the goal argument will be the closest D-bearing element; the theme will not be able to passivise since it will be blocked by the intervening goal.

Grammar 2. Grammar 2 differs from Grammar 1 in allowing theme–goal orders in both active and passive contexts. I propose that these differences are attributable to a single difference between the two grammars, namely whether v has EPP features attracting the theme and goal: in Grammar 1, v lacks an EPP feature and the objects stay in situ; in Grammar 2, on the other hand, EPP features on v will attract both the theme and goal. The inversion of the internal arguments, then, reflects their order of movement to Spec, vP under locality of agreement and the extension condition—that is, assuming no tucking in (Richards, 1997). As the higher of the two arguments, the goal will be probed first, and will raise to a specifier of vP above the external argument. The theme will agree next and will raise to the top specifier of vP. On these assumptions, the position of the verb relative to the theme seems to indicate that the verb has moved out of vP. In particular, I will assume that the verb raises to a position immediately above vP, here labelled F.

This proposal is illustrated in (74), which derives the theme–goal order shown in (8), repeated here.

(8) She gave the ball the boy.

(74) a. Build VP:
[$_{VP}$ *give* [$_{ApplP}$ *the boy* [$_{Appl'}$ Appl *the ball*

b. Merge v, and head adjoin *give*:
[$_{vP}$ *give*-v [$_{VP}$ <*give*>[$_{ApplP}$ *the boy* [$_{Appl'}$ Appl *the ball*

c. Merge EA:
[$_{vP}$ EA [$_{v'}$ *give*-v [$_{VP}$ <*give*>[$_{ApplP}$ *the boy* [$_{Appl'}$ Appl *the ball*

d. Raise *the boy*:
[$_{vP}$ *the boy* [$_{v'}$ EA [$_{v'}$ *give*-v [$_{VP}$ <*give*>[$_{ApplP}$ <*the boy*> [$_{Appl'}$ Appl *the ball*

d. Raise *the ball*:
[$_{vP}$ *the ball* [$_{v'}$ *the boy* [$_{v'}$ EA [$_{v'}$ *give*-v [$_{VP}$ <*give*>[$_{ApplP}$ <*the boy*> [$_{Appl'}$ Appl <*the ball*>

e. Merge F and head adjoin *give*-v:
[$_{F\ P}$ *give*-v-F [$_{vP}$ *the ball* [$_{v'}$ *the boy* [$_{v'}$ EA [$_{v'}$ <*give*-v> [$_{VP}$ <*give*>[$_{ApplP}$ <*the boy*> [$_{Appl'}$ Appl <*the ball*>

In passive contexts in this grammar, the theme rather than the goal will raise to subject position, since the theme will be the closest element to T with a D feature.

Grammar 3. Grammar 3 is instantiated by speakers who accept theme passives but not theme–goal ditransitives. I propose that the difference between active and passive contexts in this grammar is related to the presence vs. absence of an external argument in the derivation. In particular, in the spirit of work on expletive *there* (Chomsky, 1995), let us assume that by virtue of the external argument being first merged in this position in active contexts, the EPP feature of v is valued and the objects do not raise.[14] Grammar 2 will then differ from Grammar 3 in allowing for multiple EPP features on v. That is, in Grammar 2, v will be able to host an external argument first merged in its spec as well as attract the theme.

The converse of Grammar 3 is not attested. That is, there seem to be no speakers who accept theme–goal orders in active contexts but not theme passives. This apparent fact falls out of the analysis so far without further assumptions: as long as the theme is able to move out of the c-command domain of the goal, then *ceteris paribus* the theme will be able to raise to TP.

Grammar 4. The final pattern, Grammar 4, is that of speakers who accept both theme passives and theme–goal ditransitives, but the latter only with pronominal objects. Accounting for this set of facts will require additional assumptions.

The availability of theme–goal orders for pronominal objects suggests that, in this grammar, v attracts the theme argument as in Grammar 2. Let us assume this is the case. The fact that pronominal but not full DP themes may spell out in the intermediate spec, vP position suggests that phonological lightness is crucial to the availability of objects in this position. From the perspective recent work focusing on the interaction of Chain Reduction with phonological/morphological rules (Bobaljik, 2002; Landau, 2006), one possible approach to Grammar 4 is that cliticisation of object pronouns bleeds application of a PF rule/filter otherwise fatal to objects in spec, vP. The remaining discussion develops this intuition. In particular, the linchpin of this proposal will be the following constraint on syntax-to-prosody mapping[15] for Grammar 4, which requires FP to be contained within a prosodic word (PWd) (Truckenbrodt, 1999).

(75) **Wrap (FP, Pwd)**
FP can be no bigger than a prosodic word.

[14] I owe this suggestion to Anders Holmberg (personal communication).
[15] See Adger (2006) and Szendroi (2001), chapter 2 for somewhat likeminded proposals.

This constraint initially appears to incorrectly exclude quite a few kinds of structure with overt material in VP. We will show later on that (75), together with further assumptions about phases as phonological units, indeed helps draw the correct distinctions for Grammar 4.

Let us assume that in Grammar 4, the more familiar mapping conditions for prosodic words given in (76) also apply (McCarthy and Prince, 1993; Selkirk, 1995, 2005).

(76) a. Align the left edge of a prosodic word with the left edge of a morphosyntactic word.
b. Align the right edge of a prosodic word with the right edge of a morphosyntactic word.

Following Embick and Noyer (2001), assume the following definition of a morphosyntactic word.[16]

(77) At the input to Morphology, a node X^0 is (by definition) a *morphosyntactic word* (MWd) iff X^0 is the highest segment of an X^0 not contained in another X^0.

To see how these assumptions help in expressing Grammar 4, let us consider first the case of full DPs, which cannot occur in the order theme–goal in this grammar. On the approach to Grammar 2 outlined above, the lower portion of a ditransitive sentence like (8) (repeated here) will have the structure in (78).

(8) She gave the ball the boy.

(78) $[_{FP}$ *give*-v-F $[_{vP}$ *the ball* $[_{v'}$ *the boy* $[_{v}$ EA $[_{v'}$ <*give*-v> $[_{VP}$ <*give*>$[_{ApplP}$ <*the boy*> $[_{Appl'}$ Appl <*the ball*>

This structure will necessarily run afoul of either (75) or (76). On one hand, if a prosodic word boundary is inserted between the verb and the objects as in (79), the constraint in (75) is violated, since part of FP—the complement of F—spills over the prosodic word boundary.

(79) ( )$_{PWd}$
$[_{FP}$ *give*-v-F $[_{vP}$ *the ball* $[_{v'}$ *the boy*]]]

If, on the other hand, the left and right edges of the prosodic word are aligned with the left and right edge of FP respectively—as in (80)—then (76) is violated, since this will result in a prosodic word bigger than a morphological word. These assumptions, then, correctly exclude full DP objects in the order theme–goal in Grammar 4.

(80) ( )$_{PWd}$
$[_{FP}$ *give*-v-F $[_{vP}$ *the ball* $[_{v'}$ *the boy*]]]

Consider, now, the case of pronominal objects. Let us assume that weak pronominal objects, but not heavier objects, incorporate into the verb (Richards, 2006; Selkirk, 1995; Wallenberg, 2008). Specifically, let us assume that this leaning comes about in the morphological component via local dislocation merger (Embick and Noyer, 2001; Marantz, 1988)—a rebracketing operation late in the morphological component that exchanges an adjacency relation for an adjunction relation. In particular, let us posit a rule which adjoins a weak pronoun right-adjacent to the verb head, as in (81). (Here, we use Embick and Noyer's (2001) star notation (*) to represent an adjacency relation.)

(81) leaning of weak object pronouns.
$[_{FP}$ V * $[_{vP}$ * pro $[_{V'}$ v]]] → $[_{FP}$ V + pro $[_{vP}$ $[_{V'}$ v]]]

In the case of theme–goal constructions with two pronominal objects, this rule will apply cyclically, as in (82), which derives the leaning of object pronouns in the phrase *give it me*. The first application of the rule adjoins the object pronoun *it* to the adjacent verb. By this step, the goal pronoun *me* becomes adjacent to the verb head, thereby feeding a second application of the rule.

(82) Cyclic application of object pronoun leaning
Leaning of theme: $[_{FP}$ *give* * $[_{vP}$ * *it* $[_{v'}$ * *me*]]] → $[_{FP}$ *give* + *it* $[_{vP}$ $[_{v'}$ * *me*]]]
Leaning of goal: $[_{FP}$ *give* + *it* + *me* $[_{vP}$ $[_{v'}$]]]

[16] Selkirk (1995) proposes that object pronouns form a single prosodic word with the preceding verb only when the former are phonologically weak, as in the case of a pronunciation of *need him* as [nidɱ]. Some Grammar 4 speakers accept theme-goal orders more readily with reduced pronouns, but some speakers also accept theme-goal orders with unreduced pronouns, that is with *give it him* as [gɪv ɪt hɪm]. For such speakers, our analysis will require either that full pronoun forms can indeed form a single prosodic word with the preceding verb, or that FP may map to a slightly larger prosodic unit, such as a minor phrase/accentual phrase (Selkirk, 2005).

By virtue of this rule, the verb and objects form a morphological word and FP may be spelled out as a single prosodic word, as in (83), thereby satisfying both (75) and (76).

(83) ( )$_{PWd}$
[$_{FP}$ *give + it + me* [$_{vP}$ [$_{v'}$]]]

Let us return now to the undergeneration problem raised earlier. The proposal so far incorrectly excludes structures with overt material in VP that cannot lean onto the verb. Take, for example, a verb with a PP complement, as in (84). The lower portion of this sentence will have something like the structure shown in (85), on standard assumptions.

(84) She went to the shop.

(85) [$_{FP}$ *go*-v-F [$_{vP}$ <*go*-v> [$_{VP}$ <*go*> [$_{PP}$ *to* [$_{DP}$ *the shop*]]]]]

Without further assumptions, (75) and (76) will incorrectly rule out the structure in (85) since part of FP—the PP—will not be parsable as single prosodic word.

I propose that the availability of structures like (85) is, again, a consequence of the way that Spell Out feeds prosody. In particular, let us assume, more or less standardly now, that Spell Out is cyclic and further that the head of the projection in which the external argument is merged—v in our account—is a phase head: when the top level v node (vP) is formed, the complement of v is sent to PF. Material in the edge of v—the head and its specifiers—will be visible to further syntactic operations, but the spelled out complement will not be (Chomsky, 2001). Let us further assume that phases are prosodic units (Adger, 2007; Richards, 2006; Selkirk, 2005; Simpson and Wu, 2002). In particular, assume that, at least for minor phrase and word-level prosody, prosodic constraints such as (75) and (76) will apply to each phase, and will not be able to look into material from another phase.

These assumptions now correctly distinguish between theme–goal ditransitives with non-pronominal objects and structures like (85) with overt material in VP in Grammar 4. Because the prepositional phrase in (85) is not in the same phase as FP, (75) will be satisfied vacuously. In the case of structures like (78) with full DP objects in the order theme–goal, both objects will be spelled out in the same phase as FP, and (75) will apply fatally.

In passive sentences, such as (37), repeated here, full DP themes will be rescued from (75) and (76) by movement to TP. That is, the copy of the full DP theme in the intermediate spec, vP position, which would otherwise violate (75) and (76), will delete before they apply.

(37) The ball was given the boy.

In addition, the fact that some Grammar 4 speakers also accept full DP goals in theme passives suggests that the goal must also be able to spell out in its base position in ApplP, in a separate phase from FP. This proposal is illustrated in (86), which derives (37).

(86) [$_{T\ P}$ *The ball* [$_{T'}$ *was* [$_{XP}$ *given*-v-F-*n* [$_{FP}$ <*give*-v-F> [$_{vP}$ <*the ball*> [$_{v'}$ <*the boy*> [$_{v'}$ <*give*-v> [$_{VP}$ <*give*>[$_{ApplP}$ *the boy* [$_{Appl'}$ Appl <*the ball*>

4.4. Chain Reduction and grammar competition

A remaining issue is how to account for variation between goal–theme (DOC) and theme–goal orders, among speakers who accept both constructions. Recall from earlier discussion that speakers who accept theme–goal ditransitives, also accept goal–theme (DOC) orders, but not vice-versa.

This problem might be approached in one of two ways. One possibility is that this variation is a function of which copy of the theme Chain Reduction designates for pronunciation: spelling out the theme in the higher spec, vP position will produce the theme–goal order; spelling it out in the lower position will yield the order goal–theme. (Movement of the goal on this approach is string vacuous.) A second possibility is that this intra-speaker variation reflects competition between different grammars (Kroch, 1989, 1994). On this approach, Chain Reduction always spells out the higher copy in Grammars 2, 3 and 4, and goal–theme (DOC) surface orders are produced only by Grammar 1.

From the perspective of the above analysis, one kind of evidence in favour of the former approach comes from the contrast between (6) and (8) (repeated here). In particular, many speakers who reject theme–goal orders with two full DP objects as in (8), nevertheless accept sentences like (6) with a pronominal theme and a full DP goal (see Fig. 1).

(6) %She gave it the boy.

(8) %She gave the ball the boy.

The fact that the objects in (6) are ordered theme–goal order indicates that the theme has raised to vP. The fact that the goal is a full DP, however, indicates that it cannot have spelled out in spec vP, since doing so would violate (75) or (76).

Rather, on the approach to Grammar 4 just outlined, the availability of such sentences suggests the possibility that the goal may spell out in its first-merged position as in (87).

(87) $[_{FP}$ *give*-v-F $[_{vP}$ *it* $[_{v'}$ <*the boy*> $[_{v'}$ <v> $[_{VP}$ <*give*> $[_{ApplP}$ *the boy* $[_{Appl'}$ Appl <*it*>]]]]]]

The availability of sentences such as (6) among speakers who reject (8), therefore provides some theory-internal evidence that variation between goal–theme (DOC) and theme–goal orders is partially a function of which copy Chain Reduction designates for pronunciation.

5. Conclusion

This paper is a study of theme–goal ditransitives and theme passivisation in British English dialects. Based on standard diagnostics of double-object-hood vs. prepositional dative-hood, this paper argues that both theme–goal ditransitives and (indirectly) theme passives in British dialects are derived from ordinary double object constructions. A challenge for such a unified approach concerns different restrictions on objects in these two constructions: for many speakers, the theme in theme–goal orders in active contexts must be pronominal, while derived subject themes may be pronouns or full DPs. This paper argues that these restrictions are a consequence of the way that Chain Reduction feeds post-syntactic leaning rules and prosody. The analysis lends support to recent work suggesting that many canonical problems of object movement are usefully approached as PF interface phenomena.

Acknowledgments

I am grateful to the participants in this study and to the project's research assistant, Hannah Britton. For comments on different parts of the material presented here I am grateful to Milan Rezac, Bernadette Plunkett, Kevin Watson, Dora Alexopoulou, Sam Hellmuth, Richard Ogden, Paul Foulkes, Tony Kroch, Helen Goodluck, Tamar Keren-Portnoy, Daniel Ezra Johnson, Anders Holmberg, Hidekazu Tanaka, George Tsoulas, two very insightful Lingua reviewers and audiences at the UNC Chapel Hill, Queen Mary University of London, the University of Leeds, Incontro di Grammatica Generativa 34, and UKLVC. All errors are my own. Work on this paper was supported in part by ESRC grant number 061-25-0033.

References

Adger, D., 2006. Post-syntactic movement and the Old Irish verb. Natural Language and Linguistic Theory 24, 605–654.
Adger, D., 2007. Stress and phasal syntax. Linguistic Analysis 33, 238–266.
Anagnostopoulou, E., 2003. The Syntax of Ditransitives. Mouton de Gruyter, Berlin.
Anagnostopoulou, E., 2008. Notes on the person case constraint in Germanic (with special reference to German). In: D'Alessandro, R., Fischer, S., Hrafnbjargarson, G.H. (Eds.), Agreement Restrictions. Mouton de Gruyter, Berlin, pp. 15–48.
Baker, M., 1988. Incorporation. University of Chicago Press, Chicago.
Bard, E., Robertson, D., Sorace, A., 1996. Magnitude estimation of linguistic acceptability. Language 72, 32–68.
Beck, S., Johnson, K., 2005. Double objects again. Linguistic Inquiry 35, 97–124.
Bissell-Doggett, T., 2004. All things being unequal: locality in movement. Ph.D. Dissertation. MIT.
Bobaljik, J., 2002. A-chains at the PF-interface: copies and 'Covert' movement. Natural Language and Linguistic Theory 20, 197–267.
Boersma, P., Hayes, B., 2001. Empirical tests of the Gradual Learning Algorithm. Linguistic Inquiry 32, 45–86.
Bonet, E., 1991. Morphology after syntax: pronominal clitics in Romance. Doctoral Dissertation. MIT.
Bresnan, J., Nikitina, T., 2003. On the Gradience of the Dative Alternation. Ms. Stanford University.
Chomsky, N., 1995. The Minimalist Program. MIT Press, Cambridge, MA.
Chomsky, N., 2001. Derivation by phase. In: Kenstowicz, M. (Ed.), Ken Hale: A Life in Language. MIT Press, Cambridge, MA, pp. 1–52.
Collins, C., Thráinsson, H., 1996. VP-internal structure and object shift in Icelandic. Linguistic Inquiry 27, 391–444.
Diaconescu, C., Rivero, M., 2004. An applicative analysis of double object constructions in Romanian. In: Proceedings of the 2005 Annual Conference of the Canadian Linguistics Association.
Embick, D., Noyer, R., 2001. Movement operations after syntax. Linguistic Inquiry 32, 555–595.
Erteschik-Shir, N., 2005. Sound patterns of syntax: object shift. Theoretical Linguistics 31, 47–93.
Fasold, R., 2005. Coping with Variability in Judgments. Ms. Georgetown University.
Green, G., 1974. Semantics and Syntactic Irregularity. Indiana University Press, Bloomington.
Harley, H., 2002. Possession and the double object construction. Linguistic Variation Yearbook 2, 31–70.
Haspelmath, M., 2004. Explaining the ditransitive person-role constraint: a usage-based approach. Constructions 2, 1–71.
Hayes, B., 2000. Gradient well-formedness in optimality theory. In: Dekkers, J., van der Leeuw, F., van de Weijer, J. (Eds.), Optimality Theory: Phonology, Syntax, and Acquisition. Oxford University Press, Oxford, pp. 88–120.
Hellan, L., Platzack, C., 1999. Pronouns in Scandinavian languages: an overview. In: van Riemsdijk, H. (Ed.), Clitics in the Languages of Europe. Mouton de Gruyter, Berlin, pp. 123–142.
Holmberg, A., 1999. Remarks on Holmberg's generalization. Studia Linguistica 53, 1–39.
Holmberg, A., Platzack, C., 1995. The Role of Inflection in Scandinavian Syntax. Oxford University Press, Oxford/New York.
Hughes, A., Trudgill, P., Watt, D., 2006. English Accents and Dialects, fourth edition. Hodder Arnold, London.
Johnson, K., 1991. Object positions. Natural Language and Linguistic Theory 9, 577–636.
Kayne, R., 1984. Unambiguous paths. In: Connectedness and Binary Branching, Foris Publications, Dordrecht, pp. 129–164.
Kirk, J.M., 1985. Linguistic atlases and grammar: the investigation and description of regional variation in English syntax. In: Kirk, J.M., Sanderson, S., Widowson, J.D.A. (Eds.), Studies in Linguistic Geography. Croon Helm, London, pp. 130–156.
Kroch, A., 1989. Reflexes of grammar in patterns of language change. Language Variation and Change 1, 199–244.
Kroch, A., 1994. Morphosyntactic variation. In: Beals, K. (Ed.), Proceedings of the 30th Annual Meeting of the Chicago Linguistics Society, Chicago Linguistic Society, Chicago, pp. 180–201.
Landau, I., 2006. Chain resolution in Hebrew V(P)-fronting. Syntax 9 (1), 32–66.

Larson, R., 1988. On the double object construction. Linguistic Inquiry 19, 335–391.
Levin, B., 1993. English Verb Classes and Alternations. A Preliminary Investigation. The MIT Press, Cambridge, MA.
Marantz, A., 1988. Clitics, morphological merger and the mapping to phonological structure. In: Hammond, M., Noonan, M. (Eds.), Theoretical Morphology. CLC Publications, Ithaca, pp. 253–270.
McCarthy, J., Prince, A., 1993. Prosodic morphology I: constraint interaction and satisfaction. Technical Report #3. Rutgers University Center for Cognitive Science.
McDaniel, D., Cowart, W., 1999. Experimental evidence of a minimalist account of English. Resumptive pronouns. Cognition 70, B15–B24.
McGinnis, M., 1998. Locality in A-movement. Ph.D. Dissertation. MIT.
McGinnis, M., 2001. Phases and the syntax of applicatives. In: Kim, M., Strauss, U. (Eds.), Proceedings of NELS 31, GLSA, Amherst, MA.
Orton, H., Sanderson, S., Widdowson, J., 1978. The Linguistic Atlas of England. Croom Helm, London.
Postal, P., 2004. Skeptical Linguistic Essays. Oxford University Press, Oxford.
Pylkkänen, L., 2002. Introducing arguments. Ph.D. Dissertation. MIT.
Rezac, M., 2008. The syntax of eccentric agreement: the Person Case Constraint and absolutive displacement in Basque. Natural Language and Linguistic Theory 26, 61–106.
Richards, M., 2006. Weak pronouns, object shift and multiple Spell-Out: evidence for phases at the PF-interface. In: Boeckx, C. (Ed.), Minimalist Essays. John Benjamins, Amsterdam, pp. 160–181.
Richards, N., 1997. What moves where when in which language? Ph.D. Dissertation. MIT.
Selkirk, E.O., 1995. Sentence prosody: intonation, stress and phrasing. In: Goldsmith, J.A. (Ed.), Handbook of Phonological Theory. Blackwell, Cambridge, MA, pp. 550–569.
Selkirk, E.O., 2005. Comments on intonational phrasing in English. In: Frota, S., Vigario, S., Freitas, M.J. (Eds.), Prosodies. Selected Papers from the Phonetics and Phonology in Iberia Conference, 2003. Phonetics and Phonology Series, Mouton de Gruyter, Berlin.
Siewierska, A., Hollmann, W.B., 2007. Ditransitive clauses in English with special reference to Lancashire dialect. In: Hannay, M., Steen, G.J. (Eds.),Structural-functional studies in English grammar. John Benjamins, Amsterdam/Philadelphia, pp. 83–102.
Simpson, A., Wu, Z., 2002. IP-Raising, tone sandhi and the creation of sentence-final particles: evidence for cyclic Spell-Out. Journal of East Asian Linguistics 11, 67–99.
Szendroi, K., 2001. Focus and the syntax-phonology interface. Ph.D. Dissertation. University College London.
Thráinsson, H., 2001. Object shift and scrambling. In: Baltin, M., Collins, C. (Eds.), The Handbook of Contemporary Syntactic Theory. Blackwell, Oxford, pp. 148–202.
Truckenbrodt, H., 1999. On the relation between syntactic phrases and phonological phrases. Linguistic Inquiry 30, 219–255.
Ura, H., 1996. Multiple feature-checking: a theory of grammatical function. Splitting. Ph.D. Dissertation. MIT, Cambridge, Massachusetts.
Wallenberg, J.C., 2008. English weak pronouns and object shift. In: Chang, C.B., Haynie, H.J. (Eds.), Proceedings of the 26th West Coast Conference on Formal Linguistics, Cascadilla Proceedings Project, Somerville, MA, pp. 489–497.
Woolford, E., 1993. Symmetric and asymmetric passives. Natural Language and Linguistic Theory 11, 679–728.