# The Old English to-dative construction[1]

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# Abstract

In Present Day English (PDE), the to-dative construction refers to clauses like *John told/offered/mentioned/gave the books to Mary*, in which a ditransitive verb takes a Recipient that is expressed as a to-Prepositional Phrase (to-PP). This study examines the to-dative construction in Old English (OE). I show, first of all, that this construction was not rare in OE, in contrast to what has been suggested in the literature. Second, I report on two corpus studies in which I examined the ordering behaviour of the NP and the to-PP. The results of the first study suggest that the same ordering tendencies already existed in OE as in PDE: both the NP-to-PP and the to-PP-NP orders were grammatical, but the NP-to-PP was the most frequently used one. However, in OE, the to-PP-NP was more common than in PDE, where its use is heavily restricted. My second corpus study is informed by the multifactorial approach to the English dative alternation and uses a mixed-effects logistic regression analysis to evaluate the effects of various linguistic (verbal semantics, pronominality, animacy, definiteness, number, person and length) and extra-linguistic variables (translation status, time of completion/manuscript) on the ordering of NP and to-PP. The main finding is that, generally speaking, the same factors that motivate the dative alternation in PDE were involved in OE as well. No evidence was found for the influence of verbal semantics nor of the extra-linguistic variables. Finally, I argue against the view that *to* was semantically reanalysed from a Goal to a Recipient marker from OE to ME. Building on evidence that the Recipient use of *to* was already embryonically present in OE, I make the case that this semantic change was far more gradual than traditionally assumed.

## 1 BACKGROUND

This study examines the Old English (OE) roots of the *to*-dative construction, defined as the clausal pattern given in (1) and as illustrated in (2):

(1) [ditransitive verb + NP + to-P(repositional) P(hrase)]

(2) I offer/give/sell/send/show/donate the books to Mary.

The to-dative construction features a to-PP referring to a third participant in a state of affairs that generally involves some kind of transfer and an NP referring to the object of transfer. Note, however, that the same pattern can also be used, however, with a verb that denotes the denial of a transfer, as in (3), or the deprivation of a possession, as in (4) (examples taken from Bresnan & Nikitina 2009):

(3) [D]enied a leave to a teacher.

(4) The IRS is unionized, and the union apparently has the fear that outsourcing will cost jobs to their members.

In PDE, the *to*-dative construction alternates with the Double Object Construction (DOC), as illustrated in (5).

(5) I offer/give/sell/bring Mary the books.

The synchronic features of the dative alternation are well-studied. There is solid evidence that the speaker's choice for one of the two constructions is motivated by verbal semantics as well as discourse-pragmatic and semantic factors associated with the two objects involved (Thompson 1995, Bresnan & Hay 2008, Bresnan 2007, Bresnan, et al. 2007, Bresnan & Nikitina 2009, Kendall, Bresnan & Van Herk 2011, de Marneffe, et al. 2012, Theijssen 2012, Theijssen, et al. Ms.). The results of recent studies further suggest that the extra-linguistic factors modality (written vs. spoken) and macro-linguistic region may also be involved in the choice of order (Bresnan & Ford 2010, Wolk, et al. 2012, Theijssen, et al. 2013).

The diachrony of the dative alternation has received much less attention in the literature. The Old English DOC with an accusative object (ACC) and a dative object (DAT) is examined by Visser (1963), Koopman (1990), and De Cuypere (2010). The results of the latter suggest that the choice of orders appears to be largely influenced by the same factors that motivate the dative alternation in PDE.

The historical emergence of the *to*-dative construction has traditionally been situated at the transition from OE to Middle English (ME) (McFadden 2002, Polo 2002, Visser 1963: 624). This view is informed by the assumption that prepositions took over the function of morphological case in Middle English; *to* would thus have taken over the function of the dative case. It is indeed true that the *to*-dative construction was not used in OE in clauses that had a verb that inherently denoted a transfer of possession (e.g., *agifan, gifan, sellan* 'give' and *offrian* 'offer') and a human recipient. However, there were many other ditransitive verbs with which the *to*-dative construction was commonly used in OE, such as: *cweðan* ('to say, speak'), *sprecan* ('to speak, say, utter'), *cleopian* ('to call, cry out'), *sendan* ('to send'), *lætan* ('to let'), *niman* ('to take') and *bringan* ('to bring') (Cassidy 1938, Mitchell 1985, Vol.1: 512).

The aim of this paper is to present a detailed description and analysis of the *to*-dative construction in OE. The study comprises three sub-studies, which look at three different aspects of the construction at hand.

Section 2 starts off with a comparison of the relative frequencies of the *to*-dative construction vs. the DOC in OE and Present Day English (PDE). The results indicate that, although perhaps being less frequent than in PDE, the *to*-dative construction was not rare in comparison to the DOC in OE. In fact, although the construction was not used with transfer of possession verbs in OE, it seems that the construction was already fully established with certain verb classes, in particular with verbs of caused motion and of communication.

Section 3 looks at the ordering tendencies of the accusative object (ACC, equivalent to the DO in PDE) and the *to*-dative object (*to*-DAT, equivalent to the *to*-PP) in the *to*-dative construction. A natural hypothesis is that this choice was associated with the same factors that motivate the dative alternation in PDE. A mixed-effects logistic regression analysis of the corpus data corroborates this hypothesis. Five factors were found to be associated with the object orderings: Pronominality of the ACC and the *to*-DAT, Definiteness of ACC, Number of DAT and the difference in Length between the ACC and the *to*-DAT. Moreover, the relative impact effects and their direction are similar to those found for the dative alternation in PDE.

Section 4 takes a more qualitative approach and outlines various uses of *to* and the *to*-DAT in OE. I make the case that the semantic change of *to* from OE to ME was less saltational than what has been suggested in the literature, i.e. from a Goal to a Recipient marker (e.g., McFadden 2002). The empirical evidence suggests that the use of *to* as a Recipient marker was embryonically present from early OE onwards.

## 2 Frequency of the *to*-dative construction in OE

2.1 *Data sample*

To estimate the frequency of the *to*-dative construction in OE, I collected all instances of the OE *to*-dative construction from the *York-Toronto-Helsinki Parsed Corpus of Old English Prose* (YCOE) (Taylor et al. 2003), using *CorpusSearch2* (Randall 2003). I also retrieved all possible DOCs with an accusative object (ACC) and a dative object (DAT) from the same corpus.

Recall that the *to*-dative construction was defined in (1) as a clause featuring the pattern [Ditransitive Verb+NP+*to*-PP]. Crucially, the *to*-dative construction involves a ditransitive verb. I have therefore operationalized the *to*-dative construction on the basis of the following two criteria.

First, the *to*-dative construction was taken to include a ditransitive verb, i.e., a verb that could also take the DOC, such as *asendan* (‘to send forth’) in (6). I determined the possibility to take a DOC by examining the DOC data collected for this study, supplemented by information from Bosworth & Toller (1955), Visser (1963, Vol.1: 621), and Mitchell (1985, Vol.1:455–464).

(6) & his halgan Fæder þe hine asende to us
and his holy father who him sent-out to us
‘and his holy father, who sent him out to us’
(coaelhom, ÆHom_12:231.1878)

My second criterion was that the *to*-DAT should refer to an animate being, e.g., *to þære abbudissan* 'to the abbess' in (7), and not a location, as in (8) *to Rome*. This criterion is informed by the dative alternation in PDE, which also excludes sentences with a locational *to*-PP, which lack a DOC counterpart in which the IO receives the same locational meaning as the *to*-PP. In the DOC, the interpretation of the locational DAT is coerced to an animate entity, as in *John sends London the books*, where *London* metonymically refers to a human recipient.

(7) & he hine sona to þære abbudissan gelædde.
'and he immediately led him to the abbess'
(cobede,Bede_4:25.344.17.3461)

(8) & him bebead, þæt he hine to Rome gelædde.
'and prayed him, that he would lead him to Rome'
(cobede, Bede_5:17.452.31.4553)

Fronted ACCs and *to*-DATs, i.e., ACCs and *to*-DATs that precede the expressed Subject, were also excluded from the corpus sample. Given that fronting is associated with its own specific pragmatic motivations (Biber et al. 1999: 9000), these data would have obscured the motivations behind the optional object ordering.

Also excluded were *to*-DATs functioning as object complements, as in (9) *geceas to folgerum* 'chose as disciples' and to-DATs indicating a Result, as in (10) *gebrohte to ecere reste* 'bring to eternal rest'.

(9) Crist geceas fisceras him sylfum to folgerum,
Christ chose himself fishermen as disciples,'

(coaelhom, ÆHom_15:228.2253)

(10) Crist hi gebrohte to ecere reste

'Christ has brought her to eternal rest'

(cocathom2.o3: 440, 28)

Finally, sentences with ACCs or *to*-DATs functioning as Adjuncts were obviously also omitted from the sample.

The data collection of the DOC was more straightforward. I excluded fronted objects (to allow for a comparison with the sample of *to*-datives), as well as ACCs or DATs functioning as Adjuncts and clauses with object ellipsis.

## 2.2 *Results and discussion*

For this part of the study, I collected N = 468 instances of the *to*-dative construction and N = 2706 instances of the DOC. Overall, then, there were 15% *to*-dative constructions in a total of N = 3174 constructions. Is this proportion lower than one would expect if the sample was drawn from Present-Day English?

Answering this question requires a reliable estimate of the dative proportions in PDE. Estimates for these proportions are available based on the following corpora: the *ICE-GB corpus* (Theijssen 2012), the *Switchboard corpus*, a corpus of US Spoken English (telephone conversations) (Bresnan et al. 2007), the *PennTreebank Wall Street Journal Corpus* (Bresnan et al. 2007) and *Archer 3.1* (Wolk et al. 2012). The latter corpus covers the period between 1650 and 1999. The proportion of *to*-dative constructions in it remains largely stable, ranging from

30% (1900–49) to 39% (1800–49) (Wolk et al. 2012). The dative proportions observed in these corpora are given in table 1.

| | DOC | *To*-dative construction | Total |
|---|---|---|---|
| Old English | 2706 (85%) | 468 (15%) | 3149 |
| Switchboard | 1864 (79%) | 496 (21%) | 2360 |
| ICE-GB (spoken) | 406 (73%) | 152 (27%) | 558 |
| ICE-GB (written) | 266 (71%) | 106 (29%) | 372 |
| ARCHER 3.1 | 2050 (66%) | 1043 (34%) | 3093 |
| Wall Street Journal | 561 (62%) | 344 (38%) | 905 |

*Table 1*

*Estimated dative proportions for different varieties of English*

A comparison of our observed proportion of *to*-dative constructions in OE (468/3149) with those found for present-day British English based on ICE-GB (258/930; spoken and written data taken together) indicates that this difference is statistically very significant and that the use of the to-dative construction was indeed less frequent in OE than in PDE ($\chi^2 = 80$, df = 1, *p*-value < 0.0001, 95% Confidence Interval = 10% to 16%). However, the results also contradict the view that the *to*-dative construction was rare in OE, as suggested, for instance, by Visser (1963: 637). The upper limit of the estimated confidence interval equals 16%. The actual difference between OE and present-day British English is thus possibly not larger than between the *Switchboard* and *Wall Street Journal* corpora, i.e., between spoken and written American English. Moreover, given that in OE the *to*-dative construction was not used with 'transfer of possession' verbs – the most frequently used verb class with the *to*-dative construction in PDE –, the construction was probably just as common in OE as in PDE with those verbs with which the *to*-dative construction could be used. This conclusion is strongly supported by Cassidy's (1938) finding that the *to*-dative construction was more frequent than the DOC with verbs of caused-motion (e.g. *beran*,

*bringan*, *feccan*) and of communication (e.g. *tellan*, *secgan*). Table 2 summarizes Cassidy's (1938) findings for these two verb classes.

| | DOC | *To*-dative construction |
|---|---|---|
| $V_{communication}$ | 1357 (42 %) | 1869 (58 %) |
| $V_{caused\text{-}motion}$ | 258 (47 %) | 296 (53 %) |

*Table 2*

*Distribution of DOC and to-dative construction with verbs of communication and verbs of caused-motion. Based on Cassidy (1938: Chart I)*

Based on a 2-sample test for equality of proportions (with continuity correction), the proportion of the *to*-datives was found to be significantly larger than that of the DOC for both verb classes: $V_{COMMUNICATION}$: $\chi^2 = 161$, df = 1, *p*-value < 0.0001, 95% Confidence Interval for the difference in proportion = 13% to 18%; $V_{CAUSED\text{-}MOTION}$: $\chi^2 = 4.94$, df = 1, *p*-value = 0.02 , 95% Confidence Interval for the difference in proportion = 0.08% to 13%. The proportional difference was less outspoken with verbs of caused motion, but was nevertheless still significant.

I found similar results based on my dataset. Table 3 shows my observations of the *to*-dative construction vs. the DOC for the six most common OE alternating verbs.

| | Construction | |
|---|---|---|
| | DOC | to-dative construction |
| *lædan* | 1 (1%) | 94 (99%) |
| *sendan* | 58 (42%) | 81 (58%) |
| *bringan* | 90 (62%) | 56 (38%) |
| *asendan* | 10 (22%) | 36 (78%) |
| *beran* | 10 (40%) | 15 (60%) |
| *cweðan* | 6 (18%) | 28 (82%) |

*Table 3*

*Distribution of the DOC vs. to-dative construction with the six most common OE alternating verbs*

Except for *bringan*, which was most often found with a DOC, all other alternating verbs were most frequent with the *to*-dative construction, which again suggests that the construction was commonly used in OE, if the verb allowed for both constructions.

The results further add to Allen's (2006: 214) argumentation against the hypothesis that the *to*-dative construction replaced the dative case marked IO (cf. McFadden 2002): 'given that the *to*-dative was already found with some verbs in OE when it was not in any sense "necessary" to mark Case, there is no necessity to assume that the *to*-dative only became available once the morphological dative case was not available'. As the results of this study show, the *to*-dative was not only available with certain verbs, but already very common. Moreover, Cassidy's (1938) results, given in table 4, additionally indicate that the *to*-dative construction was already being used from early OE onwards. Taken together, the empirical evidence supports Allen's reasoning that the *to*-dative construction did not replace the dative case marked IO.

| | 925 | 975 | 1000 | 1050 | 1075 | 1100 | 1125 | 1150 | 1200 |
|---|---|---|---|---|---|---|---|---|---|
| $V_{communication}$ | 50 | 141 | 446 | 495 | 35 | 26 | 86 | 446 | 137 |
| $V_{caused\text{-}motion}$ | 24 | 36 | 43 | 75 | 7 | 17 | 22 | 38 | 32 |

*Table 4*

*Observed frequencies of the to-dative construction with verbs of communication and caused motion throughout OE (based on Cassidy 1938: chart I)*

The number of observations for communication and caused-motion verbs given in Table 4 appeared to be strongly correlated (Spearman's $\rho = 0.97$, $p$-value $< 0.0001$). Simply put, the more observations Cassidy found of the *to*-dative construction with verbs of communication, the more observations he found of the construction with verbs of caused-motion and vice versa. Apart from this correlation, however, no specific trend is discernable. Given that the OE subsample between c950 and c1050 accounts for 60% of the full OE corpus (see Kytö 1996), it

seems that in periods with more data, there are more observations for both verb classes, which suggests that there was not a specific diachronic trend in OE where the use of the *to*-dative construction was more frequent with one of both verb classes. These findings do not support the claim that the loss of the dative case leads to an increase in the use of the *to*-dative construction.

## 3 ORDERING OF ACC + *TO*-DAT

### 3.1 *Data collection and annotation*

For this part of the study, I retrieved all clauses with an ACC and a *to*-DAT from the YCOE corpus, using *CorpusSearch2*, which resulted in a corpus sample of $N = 1285$ observations. Note that this clausal pattern is more broadly defined than the *to*-dative construction discussed in the previous section, which excluded clauses with non-alternating verbs, such as *astreccan* 'prostrate' in (11), as well as inanimate/locational to-DATs, as *to Lindesfearena eae* 'to the island of Lindesfarne' in (12). I included inanimate *to*-DATs for this part of the study to evaluate their possible effect on the object ordering.

(11) and Florus hine astrehte to Maures fotum
'and Florus prostrated himself at the feet of Maurus'
(coaelive, ÆLS_[Maur]:180.1601)

(12) & his heafod mon lædde to Lindesfearena eae,
'and his head they brought to the island of Lindesfarne,'

My overall hypothesis was that the alternation of ACC and *to*-DAT was motivated by the same semantic and discourse-pragmatic factors as those that motivate the dative alternation in PDE, including: discourse status, animacy, definiteness, pronominality, number, person and relative length of the objects involved. There is corpus evidence that the ACC + DAT ordering of the DOC was motivated by the same factors that drive the dative alternation in PDE (cf. Koopman 1990, De Cuypere 2010). I expect that these factors were equally involved in the ordering of the *to*-dative construction.

I annotated the corpus data in accordance with the variables taken from the corpus studies that Bresnan and her colleagues have performed for the dative alternation in PDE (e.g. Bresnan & Ford 2010). Two extra-linguistic variables were additionally included in the analysis: TRANSLATION and DATE OF COMPOSITION/MANUSCRIPT. Below, I give a brief description of the variables and their annotation.

RESPONSE VARIABLE (annotated as 'ACC-*to*-DAT' vs. '*to*-DAT-ACC'): It should be noted here that with pronominal *to*-DATs, it was possible for the preposition to follow its head (pro)noun and that both could also be separated by other words (see Alcorn 2011). The order of such instances (157 observations in total) was based on the order of the objects. Thus, (13) and (14) were annotated as *to*-DAT-ACC and ACC-*to*-DAT respectively.

(13) min God me asende to […] his engel,
'My God sent me his angel,'
(coaelhom, ÆHom_11:343.1662)

(14) and sende […] þis ærendgewrit him to,
'and sent this letter to him,'
(coaelive, ÆLS_[Abdon_and_Sennes]:86.4777)

VERB: The dative alternation is known to be influenced by verbal semantics (e.g., Bresnan & Ford 2010). Bresnan et al. (2007) operationalized this variable as the combination of the sentence verb with one of five semantic classes ('transfer of possession', 'abstract transfer of possession', 'future transfer of possession', 'communication of information', and 'prevention of transfer'). In the present dataset, however, I have restricted this variable to the sentence verb as such (annotated as its infinitive). The problem with Bresnan et al.'s (2007) semantic class classification is that the semantic class defined as 'transfer' is too coarse-grained for the present study. The 'transfer' class does not distinguish, for instance, between verbs of accompanied motion (e.g., *bringan*) and verbs that inherently indicate a transfer of possession (e.g., *sellan* 'give'). However, this distinction is highly relevant to this study, as *sellan* is not attested with the *to*-dative construction, while *bringan* is. It would thus be misleading to draw conclusions about the transfer class on the basis of verbs of accompanied motion alone. On a statistical note, VERB is modelled as a random intercept, to inspect possible preferences between the verb and the orderings.

DITRANSITIVE (yes vs. no): As explained in section 2.1, a ditransitive verb was defined as a verb that could also take a DOC. This possibility was determined by looking at the DOCs collected for this study, supplemented by information by Bosworth & Toller (1955), Visser (1963), and Mitchell (1985). No further distinction was made between mono- or intransitive verbs.

LENGTH DIFFERENCE BETWEEN ACC AND *to*-DAT: The measurement of this difference follows Bresnan & Ford (2010) operationalization and is accordingly computed as the difference between natural logarithm of the length of the *to*-DAT and the natural logarithm of the ACC (with length measured in number of words). The effect of length on constituent ordering and the

dative alternation is well-documented. We expect to find that longer constituents followed shorter ones.

ANIMACY OF ACC and *to*-DAT (animate vs. inanimate): An object is coded as 'animate' when its referent is a living or 'animated' entity. This category is taken to include animals, ghosts, spirits and Gods. Plants are excluded from this category, their biological status notwithstanding. Plants are further distinguished from other inanimates under the variable *concreteness.* Animacy is known to influence the dative alternation, in that animate objects tend to precede inanimate ones. The same effect is expected here.

CONCRETENESS OF ACC (concrete vs. abstract): An ACC is considered 'concrete' when its referent is 'a prototypical concrete inanimate object or substance perceivable by one of the five senses' (Bresnan & Ford 2010: 10). A plant or a tangible object is thus considered as concrete. Conversely, an 'abstract' referent is neither tangible nor perceivable by any other means. This variable is included to draw a supplementary distinction between different types of inanimate accusatives. NPs with meanings such as 'love', 'knowledge' are thus coded as abstract inanimate ACCs, whereas 'plants', 'money', 'flesh' are classed as concrete inanimate ACCs. In PDE, concrete Themes are known to yield a positive effect on the choice of the DOC order. It is correspondingly expected that a concrete ACC will favour the ACC-*to*-DAT ordering.

DEFINITENESS OF ACC and *to*-DAT (definite vs. indefinite): Definiteness is here understood in terms of specificity (see Thompson 1995: 161). Thus, a definite object has a specific (group of) referent(s), whereas an indefinite object has no specific object or refers to a general class of objects. Definite objects are expected to precede indefinite ones.

PRONOMINALITY OF ACC and *to*-DAT (pronominal vs. nominal): Pronominal objects include phrases headed by a personal, demonstrative, indefinite or reflexive pronoun. Nominal objects are noun phrases with a noun or gerund as a head (Bresnan & Ford 2010: 175). The effect

of pronominality on constituent ordering in English is widely observed (pronominal objects tend to precede nominal ones) and is therefore also expected to influence the ordering at hand.

NUMBER of ACC and *to*-DAT (singular vs. plural): This feature is derived from formal marking and/or contextual clues. Unclear cases were left out of the dataset (7 cases in total). Singular objects tend to precede plural ones in the dative alternation in PDE. The same effect is expected here.

PERSON of ACC and *to*-DAT (local vs. nonlocal): local refers to the first of second person, nonlocal to the third person. Person is known to have an effect on the dative alternation in PDE in that local objects tend to precede nonlocal ones.

Two extra-linguistic variables were additionally examined:

TRANSLATION (yes vs. no): The full dataset contains 494 (38%) observations from translated texts (from Latin) and 664 (52%) from non-translated texts; 127 (10%) observations could not be classified. The information on this variable was taken from the information provided by the YCOE manual.

DATE OF COMPOSITION (early [before 950] vs. late [after 950]): This information was also retrieved from the YCOE. 394 (31%) observations in the full dataset come from texts early composed and 712 (55%) from later texts; 181 (14%) remained unclassified. The hypothesis is that the possibility of *to*-DAT-ACC order will decrease in late OE, which would indicate a change towards the preferred DO-*to*-PP-order of the to-dative construction in MnE. The manuscript date was additionally examined to see whether there was a different effect from the date of composition.

Finally, based on Alcorn (2011: 109), I annotated the dialect of each observation. However, this resulted in far too many categories to be used in a statistically sound way, and so I decided to exclude this variable from further analysis.

3.2 *Results*

I have analysed two data samples. The first sample is the full data sample with all the observations of the ACC+*to*-DAT construction (N = 1285). As mentioned in section 3.1, this sample includes inanimate *to*-DATs, to evaluate their possible effect on the object ordering. The second sample is the subset (N = 468) with the only observations of the *to*-dative construction, i.e., ACC+to-DAT construction with a ditransitive verb and an animate *to*-DAT. I specifically examined the subset with the to-dative construction to be able to draw conclusions about this particular construction.

The general ordering results, presented in table 5, indicate that the ACC-*to*-DAT order is much more frequently attested than the *to*-DAT-ACC order (5 times more in the full dataset, nearly 3 times more in the to-dative subset). See Appendix 1 for a general overview of the bivariate distributions.

| | ACC-*to*-DAT | *to*-DAT-ACC |
|---|---|---|
| ACC + *to*-DAT (Full dataset) | 1082 (84%) | 203 (16%) |
| *To*-dative Construction | 343 (73%) | 125 (27%) |

*Table 5*

*Observed frequencies of the ordering of ACC and to-DAT of the full dataset and the to-dative construction*

This proportional difference is in line with the default ordering in PDE, where the *to*-PP usually follows the DO. In PDE, it is not ungrammatical to put the *to*-PP before the NP, as illustrated by (15)(example taken from Biber et al.1999: 929):

(15) These include principally the discovery of America and the rounding of the Cape, which gave to commerce, to navigation, to industry, an impulse never before known.

This ordering is typically found in formal text genres (Biber et al1999: 929) and with long NPs ('Heavy noun phrase shift', Huddleston & Pullum 2002: 247). According to Biber et al. (1999: 928), *to* may also serve as an additional means to clarify the syntactic role of the *to*-PP.

I have found no estimates about the frequency of the *to*-PP-DO order in present-day English, which prevents me from making a statistically valid comparison between PDE and OE. Biber et al. (1999: 929) note that 'examples of this kind are very rare'. I believe this was not the case in OE, in particular not in the *to*-dative construction, where the *to*-DAT-ACC order accounts for 27% of the total data sample (see Table 5). It seems to me that the ordering of the ACC and the *to*-DAT was somewhat more lenient in OE than in PDE, even though the same general preference for the DO-*to*-PP order existed in OE as in PDE. In the remainder of this section, I examine the motivating factors behind the OE optional argument patterning.

To evaluate the simultaneous effects of the variables, I fitted a mixed-effects logistic regression model to both data samples. The mixed-effects logistic regression models were fitted by means of the Laplace approximation implemented with the lmer function of the lme4 package in R (Bates et al. 2011) in R (2010). The model estimates are given in Table 7:

| | ACC + *to*-DAT (N = 1285) | | *To*-dative Construction (N = 468) | |
|---|---|---|---|---|
| | Est. Coeff. (s.e.) | | Est. Coeff. (s.e.) | |
| Intercept | -1.76 (0.51) | | 0.31 (0.73) | |
| Ditransitive | | | | |
| yes | 0.39 (0.24) | | | |
| Animacy ACC | | | | |
| inanimate | 0.17 (0.21) | | -0.12 (0.29) | |
| Concreteness ACC | | | | |
| concrete | 0.31 (0.32) | | -0.37 (0.43) | |
| Definiteness ACC | | | | |
| indefinite | 0.84 (0.21) | *** | 1.21 (0.29) | *** |
| Pronominality ACC | | | | |
| pronominal | -0.91 (0.38) | * | -1.25 (0.55) | * |
| Number ACC | | | | |
| singular | -0.34 (0.21) | • | -0.34 (0.31) | |
| Animacy *to*-DAT | | | | |
| inanimate | -0.99 (0.29) | *** | | |
| Definiteness *to*-DAT | | | | |
| indefinite | 0.86 (0.34) | * | 0.62 (0.62) | |
| Pronominality *to*-DAT | | | | |
| pronominal | 0.96 (0.25) | *** | 1.24 (0.32) | *** |
| Number *to*-DAT | | | | |
| singular | -1.33 (0.29) | *** | -1.37 (0.42) | ** |
| Length Difference | -1.44 (0.18) | *** | -1.24 (0.26) | *** |
| Translation | | | | |
| unknown | 0.34 (0.36) | | 0.68 (0.61) | |
| yes | -0.26 (0.23) | | -0.48 (0.30) | |
| Completion | | | | |
| late | -0.25 (0.25) | | -0.30 (0.33) | * |
| unknown | -0.29 (0.34) | | -1.28 (0.57) | |
| Random Intercept Verb | 0.06 (0.25)‡ | | 0.08 (0.28) ‡ | |

*Table 7*

*Estimated mixed-effects logistic regression models for the full dataset and for the subset with to-dative construction. The to-DAT-ACC order is treated as the success (= 1).*

**** p-value < 0.001, **: p-value < 0.01, *: p-value < 0.05, •: p-value < 0.1. The significance of the variables was tested by means of a likelihood ratio test of the nested models. ‡Estimated Variance and (Standard deviation) of the Random Intercept.*

The quality of both models was very good. I evaluated the prediction accuracy by looking at the mean concordance index *C* through 100-fold cross-validation. For the sample with the ACC+*to*-

DAT construction (N = 1285), I divided the data into a training set of 900 and a test set of 385. For the sample with the *to*-dative construction (N = 468), I divided the data into a training set of 300 and a test set of 168. The concordance indexes suggest that both models make very good predictions: $C_{\text{ACC+}to\text{-DAT}}$ = 87%, $C_{to\text{-dative construction}}$ = 83% (a concordance index greater than 80% is indicative of a good predictive accuracy, cf. Harrell 2001: 247). Both indexes are also larger than the baseline percentages one would always obtain by predicting the most frequent patterns, i.e., 84% and 73% respectively.

Building on the Hosmer-Lemeshow test to evaluate the goodness of fit for logistic regression models, I grouped the predicted probabilities for each sentence into ten groups using equal cutoff points and compared the correlation between the mean probability for each group and the observed proportions of the response in the same group. The correlation plots in Figure 1 further indicate a very good fit of the models to the data (plots were made with the plot.logistic.fit.fnc function in the LanguageR package Baayen (2011).

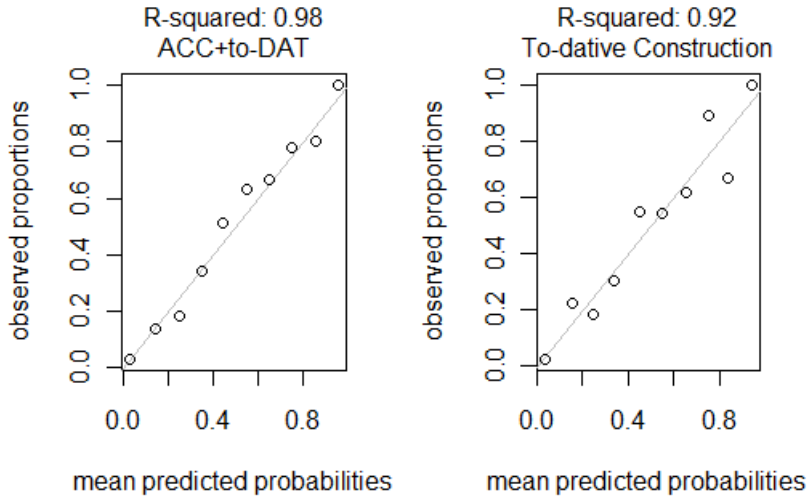


*Figure 1*
*Corpus model fit between grouped observations and mean predicted probabilities for the models for the ACC+to-DAT (N = 1285) and the to-dative constructions (N = 468).*

The direction of the significant variables was as expected, except for Definiteness of DAT, which was only significant in the full dataset, and for Number of DAT, for which singular DATs were negatively associated with the *to*-DAT-ACC order. However, as expected, an indefinite and nominal ACC, and an animate *to*-DAT were preferably used with the *to*-DAT-ACC order. The difference in length between the ACC and the *to*-DAT yielded a strong effect on the choice of order: the longer the *to*-DAT is in comparison with the ACC, the less likely it is to take a *to*-DAT-ACC ordering, which confirms our hypothesis for this variable.

As regards the extra-linguistic variables, the Date of Completion proved significant in the model for the *to*-dative construction, but only for the category of 'unknown', which suggests that there was no change in the ordering preferences during OE. No evidence was found for the effect of the other variables. I also fitted a model in which I included the Date of Manuscript rather than the Date of Composition – the date of composition is earlier than that of the manuscript for many observations and may thus yield a different effect – but this variable was not significant either.

The random intercept associated with the sentence verb was found to be low in both datasets: 0.06 and 0.08 (in comparison, the estimated variance associated with Verb Sense in Bresnan et al. 2007 was 2.27). A likelihood ratio test of the models with a random factor and the ones without indicated that the sentence verb does not contribute significantly to the choice of order (ACC+*to*-DAT construction: $\chi^2 = 1.13$, df = 1, *p*-value $\approx 0.28$; *to*-dative construction: $\chi^2 = 0.44$, *p*-value $\approx 0.51$). No evidence was found, then, that different verbs were biased towards one of the two orders. The same holds true for the variable Ditransitive: ditransitive verbs were not found to be associated with any particular order.

An interesting significant effect that is observed for the full dataset is associated with the animacy of the to-DAT: an inanimate *to*-DAT was less likely to be expressed with the *to*-DAT-

ACC order than an animate to-DAT. The odds ratio for this variable equals 0.37 (95% CI = 0.21 to 0.66), which means that the odds of an inanimate to-DAT being expressed with the to-DAT-ACC order was only about 37% of that of an animate to-DAT. To examine this effect in more detail, I additionally compared the ordering tendencies of the six most common alternating verbs with respect to the *to*-dative construction and the DOC. Consider the data given in table 9.

| | | ORDER | |
|---|---|---|---|
| | | acc-(*to*-)dat | (*to*-)dat-acc |
| *lædan* | | | |
| *to*-DAT: | animate | 86 (92%) | 8 (8%) |
| | inanimate | 117 (97%) | 4 (3%) |
| DAT (DOC): | animate | 0 (0%) | 1 (100%) |
| *sendan* | | | |
| *to*-DAT: | animate | 56 (69%) | 25 (31%) |
| | inanimate | 35 (88%) | 5 (12%) |
| DAT (DOC): | animate | 6 (10%) | 52 (90%) |
| *bringan* | | | |
| *to*-DAT: | animate | 47 (84%) | 9 (16%) |
| | inanimate | 53 (90%) | 6 (10%) |
| DAT (DOC): | animate | 17 (19%) | 73 (81%) |
| *asendan* | | | |
| *to*-DAT: | animate | 24 (67%) | 12 (33%) |
| | inanimate | 17 (99.5%) | 1 (0.5%) |
| DAT (DOC): | animate | 0 (0%) | 10 (100%) |
| *beran* | | | |
| *to*-DAT: | animate | 10 (67%) | 5 (33%) |
| | inanimate | 25 (100%) | 0 (0%) |
| DAT (DOC): | animate | 1 (10%) | 9 (90%) |
| *cweðan* | | | |
| *to*-DAT: | animate | 23 (82%) | 5 (18%) |
| | inanimate | 0 (0%) | 0 (0%) |
| DAT (DOC): | animate | 2 (34%) | 4 (66%) |

*Table 9*

*The distribution of the six most common alternating verbs with to-DAT (animate and inanimate) and DAT in the DOC by* ORDER *(no DOC with an inanimate dative object was attested).*

Looking at the ordering associated with the *to*-DATs, we can see that the animate *to*-DATs are somewhat more lenient in their ordering behaviour than inanimate *to*-DATs. While inanimate *to*-DATs nearly always take the ACC-*to*-DAT order, animate *to*-DATs more often take the

opposite *to*-DAT-ACC order (which is consistent with the results of the logistic regression model). Interestingly, the DAT-ACC order is also the preferred order of an animate DAT in the DOC. In other words, the ordering behaviour of an animate *to*-DAT is somehow in between that of an inanimate *to*-DAT and an animate DAT.

I additionally tested the overall ordering preferences of the to-dative construction vs. the DOC, by aggregating the observations (thus dropping the observations for inanimate *to*-DATs), as outlined in table 10.

| | ORDER | |
|---|---|---|
| | ACC-(*to*-)DAT | (*to*-)DAT-ACC |
| *to*-dative construction | 246 (174; 5)* | 64 (136; -6) |
| DOC | 26 (98; -7) | 149 (77; 8) |

*Table 10*

*Aggregated results for the choice of order by construction class (to-dative construction vs. DOC).* **Expected frequency and Pearson residual. (Residuals larger than |2| are regarded as major influences.)*

The data in table 10 suggest that the order of ACC and (*to*-)DAT was strongly associated with the type of construction in which they were used ($\chi^2 = 186$, df = 1, *p*-value < 0.0001, $\varphi$ = 61%): a *to*-dative construction preferably occurred with ACC-*to*-DAT order, a DOC preferred the DAT-ACC order. The Pearson residuals (see Table 10) further substantiate that the observed frequencies deviate strongly from what we would expect if the ordering of the ACC and *to*-DAT were independent from the construction in which they occurred. In other words, the OE ordering preferences for the *to*-dative construction and the DOC were already similar to the standard orderings associated with the dative alternation in PDE.

3.3 *ACC+to-DAT ordering: discussion*

I found that both orders occurred in OE, but that the ACC-*to*-DAT order tends to be used more often than the *to*-DAT-ACC order. As expected, the OE *to*-dative construction exhibited a relatively freer object ordering than that of PDE, where the *to*-PP-DO order is limited to particular contexts.

The results of the estimated logistic regression models indicated a very weak association between the ordering and the sentence verb (cf. the low variation of the random factor in both models). Building on the evidence that the dative alternation is associated with verbal semantics, I believe that the reason for this weak association may lie in the fact that there is a stronger association between a verb and the construction with which it is preferably used, than between a verb and a particular object ordering. The ordering is primarily associated with pragmatic motivations and may therefore be independent of verbal semantics.

The results of the logistic regression analysis further show that the ordering is motivated by the same factors that are also found to be involved in the dative alternation in PDE. Based on my corpus sample, I found significant evidence for the influence of five predictors: Pronominality of the ACC and the *to*-DAT, Definiteness of ACC, Number of DAT and Length Difference. Moreover, the relative effect sizes associated with these predictors as well as the direction of these effects are similar to those found for the dative alternation in PDE. The effects associated with the dative alternation in PDE have been explained in terms of 'Harmonic Alignment', which refers 'to the tendency for linguistic elements that are more or less prominent on a scale (such as the animacy or nominal-expression type scales) to be disproportionately distributed in respectively more or less prominent syntactic positions (such as preceding in word order or occupying a superordinate syntactic position)' (Bresnan & Ford 2010: 183). Animate, definite, singular, pronominal and shorter ACCs/*to*-DATs are accordingly expected to occur before

inanimate, indefinite, plural, nominal and longer *to*-DATs/ACCs. The results of this study are consistent with what is expected under the Harmonic Alignment hypothesis, which thus also seems to have been involved in OE.

How do these ordering results bear on the further development of the ditransitive constructions in ME? An important change in ME was the loss of the DO-IO order (cf. the ungrammaticality of *give the book John* in PDE, which was perfectly possible in OE). According to Allen (2006: 214), the use of the *to*-dative construction may have led to a lesser need to maintain the ACC-DAT (DO-IO) order, because of their pragmatic similarity (both order have the Recipient in final, i.e., focussed, position). The results of this study support this idea.

The fact that the IO-DO order was already the most frequent one in ME to begin with, may additionally have contributed to the loss of the DO-IO. Although hard to prove, it seems quite possible to me that both phenomena – the increased use of the *to*-dative construction (with its preferred ACC-*to*-DAT/DO-*to*-PP order) and the winner-takes-it-all behaviour of the DAT-ACC/IO-DO order of the DOC –, reinforced each other, a process which ultimately led to the ungrammaticality of the DO-IO order of the DOC.

## 4 THE SEMANTICS OF *TO* FROM OE TO ME

### 4.1 *Introduction.*

As discussed in the previous sections, the *to*-dative construction was well-established with certain verb classes in OE, particularly with caused-motion and communication verbs. However, no example has thus far been found of a *to*-dative construction with a transfer of possession verb and

a human recipient. The first examples of this type date back to the 13th century. Example (16), featuring the verb *ȝiuen* (‘give’), is one of the oldest attestations (example taken from the *Penn-Helsinki Parsed Corpus of Middle English, second edition*, cf. Kroch & Taylor 2000).

(16) ȝeue to ioseph
‘give to Joseph’
(CMJULIA, 119.390)

According to McFadden (2002), *to* was in this process semantically reanalysed form a Goal to a Recipient marker. McFadden’s account is in line with the general grammaticalization hypothesis according to which abstract grammatical functions are derived from more concrete meanings. The change from allative to recipient marker is also one of the basic pathways outlined in the grammaticalization literature and several studies argue that the semantics of *to* followed this grammaticalization path (Cuyckens 1999, Cuyckens & Verspoor 1998, Haspelmath 2003, Heine & Kuteva 2002, Luraghi 2003, Newman 1996, Tyler & Evans 2003). I believe that this general grammaticalization path may be correct if one considers the semantic development of *to* on a broad diachronic scale.

However, McFadden’s analysis disregards the empirical evidence that the *to*-dative construction already existed in OE with many verbs. Because the semantic potential of *to* was much more varied than that of a Goal marker, the actual semantic change of *to* in early ME seems to have been much ‘smaller’ than what McFadden maintains.

This section examines the various uses of *to* in OE, particularly those that closely bordered on that of Recipient. Section 4.2 first presents a comprehensive overview of various contextual

uses in which *to* is found in OE. Section 4.3., then, discusses evidence of an 'embryonic' Recipient use of *to* in OE.

The data used in this section was gathered from different sources, including: *Oxford English Dictionary*, Albers (1907), Belden (1897), Bosworth & Toller (1955), Mitchell (1985), the OE part of the Helsinki corpus, and my sample observations retrieved for the previous substudies.

## 4.2 *To in OE*

Distinguishing between the different uses/meanings of a preposition is a lasting topic of discussion (see Van der Gucht et al. 2007) and is not one that I will take up here. The outline given below does not pretend to be exhaustive nor to represent the best classification possible, but aims to illustrate the diverse spectrum of uses in which *to* already occurred in OE

A common use of *to* involves marking a spatial direction. As in PDE, this particular use is prompted by a verb that signified some kind of motion, as *cumen* ('come') in (17).

(17) ðæt he cumen to Galileum
'That they may come to Galilee'
(cocura.o2: 43, 20)

*To* also occurred in non-spatial contexts, as in (18) *to æfenes* ('till the evening'), where *to* marks a chronological direction, or in (19) *gehwyrfþ to* ('converts to'), where *to* is used in a religious context, to mark an abstract direction of a conversion towards a God or in a belief.

(18) he afæste to æfenes

‘he fasted till the evening’

(cobede,Bede_3:17.230.30.2368)

(19) manige Israhela bearna he gehwyrfþ to heora Drihtne;

‘many of the children of Israel he shall convert to their Lord;’

(coblick,LS_12_[NatJnBapt[BlHom_14]]:165.80.2097)

As discussed already, *to* was commonly used with the ACC + *to*-DAT construction with the *to*-DAT referring to a location, cf. (20), *to heora gest-huse* (‘to their guest house’), or a person, cf. (21), *to þam wælhreowan casere* (‘to the cruel emperor’).

(20) Hi ða gelaðodon hine to heora gest-huse,

‘Then they invited him to their guest house,’

(cocathom2.o3: 284, 32)

(21) and sende his gewrit to þam wælhreowan casere,

‘and sent his letter to the cruel emperor,’

(coaelive,ÆLS_[Julian_and_Basilissa]:249.1090)

As seen in section 2, the *to*-dative construction was often used with verbs of communication, as illustrated in (22) and (23), with the verbs *cweðan* (‘say’) and *witegian* (‘prophesy’):

(22) God cwæð to Moysen ðæt he wolde cumin,

‘God said to Moses that he would come,’

(cocathom2.o3: 196, 16)

(23) Be ðam wundrum Þe Crist geworhte witegode Hieremias
about the wonders that Christ performed prophesied Jeremiah
to Þære byrig Hierusalem, Þus cweðende, ‘To ðe cymð Þin Alysend
to the city Jerusalem thus saying, to you comes your Redeemer,
‘About the wonders that Christ performed, Jeremiah prophesied to the city of Jerusalem, thus saying, ‘To you comes your redeemer’’
(cocathom2.o3: 16, 10)

It is debatable whether the use of *to* as an Addressee marker could be regarded as an instance of a Recipient one, given that an Addressee is sometimes also interpreted as the intended recipient of a communicated message (e.g., Rappaport Hovav & Levin 2008: 134). This would imply that the Recipient use of *to* is already established from early OE onwards. I believe, however, that the distinction between Addressee and Recipient is here warranted by the observation that the *to*-dative construction was fully established with verbs of communication, but not used with transfer of possession verbs with an animate Recipient. The distinction thus appears to have been functional, in that the OE speaker intuitively *knew* that the use of *to* was grammatical as an Addressee marker, but not, or perhaps much less so (see section 4.3), as a Recipient marker. As we shall see, the few instances discussed in section 4.3 suggest, on the one hand, that the use of *to* as a Recipient marker was grammatical but strongly disfavored. On the other hand, the fact that no transfer of possession verb with a human Recipient is found with a *to*-dative construction suggests that this combination was ungrammatical. Unfortunately, in the absence of native speaker intuition one cannot fully determine the grammaticality of *to* as a Recipient marker in OE.

*To* could also be used as an index of a place (24) or a specific point in time (25), and even as a price indication (26) *to þrim hunde penega* (‘for three hundred penning’). Clearly, in these cases no locational change or direction is involved.

(24) settan him hyrdas to
‘set guards over him’
(coblick,LS_32_[PeterandPaul[BlHom_15]]:177.117.2258)

(25) to midre nihte
‘at midnight’
(example taken from Bosworth & Toller)

(26) þæt hie man gesealde to þrim hunde penega
‘that one sold them for three hundred pence’
(coblick,HomS_21_[BlHom_6]:75.169.943)

*To* could furthermore indicate a ‘state, quality, condition to be attained’ or ‘the occasion (as a marriage, a feast) to be attended’ (Belden 1897: 52), as illustrated in (27), *to ecere reste* (‘to eternal rest’) and (28), *to deaðe* (‘to death’):

(27) Crist hi gebrohte to ecere reste
‘Christ has brought her to eternal rest’
(cocathom2.o3: 440, 28)

(28) þæt he wolde hine sylfne syllan to deaðe
‘that he wanted to give himself to death’

(coaelive,ÆLS_[Abdon_and_Sennes]:174.4826)

A frequent use of *to* was that of purpose marker, as in (29), *to gafole* (‘as rent’):

(29) þæt nan man ne sylle nan feoh to gafole
that no man not shall give no money as rent
‘that no one shall give money as rent’
(coaelhom,ÆHom_25:4.3896)

*To* is also found as a comparison marker (30):

(30) he worhte þa Adam to his anlicnysse.
‘then he created Adam in his own likeness.’
(cocathom1,ÆCHom_I,_20:342.192.4023)

And even as a source marker (31):

(31) Swá ic ðé wéne to
as I you expect to
‘as I expect of you’
(taken from Bosworth and Toller: Beo. Th. 2797; B. 1396: 5836; B. 2922)

According to Belden (1897: 48), the meaning of *to* is in all its uses associated with the idea of ‘direction’. This is correct, I believe, although there are some uses where this idea is only

faintly present (e.g., when used as a comparison marker, cf. (30)). Most importantly, however, the examples discussed here clearly illustrate that the sense of 'direction' was not confined to spatial contexts and that highly abstract uses of *to* were abundant in OE. The next section zooms in on the use of *to* as a possible Recipient marker.

### 4.3 *To-dat as Recipient in OE?*

The semantic role of a participant in the sentence is defined by its semantic relationship with the sentence verb. A Recipient refers to the participant to whom something is transferred and who thus becomes the possessor of the object (the latter criterion distinguishes the Recipient from a locational Goal). In PDE, the Recipient role is typically associated with the IO or the *to*-PP of a transfer of possession verb.

As regards the use of the *to*-dative construction with transfer of possession verbs in OE, there are no known attestations of *sellan* or *(a)giefan* with a personal *to*-DAT. However, this does not necessarily imply that the *to*-DAT could not be used as a Recipient in OE. I believe that there are in fact uses of the *to*-DAT where the context prompts such an interpretation.

In the OE Charters, which typically document donations to a church or town – mostly of agricultural assets and commodities such as land, livestock and cereals –, one finds many examples of *sellan* with a *to*-DAT referring to a location, as in (32); more examples can be found in the OE charters 37.8, 41.20, 45.21, 45.29, 45.34, and 45.39.

Visser (1963: 624, fn 1) further notes that similar instances are occasionally found in late OE with the verb *agiefan* ('to give').

(32) Ic oswulf ond Beornðryð min gemecca sellað to cantuarabyrg to cristes cirican
I Oswulf and Beornthryth my wife give to Canterbury to Christ's church
ðæt land æt stanhamstede.
the land at Stanstead
'I, Oswulf and my wife Beornthryth give to Christ's church at Canterbury the land at Stanstead.'
(codocu1.o1: charter 37.2)

Although *to cantuarabyrg* ('to Canterbury') in (32) denotes a location, it is clear that its actual referent is the community of the church of Canterbury. The gift is thus not so much directed to the church as a physical place, but rather to the social community to which the place name metonymically refers. A Recipient reading of the *to*-DAT therefore seems appropriate.

The Recipient role of the *to*-DAT is further prompted by *lettan* ('leave', 'let', 'lease') and *niman* ('take', 'receive', 'get'), illustrated in (33) to (35):

(33) Denewulf bisceop & ða hiwan in Wintanceastre leton to Beornulfa hiora landes xv hida
'Bishop Denewulf and the community at Winchester have let to Beornwulf fifteen hides of their land'
(S1285, dated: c. A.D. 902)[2]

(34) Eadward cyning & þa hiwan in Wintanceastre lætað to Ðænewulfe bisceope twentig hida lands

[2] S refers to the Sawyer number, see www.esawyer.org.uk (DOA: 12/05/2013).

'King Edward and the household in Winchester leave to bishop Denewulf twenty hides of land'

(S385, dated: c. A.D. 909)

(35) and we […] ðe eft genimað to us;

and we […] you again take to us;

'and we will take you again to us;'

(cocathom2,ÆCHom_II,_22:197.241.4383)

The state of affairs referred to in (33) and (34) involves a possessional transfer between human individuals, which qualifies both *to*-DATs as Recipients. The Recipient role of the *to*-DAT in sentence (35) becomes clear if one takes into account the full context; the sentence is uttered by angels talking to a fallen one, who wish to accept the fallen angel back into their midst.

The examples discussed in 4.3 provide evidence that the OE *to*-DAT could be interpreted as a Recipient in contexts that involve some kind of possessional transfer. It is, nevertheless, a matter of fact that the total number of instances of this useremains very small in OE (the clearest examples that I could find are all cited in this article). Assuming that this was not merely due to a lack of recorded evidence and that the evidence was not just lost in the sands of time, one may wonder why this possibility of using the *to*-DAT as a Recipient was not fully exploited until ME.

There are two possible explanations, I believe, which, admittedly, remain tenuous in the light of the available empirical evidence. A first explanation could be that the use of a transfer of possession verb with a *to*-dative construction was initiated by some OE speakers but never adopted by many other speakers of the language community, or at least not by the writers of the OE texts that have survived. This account is not very satisfactory, however, as it merely restates the question of why the innovation did not catch on with the rest of the community.

A second, more likely, explanation, is that the use of the to-dative construction with transfer of possession verbs was syntactically blocked by the ACC+DAT DOC. The latter construction is said to be semantically associated with a possessional transfer, while the *to*-dative construction is associated with a locational change (see Pinker 1989, Langacker 1991, Krifka 1999, Harley 2003). Based on Bresnan's studies, we know that this semantic difference is not the main factor that drives the dative alternation in PDE, but it is possible that this semantic distinction was stronger in OE, which would explain why a transfer of possession verb only occurred with the DOC. A strong semantic association between the DOC and the 'transfer of possession' meaning could have blocked the use of a 'transfer of possession' verb with the *to*-dative construction. Moreover, since the DOC occurred with both object orders, pragmatic differences could be expressed by the DOC alone, which is no longer possible in PDE, where the *to*-dative construction is obligatory when the order is IO-DO. Unlike in PDE, then, where the *to*-dative must be used to express certain pragmatic features, there was no need to use it in OE, as both DOC orders could be used with the transfer of possession verbs. Once case morphology was lost, the *to*-dative construction, which preferred the ACC-*to*-DAT order, could then have been used to compensate for the loss of the DO-IO order.

## 5 Conclusion

This study has examined four aspects associated with the OE *to*-dative construction, which was defined as the clausal pattern [ditransitive Verb + NP + *to*-PP]. First, based on an investigation of data from the YCOE corpus, I found that the *to*-dative construction was not rare in comparison to the DOC in OE and that this construction was fully established with verbs of caused motion and

communication. The results thus clearly falsify any alleged causal relationship between the emergence of prepositions and the loss of case morphology; the use of the *to*-dative construction did not lead to the demise of the ACC/DAT distinction, nor did the to-dative construction emerge upon the loss of the ACC/DAT morphology. It remains a matter of fact, however, that no examples were attested of a transfer of possession verb with a human *to*-DAT Recipient; it therefore remains possible that the use of the *to*-dative construction with this verb class was associated with case loss. Second, the corpus data furthermore revealed that, overall, the same ordering tendencies already existed in OE as in PDE. Both the ACC-*to*-DAT and the to-DAT-ACC orders were grammatical, with the former being the most frequent one. However, in contrast to PDE, the *to*-DAT-ACC appeared to have been more broadly used than in PDE, where its use is heavily restricted. Third, building on the multifactorial approach to the dative alternation in PDE, I used a mixed-effects logistic regression model to evaluate the effect of various factors on the ordering of the *to*-dative construction in OE (factors that are known to be associated with the dative alternation in PDE). Five factors were found to be associated with this ordering: Pronominality of the ACC and of the *to*-DAT, Definiteness of ACC, Number of DAT and the difference in Length between the ACC and the *to*-DAT. The relative impact effects of these factors as well as the direction of their effect were additionally found to be similar to those observed for the dative alternation in PDE. Fourth, I made the case that the semantic change of *to* from OE to ME was more gradual than what has traditionally been appreciated in the literature. Given that the to-dative construction was not used with transfer of possession verbs until ME, it stands as a matter of fact that the main semantic change associated with to was the extension of its use to a Recipient marker. However, in contrast to the traditional account, which says that *to* was reanalysed form a Goal to a Recipient marker, I argued that this alleged change is far too

'saltational' in the light of the empirical data, which actually suggests that a Recipient use of *to* was already embryonically present in OE.

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**APPENDIX 1: Bivariate descriptive statistics**

| | ACC + *to*-DAT (N = 1285) | | *To*-dative Construction (N = 468) | |
|---|---|---|---|---|
| | ACC-*to*-DAT | *to*-DAT-ACC | ACC-*to*-DAT | *to*-DAT-ACC |
| | 1082 (84%) | 203 (16%) | 343 (73%) | 125 (27%) |
| Ditransitive verb | | | | |
| yes | 685 (82%) | 150 (18%) | 343 (73%) | 125 (27%) |
| no | 397 (88%) | 53 (12%) | | |
| Animacy | | | | |
| ACC animate | 753 (87%) | 113 (13%) | 206 (75%) | 68 (25%) |
| ACC inanimate | 329 (78%) | 90 (21%) | 137 (71%) | 57 (29%) |
| *to*-DAT animate | 506 (75%) | 170 (25%) | 343 (73%) | 125 (27%) |
| *to*-DAT inanimate | 576 (95%) | 33 (5%) | | |
| Concreteness | | | | |
| ACC concrete | 980 (84%) | 180 (16%) | 318 (74%) | 109 (26%) |
| ACC abstract | 102 (82%) | 23 (18%) | 25 (61%) | 16 (39%) |
| Definiteness | | | | |
| ACC definite | 897 (89%) | 109 (11%) | 275 (83%) | 56 (17%) |
| ACC indefinite | 185 (66%) | 94 (33%) | 68 (50%) | 69 (50%) |
| *to*-DAT definite | 951 (84%) | 180 (16%) | 329 (74%) | 116 (26%) |
| *to*-DAT indefinite | 131 (85%) | 23 (15%) | 14 (60%) | 9 (40%) |
| Pronominality | | | | |
| ACC pronominal | 470 (98%) | 11 (2%) | 138 (96%) | 5 (4%) |
| ACC nominal | 612 (76%) | 192 (24%) | 205 (63%) | 120 (37%) |
| *to*-DAT pronominal | 254 (67%) | 123 (33%) | 171 (64%) | 94 (36%) |
| *to*-DAT nominal | 828 (91%) | 80 (9%) | 172 (85%) | 31 (15%) |
| Number | | | | |
| ACC singular | 841 (88%) | 112 (12%) | 282 (80%) | 70 (20%) |
| ACC plural | 241 (73%) | 91 (27%) | 61 (53%) | 55 (47%) |
| *to*-DAT singular | 969 (86%) | 167 (15%) | 304 (75%) | 103 (25%) |
| *to*-DAT plural | 113 (76%) | 36 (24%) | 39 (64%) | 22 (36%) |
| Person | | | | |
| ACC local | 4 (100%) | 0 (0%) | 1 (100%) | 0 (0%) |
| ACC non local | 1078 (84%) | 203 (15%) | 342 (73%) | 125 (27%) |
| *to*-DAT local | 30 (71%) | 12 (29%) | 27 (69%) | 12 (31%) |
| *to*-DAT non local | 1052 (84%) | 191 (15%) | 316 (74%) | 113 (26%) |
| Translation | | | | |
| yes | 421 (85%) | 73 (15%) | 155 (78%) | 43 (22%) |
| no | 559 (84%) | 105 (16%) | 152 (68%) | 70 (32%) |
| unknown | 102 (80%) | 25 (20%) | 36 (75%) | 12 (25%) |
| Composition | | | | |
| early | 332 (84%) | 62 (16%) | 88 (70%) | 37 (30%) |
| late | 604 (85%) | 108 (15%) | 196 (72%) | 75 (28%) |
| unknown | 146 (82%) | 33 (18%) | 59 (82%) | 13 (18%) |
| Manuscript | | | | |
| early | 159 (84%) | 31 (16%) | 41 (70%) | 17 (30%) |
| late | 780 (85%) | 140 (15%) | 243 (72%) | 95 (28%) |
| unknown | 143 (82%) | 32 (18%) | 59 (82%) | 13 (18%) |

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