

A NEW PERSPECTIVE ON THE DEVELOPMENT  
OF THE *TO*-INFINITIVE

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**The Rise of the *To*-Infinitive**, by Bettelou Los, Oxford University Press, Oxford, 2005, xvi+335pp.

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1. Introduction

The book under review is a revised version of Bettelou Los's (1999) dissertation, supplemented with an article published thereafter. The volume consists of the following six parts:

- Part I Introduction
- Part II The *to*-infinitive as GOAL
- Part III The *to*-infinitive as THEME
- Part IV Syntactic Status
- Part V Changes in Middle English
- Part VI Summary and Conclusions

In parts II and III, the author describes the distribution of the *to*-infinitive in Old English (OE) based on her extensive research of corpora data. In part IV, Los deals with issues concerning the categorial status of the OE *to*-infinitive and the diachronic change of the infinitive marker *to*. In part V, she discusses the changes in Middle English (ME), particularly the emergence of the Exceptional Case-Marking (ECM) con-

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struction.

On the whole, the true value of this book appears to lie in the synchronic analyses of the OE *to*-infinitive from part II to the first half of part IV (from chapters 2 to 7). In the Introduction, Los states the following:

- (1) [M]uch previous work on the subject is based on two assumptions about the situation of the *to*-infinitive in OE that have never been tested, but have, through constant reiteration, achieved the status of axioms: first, that the categorial status of the *to*-infinitive in OE is PP; and secondly, that the *to*-infinitive spread at the expense of the infinitive without *to*, the bare infinitive [...]. (p. 4)

Los successfully challenges these two “established” assumptions and, instead, argues that the OE *to*-infinitive is in fact CP, which is in competition with the subjunctive *that*-clause rather than the bare infinitive.<sup>1</sup> On the other hand, her discussion on diachronic changes in the latter half of part IV and part V seems to involve some controversial issues.

In this article, I will review the main points of the book, i.e. the distribution of the OE *to*-infinitive (section 2), the categorial status of the OE *to*-infinitive (section 3), the change in the syntactic status of infinitival *to* (section 4), and the rise of the ECM construction in ME (section 5). In each section, I will indicate the problems in Los’s analyses. Finally, in section 6, I will review an alternative approach that can solve the problems discussed in previous sections while incorporating Los’s crucial insights.

## 2. Distribution and Extension of the OE *To*-Infinitive

### 2.1. Reclassification of Subcategorization Frames

This subsection addresses the second issue raised by Los in (1): the assumption that the OE *to*-infinitive is in competition with the bare infinitive and that the former spreads at the expense of the latter. Adhering to Los’s argument, let us refer to this conventional view as

<sup>1</sup> Los employs the term “subjunctive clause” in a broad sense, which includes “actual subjunctives, ‘neutralized’ subjunctives that can be expected to be subjunctive because of the putative nature of the clause, and clauses with modals, indicative or subjunctive” (p. 24).

the replacement theory. Numerous previous studies such as Mustanoja (1960), Lightfoot (1979), and Jarad (1997) that offer explanations for the development of the *to*-infinitive explicitly or implicitly assume this kind of replacement theory. This assumption is based on the commonly-held notion that the subcategorization patterns for the bare and *to*-infinitives are so chaotic in OE that their distribution is determined merely by the unpredictable, idiosyncratic properties of the matrix verbs.

Callaway's (1913) classic study on the two infinitives in OE, which gives a strong impression that their distribution largely overlaps, has had significant influence with regard to the replacement theory. However, Los (p. 12) states that Callaway's classification of the two infinitives involves the following problems: (i) the semantic groups of matrix verbs are very broad and do not focus on the specific meaning that the relevant verb exhibits when complemented by an infinitive, (ii) the adjunct and argument infinitives are not clearly distinguished, and (iii) the classification is based on surface strings rather than underlying structures.<sup>2</sup> In order to overcome these shortcomings and override the conventional replacement theory, Los conducted a survey of corpora and classified the results obtained within the framework of the argument structures that are widely employed in modern syntactic theories.

Los first classifies OE *to*-infinitives into those that express Goal and those that express Theme, and then further classifies them according to their function or the semantic class of the matrix verbs. The environments in which the *to*-infinitive appears as an expression of Goal include the purpose adjunct, the complement of conatives, and the complement of verbs of persuading and urging. The categories that can appear as the purpose adjunct and the subcategorization frames of the relevant verb classes are represented in (2)–(4) below.

- (2) *Expressions of the Purpose Adjunct*  
 [*to*-PP]  
 [subjunctive clause]  
 [*to*-VP]

<sup>2</sup> The other problems with Callaway's classification that are pointed out by Los and do not have direct relevance to the discussion in the text are as follows: (iv) possible influence from a Latin *Vorlage* is not filtered out and (v) verbs with or without the prefix *ge-* are counted as separate lexical items.

- (3) *Conatives* (e.g. *fundian* 'hasten', 'try'; *hyhtan* 'trust', 'hope'; *tilian* 'exert oneself', 'strive', 'try')
- GOAL  
[*to*-PP]  
[subjunctive clause]  
[*to*-VP]
- (4) *Verbs of Persuading and Urging* (e.g. *abisgian* 'engage in'; *biddan* 'ask', 'urge'; *gremian* 'provoke'; *læran* 'advise', 'teach'; *mynegian* 'remind'; *spanan* 'persuade'; *trymman* 'encourage'; *underðeodan* 'subject', 'force')
- THEME            GOAL  
[NP<sub>Acc</sub>]        [*to*-PP]  
[NP<sub>Acc</sub>]        [subjunctive clause]  
[NP<sub>Acc</sub>]        [*to*-VP]

Although in the environments represented in (3) and (4) the *to*-infinitive is often analyzed as expressing Theme in the Present-day English (PE), Los maintains that at least in OE, it is more appropriately analyzed as expressing Goal; she bases her claim on the following grounds. First, the argument positions in question can be expressed by the same three categories as the purpose adjunct, i.e. the *to*-PP, the *to*-infinitive, and the subjunctive *that*-clause, which clearly express the meaning of Goal therein. Second, with respect to (4), the postverbal NP in the accusative case cannot be interpreted as Goal, which is essentially restricted to the dative NP in OE (see (6) and (7) below); thus, the *to*-infinitive rather than the NP should be the Goal.

The environments in which the *to*-infinitive appears as an expression of Theme include the complement of verbs of intention and aspectualizers, the complement of verbs of commanding and permitting, and the complement of commissives. The subcategorization frames of the relevant verb classes are represented in (5)–(7) below.<sup>3</sup>

- (5) *Verbs of Intention and Aspectualizers* (e.g. *beginnan* 'begin'; *behealdan* 'take care'; *earnian* 'deserve', 'strive'; *geliefan* 'believe'; *hogian* 'intend'; *leornian* 'learn'; *lystan* 'desire';

<sup>3</sup> The structural realizations of a given thematic role are not necessarily available to all the members of the relevant verb class; for example, only a subset of the verbs belonging to the class in (5) can take both the bare infinitive and the *to*-infinitive as their complement, as indicated immediately below.

*onginnan* ‘begin’; *wandian* ‘hesitate’)

THEME

[NP<sub>Acc</sub>]

[VP]

[subjunctive clause]

[*to*-VP]

- (6) *Verbs of Commanding and Permitting* (e.g. *aliefan* ‘allow’; *beodan* ‘order’; *dihtan* ‘direct’; *don* ‘make’, ‘see to it’; *hatan* ‘command’; *lætan* ‘let’, ‘permit’; *sellan* ‘grant’; *tiðian* ‘grant’, ‘permit’; *tæcan* ‘teach’; *wissian* ‘guide’)

Ditransitive frame:

Monotransitive frame:

RECIPIENT

THEME

THEME

[NP<sub>Dat</sub>]

[NP<sub>Acc</sub>]

[NP<sub>Acc</sub> VP]

[NP<sub>Dat</sub>]

[subjunctive clause]

[NP<sub>Acc</sub> Pred]

[NP<sub>Dat</sub>]

[*to*-VP]

- (7) *Commissives* (e.g. *behatan* ‘promise’, ‘threaten’; *beotian* ‘promise’, ‘threaten’, ‘boast’; *gehatan* ‘promise’, ‘threaten’; *swerian* ‘swear’; *ðeowan* ‘threaten’; *ðreatian* ‘threaten’; *wed-dian* ‘vow’)

RECIPIENT<sup>4</sup> THEME

([NP<sub>Dat</sub>])

[NP<sub>Acc</sub>]

([NP<sub>Dat</sub>])

[subjunctive clause]

([NP<sub>Dat</sub>])

[*to*-VP]

As illustrated in (6), verbs of commanding and permitting have a monotransitive subcategorization frame in addition to the ditransitive one. Note that although the bare infinitive can appear in the monotransitive frame, it is not in competition with the *to*-infinitive in the ditransitive frame. This is because while the *to*-infinitive is directly selected by the matrix verbs as their Theme argument, the bare infinitive is not a subcategorized element; rather, it is the predicate of the accusative NP, and the entire small clause serves as the Theme argument of the matrix verbs.

Thus, the only case in which the bare and the *to*-infinitives occur in

<sup>4</sup> The Recipient argument of commissives is allowed to be, and sometimes forced to be, implicit. As Los argues, this may be partially due to the fact that commissives are subject control verbs; in this respect, they are more like intention verbs than verbs of commanding and permitting.

the same subcategorization frame is verbs of intention and aspectualizers, which is represented in (5). These verbs are further divided into the following three subclasses according to their (in)compatibility with the two infinitives: (i) those that can take both the bare and the *to*-infinitives, e.g. *beginnan*, *earnian*, *hogian*, *leornian*, *onginnan*; (ii) those that can only take the *to*-infinitive, e.g. *geliefan*, *wandian*; and (iii) those that can take only the bare infinitive, e.g. *behealdan*, *lystan*. With regard to the aspectualizers *onginnan*, (*a*)*ginnan*, and *beginnan*, which belong to the first subclass, Los demonstrates that the occurrence of the bare and the *to*-infinitives is not unpredictable, but it is systematically regulated by a semantic criterion. More specifically, it is argued that the *to*-infinitive in the complement of the relevant verbs expresses temporally segmentable events, whereas the bare infinitive are exclusively employed to express unsegmentable events. This implies that the bare infinitive is more closely connected with the aspectualizers than the *to*-infinitive; then, Los suggests that the *ginnan*-verbs that cooccur with the bare infinitive are best regarded as auxiliaries that lack their own argument structures. Furthermore, concerning the verbs in the third subclass, if the conventional replacement theory is correct, it is expected that more verbs belong to this category in OE than in PE. However, Los's investigation of the Toronto Corpus reveals that the mean frequency of occurrence of these verbs is less than six examples, which is far below that of the verbs in the other two subclasses. On the grounds that it is not certain that the verbs in the third subclass never cooccur with the *to*-infinitive in OE, Los (p. 77) concludes that the only verbs that exclusively select the bare infinitive are modals and rejects the validity of the conventional replacement theory.

## 2.2. Extension of the *To*-Infinitive

Based on the abovementioned reclassified subcategorization frames, Los presents a novel pathway for the spread of the *to*-infinitive. She argues that it first appeared as the purpose adjunct and then extended its domain into the Goal argument and finally into the Theme argument, as illustrated schematically in (8).

(8) Purpose adjunct > Goal argument > Theme argument

What was the driving force behind this development? The frames represented in (2)-(7) clearly indicate that the distribution of the *to*-infinitive is parallel to that of the subjunctive *that*-clause rather than the bare infinitive in OE. Building on this previously unnoticed parallelism, Los

proposes the following path of change. The *to*-infinitive was first introduced as the purpose adjunct modeled on the *to*-PP, and subsequently, it spread into the Goal argument, where it still retained its directional or purposive meanings. However, once the *to*-infinitive established its status as the Goal argument, it came to be interpreted as a nonfinite alternative to the subjunctive *that*-clause, and their distributional and functional similarity with each other led the *to*-infinitive to spread into the Theme argument, which was another thematic area where the subjunctive *that*-clause was productively used.<sup>5</sup> The issue pertaining to the categorial status of the *to*-infinitive and its competition with the *that*-clause will be addressed in the next section.

In summary, Los persuasively demonstrates that the subjunctive *that*-clause—not the bare infinitive—competes with the *to*-infinitive in OE. Thus, it can be fairly stated that the author has achieved her aim of casting doubt on the conventional replacement theory. At the same time, however, her analysis is not without problems. First, if the bare infinitive was not replaced by the *to*-infinitive, then it must be clarified why the bare infinitive diminished in the complement of verbs of intention; however, Los does not provide explicit explanations for this change.<sup>6</sup> Second, since the verb classes provided in (3)–(7) are primarily based on their subcategorization patterns, semantic differences between the verbs that take the propositional Goal argument and those that take the propositional Theme argument remain somewhat vague. Los (p. 73) herself states that conatives are a subset of intention verbs. Thus, it is sometimes difficult to determine whether a given *to*-infinitive

<sup>5</sup> This series of changes can be regarded as an instance of grammaticalization because these changes fit well with the general rule “as denotation increases connotation decreases.” That is, the *to*-infinitive began to be used in the specific context, i.e. the purpose adjunct, and then expanded to the other environments; accordingly, its original directional meaning was gradually bleached. On the other hand, within the infinitival clause, an apparent degrammaticalization phenomenon occurred, to which we will return in section 4.

<sup>6</sup> With respect to the loss of the bare infinitive after verbs of intention, Los briefly mentions that it was “part of the general restructuring of the verb system which ultimately resulted in modals no longer being base-generated in V but in T” (p. 83). However, this explanation appears to be implausible because it would have been equally possible for the intention verbs to be reanalyzed as auxiliaries generated in T, as was the case with some aspectualizers in OE, and to continue to take the bare infinitive.

expresses Goal or Theme based solely on the meaning of the matrix verb; however, this might not be a serious problem if it is this ambiguity that aided in the extension of the *to*-infinitive from Goal to Theme. In any event, the author's attempt should be highly valued to the extent that she presents a novel picture of the distribution of the OE *to*-infinitive in terms of the modern linguistic framework and offers an alternative model to the conventional replacement theory.

### 3. Clausal Properties of the OE *To*-Infinitive

Another traditional assumption that is challenged in this book is the view that the OE *to*-infinitive is PP headed by the preposition *to*. This assumption has been endorsed by traditional grammarians—such as Callaway (1913), Jespersen (1909–49), and Mustanoja (1960)—as well as theoretical linguists, including Lightfoot (1979), van Gelderen (1993), Kageyama (1992), and Jarad (1997) among others. To refute this position, Los critically evaluates putative evidence in support of the PP hypothesis and then argues that the OE *to*-infinitive is CP.

#### 3.1. Arguments against the PP Analysis

One of the principal arguments supporting the PP hypothesis of the OE *to*-infinitive stems from the etymological origin of this infinitive. Los observes that the *to*-infinitive can ultimately be traced back to the Primitive Germanic structure represented in (9), wherein the preposition *to* takes a nominalization form of a verbal stem.

- (9) *The Etymology of To-Infinitives* (e.g. *to berenne*)  
*to* (preposition) + *ber-* (verb stem) + *-\*anja-* (derivational suffix) + *-\*i* (dative singular inflection)  
 Primitive Germanic: *\*to beranjōi* (p. 156)

Thus, Los accepts the view that the *to*-infinitive started out as PP, but she immediately adds that “[t]he etymological evidence in itself does not suggest that the *to*-infinitive was still a PP in OE” (p. 157). Instead, she suggests the possibility that the dative ending of the OE *to*-infinitive is fossilized (p. 164).

Another fact that has been repeatedly exploited by the proponents of the PP hypothesis is the coordination of a PP and a *to*-infinitive, as represented in (10).

- (10) þæt he [...] mihte [...] undon his muð to wisdomes  
 that he might undo his mouth to wisdom's



spræcum, and to wurðianne God  
 speech and to praise God  
 ‘so that he [...] might [...] open his mouth to wisdom’s  
 speech, and to praise God’ (ÆHom 16, 184/p. 157)

Los analyzes this example in terms of the following structure:

- (11) [<sub>CP</sub> þæt he mihte undon his muð to wisdomes spræcum] and  
 [<sub>CP</sub> ~~þæt he mihte undon his muð~~ to wurðianne God]

Here, the coordinated constituents are two CPs, and the part preceding the *to*-infinitive in the second conjunct is deleted under identity. If this structural analysis were to be correct, then it would follow that coordination data, such as the one illustrated in (10), do not suffice to substantiate the PP hypothesis of the OE *to*-infinitive.

Further, Los provides positive evidence to show that the *to*-infinitive behaves differently from ordinary PPs. First, although it is imperative for the OE infinitive marker *to* to be adjacent to the head of its complement, i.e. the infinitive verb, ordinary prepositions are immune to this restriction; they are allowed to be separated from the head of their complement NPs.<sup>7</sup> In the following example, *þæs hælendes*, which is the object of the head noun *slege*, intervenes between the preposition *to* and the head noun.

- (12) Ac se deofol forwyrhte hine sylfne þa ða he tihte þæt  
 but the devil ruined him self when he urged the  
 folc to þæs hælendes slege  
 people to the Saviour’s murder  
 ‘But the devil ruined himself when he urged the people to  
 murder the Saviour’ (ÆCHom I, 20 292.5/p. 162)

Second, in the coordination structure wherein two PPs are conjoined, the preposition *to* can be omitted in the second conjunct; however, infinitival *to* must be retained in the both conjuncts in OE. This contrast is schematically represented in (13).

- (13) a. to N and (to) N  
 b. to V-en and \*(to) V-en

Third, ordinary PPs can appear freely either to the left or to the right of the matrix verb.

<sup>7</sup> See (22) in section 4 for the illustration of strict adjacency between *to* and the infinitive verb.

- (14) a. Gif hwa to hwæðrum þissa genied sie on woh  
 if anyone to either of-these forced be unjustly  
 ‘If anyone is forced to either of these unjustly’  
 (LawAf 1, 1-1.1/p. 167)
- b. On þæm dagum Ualentinianus geniedde eft þa  
 on those days Valentinianus forced again the  
 Seaxan to hiera agnum lande  
 Saxons to their own land  
 ‘In those days Valentinian forced the Saxons back again  
 to their own country’ (Or 6 33.152.1/ibid.)

In contrast, the *to*-infinitive always appears to the right of the matrix verb.

- (15) ða eaðmodan [...] weorðen geniedde hiera unðeawas  
 the humble be<sub>SUBJ</sub> forced their faults  
 to herianne  
 to praise  
 ‘the humble [...] would be forced to praise their faults’  
 (CP 41.302.18/ibid.)

Based on the above discussion, Los concludes that the OE *to*-infinitive cannot be grouped with other PPs under the same categorial label.

### 3.2. *To*-Infinitive in Competition with *That*-Clause

Having rejected the PP hypothesis of the OE *to*-infinitive, Los develops her argument for the CP hypothesis, which is strengthened by qualitative and quantitative evidence suggesting that the *to*-infinitive is in competition with the subjunctive *that*-clause in OE.

Qualitative evidence is obtained from a comparison of the two versions of Gregory’s *Dialogue*, i.e. ms. C written between the early 870s and the early 890s and ms. H written between 950 and 1050. What is noteworthy about this revision is that it includes some systematic changes in the syntax. Los reports that ms. H contains 53 more instances of *to*-infinitives than ms. C. Among them, as many as 31 instances replace subjunctive *that*-clauses in ms. C. An example of this is represented in (16) as follows:

- (16) a. Daid, þe gewunade, þæt he hæfde witedomes gast  
 David who was-wont that he had of-prophecy spirit  
 in him  
 in him  
 ‘David, who was wont, that he had the spirit of prophe-

- cy in him' (GD 4.40.26, C/p. 180)
- b. Daid, þe gewunode to hæbþenne witedomes gast  
 David who was-wont to have of-prophecy spirit  
 on him  
 in him  
 'David, who was wont to have the spirit of prophecy in  
 him' (GD 4.40.26, H/ibid.)

This strongly suggests that the *to*-infinitive is a nonfinite alternative to the subjunctive *that*-clause, and thus, it serves as evidence that the OE *to*-infinitive has clausal properties.

Moreover, in order to demonstrate that the replacement of *that*-clauses by *to*-infinitives as represented in (16) is not an accidental phenomenon in the particular text, Los presents quantitative evidence supporting the competition between the two forms. She investigates four OE subcorpora in the Brooklyn-Geneva-Amsterdam-Helsinki Corpus and two ME subcorpora in the Penn-Helsinki Parsed Corpus of Middle English, and counts the tokens of *that*-clauses and *to*-infinitives in the purpose adjunct as well as the complement of verbs of intention and manipulatives.<sup>8</sup> The obtained result is summarized in the table below.

(17) Relative frequencies of *to*-infinitives and compatible subjunctive *that*-clauses in Old English and Middle English

<i>function</i>		<i>OE1</i>	<i>OE2</i>	<i>OE3</i>	<i>OE4</i>	<i>total</i> <i>OE</i>	<i>ME1</i>	<i>ME2</i>	<i>total</i> <i>eME</i>
purpose	<i>that</i>	1 (20%)	60 (52%)	91 (51%)	26 (59%)	178	6 (5%)	6 (8%)	12
	<i>to</i>	4 (80%)	55 (48%)	86 (49%)	18 (41%)	163	121 (95%)	72 (92%)	193
INTENTION	<i>that</i>	2 (100%)	164 (84%)	145 (82%)	69 (84%)	380	48 (38%)	35 (40%)	83
	<i>to</i>	0 (0%)	31 (16%)	31 (18%)	13 (16%)	75	80 (62%)	53 (60%)	133
manipulatives	<i>that</i>	11 (92%)	175 (86%)	183 (87%)	95 (90%)	464	44 (34%)	33 (38%)	77
	<i>to</i>	1 (8%)	28 (14%)	27 (13%)	11 (10%)	67	84 (66%)	53 (62%)	137

(p. 186)

<sup>8</sup> The manipulatives referred to here include verbs of commanding and permitting and verbs of persuading and urging.

This table clearly indicates that while the subjunctive *that*-clause is predominant in all the environments throughout OE, the percentage of the *to*-infinitive sharply increases at the expense of the *that*-clause in early ME; as a result, the relationship between the two forms is reversed. This statistically supports Los's claim that the *to*-infinitive is an alternative to, and thus in competition with, the subjunctive *that*-clause in OE.

### 3.3. More on Coordination

To reinforce Los's argument that the OE *to*-infinitive is CP rather than PP, let us further discuss the issue of coordination. I agree with the author that the coordination data are not sufficient to prove the PP hypothesis; this is simply because the *to*-infinitive can be coordinated with the *to*-PP even in PE (see also Johannessen (1998)):

- (18) a. The University provides a great opportunity [for adventures of the mind and to make friendships that will last a lifetime]. (Huddleston and Pullum (2002: 1327))
- b. He signed on [to please his wife but with no hope of success]. (ibid.: 1328)
- c. In times of economic recession when business and commerce have to look closely at their finances, the low costs, top quality facilities and services which Larne provides are even more vital [to the economy and to enable Irish industries to compete effectively in Europe].  
(*A Guide to Exporting*/British National Corpus (BNC))
- d. Interest rates are set, as I said, in a way that is compatible with our commitment [to the exchange rate mechanism and to bear down on inflation].

(Hansard extracts/BNC)

Although the formal requirement for the two conjuncts to have the same categorial status is rather robust, the surface coordination of unlike categories is nevertheless permissible when the two elements are functionally alike, possibly owing to some deletion processes. If we consider the abovementioned data at their face value, we would then be led to the (probably erroneous) conclusion that the *to*-infinitive is still PP in PE.

However, there appears to be a certain amount of doubt concerning Los's structural analysis of the relevant data. As mentioned in section 3.1 and repeated in (19), she derives the surface coordination of PP and the *to*-infinitive in terms of CP coordination and subsequent deletion in

the second conjunct.

- (19) [<sub>CP</sub> þæt he mihte undon his muð to wisdomes spræcum] and  
 [<sub>CP</sub> ~~þæt he mihte undon his muð~~ to wurðianne God]

In light of the widely accepted assumption that only constituents can undergo deletion, the structure in (19) is problematic because the deleted string *þæt he mihte undon his muð* does not form a constituent. A possible solution would be to remove the infinitive *to wurðianne God* from the CP by either Extraposition or Topicalization and then delete the entire CP, as delineated below.

- (20) a. [<sub>XP</sub> [<sub>CP</sub> ~~þæt he mihte undon his muð~~ <sub>t<sub>i</sub></sub>] [to wurðianne God]<sub>i</sub>]  
 b. [<sub>XP</sub> [to wurðianne God]<sub>i</sub> [<sub>CP</sub> ~~þæt he mihte undon his muð~~ <sub>t<sub>i</sub></sub>]]

Unfortunately, however, both these possibilities should be dismissed. The landing site of rightward movements including Extraposition is restricted to the VP-adjoined or the TP-adjoined position (Johnson (1985), Rochemont and Culicover (1990) among others); thus, the *to*-infinitive cannot be extraposed from the CP as represented in (20a). Further, it cannot be moved leftward as in (20b) because Topicalization across the CP boundary is also prohibited; hence, the topic in embedded clauses appears to the right of the complementizer *that*.<sup>9</sup>

A detailed investigation of the structure of coordination falls outside the scope of this article; however, the OE example in question can be more appropriately analyzed by positing the VP-shell structure. The apparent coordination of unlike categories would then be derived through vP coordination plus VP deletion.

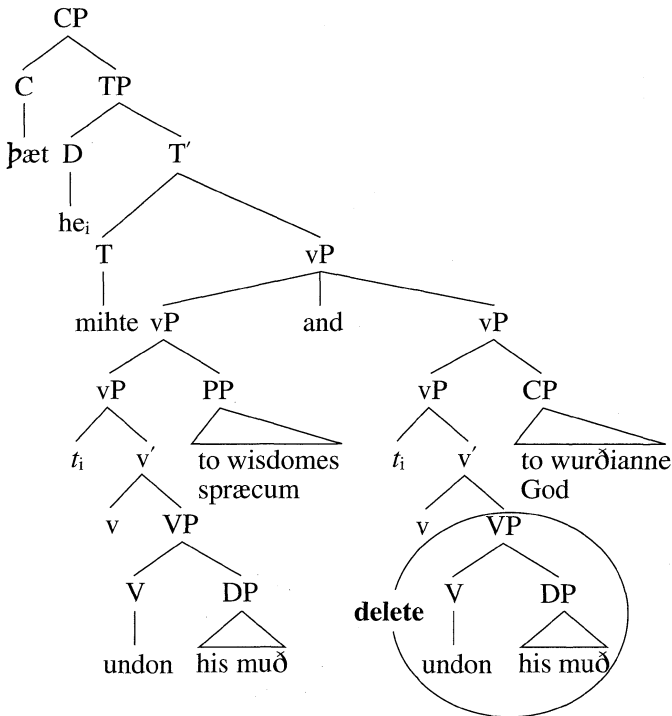
<sup>9</sup> Some languages tolerate the word order in which the topic element precedes the complementizer in embedded clauses. Kroch and Taylor (1997) report that this word order is observed in the Northern dialect of ME, as represented in (i).

(i) I sal yu lere þe dute of god, his wille þat ze may do  
 I shall you teach the duty of God his will that you may do

(Benet 2.5/ibid.: 315)

Such examples, however, are irrelevant to the present discussion because OE is not among the languages that allow this order.

(21)



Note that the PP *to wisdomes spræcum* and the infinitive *to wurðianne God* are adjoined to vP as purpose adjuncts and that the subject *he* is extracted across the board from both the conjuncts. Since the deleted string forms a VP constituent, this analysis, unlike Los's, does not face the problem of non-constituent deletion.

#### 4. Status of Infinitival *To*

In this section, let us consider how Los deals with the diachronic change of the infinitive marker *to*. In a nutshell, based on the aforementioned claim that the *to*-infinitive is already CP in OE and the standard hypothesis that infinitival *to* is located in T in PE, she argues that infinitival *to* did not experience any categorial changes in the history of English and has been a T element throughout.

However, there is a noticeable difference between the *to*-infinitive in OE and that in ME onward. As mentioned in section 3.1, OE infinitival *to* had the clitic-like property of being strictly adjacent to the head

of VP. Thus, particles like *ut*, which could be placed immediately before the verbs in finite clauses, always appeared to the left of *to*, as represented below:

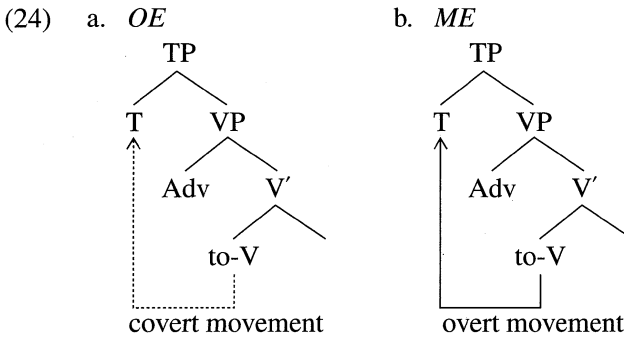
- (22) þæt him wære alyfed ut to farenne  
 that him was allowed out to go  
 ‘that he was allowed to leave’ (GD 2 (H) 25.155.26/p. 210)

This adjacency requirement disappeared in late ME, when split infinitives as in (23) began to be observed.

- (23) Her amidde wes this meiden iset forte al to-renden  
 Here among was this maiden set for-to all asunder-rend  
 reowliche  
 cruelly  
 ‘Amongst this the maiden was placed to tear all asunder cruelly’  
 (Kathe, 44.408/p. 211)

In the above example, the adverb *al* intervenes between the infinitive marker *for to* and the verb *to-renden*; thus, it gives the impression that infinitival *to* has changed its status from a clitic to an independent grammatical word.

To explain this change, Los assumes that OE infinitival *to* was a clitic that was lexically attached to V, which covertly raised to T to check its subjunctive features, as represented in (24a).



In that case, it is argued that *to* gained its morphological independence in ME and began to move to T overtly, rather than covertly, as in (24b), resulting in the emergence of split infinitives.

The shift from covert to overt movement of *to* is also accounted for in terms of the parallelism between the *to*-infinitive and the subjunctive *that*-clause. Los proposes the following scenario: as the subjunctive mood in the finite clause, originally expressed by verbal inflections,

came to be realized by modal auxiliaries base-generated in T, the requirement for an overt realization of T was generalized into the *to*-infinitive, a nonfinite alternative to the subjunctive *that*-clause, so that infinitival T came to be lexicalized with *to*.

However, this explanation suffers from several problems, both conceptual and empirical. The conceptual problem pertains to the directionality of the morphological change. Los considers the change of *to* from a clitic to an independent grammatical word to be an instance of degrammaticalization (p. 229); however, this defies the well-known generalization drawn by Hopper and Traugott (2003), which states that a content item changes into a grammatical word, then into a clitic, and finally into an inflectional affix, and not vice versa. Moreover, the situation develops more complications when we take into account the fact that the etymological origin of infinitival *to* is a preposition (see section 3.1). More precisely, the relevant change is not mere degrammaticalization, but the re-lexicalization of a clitic that had once undergone grammaticalization. Why does infinitival *to* exhibit such a weird process of change?

The empirical problem stems from Los's claim that the "degrammaticalization" of *to* resulted from the general requirement of subjunctive T to be overtly realized, which in turn was promoted by the development of modal auxiliaries in the finite clause. Note, however, that the subjunctive mood did not come to be realized exclusively by modals and that certain forms are still represented by (null) verbal affixes in PE. In this domain, a change that is contrary to the one shown in (24) occurred. From OE to early Modern English (ModE), subjunctive verbs appeared to the left of negative adverbs, which indicates that they overtly raised to T, as indicated below:

(25) Beware that thou bring not my son thither again.

(1611 *Bible*, Gen 24.6/Roberts (1993: 323))

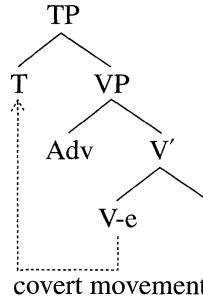
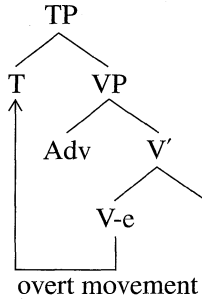
In contrast, from late ModE onward, subjunctive verbs appear to the right of negative *not*, as shown in (26). What is important is that *do*-support is not triggered, and hence, T is not lexicalized.

(26) I require that he not leave before 6. (ibid.)

These examples suggest that subjunctive T had been lexicalized by main verbs until late ModE, when they ceased to overtly raise to T. The relevant diachronic change can be represented as follows:



- (27) a.
- OE, ME, early ModE*
- b.
- late ModE*



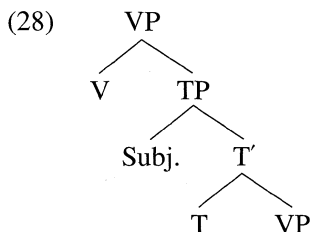
Thus, it can be reasonably concluded that the “degrammaticalization” of infinitival *to* cannot be attributed to the requirement for realizing subjunctive T, which, in the first place, cannot be stated as a general rule.

## 5. Rise of the ECM Construction

Let us now consider the issue of the rise of the ECM construction in ME, which is the final main point of the book. Los adheres to the distinction between the *want*-type ECM with verbs of commanding and permitting and the *believe*-type ECM with verbs of thinking and declaring (Lasnik and Saito (1991)); she argues that the former developed as a result of the reanalysis of the three-place argument structure of the relevant verbs (pp. 239–252; see also (6) in section 2.1). In this section, we will focus on the *believe*-type ECM, which is often referred to as the “genuine” ECM construction. We will first review Los’s analysis of this construction and her explanation for its historical development, following which we will critically evaluate the validity of her argument.

### 5.1. Los’s Analysis

What is most striking about Los’s analysis of the *believe*-type ECM (henceforth simply ECM) is that she takes the position that the widely accepted structure of this construction depicted in (28), where the matrix verb takes a TP complement, is illegitimate.



Her argument is based on the twofold peculiarity of the ECM, which she reveals in her corpus investigation. The first is that the NP *to* VP word order after the *believe*-verbs, where *believe* is active and the postverbal NP is not A-moved or A'-moved, is consistently very rare in every period of English, including in ME, ModE, or PE.<sup>10</sup> The other peculiarity is that the infinitive verb is restricted to *be*, *have*, and other statives. Based on these observations, Los concludes that the ECM has never been acceptable in the history of English, and consequently expels it from the domain of the core grammar.

Given the above, the question that arises is how to produce the ECM, which is found at least sporadically in the corpus. At this point, Los makes recourse to the notion of “grammatical virus” advanced by Sobin (1997). A grammatical virus is “a device that can read grammatical structure and affect it, though it is grammar-external” (*ibid.*: 319). Sobin maintains that grammatical viruses are employed to produce prestige but linguistically deviant constructions as observed in (29) (non-prestige forms are parenthesized).

- (29) a. Mary and *I (me)* left early.  
 b. Mary is richer than *I (me)*.  
 c. There *are (-'s/is)* a cat and a dog in the yard.

(*ibid.*: 318)

It is argued, for example, that the nominative Case on the coordinated subject pronoun in (29a), which is not in a local configuration with the finite T, cannot be checked via Spec-head agreement; instead, it is

<sup>10</sup> Los’s investigation of the MicroConcord, a PE corpus, has detected 9 examples of the string where NP *to* VP follows *believe* in the active form; out of these 7 involve *to be* as the infinitive. On the other hand, it is reported that there are 75 instances of the passivized ECM where the postverbal NP is A-moved and 14 instances of the topicalized ECM where the NP is A'-moved.

licensed by the grammatical virus called the "... and I ..." Rule.<sup>11</sup>

Los applies the device of grammatical viruses to the following ECMs:

- (30)
- a. I believe him to be an evil person.  
(active matrix V with *to be*)
  - b. Witches were believed to take the form of cats.  
(passive matrix V with active *to*-infinitive)
  - c. Her resignation was believed to be related to the problem.  
(passive matrix V with *to be*)

To justify the three types of ECMs represented in (30), Los assumes two types of grammatical viruses. The first produces (30a), wherein the matrix verb is active and the infinitive is *to be*. Los argues that in this type of an ECM, the matrix verb selects as its complement AgrP without tense (a small clause) where the head Agr is anomalously spelled out as *to be* through the effect of the grammar-external virus. The other grammatical virus is the "raising virus," which produces (30b, c); in these cases, *be believed* is treated as a kind of raising verb, and the whole sentence is assigned the structural interpretation modeled on the raising construction. These viruses are summarized in the table below.

(31) *Los's Account for Believe-ECMs*

	<i>active to-infinitive</i>	<i>to-infinitive is to be</i>
active matrix V	—————	AgrP with overt head
passive matrix V	raising virus	raising virus

(p. 262)

The ECM in which the matrix verb and the infinitive are both active is banned, since neither virus can affect the structure.<sup>12</sup>

Another problematic issue concerning the English ECM is the cause of its historical development. Los notices that the rise of the ECM,

<sup>11</sup> Sobin (1997) argues that the prestige verbal agreement in the *there*-construction in (29c) is licensed by the grammatical virus called the "*there are* ..." Rule, rather than through covert NP raising to the subject position occupied by *there*; this is in contrast with Chomsky (1993). Under the more recent framework of Chomsky (2000, 2001), long-distance agreement of this kind can be established through Agree, a core grammatical operation.

<sup>12</sup> This appears to be an oversimplification of the data, since certain stative verbs other than *be* can appear in the active ECM (see note 10). See Bošković (1997) and Martín (2001) for a Case-theoretic approach to the relevant facts.

especially the passive ECM, and the loss of verb second (V2) coincide at the end of the 14th century and during the 15th century; she argues that the loss of V2 triggered the development of the ECM. Her explanation, which is essentially functional, is as follows: in the V2 construction, the element proposed to the sentence initial position is interpreted as the topic, but after the loss of V2, the topic of a sentence came to be primarily expressed by the grammatical subject; then, in order to pose NPs that are to be interpreted as the topic at the subject position, the passive ECM developed as an alternative to V2.

## 5.2. Problems with Los's Analysis

Los's analysis of the ECM explicated above suffers from problems concerning data interpretation, the grammatical device, and the explanation of the historical change. Let us address each of them individually.

The first problem concerns the assessment of the grammatical status of the ECM construction. As mentioned above, based on her corpus investigation, Los asserts that the ECM is a marginal or grammatically illegitimate construction in English. Needless to say, however, in the spirit of the generative tradition, a construction should be regarded as the reflex of the linguistic knowledge of native speakers to the extent that they judge it to be acceptable, regardless of how low its frequency is in the corpus. Certainly, the ECM is one such construction.

In this respect, it is worthwhile to consider another instance in the book where Los refers to the interpretation of statistical data taken from the corpus. In addition to the ECM, passive *to*-infinitives as in (32a), perfective *to*-infinitives as in (32b), and negative *to*-infinitives as in (32c) are often mentioned as novel infinitival constructions that developed in ME.

- (32) a. These clothes need to be washed.  
 b. He expected to have finished last Wednesday.  
 c. They motioned to her not to come any further. (p. 4)

Los attributes the absence of these constructions in OE to the semantic property of control infinitives expressing intention, promotion, permission, and so on, which are essentially active and affirmative. Suggesting that they are in fact grammatical in OE, she states: "[T]here is no reason to assume that passives and negatives are structurally impossible in OE [...]. This means that one must always be aware of the strengths, and the limitations, of a corpus of performance data (p. 22)." Setting aside the validity of her analysis pertaining to these par-

ticular constructions, the important point is that the same logic would equally apply to the judgment of the ECM's status in ME onward. Thus, it would be inconsistent to claim that, on the one hand, passive, perfective, and negative *to*-infinitives in OE are grammatical despite their absence in the corpus, and that the ECM is banned in accordance with the corpus data on the other.

The second problem concerns the nature of the grammar-external viruses that Los posits. Sobin (1997) originally defines grammatical viruses as lexically specific rules. He observes: "[A] virus strongly involves particular lexical items. Lexical specificity is uncharacteristic of mainstream syntactic processes, which are normally lexicon-neutral and category-neutral (p. 329)." Thus, viruses such as the "... *and I* ..." Rule and the "*there are* ..." Rule are, as their names imply, all intended to function as regulations on morphophonological realizations of certain lexical items (see note 11). Given this characterization, Los's "raising virus" does not qualify as a proper virus, since the raising construction involves NP movement, which is a genuine, lexicon-neutral syntactic operation. What is even stranger is that Los adopts the widely held assumption that raising verbs take an IP complement (p. 274); note that the relevant structure is the same as the one delineated in (28). However, no satisfactory explanation is provided for why the identical structure is available to raising verbs but not to ECM verbs.

The third problem pertains to the mechanism concerning the emergence of the ECM. As mentioned above, Los argues that the (passive) ECM developed to fill the "ecological niche" that had formally been occupied by the V2 word order. If this argument is valid, then it is expected that the ECM would have also emerged in other languages where V2 was lost. However, this prediction is not borne out; for example, French is one of the languages that experienced the loss of V2 but never developed the ECM. Thus, Los's explanation is obviously teleological. The loss of V2 could not have been the immediate cause of the ECM's emergence, although it might well be the case that once the ECM was established, its passive form came to be employed as a functional alternative to the former V2 order. Given the fundamental premise of the generative grammar that function depends on structure and not vice versa, the direct trigger of the ECM should be sought in some structural change.

## 6. An Alternative Analysis

To sum up the discussion thus far, Los convincingly argues that the OE *to*-infinitive was not PP in competition with the bare infinitive, as has been conventionally believed, and establishes the parallelism between the *to*-infinitive and the subjunctive *that*-clause in OE; however, she has left open problems concerning the cause and process of the “degrammaticalization” of infinitival *to* and the mechanism for the rise of the ECM. This section reviews Nawata (2007), which offers an alternative analysis that can solve these problems while incorporating Los’s basic idea that the *to*-infinitive has been a full-fledged clause throughout the history of English.

Nawata accounts for the adjacency effect between *to* and the infinitive verb in OE in terms of the theory of T-to-C movement proposed by Pesetsky and Torrego (2001, 2004). Although this theory is intended to apply to both matrix and finite/nonfinite embedded clauses in general, we will focus on T-to-C movement in the infinitival clause. The relevant assumptions are summarized in (33).

- (33) *T-to-C Movement in Infinitives* (Pesetsky and Torrego (2001, 2004))
- a. Case is an uninterpretable T-feature ( $uT$ ) on D.
  - b. C bears  $uT$  with the EPP property.<sup>13</sup>
  - c.  $uT$  on C is satisfied either by T-to-C movement or DP movement to [Spec, C].
  - d. *For* is a particular realization of T moved to C.
  - e. An uninterpretable feature, once marked for deletion, remains accessible to further computation until the relevant phase has been fully built.

Take the alternation in (34a, b) for example to observe how these assumptions work together.

- (34) a. I would prefer [for Sue to buy the book].  
 b. I would prefer [Sue to buy the book].

In these infinitival complements, the subject *Sue* is thrown into the syntax with interpretable  $\phi$ -features and  $uT$ , and it is merged to [Spec, v]

<sup>13</sup> Pesetsky and Torrego (2001, 2004) assume that the EPP is not a property of a head itself, but a property of a feature of a head.

(see (33a)). When T is introduced into the structure, its uninterpretable  $\phi$ -features ( $u\phi$ ), which act as a probe, delete  $uT$  on *Sue* and remerge *Sue* to [Spec, T] via their EPP property. Thus, the following common intermediate structure in (35) is derived.

(35) [TP [DP *Sue*,  $\#F$ ,  $\phi$ ]<sub>i</sub> [T,  $u\phi$ ] [<sub>VP</sub> *t<sub>i</sub>* buy the book]]

The next step is the merger of C that bears  $uT$  with the EPP property (see (33b)). Importantly, two operations are available to delete  $uT$  on C (see (33c)). The first option is T-to-C movement, whereby the head and tail of the chain formed are phonologically realized as *for* and *to*, respectively (see (33d)). The resulting structure is (36a), which corresponds to the infinitival complement with *for* in (34a). The second option is the DP movement of the subject *Sue* to [Spec, C]. Note that  $uT$  on *Sue*, which is marked for deletion in (35), remains accessible to further computation until the CP phase has been fully built (see (33e)); thus, it is still visible to  $uT$  on C at the relevant stage of the derivation. The resulting structure is (36b), which corresponds to the infinitival complement without *for* in (34b).

(36) a. [CP [T *for*]<sub>i</sub>+ [C,  $\#F$ ] [TP *Sue to<sub>i</sub>* buy the book]]

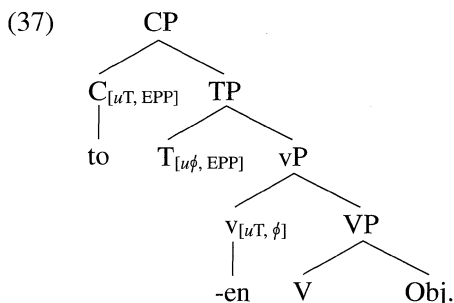
b. [CP [DP *Sue*,  $\#F$ ,  $\phi$ ]<sub>i</sub> [C,  $\#F$ ] [TP *t<sub>i</sub>* to buy the book]]

Thus, the optionality of the complementizer *for* in the irrealis infinitive in PE can be reduced to the availability of both T-to-C and DP movements for the deletion of  $uT$  on C.<sup>14</sup>

Keeping this theoretical background in mind, let us now focus on OE. With regard to the categorial status of the OE *to*-infinitive being CP, Nawata agrees with Los; however, unlike Los, Nawata maintains that the infinitival *to* is not a clitic that is attached to V, but a complementizer. The proposed structure of the OE *to*-infinitive is given in (37). The functional heads C and T are specified for the same features as in PE.<sup>15</sup>

<sup>14</sup> The complementizer *for* cannot appear when the infinitival subject is PRO. Pesetsky and Torrego (2001: 395) stipulate that when the subject is PRO,  $uT$  on C does not have the EPP property, and thus T-to-C movement does not occur. On the other hand, Pesetsky and Torrego (2004: 501) observe that T moved to C is spelled out as a null morpheme when T agrees with PRO, and otherwise as *for*.

<sup>15</sup> More precisely, Nawata proposes a structure wherein the category-neutral RootP is dominated by the projection of the verbalizer *v* within the framework of Distributed Morphology (Halle and Marantz (1993) among others). The *vP*-VP structure is adopted here for expository reasons.



With respect to the inflectional suffix *-en*, Nawata assumes that it has the dual property of being an external argument of infinitive verbs and the nonfinite tense of the infinitival clause. In (37), *-en* is placed under *v* for the sake of convenience; however, the precise relation between the phonological form /-en/ and the corresponding syntactic categories can be represented as is indicated in (38).

$$(38) \quad /-en/ \leftrightarrow T+v$$

Adopting the basic insight of Kageyama (1992), Tanaka (1994) assumes that infinitival *-en* is an external argument. This correctly predicts that the subject of the *to*-infinitive is never lexically realized in OE. Nawata further assumes that the light verb *v* to be spelled out as *-en* bears *uT* and  $\phi$ -features like ordinary DP external arguments.

The OE *to*-infinitive is derived as follows. After VP is completed, it is merged with *v* and the head *V* is raised and adjoined to *v*. Subsequently, when *T* is introduced into the structure,  $u\phi$  on *T*, which acts as a probe, marks *uT* on *v* for deletion and raises the verbal complex to *T* via its EPP property. Thus, the following intermediate structure is derived.

$$(39) \quad [_{TP} [_{v} V-en, uF, \phi] + [T, u\phi] [_{VP} t_v \text{ Obj.}]]$$

Then, *C* with *uT* is merged with this structure. Importantly, unlike PE, which has two options to delete *uT* on *C*, i.e. T-to-C movement and DP movement to [Spec, *C*], only the former is available in OE. This is because the suffix *-en* serves as the external argument, and hence, no subject DP is present in the structure. Thus, the verbal complex necessarily moves to *C*.

$$(40) \quad [_{CP} [C \text{ to}, uF] + [_{v+T} V-en, uF, \phi] [_{TP} t_{v+T} [_{VP} t_v \text{ Obj.}]]]$$

As is evident from the above structure, *to* and *V-en* form a complex head on *C*, which results in the adjacency effect in the OE *to*-infinitive.

Moreover, it is argued that the T-to-C analysis readily accounts for



the non-deletability of *to* in the coordination structure (see (13) in section 3.1). The structures of the strings *to V-en and to V-en* and illegitimate *to V-en and V-en* can be represented as in (41a, b), respectively.

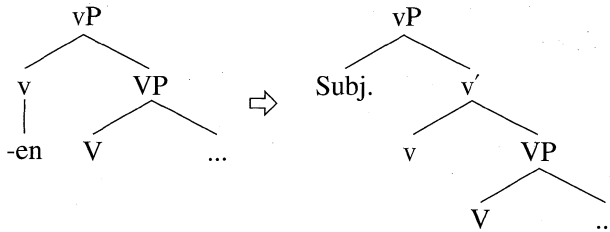
- (41) a. [<sub>CP</sub> *to V-en*<sub>i</sub> [<sub>TP</sub> *t*<sub>i</sub>]] and [<sub>CP</sub> *to V-en*<sub>j</sub> [<sub>TP</sub> *t*<sub>j</sub>]]  
 b. \* [<sub>CP</sub> *to V-en*<sub>i</sub> [<sub>TP</sub> *t*<sub>i</sub>]] and [<sub>TP</sub> *V-en*]]

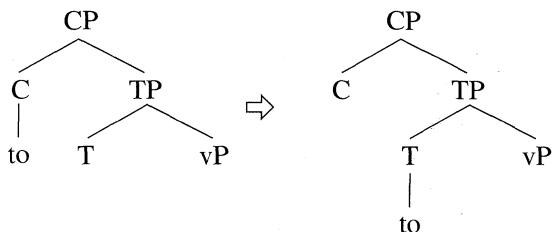
In the illegitimate structure, depicted in (41b), T-to-C movement occurs only in the first conjunct while *V-en* stays on T in the second conjunct. This is a clear violation of the Coordinate Structure Constraint (see also Kageyama (1992)). Note that merely stating that *to* is a clitic, as in Los's analysis, does not suffice to explain the relevant data; this is because the requirement on the part of *to* to attach to a host would be satisfied at the first conjunct in *to V-en and V-en*. Based on this reasoning, Nawata interprets this phenomenon as evidence for the presence of *to* in a higher functional head to which the infinitive verb moves.

Further, Nawata diverges from Los with respect to the analysis of the changes in ME. He attributes the series of changes to the morphophonological attrition of the infinitival suffix *-en*. As is well known, the suffix *-en* slowly declined through ME and came to be spelled as *-e* or *-ϕ* in late ME (Nakao (1972)). Nawata suggests that *-en* lost the ability to realize the external argument and the nonfinite tense along with its decline, and by way of compensation, these items came to be carried by the subject DP merged to [<sub>Spec</sub>, *v*] and infinitival *to* diachronically reanalyzed as a T head, respectively.

- (42) *The Compensation Effects of the Loss of the Infinitival Suffix in ME*

- a. the change in the mode of realizing external arguments



b. the shift of *to* from C to T

As a result of the emergence of the subject DP and the shift of *to*, the phonological realization of the infinitival clause became almost identical to that in PE. This in turn implies that the output of feature-deletion in the derivation of the *to*-infinitive also came to exhibit the PE pattern. The crucial point is that, by virtue of no longer being an argument, the head of vP does not carry  $\phi$ -features and  $uT$ , and thus, it is not visible from  $u\phi$  on T. Consequently, the infinitive verb remains on v and is separated from T, where *to* is realized. This explains the loss of the adjacency effect between *to* and the infinitive verb.

The main points of Nawata's analysis can be summarized as follows: (i) the OE infinitive marker *to* was not a clitic, but a complementizer and (ii) the change in the syntactic status of *to* was not caused by the requirement for lexicalization of subjunctive T but by the decline of the infinitival suffix. Based on (i) it can be stated that infinitival *to* has consistently been an independent functional head, and thus, its change cannot be regarded as an instance of degrammaticalization, as Los claims it to be. Furthermore, if (ii) is valid, the contradictory situation concerning the lexicalization of finite and nonfinite subjunctive T in (24) and (27) in section 4 does not even arise.

Moreover, Nawata's analysis provides a straightforward explanation of the ECM's emergence in ME. Given that the ECM infinitive is TP with the lexical subject (see (28) in section 5.1), it naturally follows that the ECM construction was not available in OE, wherein the *to*-infinitive was CP without lexical subjects, and that it later developed in ME when the external argument of the infinitive came to be realized by nominals and the sequence of *to* plus the infinitive verb was reanalyzed as the TP constituent. This approach has two advantages over Los's approach. First, since the ECM is explained as the reflex of the core grammar, we do not need to invoke the notion of grammatical viruses. Second, we can avoid a teleological fallacy of the sort found in Los's

analysis; thus, for example, the absence of the ECM in modern French does not offer a problem. If Kayne's (1981) assumption that the French *de*-infinitive is CP headed by the infinitive marker *de* is correct, then the ECM will be ruled out for the same reason as in OE.

A potential problem with Nawata's analysis pertains to how to derive the word order in which the infinitive verb follows its arguments, a pattern that is often observed in OE. Nawata (2004, 2007) maintains that the OV order in the infinitival clause is derived through overt object movement to [Spec, C]. However, as pointed out by two anonymous *EL* reviewers, this analysis does not account for the word order exemplified in (43), in which more than one argument precedes the infinitive verb, on the assumption that only one constituent can occupy [Spec, C].<sup>16</sup>

- (43) he wæs sended [Ongolþeode Godes word to bodienne  
 he was sent English people God's word to preach  
 & to læranne]  
 and to teach  
 'he was sent to preach and teach God's word to English  
 people' (Bede 272, 25/Ono and Nakao (1980: 431))

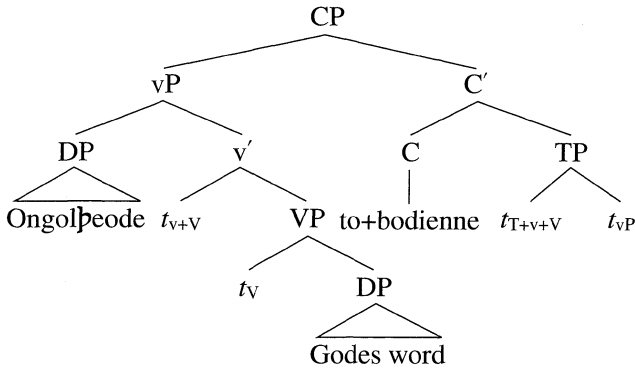
This example clearly indicates that the OE *to*-infinitive optionally exhibits the verb-final property.

Under Nawata's framework, this implies that CP can be head-final in the OE *to*-infinitive. One way of deriving the verb-final order is to assume that the verb raises to a higher functional head via head movement, and subsequently, the remnant containing its arguments moves across the extracted verb. In the case under discussion, the verb-final order can be obtained through successive V-raising into C and subsequent vP fronting to [Spec, C].<sup>17</sup> Thus, the structure of the relevant part of (43) can be delineated as follows:

<sup>16</sup> I am grateful to an anonymous *EL* reviewer for pointing out this example to me.

<sup>17</sup> The category that undergoes the remnant movement might possibly be TP. The choice is irrelevant to the present discussion.

(44)



Since the remnant movement of *vP* is optional, it appears rather reasonable to suppose that it is triggered for some discourse-related reasons, although the precise mechanism is left open for further investigation.<sup>18</sup>

## 7. Concluding Remarks

In this article, I have examined several issues in Los's analysis of the rise of the *to*-infinitive in the history of English. On the positive side, the author challenges the conventional views that the OE *to*-infinitive has the categorial status of PP and that its distribution overlaps with that of the bare infinitive. Further, she convincingly argues that it is in fact CP that is in competition with the subjunctive *that*-clause. On the negative side, her analyses of the "degrammaticalization" of *to* and the emergence of the ECM are ad hoc to an extent and make incorrect predictions. In the final part of this article, I have reviewed an alternative analysis that incorporates Los's insights as well as solves the problems.

It should be stressed that the shortcomings mentioned in this paper do

<sup>18</sup> If the analysis presented here is on the right track, it would follow that the functional category that is eligible to take the head-final option, i.e., to trigger the remnant movement in our approach, is different in finite and infinitival clauses; this is because it is generally observed that TP—and not CP—exhibits the head-final property in the finite clause in OE (see Pintzuk (1999), Biberauer and Roberts (2005) among others for a detailed discussion). Note that this variation also successfully captures the fact that unlike the infinitival clause, the finite clause in OE never allows object NPs or clitics to appear to the left of the complementizers *þæt* or *þe*. The reason for this variation, however, should be left for future research.

not deteriorate the value of Los's work. Her contribution deserves special mention in that she modifies the hypothesis that has long been dominant since Callaway (1913) and provides a new perspective on the development of the *to*-infinitive, based on previously unnoticed facts that are put in order in accordance with the modern theoretical framework. In addition, the presented data also have implications for the syntactic analysis of the PE *to*-infinitive. Thus, the book under review broadly appeals to linguists, both theoretical and philological, who are working on topics related to the *to*-infinitive, regardless of whether they are interested in its synchronic behavior or its diachronic change.

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