The Historical Change of English Infinitives:
An S-Selectional Perspective*
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1. Introduction

In this paper, I deal with the English infinitival constructions as verbal complements diachronically, based on the semantic difference of the infinitival constructions.

As is well known, the English infinitival constructions as verbal complements are divided into two types: The one is the control construction and the other is the Exceptional Case-marking (henceforth, ECM) construction. They are exemplified as follows:

(1) a. John$_i$ tried [PRO$_i$ to win].

b. John believed [him to be innocent].

The example in (1a) is the control construction, in which PRO is controlled by the proper antecedent *John*, and the example in (1b) is the ECM construction.[1]

There are two approaches to these constructions: A c-selectional approach and an s-selectional one. *C-selection* is a 'categorial selection (i.e. the selection for the syntactic categories of the complement)'. In the basic framework in the 1980s (Chomsky (1981, 1986)), it is assumed that the control-type verbs (e.g. *try*) c-select CP, whereas the ECM-type verbs (e.g. *believe*) c-select TP:[2]

(2) a. John tried [$_{CP}$ [$_{TP}$ PRO to win]].

b. John believed [$_{TP}$ him to be innocent].

In contrast, *s-selection* is a 'semantic selection (i.e. the selection for the semantic type of the complement)'. In Bošković (1996), it is assumed that control-type verbs s-select a non-propositional *irrealis* (i.e. [+Tense]), whereas ECM-type verbs s-select a proposition (i.e. [−Tense]).[3] He attempts to reduce the semantic property of the infinitives (i.e. [±Tense]) to the syntactic analysis of infinitival constructions.

The semantic property [±Tense] has much significance in Present-day English (PDE) to explain the semantic difference between control and ECM constructions, and the property [±Tense] is generally assumed to be located in T. It seems that *to*-infinitives in Old English (OE (700-1100)) and Middle English (ME (1100-1500)) cannot be analyzed in the same way, because the c-selectional analysis of them is largely based on the assumption that the T-node does not come into existence in infinitival constructions until late ME (1300-1500). If

we take the semantic property of *to*-infinitives in PDE into consideration, however, we will recognize that *to*-infinitives in OE and ME contain the same semantic property (i.e. [±Tense]) as those in PDE. Accordingly, it can be said that the T-node was already present earlier than the late ME period, because the semantic feature [±Tense] is generally analyzed as being base-generated in T.

In this paper, based on the semantic property of the infinitives in PDE, I will apply the s-selectional approach to the infinitival constructions in OE/ME and their historical change. And also, I will argue that the T-node is necessary for the infinitival constructions in OE/ME which involve the same semantic property as those in PDE.

The organization of this paper is as follows. Section 2 introduces the s-selectional approach by Bošković (1996), and validates the semantic property of the infinitives. Section 3 overviews the c-selectional analyses based on the assumption that the T-node is first attested in late ME. After briefly surveying the infinitival constructions in OE/ME, section 4 examines the semantic property of the infinitives in OE/ME. Section 5 summarizes the historical development of infinitival constructions, and verifies it under the s-selectional approach. Section 6 makes some concluding remarks.

2. The S-Selectional Property of the Infinitives in PDE

In this section, I briefly review the s-selectional analysis of the infinitives in PDE by Bošković (1996) and Martin's (2001) modification of the semantic aspect in order to introduce the semantic property of infinitives. Their arguments support the view that there is a semantic difference between control and ECM infinitives.

2.1. An S-Selectional Approach to English Infinitives

In Chomsky and Lasnik (1993), it is assumed that PRO is marked for null Case, and the way of null Case-checking holds the central place in the analysis of English infinitives.

Bošković (1996) provides the s-selectional approach to null Case-checking of PRO. The s-selectional approach to the infinitival constructions is based on Stowell's (1982) observation that the temporal properties of control infinitives differ from that of ECM infinitives: The event time of the infinitival verbs is *unrealized* or future-oriented with respect to that of the matrix verbs in control constructions. Following this observation, Bošković assumes that control-type verbs s-select a non-propositional *irrealis* (i.e. unrealized tense), which allows them to take infinitival complements with [+Tense, −Finite] T, whereas

ECM-type verbs s-select a proposition, which allows them to take infinitival complements with [−Tense, −Finite] T. He also adopts Martin's (1992) assumption that PRO is Case-checked via Spec-Head Agreement with [+Tense, −Finite] T. It follows that PRO is null Case-checked in infinitival complements of control verbs, but not in those of ECM verbs. The following examples illustrate his analysis. In his analysis, both control and ECM infinitives are TP:

(3) a. John tried [$_{TP}$ PRO to win].
    b. *John tried [$_{TP}$ him to win].

(Bošković (1996:271-272))

(4) a. John believed [$_{TP}$ him to be crazy].
    b. *John believed [$_{TP}$ PRO to be crazy].

(Bošković (1996:271))

(3b) is ungrammatical, because the objective *him* is null Case-checked with *to*. And also, (4b) is excluded because PRO is not null Case-checked with *to*.[4]

To sum up, Bošković (1996) argues that null Case-checking of PRO is conditional on the semantic property of [+Tense] T, and specifies the semantic difference between control ([+Tense]) and ECM ([−Tense]) constructions.[5]

2.2. The Semantic Property of the Infinitives in PDE

Martin (2001) modifies Bošković's (1996) s-selectional view. Following Stowell (1982), he assumes that [+Tense] in control infinitives is in some sense future-oriented and proposes that the tense of control infinitives is invariably a modal element corresponding most closely to *would*.[6]

Martin distinguishes between control and ECM infinitives in that eventive predicates are possible in control infinitives, not in ECM. He provides the following examples:

(5) a. Ginny remembered to bring the beer.
    b. The doctor showed Bill to be sick.

(Martin (2001:147))

The examples in (5) are the control infinitive and the ECM infinitive, respectively. Whereas the infinitive in (5a) is eventive, that in (5b) is stative. He takes up Enç's (1990) proposition that eventive predicates contain variables that must be bound by tense or a modal/temporal operator, but stative predicates do not have variables that need to be bound.

In short, since the eventive predicates are available for control infinitives, the control infinitives involve the semantic property [+Tense]. ECM infinitives, on the other hand, contain [−Tense] because the stative predicates, not eventive, are possible for them.

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3. The C-Selectional Analysis of *To*-Infinitives in OE/ME

In the previous section, I overviewed the semantic property of the control and ECM constructions (i.e. [±Tense]) in PDE. It is generally assumed that the semantic property [±Tense] is base-generated under T in PDE.

However, the c-selectional analysis of infinitival constructions does not consider the semantic property (e.g. [±Tense]). In this section, I survey the c-selectional analysis of the *to*-infinitives in OE/ME, which is based on the assumption that the T-node is not present in the *to*-infinitival constructions in OE and early ME (1100-1300). I take up the argument that some constructions which denote the presence of the T-node in PDE are not attested in OE and early ME.

3.1. The evidence for the Lack of T-node in OE/ME

It is generally assumed that in PDE, tense features are base-generated in T which is occupied by *to*, *do*, and modals. Under this assumption, the infinitival verb is separate from *to* in T. Therefore, split-infinitive constructions, where an element occurs between *to* and the infinitive, are grammatical. Likewise, pro-infinitive constructions are possible, which denote that the infinitival VP is deleted without *to*. In addition, *do* being in the complementary distribution with modals is generated in T, which is observed in the *do*-support constructions. The examples are the followings:

(6) a. Remember *to* always *footnote* the source.
    b. John tried *to run* and I tried *to* also.

(van Gelderen (1993:17))

(7) a. I *do* not run.
    b. I *will* not run.
    c. *I *do* *will* not run.

(van Gelderen (1993:18))

The examples in (6) involve split-infinitive and pro-infinitive, respectively. (7a) indicates that *do* is assumed to be in T which is occupied by the modal *will* in (7b), and therefore (7c) is ungrammatical.

In contrast, some analyses of OE *to*-infinitives under c-selectional approach are based on the assumption that *to*-infinitives have the T-less structures, such as Kageyama (1992).[7] It is generally observed that the constructions requiring T-position are first attested not in OE but in late ME. The following examples in late ME are assumed to denote the presence of the T-node:

(8) a. It is better þee to haue it, þan þee *to* not *haue* it,

'It is better for you to have it than for you not to have it.'

(Pecock, *Reule* 65; Visser 1040; van Gelderen (1993:60))

b. þey   wlde nat do for hym þat   þey were ordeyned *to*

they would not do for him that they were appointed to

'They did not want to do for him what they were appointed to.'

(HS, 6401-02: Sullens ed; van Gelderen (1993:60))

c. a man þat with him *did* nat fiȝte,

'a man that did not fight with him'

(Beryn, 558; Visser 1530; van Gelderen (1993:63))

(8a) involves the split-infinitive, which indicates that *to* and the infinitive are independent elements, that is, *to* is located in the position which immediately precedes VP (i.e. T). In (8b), the infinitival VP is deleted in terms of 'VP-deletion' and infinitival *to* stays behind. This is the pro-infinitive (*to*-stranding) construction, which denotes the separability of *to* and the infinitive in the same way as the split-infinitive does. '*Do*-support' is used in (8c), in which *did*, as well as *do* in (7a), is analyzed to be in T. In sum, the T-node is not available for the infinitival constructions in OE and early ME because these kinds of constructions are not attested in OE and early ME.

3.2. The C-Selectional Analysis of To-Infinitives in OE

Kageyama (1992) makes a premise that OE *to*-infinitives are functionally PP, in other words, the infinitival *to* functions as preposition, providing the following example of the coordinated structures:

(9) Ut eode *to his gebede* oððe *to leornianne* mid his geferum.

out went to his prayer or   to   study   with his comrades

'He went out to give his prayer or to study with his comrades.'

(Bede162,7:C139; Kageyama (1992:99))

In (9), *to leornianne* 'to study' is coordinated with an ordinary PP, *to his gebede* 'to his prayer'. Presupposing a parallel structure condition that the two conjuncts are symmetrical, Kageyama suggests that OE *to*-infinitives function as PP and that the infinitival marker *to* is lexically specified as a preposition. And also, following the assumptions that the infinitival structures in OE lack the T-node, Kageyama argues that infinitival *to* is located in AGR.[8]   In short, the infinitival *to* lexically functions as a preposition and is located in AGR.

Kageyama also proposes that the infinitival *to* in OE is a 'clitic' because of the absence of the constructions, such as split-infinitive, and that *to* and an infinitival verb can be 'amalgamated' into one word, due to the characteristic of infinitival *to* as a clitic. Taking up the dative inflection of the *to*-infinitives in

the coordinated infinitival constructions, he argues that the characteristic of OE *to*-infinitives as a word unit is derived syntactically. OE has two types of coordinated infinitival constructions: They are '*to*-infinitive and *to*-infinitive' and 'to-infinitive and bare infinitive':[9]

(10) a. Me is geseald anweald *to ofsleanne* and *to edcucigenne*.
   Me is given   power   to slay.DAT and to revive.DAT
   'Power is given me to slay and make alive again.'

   (Ælf.L.S. XXXIV 321-322; Kageyama (1992:96))

 b. Me is neod *to farenne* and ðone *geseon*.
   Me is need to go.DAT and it   see
   'I need to go and see it'

   (Ælf.Hom 372, 18: C174; Kageyama (1992:96))

Both infinitives following *to* exhibit the dative inflection (*-ne*) in (10a). In contrast, only the infinitive preceded by *to* shows the dative inflection, whereas the other one does not in (10b). Kageyama suggests that *to* and the infinitive are 'amalgamated' into a word and show the dative inflection, and therefore the appearance of the dative inflection depends on whether or not *to* immediately precedes the infinitival verb. He argues that there is almost no semantic and functional difference between these coordinated structures and that the reduction of *to* in conjuncts as in (10b) is optional.

However, based on the semantic consideration, Fischer (1996) makes a counterargument to this optional reduction of *to*. She cites the following examples:

(11) a. Wið   eagena sare, haran   lifer gesoden ys god on wine *to*
      Against of-eyes sore, of-hare liver boiled   is good in wine to
      drincenne, &   mid þam broþe ða eagan *to beþianne*
      drink,   and with the broth the eyes to bathe
      'Against eye-sore, a boiled hare's liver is good to drink in wine, and to bathe the eyes with the broth.'
      (O2/3 Quadrupedibus; de Vriend (1984:252); Fischer (1996:114))

 b. ac us gedafenaþ swyðor   mid geswince *to campigenne* for
    but us befits   more-strongly with toil   to fight   for
    þam undead-licum cynincge and þe   *ofer-swiðan*.
    the undeadly   king   and thee overpower
    'but it befits us more to fight with toil for the immortal king and overcome you'
    (Saints' Lives 11, 30; Visser §967; Fischer (1996:115))

The examples in (11a, b) involve the coordination of '*to*-infinitive and *to*-infinitive' and '*to*-infinitive and bare infinitive', respectively. Fischer points out the semantic difference between two types of the coordinated structures: In (11b), the second conjunct *ofer-swiðan* 'overpower' expresses a similar activity to the first one *to campigenne* 'to fight', whereas in (11a) the second conjunct *to beþianne* 'to bathe' shows a different activity from the first *to drincenne* 'to drink'. In other words, the second conjunct in (11b) expresses the content of the first activity or the way through which the first activity may be achieved in the '*to*- and bare infinitive' conjunction. By contrast, the conjuncts in (11a) indicate separate activities from each other in the '*to*- and *to*-infinitive' conjunction. Fischer proposes that as the second conjunct, the bare infinitive indicates 'directness (the actuality of an event and simultaneity of tense domains)' and *to*-infinitive 'indirectness (a separation between the activities denoted by *to*-infinitives in terms of either time or reality)'. It seems that this semantic difference applies to the examples in (10) cited in Kageyama (1992). Therefore, she suggests that the semantic characteristics underlie the difference between the coordinated structures in (10) as well as in (11), and argues that the reduction of *to* in the second conjunct in (10b) is not optional.

As indicated in Fischer's argument, the syntactic analysis based on the semantic considerations is required. I will apply the semantic considerations to the *to*-infinitival constructions in OE and ME in section 4.

3.3.   The C-Selectional Analysis of ME To-Infinitives

As shown in 3.1., it is supposed that the T-node is not available until late ME because some constructions which require it are not attested in OE and early ME. Following this supposition, van Gelderen (1993) suggests that the infinitival *to* is a tense holder and that the tense feature of infinitives (i.e. *to*) is located in the position other than T.

Following the assumption that the difference in the text which has two versions shows the historical change in ME, van Gelderen deals with some texts in early ME, *Katerine* and *Historia Brutonum (Brut)*.

First, she presents the examples from *Katerine* which dates from the early 1200s:

(12) a.   't   i   þis world iset   us *for to frourin*
           and in this world placed us for to comfort
           'and placed in this world to comfort us',

                           (Katerine, 283-4; van Gelderen (1993:87))

   b.   't   feng on þus *to speokene*,

and started thus to speak

'and started to speak thus'(Katerine, 312; van Gelderen (1993:87))
She supposes that both *to* and *forto* which is regarded as one word (see NOTES 7) are not in C because an infinitival object *us* in (12a) and an adverbial *pus* in (12b) cannot precede the lexical element in C. Similarly, she excludes the possibility of *forto/to* being in T because of the absence of the positive evidence proving T to be available in early ME. Therefore, she assumes both *for to* and *to* are inside VP as a prefix to the infinitive.

Next, she deals with the text *Brut* which has two versions: The first version is *Caligula (Cal)* in the early 1200s, and the second is *Otho* probably in the late 1200s. She infers that infinitival *to* observed in both *Cal* and *Otho* cannot be located in T because the T-node is assumed to be unavailable in 1200s. In fact, she indicates that the split-infinitive and the pro-infinitive are not attested in both versions.

The following is the example in *Cal* (the early version):

(13) heo wenden hine *to finden*

      they went him to find

      'they went to find him'   (Brut. Cal, 8874; van Gelderen (1993:94))
Similarly to *us* in (12a), the infinitival object *hine* 'him' in (13) precedes *to*, hence *to* in (13) is not situated in C. Van Gelderen supposes that *to* is located inside VP in *Cal*, as well as *to* in *Katerine*. But, *forto* in *Cal* is a little problematic, because *for* is used as a complementizer, as in (14a):

(14) a. *for* þe king him wæs glad wið

      'because the king was happy with him'

                         (Brut. Cal, 9268; van Gelderen (1993:96))

    b. *for to* hine *finde*

      for to him find

      'for to find him'   (Brut. Otho, 8490; van Gelderen (1993:97))
So, she presumes that *for* is a complementizer in a finite clause but *forto* is a part of the VP. The reason why *forto* is analyzed to be a part of VP is that the constructions as in (14b) are not attested in *Cal*. In (14b), the infinitival object *hine* 'him' does not precede *forto* (cf. (12a) from *Katerine*). Van Gelderen infers that *forto* in (14b) is located in C. She suggests that the noteworthy change of *forto* is observed in *Otho* version (i.e. in the late 1200s). (14b) involves the split-infinitive in the *forto*-infinitival construction. *Forto* is inside the VP in *Cal*, but the appearance of 'split-infinitive' in the *forto*-infinitival construction causes the separation of *forto* from the infinitival VP, namely, *forto*

in C (T is not assumed to be available in *Otho*). However, almost no change of *to* occurs in *Otho*, that is, the *to*-infinitive in *Otho* is similar to that in *Cal*, so that *to* is analyzed to be located within the VP in *Otho*. In short, van Gelderen suggests that the location of *to* in *Otho* is dependent on whether *for* is present or not: If *for* is present in C, *to* is also situated in C and forms a word unit *forto*, and otherwise, *to* is inside the VP.

As observed above, there are some pieces of positive evidence that the T-node comes into existence and that infinitival *to* is located in T in late ME: *Do*-support, split-infinitive, and pro-infinitive. However, *forto* is in C because *to* is merged into *for* in C. It follows that the location of *to* in late ME is also dependent on whether *for* is present or not: *To* is in T, but *forto* is in C.

To sum up, van Gelderen analyzes the location of *(for)to* as the following, observing the change of the *(for)to* infinitives during the ME period:

(15)   date   /   the location of *(for)to*
  a.   - early 1200s   /   *(for)to* ⋯ within VP
  b.   late 1200s   /   *to* ⋯ within VP / *forto* ⋯ in C
  c.   late ME (1300-) /   *to* ⋯ in T / *forto* ⋯ in C
  d.   1500-   /   in T (*forto* is not present)

She assumes that the infinitival *to* is a holder of the tense feature, and hence argues the tense feature is situated where the infinitival *to* occupies. In other words, she assumes that the tense feature is a 'floating' feature not necessarily connected with T and that *to* (i.e. the tense feature) is located in the position other than T until late ME, as shown in (15).

According to van Gelderen (1993), the location of *to* (i.e. the tense feature) is dependent on the presence or absence of *for*. In other words, the position of *to* as a tense holder (that is, the position of the tense feature) is changeable as shown in (15). If we assume that the T-node is invariably available for the infinitival constructions in OE and ME, we can, at least, propose the unified analysis as to the location of the tense feature.

4.   An S-Selectional Approach to the Infinitives in OE/ME

In the previous section, I overviewed the c-selectional analyses of OE/ME, which are based on the assumption that the T-node is not available until late ME. However, both analyses do not cover the discussion of the semantic property of the infinitives in OE/ME.

In this section, I survey the control and ECM infinitives in OE/ME. And subsequently, based on the overview, I examine whether both infinitives in

OE/ME have the same semantic property (i.e. [±Tense]) as those in PDE.

4.1.   Control Infinitives in OE/ME

The bare infinitives originally function as a purposive adjunct, but they are substituted by *to*-infinitives with that function.   The *to*-infinitives spread as complements to nouns and adjectives in OE.[10]   Subsequently, the expansion of infinitival constructions as complements to verbs occurs.

To-infinitives as well as bare infinitives can occur as control constructions in early OE (700-900):

(16) a.   Ic hi[ne] ... | ... *wrīþan*   þōhte
     I him.ACC   bind   thought
     'I planned to bind him'   (Beo 963f; Miller (2002:190))

     b.   þēah   ðe hlāford ūs þis ellen-weorc āna   āðōhte   *tō*
     though   that lord   us this valor-deed alone intended   to
     gefremmanne
     accomplish
     'although our lord had planned to accomplish this valor-deed alone for us'   (Beo, 2642ff; Miller (2002:190))

Being substituted by *to*-infinitives, bare infinitives gradually decline in ME.[11]   *To*-infinitives in ME take over the functions of *to*-infinitives in OE, and *to*-infinitives are used in control constructions in ME as well as in OE:

(17)   ... he first bigan | To riden out
     '... he first began to venture out'

                              (CT 1. 2272; KT 1414; Miller (2002:192))

In summary, both bare and *to-* infinitives are available for control constructions in OE.   However, bare infinitives are gradually substituted by *to*-infinitives, and as a result of this substitution, only *to*-infinitives are used for control infinitives in ME.

4.2.   ECM Infinitives in OE/ME

The control constructions appear in early OE, whereas ECM constructions do not become available until late OE (900-1100).   Only bare infinitives are possible for ECM constructions, as follows:

(18)   ac wē witun þē   bilewitne *wesan*
     but we know you   gentle   be
     'but we know you to be gentle'   (ÆColl, 9; Miller (2002:173))

The bare infinitives occur as ECM constructions in late OE, whereas *to*-infinitives become available for ECM constructions in ME.   The example is below:

(19) I have knowe vertu *to haue gon* out of me,

'I have known virtue to have gone out of me'

(WBible, *Luke*,8.46; Visser 2313; van Gelderen (1993:61))

In short, ECM constructions originally occur with bare infinitives in late OE, and those with *to*-infinitives subsequently appear in early ME. As well as control constructions in OE, ECM constructions with bare infinitives are gradually replaced by those with *to*-infinitives in ME.

4.3. The Semantic Property of the Infinitives in OE/ME

Now let us examine the semantic property of control and ECM infinitives in OE/ME. As noted in section 2, there is a semantic difference between control and ECM infinitives. Control infinitives are used for eventive predicates, which have the s-selectional property [+Tense]. In contrast, ECM infinitives are possible for not eventive but stative predicates of which the s-selectional property is [−Tense].

First, I check up on the control constructions in OE in (16), repeated below:

(20) a. Ic hi[ne] ... | ... *wrīþan*   þōhte
     I him.ACC   bind   thought
     'I planned to bind him'   (Beo 963f; Miller (2002:190))

   b. þēah   ðe   hlāford ūs þis ellen-weorc āna   āðōhte *tō*
      though   that lord   us this valor-deed alone intended to
      gefremmanne
      accomplish
      'although our lord had planned to accomplish this valor-deed
      alone for us'   (Beo 2642ff; Miller (2002:190))

In (20a), the event time of the infinitive *wrīþan* (bind) is, in some sense, 'unrealized (i.e. future-oriented)' with respect to the matrix verb *þōhte* (thought). This is true of (20b). Both examples in (20) contain the infinitives with future-orientation, which are interpretable as eventive predicates. That is, control infinitives are considered to include [+Tense] in OE as well as in PDE.

Second, consider the control construction in ME:

(21) ... he first bigan | To riden out   (= (1.7))

    '... he first began to venture out'

(CT 1.2272: KT 1414; Miller (2002:192))

It is likely that eventive predicates are possible for the ME control infinitives, in other words, control infinitives in ME are [+Tense].

Next, I take up ECM constructions of bare infinitive and *to*-infinitive.

The examples are below: (18) and (19) are repeated here as (22) and (23), respectively:

(22) acwē witun þē   bilewitne *wesan*
   but   we know you   gentle   be
   'but we know you to be gentle'   (ÆColl, 9; Miller (2002:173))

(23) I have knowe vertu *to haue gon* out of me,
   'I have known virtue to have gone out of me'

(WBible, *Luke*, 8. 46; Visser 2313; van Gelderen (1993:61))

The example (22) cannot mean that at present time, we know that you would be gentle at some future time. This also holds true of (23). Both ECM constructions in (22) and (23) do not involve the infinitival complements with future-orientation, and therefore they are not interpretable as eventive predicates. The ECM constructions in ME seem to be not eventive but rather stative. To put it differently, the ECM infinitives contain the semantic property [−Tense] in ME.

To sum up, control infinitives are diachronically [+Tense] and ECM infinitives are [−Tense]. In other words, the semantic property of the infinitival complements (i.e. [+Tense] or [−Tense]) remains unchanged. The semantic property of the infinitives in OE/ME is the same as that in PDE.

5.   Some Remarks on the S-Selectional Approach to Historical Changes

As seen in section 3, the c-selectional analysis is based on the assumption that the T-node is not present in the *to*-infinitival constructions in OE and early ME. However, if the *to*-infinitives in OE/ME involve the same semantic property (i.e. [±Tense]) as those in PDE, we can say that the T-node came into existence in the OE/ME period, because T is presumably the most proper position in which the tense feature is placed.

In section 4, I examined the semantic property of the OE/ME infinitives. The semantic property involved in the OE/ME infinitives is the same as that of the infinitives in PDE. More specifically, the infinitives in OE/ME, as well as those in PDE, have the semantic property [±Tense].

In this section, organizing the historical change of the control and ECM infinitives, I examine it under the s-selectional approach and suggest the availability of the T-node in OE/ME.

5.1. *Historical Change*

As noted above, the infinitival constructions diachronically go through considerable changes. As a matter of convenience, I focus on the infinitives as

verbal complements, dealing with the historical change of the control/ECM constructions in this section.

In OE, bare infinitives occur as both control and ECM constructions, whereas *to*-infinitives occur only control constructions. More properly, both bare and *to*-infinitives take control constructions in early OE, and then, only bare infinitives occur as ECM constructions in late OE. The examples are as follows:

(24) a. he hi   næfre *forlætan* ne þenceð
       he them never leave   not thinks
       'he intends never to leave them'

<div align="right">(Boeth 35. 103. 17; Los (1999:258))</div>

    b. god ... wē lyfað æfre *bēon* andwyrde
       'God we believe ever to be present'

<div align="right">(BenR (P) 30/10f; Miller (2002:173))</div>

(25) Esau ðin broðor   þe   ðeneð *to ofsleane*
     Esau thy brother thee intends to kill
     'Your brother Esau intends to kill you'

<div align="right">(Gen 27.42; Los (1999:258))</div>

The bare infinitives take the control and ECM constructions in (24a, b), respectively, and the *to*-infinitives take the control construction in (25).
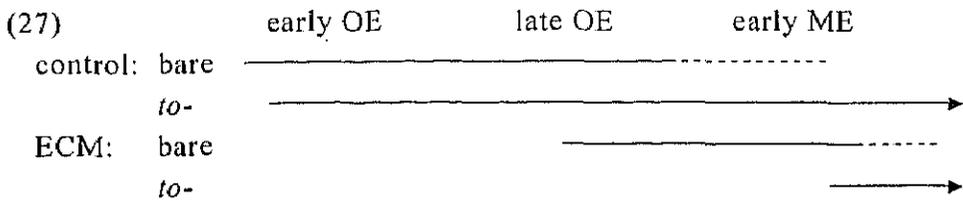
Prevailing in early ME, *to*-infinitives make an appearance as ECM constructions, and thereby, *to*-infinitives are available for both control and ECM constructions as well as bare infinitives in OE. The following is the example of an ECM construction with *to*-infinitive:

(26) the schipmen supposiden sum cuntre *to appere* to hem
     'the sailors deemed some country to appear to them'

<div align="right">(WBible, *Acts* 27: 27 LV; Miller (2002:178))</div>

Meanwhile, bare infinitives gradually decline in ME, being substituted by *to*-infinitives.

In summary, the historical change of infinitival constructions as verbal complements is shown as below, in which the full lines represent the presence of each construction, the dashed lines indicate the decline of the usage, and the arrowed lines stands for the presence and the continued existence of the constructions:[12]

(27)   early OE   late OE   early ME

control: bare ——————————————————- - - - - - - -

       to-   —————————————————————————→

ECM: bare   ——————————————- - - - - -

       to-   ————→

Diachronically, the infinitives as verbal complements are extended from control to ECM constructions.

5.2. An S-Selectional Approach to Historical Change

As noted just above, both bare and *to*-infinitives originally occur as control infinitives and gradually become available to the ECM constructions. If we apply the semantic property (i.e. [±Tense]) of the s-selectional approach to this historical development of English infinitives, both infinitives originally have only [+Tense] and gradually obtain [−Tense]; and consequently, infinitives contain both of the semantic property [±Tense]. This development of the semantic property is the trigger for the historical change of infinitival constructions under the s-selectional approach.[13]

As observed in section 2, the semantic property [±Tense] is absolutely essential for the s-selectional approach to infinitival constructions. At this point, the question arises as to where the semantic property [±Tense] is located in the syntactic structure. Presumably, the T-position is the most proper location for it. Unlike the analyses under the c-selectional approach, such as Kageyama (1992) and van Gelderen (1993), the T-node is assumed to be available as the location of the semantic property [±Tense] even in OE under the s-selectional analysis. That is to say, the semantic property of the both infinitival constructions is the positive evidence for the availability of the T-node in OE/ ME.[14]

6. Concluding Remarks

In this paper, I examined the s-selectional approach to the infinitival constructions in OE/ME. It has been shown that the specification of the semantic property of infinitival complements remains unchanged: Control infinitives are diachronically containing [+Tense] and ECM infinitives are [−Tense]. Under the s-selectional approach, the semantic development in which the semantic property expands from [+Tense] to [±Tense] causes the historical development of infinitival constructions. Infinitival *to* may, in some sense, lose substance as a marker of infinitives, and therefore the infinitival verbs become readily-detached from *to*, as observed for split-infinitive and

pro-infinitive.

Furthermore, unlike the c-selectional approach, the s-selectional approach enables us to analyze the *to*-infinitives in OE/ME based on the assumption that the T-node is available as the location of the semantic property [±Tense]. That is, the s-selectional approach provides positive evidence for the availability of the T-node in OE/ME.

NOTES

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[1] The control infinitives are further subdivided into two groups: Subject control and object control:

   (i)   a.   John$_i$ tried [PRO$_i$ to win].   (= (1a))

         b.   John persuaded Mary$_i$ [PRO$_i$ to do it].

The former involves the coreference between PRO and the matrix subject, as in (ia), and the latter between PRO and the matrix object, as in (ib). In this paper, however, this subdivision does not have much significance, because both subject and object control constructions are considered to have the same semantic property. As for the detail of the semantic property, see section 2.

[2] Under the c-selectional analysis, the control and ECM infinitival complements are analyzed as follows, respectively. As a matter of convenience, I used the category TP, not IP, here:

   (i)   a.   John tried [$_{CP}$ [$_{TP}$ PRO to win]].   (= (2a))

         b. * John tried [$_{CP}$ [$_{TP}$ him to win]].

   (ii)   a.   John believed [$_{TP}$ him to be innocent].   (= (2b))

         b. * John believed [$_{TP}$ PRO to be innocent].

(ib) is excluded because the movement of *him* for Case-checking is blocked by CP which is a barrier to movement. In (iib), PRO is governed by *believe* because of the absence of a barrier to government (i.e. CP), which violates PRO-theorem.

[3] As for the detail of Bošković's analysis, see section 2.

[4] Bošković also analyzes the infinitival complements of *want*-type verbs as follows; however, the analysis of infinitival complements of *want*-type verbs is problematic because those verbs take both control and ECM constructions:

   (i)   a.   I want [$_{TP}$ PRO to leave].   (Bošković (1996:278))

         b. * I want [$_{CP}$ [$_C$ for][$_{TP}$ PRO to leave]].

         c. * I want [$_{CP}$ [$_C$ e][$_{TP}$ PRO to leave]].

d.　I want [$_{CP}$ [$_C$ for][$_{TP}$ him to leave]].　　　　　　(Bošković (1996:280))

e.　I want [$_{CP}$ [$_C$ e][$_{TP}$ him to leave]].　　　　　　(Bošković (1996:278))

He assumes infinitival complements of *want*-class verbs are introduced by the complementizer which is phonologically null, as in (ic) and (ie), or its overt counterpart *for*, as in (ib) and (id). Adopting Watanabe's (1993) assumption that *for-to* complex is base-generated under T and checks not null Case but accusative Case via Spec-Head Agreement, Bošković excludes (ib, c) because PRO is not null Case-checked with *for-to* complex.　He analyzes the control/ECM complements of *want*-type verbs as TP/CP, respectively.

⁵ Iwakura (1997) makes a counterargument in regard to this condition for null Case-checking.　He points out some problems of Bošković's s-selectional analysis of infinitival complements with *want*-type verbs.　The *want*-type verbs inherently s-select *irrealis* (i.e. the complement with [+Tense]), but they also can take a proposition (i.e. the complement with [−Tense]).

Adopting PRO-theorem and null hypotheses that infinitival complements optionally have a null Case-checking feature and that TP is a barrier to government, Iwakura proposes the c-selectional analysis.　The following examples illustrate his analysis, in which *to$_c$* stands for *to* with a null Case-checking feature:

(i)　a.　John tried [$_{TP}$ PRO to$_c$/*to stop the car].

　　b. *John tried [$_{TP}$ Bill to$_c$/to stop the car].

　　c.　John believed [$_{T'}$ Bill *to$_c$/to be selfish].

　　d. *John believed [$_{T'}$ PRO to$_c$/to be selfish].

(Iwakura (1997:168))

(ii)　a.　John wanted [$_{TP}$ PRO to$_c$/*to win].

　　b. *John wanted very much [$_{CP}$ [$_C$ for][$_{T'}$ PRO to$_c$/to win]].

　　c. *John wanted [$_{CP}$ [$_C$ e][$_{T'}$ PRO to$_c$/to win]].

　　d.　John wanted very much [$_{CP}$ [$_C$ for][$_{T'}$ Bill *to$_c$/to win]].

　　e.　John wanted [$_{CP}$ [$_C$ e][$_{T'}$ Bill *to$_c$/to win]].

(Iwakura (1997:169))

According to his analysis, control verbs take TP complements and ECM verbs take not TP but T' complements. *Want*-type verbs take TP or CP complements.　His analysis, however, seems to be rather problematic.　It is uncertain whether the null hypotheses he adopts are acceptable (cf. Stowell's (1981) proposition that only Maximal Projections can function as Specifiers, Complements, etc.).

As Iwakura points out the problem of null Case-checking based on the semantic property, it seems uncertain whether or not null Case checking of PRO is related with the semantic property.　Nevertheless, it is reliable that there is a semantic difference between control and ECM infinitival constructions.

[6] Presupposing that modals which can have a variety of interpretations differ from pure tense, Martin suggests that control infinitives contain some sort of tense-like element.

[7] The infinitival constructions of OE are morphologically divided into two types: The one with *-an* ending is called 'bare infinitive', and the other is '*to*-infinitive' which has dative inflection *-anne (-enne)* with proclitic *to*. It is generally argued that *-an* ending of bare infinitives is originally an infinitival marker and *to* gradually comes to be regarded as the marker, and it is also supposed that this change of infinitival marker causes the displacement on the function of infinitives.

In ME, there are three types of infinitives: They are *-e(n)*, *to -e(n)*, and *for to -e(n)*. The infinitive with *-e(n)* is the bare infinitive, which corresponds to those with *-an* in OE. Similarly, the infinitive with *to -e(n)* is the correspondent of *to -anne(enne)* in OE. The *for to -e(n)* infinitive is an innovation and spreads rapidly in ME, and it is used in the same contexts as the *to*-infinitive. It is generally assumed that the '*for*' in the *for to*-infinitive is used to reinforce the purposive function of *to*. As for the '*for to*' form, its variants, '*forto*' and '*forte*', suggest that '*for to*' may be regarded as one word.

According to Miller (2002), the bare infinitive became a bare verb stem and its distribution was restricted to VP complements in ME. It is generally supposed that the distribution of *to*-infinitives gradually spreads and displaces that of bare infinitives.

[8] Kageyama splits up the category I (= INFL) into T and AGR, based on the split-INFL hypothesis (Pollock (1989)), and argues that infinitival *to* is located in AGR because of the unavailability of T in OE.

[9] It is generally observed that the coordinated constructions like 'bare infinitive and *to*-infinitive' are not attested in OE.

[10] The examples are below:

(i)　a.　ne　cōm ic sybbe *tō sendanne* ... Ic cōm mann *āsyndrian* ...
　　　　not come I　peace to send　　... I come man　divide　...
　　　　'I did not come to send peace ... I came to divide man ...'

　　　　　　　　　　　　　　　　　　(Gospel: WS₁; Miller (2002:188))

　　b.　hit *is* tīme *tō erizenne*
　　　　'it is time to plow'　　　　(Ælfric Grammar 26 S; Miller (2002:188))

　　c.　hēo wæs swīþe fæger an *tō lōcianne*
　　　　she was　very　fair　on to look
　　　　'it (the castle) was very beautiful to look at'

　　　　　　　　　　　　　　　　　　(OrII, iv fo25ᵛ B43/24; Miller (2002:215))

　　d.　sǣde ðæt hē unīeðe wǣre *tō gehealdenne*
　　　　said　that he uneasy was to　keep
　　　　'said that it (the highest excellence) was difficult to observe'

(CP, 52 409 20f [H]; Miller (2002:216))

(ia) is the example of bare/*to*-infinitives as a purposive and (ib) involves complement to noun. (ic, d) exhibit the complement to adjectives, and Miller (2002) analyzes the example (ic, id) as object deletion and object raising constructions, respectively.

[11] In contrast to bare infinitives, *to*-infinitives as purposives and complements to nouns/adjectives are taken over from OE but the *for to*-infinitive is more preferable in the distribution of a purposive. The examples are the followings:

(i) a. And wente *for to doon* his pilgrymage
        'and went to make his pilgrimage' (CT-P, 1. 78; Miller (2002:193))

    b. In hope *to stonden* in his lady grace
        'in (the) hope of standing in his lady's grace'(CT-P, 1. 88; Miller (2002:195))

    c. for þi leor is swa unimete   lufsum & lusti on *to look*
        for thy face is so immeasurably lovesome & pleasing on to look
        'for your countenance is so extremely lovable and pleasant to look upon'

        (WooLord, 39f; Miller (2002:215))

    d. For scheep ben goode *for to ete*
        'for sheep are good to eat'   (Wyc Serm ii. 46. 17; Miller (2002:194))

(ia) is the example of *for to*-infinitive as a purposive. (ib) involves the complement to noun, and (ic, d) the complements to adjectives.

[12] The representation in (27) is a simple overview. Unfortunately, I can date the occurrence of the constructions only loosely. (27) shows that the occurrence of bare infinitives in both control and ECM constructions precedes that of *to*-infinitives, and also that the occurrence of control infinitives precedes that of ECM infinitives.

[13] As for the relationship between the infinitival *to* and the semantic property of the control infinitives (i.e. [+Tense]), it is just conceivable that the infinitival *to* originally derives from the prepositional *to* which has a certain type of directivity and hence, as a verbal complement, takes the control constructions with future-orientedness. In addition, it is also supposed that the functional aspect of *to* as an infinitival marker is highlighted and the innovation of the ECM infinitives with *to* occurs. However, I decline to comment further on this matter here.

[14] If we assume that the T-node is available in OE and early ME under the s-selectional approach, we must find an answer to the question as to why some constructions which syntactically require the T-position, like split-infinitives and pro-infinitives, are not attested until late ME. This question is controversial, so the plausible solution cannot be proposed here. However, Los (1999) provides a c-selectional analysis under the assumption that the T-node is available even in OE. For the detail, see Los (1999). In addition, Saito, Okazaki, and Shimada (1991) make an interesting proposition that the change of the value of the

head-complement parameter happens between early OE and late OE: IP (= TP) is head-final in early OE, whereas IP (=TP) is head-initial in late OE as well as in PDE.

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