

## Infinitival *to* as an Aspectual Affix

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In the traditional version of English grammar that has been taught in Japan, non-finite verb forms are all treated under the same label, “jun-doshi,” or literally, “semi-verbs,” and accordingly the *to*-infinitive, which is non-finite by definition, is subsumed under a category along with the other non-finite verb forms. With this traditional perspective as a basis, I will present *to*-infinitive as an aspectual verb form on a par with progressive-*ing*, and perfective *-en*. I will first discuss the historical nature of the *to*-infinitive, referring to diachronic evidence borrowed from Curme (1976) and others. I will then show that the referential characteristics of the *to*-infinitive would be better explained as aspectual, quoting Lyons (1977) and Comrie (1976, 1985) among others.\*

### Deictic, Current Relevance, Prospective Aspect, AspP

#### 0. Introduction

In generative grammar, *to*-infinitives are usually given a configuration parallel to the one assigned to finite clauses. As Felser (1994: 4) puts it, “all infinitival constructions are structurally analogous to full clauses.” Thus the two sentences below will be assigned identical structures in the generative analysis (Haegeman & Gureron (1999: 100)):

- (1) a. I hope that Thelma will dance after lunch.
- b. I hope for Thelma to dance after lunch.

So in generative grammar, “both modals and infinitival *to* were standardly taken to be functional elements generated under Infi” (Felser (1999: 17)).

*To*-infinitives are different from finite clauses in at least two respects. First,

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they never occur as a “free-standing matrix clause” (Hornstein (1990: 146)), and “the temporal interpretation of an embedded infinitive is always dependent on the temporal interpretation of the matrix clause under which it is embedded” (Hornstein: *ibid.*).<sup>1</sup>

Those two properties can readily be attributed to non-finite verb forms such as progressive *-ing* and perfective *-en*. Based on this fact, I will propose that *to*-infinitive be treated as an aspectual expression which constitutes, along with progressive *-ing* and perfective *-en*, the morphological aspect system of English.

## 1. *To*-Infinitive and Prepositional Phrase

### 1.1 The Historical Background of *to*-Infinitive

Historically, *to*-infinitive is closely related to prepositional phrases (PPs). Visser (1966: 947) provides a clear description of the prepositional origin of infinitival *to*: “The particle *to* preceding the infinitive was originally a preposition with the sense of ‘direction towards.’” Onions (1932, revised 1971: 112) also briefly describes the historical process which derived infinitival *to* from prepositional *to*.

The basic function of prepositional *to* is to denote some sort of spatial direction, while infinitival *to* has more to do with temporal reference and modality. The shift from spatial meanings to the other meanings has been recognized in literature, forming an important component of the hypothesis known as “localism.” In this hypothesis, as Lyons observes, “spatial expressions are linguistically more basic,” and “they serve as structural templates” (Lyons (1977:718)). In fact, again quoting Lyons, “temporal expressions, in many unrelated languages, are patently derived from locative expressions” (Lyons (*ibid.*)). Thus it is hardly surprising if the historical (*i.e.* spatial) property of *to*-infinitive remains in its modern (*i.e.* temporal and otherwise) usage.

### 1.2 Semantic Similarities between Infinitival *to* and Prepositional *to*

Both infinitival *to* and prepositional *to* may indicate a result that is brought about by the event or action denoted by the matrix clause or a purpose that is

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realized by the action denoted by the matrix clause. A possible explanation for the similarity is that infinitival *to* still retains its prepositional meaning, *i.e.* “in the direction of.” Probably the most fundamental meaning of prepositional *to* is that something is inclined towards whatever follows *to*. The following sentences exemplify prepositional *to* denoting a spatial direction or destination:

- (2) a. The needle of a compass always points *to the north*.
- b. Take the first turning *to the right*.
- c. Japan lies *to the east of China*.
- d. We invited Maria *to the party*.
- e. The space probe transmits images back *to Earth*.

The sense of direction, when transferred from a spatial context to a temporal setting, may denote results or purposes. Consider the following examples:

- (3) a. He drank himself *to death*. (result)
- b. They fought *to the last man*. (result)
- c. They all sat down *to dinner*. (purpose)
- d. The missionary worked *to a noble end*. (purpose)

Prepositional *to* denotes an event or a situation that occurs after what is expressed by the matrix clause, which seems to be the reason why prepositional *to* is employed to refer to results and purposes.

Interestingly, *to*-infinitives functioning as adverbial phrases behave in a very similar manner:

- (4) a. She grew up *to be a lovely woman like her mother*. (result)
- b. He told the truth only *to find that he was not believed*. (result)
- c. She was on a diet *to lose weight*. (purpose)
- d. What are the raw materials used *to make plastic?* (purpose)

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We may summarize the functions of the two types of *to* as follows:

Table 1: Semantic Similarities between Prepositional *to* and Infinitival *to*

types of <i>to</i>	spatial	temporal (result)	temporal (purpose)
prepositional	Japan lies <i>to</i> the east of China.	He drank himself <i>to</i> death.	They all sat down <i>to</i> dinner.
infinitival		She grew up <i>to</i> be a lovely woman like her mother.	She was on a diet <i>to</i> lose weight.

1.3 Syntactic Similarities between Infinitival *to* and Prepositional *to*

Prepositional *to* and infinitival *to* share some fundamental syntactical functions as well. For example, PPs headed by *to* are capable of forming an adjectival phrase, *i.e.* a string of words that restrictively modifies an NP. This is expected because PPs in general have this particular function:

- (5) a. Is this the key *to the box*?
- b. She is secretary *to managing director*.
- c. a room *to myself*
- d. the U.S ambassador *to Japan*

*To*-infinitive is also capable of restrictively modifying an NP:

- (6) a. He is the very man *to save the world*.
- b. In time *to come* people may be taking vacations on the moon.
- c. I went into the shop, but there was nothing *to buy*.
- d. I have no one *to help me*.

Curme (1976: 93) attributes this syntactic similarity between prepositional *to* and infinitival *to*, to the diachronic link between the two, as he observes that “the

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infinitive has its original force, *i.e.* is still a prepositional phrase with the literal meaning of the preposition *to*.”

PPs headed by *to* and *to*-infinitives are also capable of working as adverbial phrases, as is illustrated in the following examples in (7) and (8) reproduced from (3) and (4):

- (7) a. He drank himself *to death*.  
 b. They fought *to the last man*.  
 c. They all sat down *to dinner*.  
 d. The missionary worked *to a noble end*.
- (8) a. She grew up *to be a lovely woman like her mother*.  
 b. He told the truth only *to find that he was not believed*.  
 c. She was on a diet *to lose weight*.  
 d. What are the raw materials used *to make plastic*?

To summarize, *to*-infinitive shares the two fundamental functions with PP: restrictively modifying an NP and performing as an adverbial phrase.

#### 1.4 The Modality of *to*-Infinitive

Some sort of modality is often attributed to infinitival *to*. For example, Felser (1999: 32ff) observes that *to*-infinitives have “epistemic” sense, citing the following examples:

- (9) a. We saw John *to be intelligent*.  
 b. \*We watched John *to be intelligent*.

She argues that (9b) is unacceptable because the verb *watch* necessarily denotes direct, *i.e.* not epistemic, perception. In other words, the modality of the *to* in (9b) is not compatible with the physical perception denoted by *watched*, while the

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cognitive perception that *saw* in (9a) denotes permits the *to*-infinitive.

The modality of infinitival *to* is even more obvious in the following sentences:

- (10) You are the man *to marry that girl*.  
“You are the man *that should marry that girl*.”
- (11) I have no one *to help me*.  
“I have no one *who will help me*.”
- (12) He is coming here *to see you*.  
“He is coming here *so that he may (can) see you*.”

The above examples seem to suggest that infinitival *to* inherently carries some sort of modality. The modality seems to have derived from the fact that infinitival *to*, because of its prepositional origin, is closely related with the sense of futurity, which is usually expressed with modality. Indeed, Lyons (1977: 677) associates futurity with modality as he observes that “futurity is never a purely temporal concept; it necessarily includes an element of prediction or some related modal notion.”

To sum up the discussion so far, the spatial meaning of prepositional *to* may have yielded its future-denoting function, which in turn, might remain as the future sense of infinitival *to*. Assuming that futurity necessarily involves some sort of modality, it is possible that this futurity is responsible for the modality of infinitival *to*.

### 1. 5 Progressive: Another Aspectual Form Descended from Prepositional Phrase

The historical process which gave rise to progressive *-ing* seems very much like the one that produced *to*-infinitive. It has been observed in literature that the progressive form also has descended from a PP. For instance, Felser (1999: 78)

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observes that “the progressive form developed from prepositional phrases headed by *on* or *in*, which were first weakened to *a-*, and eventually disappeared altogether,” and offers the following sentences:

- (13) a. I feele my-self *a*-dying now.  
 b. I heard a clashing of swords, and men *a*-fighting.

Vlach (1981: 286) provides a similar description of the derivation of progressive *-ing*, giving the following example:

- (14) John is at/on/a- hunting.

And he observes that “the earliest of these forms used *on* or *at*, which later shortened to *a-* and finally dropped altogether, resulting in the modern form of the progressive.”

Summing up, progressive *-ing* may be characterized as a morphologically integrated PP. This patterns quite well with the historical origin of the modern *to*-infinitive, *i.e.* a PP headed by prepositional *to*. This seems to support the view that *to*-infinitive is also an aspectual form of a verb.

## 2. Time Reference of *to*-Infinitive

### 2.1 Tense as a Deictic Notion

Lyons (1977: 682) characterizes tense as a deictic concept in the following observation: “The crucial fact about tense, whether we are talking about sentences or propositions, is that it is a deictic category.” Matthews (1997: 374), echoing Lyons’ view of tense as a deictic category, describes tense as a deictic notion and gives the following definition of tense: “Inflectional category whose basic role is to indicate the time of an event, etc. in relation to the moment of speaking.”

Thus Lyons and Matthews view tense as a temporally deictic reference as seen from the moment of utterance. If we follow this view, we may conclude that

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*to*-infinitive does not have tense at least in this particular sense because *to*-infinitive is not capable of deictic reference.

## 2.2 The Aspectual Nature of *to*-infinitive

If *to*-infinitive does not denote tense, what does it denote? One possibility is aspect. In fact, the perfective form of English, which is unarguably aspectual, shows striking similarities to *to*-infinitives with respect to time reference.

The non-deictic nature of the temporal reference of perfective form has been analyzed in terms of Reichenbach's tripartite time reference system. The system assumes three distinct points, S (speech time), R (reference time), and E (event time) on the time axis. The following representation quoted from Thompson (2001: 288) illustrates the spirit of the system:

- |      |        |         |         |                 |
|------|--------|---------|---------|-----------------|
| (15) | S,R,E  | present | E__S, R | present perfect |
|      | R,E__S | past    | E__R__S | past perfect    |
|      | S__R,E | future  | S__E__R | future perfect  |

Of any two times separated by a line, the one on the left temporally precedes the other. Two times separated by a comma are co-temporal.

As is shown above, the Reichenbachian system provides a consistent framework for analyzing various types of temporal reference.

Perfective form presents an event as prior to the reference point. For example, in the following past perfect sentence in (16a), the reference time is in the past (denoted by the finite verb *had*) and the event (denoted by the aspectual form *eaten*) is defined as prior to the reference time:

- (16) a. Tom had eaten the bread (when I asked him about it).  
 b. E\_\_R\_\_S

The temporal reference of the *to*-infinitive works in a very similar manner,

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with the only difference being that the event time is defined as posterior, rather than prior, to the reference time. Observe the following example:

- (17) a. Tom was to give a speech at Jim's wedding party.  
 b. R\_\_E\_\_S

In (17a) the event denoted by the infinitive *to give a speech at Jim's wedding party* is represented as posterior to the reference time denoted by the finite verb *was*.

This relative "futurity" of *to*-infinitives is recognized, for example, in Stowell (1982: 563), as he observes that "it is essential to consider the tense of the infinitive strictly in relation to that of the matrix...." and he goes on to say that the tense of the infinitive is "...unrealized with respect to the time of the action denoted by the matrix itself."

To sum up, the time reference systems of perfective form and *to*-infinitive may be represented as in the following examples, which show that the two expressions have temporally symmetrical structures:

- (18) a. Paul had eaten the cake by last Sunday. (E\_\_R\_\_S)  
 b. Paul has eaten the cake.. (E\_\_S,R)  
 c. Paul will have eaten the cake by next Sunday. (S\_\_E\_\_R)
- (19) a. At the beginning of May Tom was planning to visit Milan. (R\_\_E\_\_S)  
 b. Now Tom is planning to visit Milan. (S,R\_\_E)  
 c. By the time he graduates, he will be planning to visit Rome.(S\_\_R\_\_E)

These examples uniformly show that the event time expressed by perfective form may be characterized as "prior" to the reference point, while the event time expressed by *to*-infinitive may be characterized as "posterior" to the reference point.

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### 2.3 Relative Tense and Aspect

However, there might possibly be one argument against the view presented above. One could argue that the temporal reference function of *to*-infinitive is not that of aspect but that of “relative tense” or, as some linguists prefer to call it, “secondary tense.”

Indeed, Lyons (1977: 705) alerts us to the danger of confusing aspect and tense as he writes “...aspect has been confused with tense in the standard treatments of particular languages,” and specifically warns against confusing relative tense and aspect: “...the distinction between tense and aspect is hard to draw with respect to what is sometimes described as relative, or secondary, tense.”

As Lyons suggests, the relative or secondary tense and aspect are two distinct notions that should be strictly distinguished. In order to claim legitimately that *to*-infinitive is an aspectual expression, it needs to be shown that *to*-infinitive has aspectual function, not that of mere relative or secondary tense.

The difference between the two concepts is represented in the following pairs from Comrie (1976: 55):

- (20) a. *Having eaten* a three-course dinner, Bill is no longer hungry.  
 b. As he *has eaten* a three-course dinner, Bill is no longer hungry.
- (21) a. *Having been* in Berlin before the War, Bill is surprised at the many changes.  
 b. As he *was* in Berlin before the War, Bill is surprised at the many changes.

*Having eaten* in (20a) above may be paraphrased as *has eaten* in (20b), while *having been* in (21a) may be paraphrased as *was* in the (21b). This suggests that the *having eaten* in (20a) expresses perfective aspect, whereas *having been* in (21a) denotes simple past.

Now let us identify the difference between aspect and relative tense. Accord-

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ing to Comrie (1976: 52), the present perfect aspect expresses “a relation between two time-points,” or more specifically, it “indicates the continuing present relevance of a past situation.” Comrie (*ibid.*) offers the following examples to clarify his point:

- (22) a. I have lost (Perfect) my penknife.  
b. I lost (non-Perfect) my penknife.

and elaborates that the a difference between (22a) and (22b) is that the aspectual expression in (22a) implies that the penknife is still missing, while the simple past in (22b) does not have such implication.

Thus Comrie claims that an aspectual expression refers to an event or state as something bearing relevance to the situation at the moment of the finite matrix tense. In other words, he says that a perfective form carries relevance to the reference point, R. A similar observation is made in Kaneko & Endo (2001: 134), and is shown with the following examples:

- (23) a. John has broken the teapot (and it is still broken).  
b. John broke the teapot (but it may have been mended).

They explain that the perfect sentence in (23a) implies that the state of the teapot being broken holds at the present, or to use the Reichenbachian system, at the reference point, R.

Now, if this type of contrast between the present perfect and the simple past holds between *to*-infinitive and the deictic future expression, we may reasonably claim that *to*-infinitive carries aspectual function, and accordingly, that infinitival *to* is an aspectual affix. I assume that such a contrast does exist and *to*-infinitive may be considered to be an aspectual verb form denoting “prospective aspect” suggested in Dahl (1985: 112) and Comrie (1976: 64).

As to the plausibility of this particular type of aspect, Dahl (*ibid.*) observes that

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there is “some evidence for postulating a cross-linguistic category PROSP (prospective aspect),” but also says that “all the assumed examples of PROSP are periphrastic.” Comrie (*ibid.*) is more willing to recognize the aspect type. Though he does not present prospective aspect as a syntactically formalized feature, he emphasizes the semantic difference between what he calls “straight future” and “prospective future,” and suggests that the latter be considered as an aspectual category. Observe the following examples he offers:

- (24) a. Bill is going to throw himself off the cliff. (prospective future)  
b. Bill will throw himself off the cliff. (straight future) (Comrie (1976:64))

According to Comrie, if the speaker says (24b) and Bill is prevented from falling, the speaker would be wrong because the auxiliary *will*, which is often regarded as a typical future tense marker, actually predicts the action of throwing himself off the cliff. On the other hand, if the speaker says (24a) and Bill is prevented from falling, the utterance would still be correct because it simply alludes to Bill’s intention at the present.

Palmer (1979: 121) makes a very similar observation, noting that “BE GOING TO...does not simply refer to the future, but rather to the future from the stand point of the present.” And Palmer (*ibid.*) proposes that the property of BE GOING TO be labeled “Current Orientation,” because:

...where the past tense forms are used the orientation is equally to the past. BE GOING TO is used to suggest, in its present tense forms, that there are features of the present time that will determine future events.

(Palmer (1979:121))

Is “prospective aspect” syntactically identifiable? The answer seems to be in the affirmative. It seems that the characteristics of the temporal reference of *be going to* also holds with the simple form of *to*-infinitive. Consider the following:

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- (25) a. Tom *was to give* a speech at Jim's wedding party, but an accident prevented him from attending the party.  
 b. ?Tom *would give* a speech at Jim's wedding party, but an accident prevented him from attending the party.

As is shown by the grammaticality of (25a), *to*-infinitives may bear some sort of relevance to the situation at the matrix tense, *i.e.* reference point R. In other words, the *to*-infinitive in (25a) carries "current" relevance to the situation at the finitely specified reference point. Hence, even if the actions denoted by the infinitive in (25a) is not realized for some reason, the sentence will not seem awkward presumably because the *to*-infinitive simply describes the subject's intention or inclination at the time of the finite tense (*i.e.* current orientation), and does not necessarily predict the action. The following characterization by Perkins (1983: 68) may provide some support:

Literally, IS TO states that circumstances which currently exists are disposed towards the occurrence of an event which is as yet unrealized.

On the other hand, the auxiliary *would* in (25b), which predicts Tom's action in the future (relative to the speech moment) seems odd because it does not have the current relevance. This contrast, incidentally, patterns neatly with the contrast between the perfective aspect and the simple past that we saw earlier.

Let us summarize the properties of perfective and *to*-infinitive with respect to the relevance to the moment of the finite tense:

- (26) a. John *has lost* his watch.  
 b. John *lost* his watch.
- (27) a. Johnson *is to pitch* in the final game of the series.  
 b. Johnson *will pitch* in the final game of the series.

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(26a) refers to the current situation at present and thus it is implied that John's watch is still missing. On the other hand, (26b) does not say anything about the current situation because it directly depicts an event in the past, and therefore, it is not implied whether John's watch has been recovered or it is still missing. Likewise, in (27a), the implication is that Johnson is currently scheduled to pitch in the final game, but some unexpected situation could still arise and he may end up not pitching. On the contrary, (27b) more straightly predicts Johnson's pitching in the game, so the sentence would be awkward if the possibility of his not pitching is mentioned in the same context.

This suggests that perfective aspect and *to*-infinitive share an important property: *i.e.* they indirectly refer to the situation that holds at the matrix tense, or the reference time. Thus, if the appropriate characterization of perfective form is aspectual, then *to*-infinitive should also be characterized as aspectual.

### 3. Conclusion

The discussion so far has provided two pieces of evidence for the aspectual status of *to*-infinitive.

Firstly, *to*-infinitive was shown to have developed from a PP, and this historical background of *to*-infinitive patterns parallel to another PP-originating expression, *i.e.* progressive *-ing*, which is unarguably an aspectual expression.<sup>2</sup>

Secondly, the temporal reference property of *to*-infinitive is similar to that of perfective *-en* in that they both indirectly refer to the situation at the finitely specified moment, *i.e.* the point R in the Reichenbachian system.

The assumption that infinitival *to* is an aspectual affix offers a number of advantages over alternative analyses and a lot of supporting data is available.

First, one can correctly predict that infinitival *to* exclusively selects the bare verb stem as its complement, since, from the assumption that infinitival *to* is an aspectual affix, it follows that it will be distributed in a complementary manner with the other aspectual affixes, *i.e.* *-ing* and *-en*.

Second, one can predict that infinitival *to* is never assigned a stress stronger

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than the one assigned to the following bare verb, because the other aspectual affixes never receive a stress stronger than the one on the verb stem.

Third, one can predict that *to*-infinitive occurs in numerous syntactic environments where progressive *-ing* also occurs:

- (28) As complements of *be*
- a. He is *to run a marathon on Tuesday*.
  - b. He is *singing on the stage*.
- (29) As complements of the object of a transitive verb
- a. He got the tailor *to mend his shirt*.
  - b. He got the machine *running*.
- (30) As complements of intransitive verbs
- a. He came *to see you*.
  - b. He came *hopping*.
- (31) Restrictively modifying an NP
- a. a man *to change the world*
  - b. a man *working for refugees*
- (32) In absolutes with the speaker as implicit subject
- a. *To tell you the truth*, that idiot is my brother-in-law.
  - b. *Judging from his accent*, he must be a Texan.
- (33) In absolutes with the matrix clause as implicit subject
- a. *To make matters worse*, their car suddenly broke down.
  - b. *Making matters worse*, their car suddenly broke down.

Fourth, infinitival *to*, progressive *-ing*, and perfective *-en* are all combined with

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tense, polarity, and passive voice in an analogous linear arrangement, which is predictable if we suppose that infinitival *to* is an aspectual affix<sup>3</sup>:

Table 2: Linear Arrangement of Tense, Polarity, Aspect, and Voice

	tense	polarity	aspect	voice	
The car	is	not	to be	waxed	on Sunday.
The car	is	not	being	waxed	now.
The car	has	not	been	waxed	before.

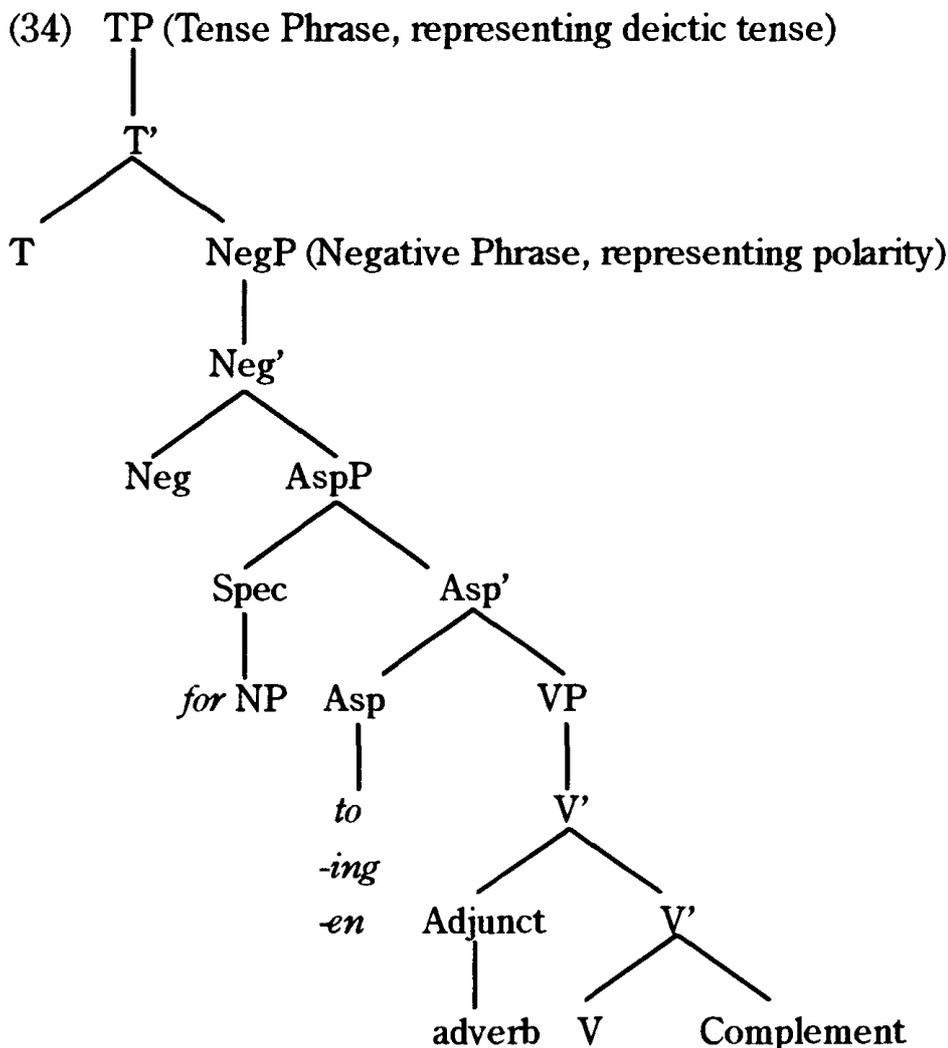
Fifth, assuming that infinitival *to* is an aspectual affix denoting prospective aspect, one can construct a consistent binary system which comprises tense, aspect, and modality in an integrated paradigm as shown below:

Table 3: A Binary Tense-Aspect-Modality System of English

time reference					
+ finite (tense)			- finite (aspect)		
- past	+ modality	<i>will, shall</i> etc.	- past	+ modality	<i>to</i> -infinitive prospective
	- modality	<i>-es</i>		- modality	<i>-ing</i> progressive
+ past	<i>-ed</i>		+ past	<i>-en</i> perfective	

Now let me propose a highly speculative syntactic configuration that may be assigned to infinitival *to*, assuming that something like Aspect Phrase (cf. Borer (1994: 28ff), Kaneko & Endo (2001: 114)) is present above VP<sup>4</sup>:

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Let us assume that an element in [Head, AspP] is obligatorily lowered to the right of the V element unless it carries modality. This allows *to* to remain under Asp since it has modality. This stipulation is justifiable because the same rule seems to work with elements in [Head, TP]: modal auxiliaries and emphatic *do*, *does*, and *did* stay in [Head, TP].

The adjunct slot of VP allows an adverb to occur following *to*, so split infinitives do not contradict the structure in (34).

The framework described in (34) predicts the following data:

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Table 4: Linear Arrangement of *Ought Not to*-Infinitive

	tense	polarity	aspect	voice	
She	ought	not	to be	criticized	like that.

Here *ought* is generated in [Head, TP] and stays there because it has modality. *To* is generated in [Head, AspP], staying there for the same reason. *Not* intervenes because polarity (NegP) is located between TP and AspP.

The sequence *ought not to*-infinitive suggests that modal auxiliaries and infinitival *to* are generated on the opposing sides of polarity, and therefore syntactically different elements.

The following data is also predicted by the structure depicted in (34):

(35) She took an umbrella with her *not to* get wet in the rain.

In this sentence, the sequence *not to* is inexplicable if we suppose that *to* is generated under T node, because T is located above, and therefore to the left of, polarity or NegP. Since the *to* in (35) is outside the scope of the *not*, we cannot justify the linear sequence by referring to scope. Thus the most logical explanation for (35) is that *to* is generated below, or on the right side of, NegP.

In the structure in (34) the *for* NP denoting the infinitival subject is positioned in [Spec, AspP].<sup>5</sup> There are some simple empirical data that support it:

(36) a. It would be wonderful *to visit New York now*. (nominal)  
 b. It would be wonderful *for him to visit New York now*. (nominal)

(37) a. Here is some work *to finish immediately*. (adjectival)  
 b. Here is some work *for you to finish immediately*. (adjectival)

(38) a. She opened the door *to enter the room*. (adverbial)  
 b. She opened the door *for Bob to enter the room*. (adverbial)

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- (39) a. She is anxious *to visit her hometown*. (adverbial)  
 b. She is anxious *for him to visit her hometown*. (adverbial)

In all the pairs (36)-(39), adding *for* NP does not change the grammatical status of the infinitives. Assuming that *for* is not a complementizer, this is a rational consequence.

When *for* NP occurs in a negated infinitive as in (40) below, it seems that the *for* NP is raised, across polarity, from its original position to an upper location, most likely the Specifier position of some upper phrase<sup>6</sup>. “Raising” movements of subjects have been recognized since the VP-internal subject hypothesis was first proposed. (See, *e.g.*, Radford (1997: 318))

The structure in (34) also predicts that *for* is not capable of representing the whole infinitival clause, which is verified by the following data:

- (40) Maria: I hope for him to come.  
 Linda: I hope for \*(him to come), too.

Finally, let me make it clear that I am fully aware of the limitations of my proposal. Namely, the hypothesis presented here is not accompanied with evidence from languages other than English. Searching other languages for relevant data would undoubtedly be an important part of further research, and if successful, it would infinitely strengthen the argument put forth here.

## Notes

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1. Hornstein does not intend to illustrate the similarities between *to*-infinitives and other non-finite

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verb forms.

2. Another example of a prepositional phrase turning into a single form may be those adjectives beginning with *a-*: alive, asleep, and awake.
3. The fact that *to*-infinitives may be combined with aspectual expressions to form complex structures such as *to be singing* and *to have gone* do not contradict the aspectual status of *to*-infinitive, since conventionally recognized aspectual expressions, *i.e.* perfective and progressive, may be combined to form a complex aspect construction: *He has been singing for and hour.*
4. Borer's AspP seems to be concerned with the notion of lexical aspect, which is incorporated within the semantic property of a given verb. The AspP discussed in the present paper, on the other hand, is concerned with what might be called grammatical aspect.
5. This was suggested by Nobuko Hasegawa.
6. This was also suggested by Nobuko Hasegawa.

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