

# Negation Marker *Not* with Infinitival Clauses in Contemporary American English

Satomi NIWA

## Abstract

Despite the rule that specifies the placement of the negation marker *not* in infinitival constructions, *to*-infinitives with *not* following *to* have been increasing in a visible manner recently. In this paper, I argue that the changes in English speakers' mental attitude and recognition affect the status of negation marker, and that this may be one of the reasons why their appearance becomes more frequent. Moreover, there may be two factors that are behind this change: Jespersen's Cycle and multiple appearance of negation markers. The data of these word order frequency in this paper is collected from Corpus of Contemporary American English and The Corpus of Historical American English.

## Key words

Split infinitives, negation marker, Jespersen's Cycle.

## 1. Introduction

In order to make *to*-infinitives with the negation marker *not*, *not* is placed in front of *to* in Standard English. However, there is another word order for *to*-infinitives with negation: to put *not* between *to* and an infinitival verb. The following sentences are some of the examples of *to*-infinitives with *to*-not word order.

- (1) a. Peter expects his friends to not object his proposals.  
 b. John wants to not go. (Pollock (1989: 375))  
 c. His hardest decision was to not allow the children to go to a summer camp.  
 (Quirk et al. (1985: 497))  
 d. He decided to not co-operate with the police. (Radford(2004: 169))

This type of construction has captured some attention, and there are approaches to explain why this *to-not*-verb word-order in infinitives exists. Moreover, in the recent years, people have noticed that the utterance of this type of construction has visibly increased. Therefore, in this paper, I will focus on the diachronic changes in the frequency of their appearance in American English along with other similar word orders of *to*-infinitives. I argue that certain changes in American English speakers' mental comprehension of the *to*-infinitive construction with the negation marker *not* play a certain role in this phenomenon, and that what are observed as Jespersen's Cycle and phrasal negation of VP may have been involved here.

After this introduction, Section 2 overviews the frequency changes of the two types of word orders, and Section 3 looks into another similar word order with adverbials and discusses their similarities and differences. Then I will propose that the negation marker *not* for *to*-infinitives has been gradually changing its status in *to*-infinitives in Section 4. Section 5 is the conclusion of this paper.

## 2. Word Order of *To*-Infinitives and Negation Marker *Not*

The basic word order of infinitival clauses led by *to* is seen in the following:

- (2) a. I decided to attend the meeting.  
 b. What we all agreed on was to accept their offer.

In negation with *to*-infinitives, *not* is placed in front of *to*.

- (3) a. I decided not to attend the meeting.  
 b. What we all agreed on was not to accept their offer.

However, we have another word order for *to*-infinitives with the negation marker *not*. There is a slight difference in the meaning with these two word orders. Let us look at another pair in (4).

- (4)<sup>1</sup> a. They decided not to stay another night.  
 b. They decided to not stay another night. (Merriam-Webster Learner's Dictionary)

Merriam-Webster Learner's Dictionary, from which the sentences in (4) are taken, explains the difference in meanings of the two sentences in (4) as follows: In (4a), where *not* precedes *to stay*, the important message

is “they decided,” while the word order “*to not stay*” in (4b) conveys the information to the listener that “they will not stay” is the important part now, although they might have decided to stay previously. For the convenience of description, I will refer to the infinitives with the word order where *not* precedes *to* “*not-to* infinitives,” and the ones with *not* following *to* “*to-not* infinitives” in this paper.

Traditional English Grammar tells learners to put *not* in front of *to* for negation with *to*-infinitives, and the appearance percentage of *to-not* infinitives is very low, compared to the standard *not-to* infinitives. Let us look at *decide*, which appears in (1) to (4), and two other typical action requesting verbs, *tell* and *ask*, in Corpus of Contemporary American English (COCA<sup>2</sup>). The difference between the two word orders is obvious:

**Table 1:** *not-to* and *to-not* with the verbs *decide*, *tell* and *ask*

	<i>not to</i>	<i>to not</i>	% of <i>to-not</i>
decided -	2761	48	1.7
told -	403	10	2.4
asked -	748	13	1.7

The appearance percentage of *to-not* infinitives among all the *to*-infinitives with *not* as their negation marker is also given in Table 1. The search result shows that the *to-not* infinitives are quite limited in their appearance.

However, the number for the *to-not* infinitives is increasing. By searching *not-to* and *to-not* word orders in infinitives with COCA, we find the following results shown in Table 2 and Table 3<sup>3</sup>.

**Table 2:** *not-to*

Section	Frequency
1990 - 1994	17,807
1995 - 1999	17,275
2000 - 2004	16,594
2005 - 2009	16,065
2010 - 2014	15,498
2015- 2017	9,642
TOTAL	92,881

**Table 3:** *to-not*

Section	Frequency
1990 - 1994	662
1995 - 1999	802
2000 - 2004	915
2005 - 2009	1,123
2010 - 2014	1,392
2015 - 2017	1,118
TOTAL	7,690

Take a look at the data of the frequency of appearance of the two word orders in Table 2 and Table 3. Though *not-to* infinitives have been keeping their overwhelming dominance, *to-not* infinitives have been increasing in their appearance. Note that the data in the section 2015-2017 are a collection in three years, while other numbers in each section are collections in 5 years. To go back further in time, let us search the appearance of *not-to* infinitives in The Corpus of Historical American English (COHA<sup>4</sup>).

As seen in Table 4, the frequency of the appearance of *not-to* infinitives has been stable, staying around the same level of frequency. The frequency of *to-not* infinitives has been very low. However, looking at the percentage of *to-not* infinitives in the entire appearance of *to*-infinitive with the negation marker *not*, we can find its percentage gradually but steadily increasing. The number stays around 0.4% till the 1860's, and then its growth becomes rather visible, though it is still under 1% until the 1960's with the exception

of the 1910's and the 1930's. After the 1970's, when the percentage grows over 1%, the number still keeps increasing to be doubled the previous year's in the 1990's, and the percentage reaches 3.7% in the 2000's.

**Table 4:** Historical changes in frequency

Section	Frequency		% of <i>to-not</i>	Section	Frequency		% of <i>to-not</i>
	<i>not-to</i>	<i>to-not</i>			<i>not-to</i>	<i>to-not</i>	
1810	356	0	0	1910	4,481	52	1.15
1820	2,152	5	0.23	1920	4,718	22	0.46
1830	3,463	12	0.35	1930	4,201	49	1.15
1840	3,859	16	0.41	1940	4,276	28	0.65
1850	4,187	16	0.38	1950	4,267	38	0.88
1860	3,901	16	0.40	1960	4,171	40	0.95
1870	4,332	21	0.48	1970	4,514	55	1.20
1880	4,530	31	0.68	1980	4,573	69	1.49
1890	4,219	22	0.52	1990	5,149	157	2.96
1900	4,478	27	0.60	2000	5,675	221	3.74
<b>TOTAL</b>					<b>81,502</b>	<b>897</b>	

Concerning the appearance of *to-not* infinitives, many native speakers of English themselves have been asking on the Internet which word order is correct. To pick up some of the questions on the site *English Language and Usage*, there were 22 questions, whose inquiry titles appeared as “Should we use ‘not to’ or ‘to not’?”, “‘Pretend not to’ or ‘Pretend to not’”, “‘decided not to’ or ‘decided to not’” and so on. These tell us that the co-occurrence of these two types of word orders has had English speakers wondering or confused.

In the next section, we will look into another element which modifies a verb and also separates *to* from its verb in *to*-infinitive constructions.

### 3. Split Infinitives

There is another element that sometimes appears between *to* and its modifying infinitival verb in *to*-infinitives: adverbials. The construction where an adverbial or *not* appears between *to* and the infinitival verb is called split infinitives. The following sentences are introduced as well-formed sentences in Pollock (1989):

- (5) a. To hardly speak Italian after years of hard work means you have no gift for languages.  
 b. To often look sad during one's honeymoon is rare.  
 c. To completely lose one's head over pretty students is dangerous!  
 d. To almost forget one's name doesn't happen frequently.

(Pollock (1989: 381))

These sentences are not ungrammatical, however, there has been great controversy over this type of construction. In general, there has been a tendency to avoid this type of word order, especially in writing.

On this matter, after giving quick overview on the changes that happened to English infinitives, Jespersen (1938) expresses how he regards this construction as in (6)<sup>5</sup>.

- (6) Another recent innovation is the use of *to* as what might be called a pro-infinitive instead of the clumsy *to do so*: ‘Will you play?’ ‘Yes, I intend to.’ ‘I am going to.’ This is one among several indications that the linguistic instinct now takes *to* to belong to the preceding verb rather than to the infinitive, a fact which, together with other circumstances, serves to explain the phenomenon usually misterm’d ‘the split infinitive.’ This name is bad because we have many infinitives without *to*, as ‘I made him go.’ *To* therefore is no more an essential part of an infinitive than the definite article is an essential part of a nominative, and no one would think of calling ‘the good man’ a split nominative. Although examples of an adverb between *to* and the infinitive occur as early as the fourteenth century, they do not become very frequent till the latter half of the nineteenth century.

(Jespersen (1938:197))

To interpret (6), dropping the infinitival verb as repetitive information as in “Yes, I intend to” shows that, in speakers’ unconscious mind, *to* belongs to the preceding verb and not to the following verb. Jespersen (1938) goes on to analyze that this has made modifying adverbs to appear between *to* and its following verb more acceptable in English speakers’ mind. This means that, in the English speakers’ mind, there is no tie between *to* and the infinitival verb, and this mental attitude toward this construction lets them place modifying adverbs, which are supposed to be placed immediately before their modifying items, in front of infinitival verb.

Jespersen (1938) also states in (6) that split infinitives have existed already in the 14<sup>th</sup> century, and that “they have not become very frequent until the latter half of the nineteenth century.” It is often said that one of the reasons why the usage of split infinitives has been suppressed is that there has been resentment against split infinitives among the people with more traditional point of view.

At the same time, there are also reasons why they are employed in communication. One of the reasons is stated in Jespersen (1938) as in (7).

- (7) In some cases, they [split infinitives]<sup>6</sup> decidedly contribute to the clearness of the sentence by showing at once what word is qualified by the adverb.

(Jespersen (1938:197))

Jespersen (1938) illustrates this with the following two sentences:

- (8) a. She only wanted a pipe in her mouth considerably to resemble the late Field Marshal.  
b. The poverty of the nation did not allow them successfully to compete with the other nations.

(Jespersen (1938:197))

Jespersen (1938) points out that these two sentences “are not happily built up,” and that they “would have been clearer if the authors had ventured to place *to* before an adverb.” Another pair of examples with adverbials can be seen in (9).

- (9) a. The board voted to immediately approve building it.  
b. The board voted immediately to approve building it. (Huddleston and Pullum (2002:582))

Huddleston and Pullum (2002) explains that *immediately* in (9a) is “unambiguously modifies *approve*” and that (9b) gives more than one interpretation, where *immediately* modifies *voted* is more salient and natural<sup>7</sup>.

To pick up another instance, let us look at (3b) *What we all agreed on was not to accept their offer*. This sentence has copula *be* as its main verb and this makes its interpretation ambiguous, as there are two possibilities: 1) *not* is a sentential negation marker which is modifying the main verb *was*, and 2) *not* is an infinitival negation marker which is modifying *to accept*. When *not* appears between *to* and *accept*, the modification relationship becomes clear.

There is also a tendency to avoid clumsy, awkward constructions, which results in split infinitives. Quoting *Oxford Living English Dictionaries*, “People have been splitting infinitives for centuries, especially in spoken English, and avoiding a split infinitive can sound clumsy.” The web page where split infinitives are dealt in *Collins Dictionary* explains this with the sentences in (10).

(10) a. He decided to really try next time.

b. He decided really to try next time.

(*Collins Dictionary*)

According to its explanation, to change (10a) into (10b) “would result in an artificial and awkward construction.” Thus, putting an adverbial between *to* and the infinitival verb is acceptable and especially encouraged for clarification and smooth flow of the utterance. Thus, split infinitives are used in order to clarify the speaker’s intention and to avoid sounding awkward and clumsy, though it is often recommended to avoid in formal writing.

In the section of split infinitives, Wilson (1993) categorizes three possible modifying patterns for adverbials: an adverbial modifies 1) the verb it precedes, 2) the predicate or the entire sentence which it appears at the end of, 3) the entire sentence which it appears at the head of. This categorization in 2) shows that when an adverbial appears at the end of the sentence, it may be modifying the entire sentence or a part of the sentence, which is a predicate. This causes ambiguity. Wilson (1993) tells us that this generalization of placement also applies to the adverbial in split infinitives. In fact, Wilson (1993) attributes the popularity of split infinitives to the ambiguity the adverbials bring and to the non-existence of intonation in writing.

Now let us turn to compare the occurrence of *to*-adverbial-verb word order and *to*-infinitives with preceding adverbial modifiers in order to see whether they show the same frequency pattern as *to*-infinitives with *not*. Take a look at some examples of split infinitives in Huddleston and Pullum (2002).

(11) a. I want really to humiliate him/ I want to really humiliate him.

b. We aim utterly to ignore it/ We aim to utterly ignore it.

c. I urge you to really immerse yourself in the topic.

d. I hope to eventually have my own business.

e. I want desperately to see him again.

f. I hadn’t expected her to almost break the record.

g. Following this rule has the potential to actually create ambiguities.

h. I wouldn’t advise you to even consider accepting their offer.

j. It’s important not to further complicate an already very tense situation.

k. The board voted to immediately approve building it.

(Huddleston and Pullum (2002: 582))

Some other examples picked up from the sections where split infinitives are discussed are shown in (12), (13), (14) and (15).

(12) He decided really to try next time. (*Collins Dictionary*)

(13) a. She told me I had to quickly finish this sandwich <sup>8</sup>.

b. I thought it best to quietly sneak away from the accident.

c. I was told to always pay attention in class.

d. Harry's teacher told him to never look back. (*Faculty of Arts, University of Bristol*)

(14) a. She wished to utterly forget her past.

b. It is difficult for a son to always live up to the expectations of his parents.

(*Egawa (1991:329)*)

(15) a. She used to secretly admire him.

b. You have to really watch him. (*Oxford Living English Dictionary*)

It is almost impossible to search word strings of every verb with every possible modifying adverb. Therefore, let us take the infinitives with adverbials in the examples from (11) to (15). The results are shown in Table 5 <sup>9</sup>. We cannot find any notable increase pattern in the frequency data of split infinitives with adverbials. We must note that the results vary depending on verbs, as the frequency of their usage and their co-occurrence with particular modifiers are affected by the semantics of each verb.

**Table 5:** adverbials and infinitives in (11a)-(15b)<sup>10</sup>

Section	Frequency					
	really to humiliate	to really humiliate	utterly to ignore	to utterly ignore	really to immerse	to really immerse
1990 - 1994						
1995 - 1999						
2000 - 2004						
2005 - 2009	0					
2010 - 2017	1	0	0	0	0	0
TOTAL	1	0	0	0	0	0

Section	Frequency					
	eventually to have	to eventually have	desperately to see	to desperately see	almost to break	to almost break
1990 - 1994	4	2	3			1
1995 - 1999	2	7	2			
2000 - 2004	0	4	3		0	
2005 - 2009	1	5	2		1	
2010 - 2017	2	7	5	0	0	0
TOTAL	9	25	15	0	1	1

Section	Frequency					
	actually to create	to actually create	even to consider	to even consider	further to complicate	to further complicate
1990 - 1994		3	17	20		
1995 - 1999		5	12	16		
2000 - 2004		7	14	30		
2005 - 2009	0	4	6	12	0	
2010 - 2017	1	13	11	41	1	0
TOTAL	1	32	60	119	1	0

Frequency						
Section	to immediately approve	to immediately approve	really to try	to really try	to quickly finish	to quickly finish
1990 - 1994		1	4	7	1	
1995 - 1999		0	2	13	0	
2000 - 2004		1	5	14	2	
2005 - 2009		0	4	15	0	0
2010 - 2017	0	0	3	23	0	3
TOTAL	0	2	18	72	3	3

Frequency						
Section	quietly to sneak	to quietly sneak	always to pay	to always pay	never to look	to never look
1990 - 1994				0	5	3
1995 - 1999				1	8	0
2000 - 2004				0	7	2
2005 - 2009			0	3	3	2
2010 - 2017	0	0	1	0	6	2
TOTAL	0	0	1	4	29	9

Frequency						
Section	utterly to forgot	to utterly forgot	always to live	to always live	secretly to admire	to secretly admire
1990 - 1994			0	0		
1995 - 1999			1	1		
2000 - 2004			0	2		
2005 - 2009			0	1		
2010 - 2017	0	0	2	0	0	0
TOTAL	0	0	3	4	0	0

Frequency		
Section	really to watch	to really watch
1990 - 1994		1
1995 - 1999		3
2000 - 2004		6
2005 - 2009		4
2010 - 2017	0	2
TOTAL	0	16

The amount of data here is far from being sufficient and there should be thorough research with more adverbials and verbs. However, as I mentioned before, it would be almost impossible to make a research of an exhaustive list with possible adverb-verb combinations. Thus, at this moment, we will look at what we get from the examples at hand.

Here, we find a difference in occurrence between adverbials and *not* in split infinitives: With adverbials, the frequency has not increased, while that of split infinitives with *not* has increased in a rather remarkable way. This suggests that *not* in *to-not* infinitives are different from simple verb modifiers. Is this something to do with having negative meaning?

There are verb modifying adverbials with negative meaning. Look at (5a) again as (16).

(16(=5a)) To hardly speak Italian after years of hard work means you have no gift for languages.

(Pollock (1989: 381))

In (16), a negative adverb appears between *to* and *speak* to make it a split infinitive, and its placement is similar to a VP negation marker *not* in the *to-not* word order. Look at Table 6 and 7. These are again the data from COCA about the frequency of *to*-infinitives with frequency adverbials with negative meaning. Table 6 shows the frequency with the adverbials preceding *to*-infinitives, and Table 7 shows the frequency of split infinitives with frequency adverbials.<sup>11</sup>

**Table 6 :** Frequency adverbials with negative meaning preceding *to*-infinitives

Section	Frequency				
	hardly to V	scarcely to V	rarely to	seldom to	never to
1990 - 1994	15	2	11	5	725
1995 - 1999	21	1	1	0	740
2000 - 2004	11	0	5	2	694
2005 - 2009	11	4	2	2	649
2010 - 2014	7	0	6	2	619
2015 - 2017	4	0	2	0	352
TOTAL	69	7	27	11	3,130

**Table 7:** Frequency adverbials with negative meaning preceding *to*-infinitives

Section	Frequency				
	to hardly V	to scarcely V	to rarely V	to seldom V	to never V
1990 - 1994	6	2	6	0	100
1995 - 1999	4	1	3	1	148
2000 - 2004	4	0	7	2	180
2005 - 2009	0	4	3	1	208
2010 - 2014	6	0	3	0	242
2015 - 2017	2	0	6	1	123
TOTAL	22	7	28	5	1,001

Table 6 shows the frequency patterns of these adverbials. When they precede *to*-infinitives, the frequency results are similar to those of adverbials seen in Table 5. We find that *never-to* infinitives are outstanding in number compared to the other four negative adverbials; still the frequency pattern does not show any outstanding increase. It is rather similar to the pattern of *not-to* infinitives

Table 7 shows that the frequency patterns of the four adverbials, *hardly*, *scarcely*, *rarely*, *seldom*, are parallel to those of adverbials seen in Table 5, as well. However, the frequency of *never* in split infinitives is quite similar to the pattern of *to-not* infinitives.

One of the possible causes of the difference between the four adverbials and *never* may come from the meaning difference they convey. The four adverbs, *hardly*, *scarcely*, *rarely*, *seldom*, which Jespersen (1917) calls “incomplete negation,” leave some amount of possibility of occurrence of an action described by the following verb in their meaning, while *never* leaves none. This may lead to the frequency difference, which is analogous to the result with other adverbials and *not* in split infinitives, as we have seen in Section 3.

Then let us take a look at *to-never* infinitives more closely and see what kind of frequency pattern they show by searching in COHA. Look at Table 8. This is the result of the frequency of appearance of *to-never* infinitives. Compare this with Table 3.

**Table 8:** Frequency of *to-never* infinitives

Section	Frequency	Section	Frequency	Section	Frequency	Section	Frequency
1810	0	1860	3	1910	9	1960	11
1820	0	1870	9	1920	5	1970	11
1830	2	1880	8	1930	12	1980	12
1840	5	1890	12	1940	5	1990	36
1850	3	1900	12	1950	7	2000	70

Though the frequency of the split infinitives with *never* is lower, the pattern of their increase is similar to *to-not* infinitives: their frequency of appearance shows noticeable increase after the 1990's. This tells that *never* alone is different from the other adverbials with negative meaning: *Never* behaves much similar to *not* in split infinitives.

We never know the frequency of *to-not* infinitive affected the frequency of *to-never* infinitives or the other way around, or both of them just happened as separate incidents. These two may show similar frequency increase partly because *never* may be recognized in the speakers' mind as an intensified version of the negation marker *not*. At least, we can tell from these data that, in English speakers' mind, the placement "rule" for modifiers with completely negating meaning with *to*-infinitives, *not* and *never*, seems to be changing. Thus, regarding *never* as a variant of *not*, let us consider what are differences between adverbials and *not* in infinitive constructions. One of the differences between adverbials and *not* is that there is an irrefutable rule that specifies the placement of *not* in negation of *to*-infinitives in standard English, while there is less specific rule for placing adverbials in infinitives.

It is true that adverbials in general are allowed in multiple places in the first place, as seen in the categorization by Wilson (1993) in section 3, and whether putting them between *to* and its following verb may depend on the point of view on this matter that each speaker has. The mental attitude toward split infinitives among English speakers can be seen in the instruction in Wilson (1993). Wilson (1993) suggests to the readers that they can freely use split infinitives as they wish in speech when they want to clarify their intention, but that they should avoid split infinitives, when they write and when they don't know their readers' attitudes to split infinitives.

We have seen that split infinitives are applied to clarify and emphasize intention and avoid clumsiness, and this purpose should be the same with adverbials and *not* in split infinitives. However, while the frequency of the split infinitives with adverbials hasn't changed much, the frequency of the split infinitives with *not* has increased rather remarkably in recent years. There are two differences between these two items: *not* is a negation marker and it is governed by an overt rule for its placement. We will look into what may be behind this change with *not* with infinitives in the following section.

## 4.VP Negation and Jespersen's Cycle

### 4.1 *Not* as a Phrasal Negation Marker

The negation marker *not* appears in two ways: as a sentential negation marker and as a phrasal

negation marker. As a sentential negation marker, it has been considered to appear around functional projection TP in the researches since Pollock (1989). In these approaches with Split IP, the head of finite TP is the place where modal auxiliaries are base generated, and the differences in realizing agreement features determine the order of the functional projections and Negative Projection (NegP) within Split IP. In the case of *to*-infinitives, *to* is base-generated in the head position of TP.

For negating phrasal elements, the negation marker *not* appears in front of the phrase. Thus, negation marker *not* appears in front of VP in negating VP and we sometimes find two types of negation markers in the same sentence.

- (17) a. John has not deliberately not paid his taxes for at least two years.
- b. You simply can't not take advantage of this offer.
- c. Charley wouldn't have not seen the money if he had been looking for it.

(Culicover (1982: 144))

- (18) a. The President could not simply not ratify the treaty.

- b. You cannot not go to the party.

(Iwamoto (1998:95))

Through the process of interpreting these sentences, we realize how the meaning of these sentences are composed: First, certain meaning is established between the phrasal negation marker *not* and the following VP, and then, the sentential negation marker *not* denies or contradicts this already established meaning of the negated VP.

Now let us look at the frequency of auxiliary-*not-not*-verb sequence<sup>12</sup> from COCA and COHA.

**Table 9:** Frequency of auxiliary-*not-not*-V word order (COCA)

Section	Frequency	Section	Frequency
Spoken	28	1990 - 1994	24
Fiction	19	1995 - 1999	19
Magazine	15	2000 - 2004	10
Newspaper	15	2005 - 2009	15
Academic	15	2010 - 2014	12
		2015 - 2017	12
TOTAL	92	TOTAL	92

**Table 10:** Frequency of auxiliary-*not-not*-V (COHA)

Section	Frequency	Section	Frequency	Section	Frequency	Section	Frequency
1810	1	1860	1	1910	2	1960	1
1820	1	1870	0	1920	1	1970	3
1830	1	1880	1	1930	0	1980	9
1840	0	1890	1	1940	2	1990	3
1850	1	1900	2	1950	2	2000	2

From Table 9 and 10, we find this construction has been in use, at least since the early 1800's, and that its frequency stays stable at a low percentage. The low frequency is probably from the obscurity created by "double negative."

This construction with two *nots* may affect the speakers' recognition of the structure of *to*-infinitives. Let us take a closer look at one of the sentences with two *nots*.

(19(=(18b)) You cannot not go to the party.

Because of the presence of the first *not*, which functions as a sentential negation marker, the second *not* functions to negate the VP "go to the party." This word string auxiliary-*not-not*-VP lets the speakers of English make mental analogy to look at *to*-infinitives as formed with *to* and VP, not as *to* and infinitival bare verb as a chunk with complements and/or other elements following the chunk. This makes it possible to create the word order of *to* with a negated VP, which has *not* intervening *to* and an infinitival bare verb. This view can be also supported by the remark made in Jespersen (1938), as seen in (6), that *to* belongs to the preceding verb and not to the following infinitival verb.

#### 4.2 Change of Status of Negation Marker

Another factor comes from Jespersen's observations on negative expressions among various languages: his theory of cyclicity of negation, which is known as (the) Jespersen's Cycle, which was first suggested in Dahl (1979). Jespersen (1917) argues as following:

- (20) The history of negative expressions in various languages makes us witness the curious fluctuation: the original negative adverb is first weakened, then found insufficient and therefore strengthened, generally through some additional word, and this in its turn may be felt as the negative proper and may then in course of time be subject to the same development as the original word.

(Jespersen (1917: 4))

Let us look at what is Jespersen's Cycle by following Jespersen (1917)'s explanation.

- (21) a. ic ne secge.  
 b. I ne seye not.  
 c. I say not.  
 d. I not say.  
 e. I do not say.  
 f. I don't say.

(Jespersen (1917: 9-11))

In Old English, the dominant sentential negation marker was *ne*, which was placed in front of main verbs. Then, in Middle English, what used to be (21a) became (21b). In (21b), because the original negation marker *ne* got weakened, an additional word *not* was added. Jespersen (1917) explains that "*ne* was pronounced with so little stress that it was apt to disappear altogether." In Old English, for negating items other than verbs, what Jespersen(1917) calls "stronger negatives" *na*, *nalles*, *noht* appeared. It was often the case that one of these items was added along with existing *ne* in the same sentence to ensure the negativity. Among these added items, *not* eventually secured its place as a negation marker. Then, with time, the original negation marker completely disappeared and *not* became what Jespersen(1917) calls "the regular negative marker," as seen in (21c), in the 15<sup>th</sup> century. Periphrastic *do* appeared around 16<sup>th</sup> century and it has carried tense

and agreement information. Jespersen (1917:13) observes that “Before *do* was fully developed, there was a certain tendency to place *not* before the verb,” which derived (21d). However, even after periphrastic *do*’s full development, *not* kept its place before the verbal element that contains significant information, and the pattern of English negative sentence became (21e). Jespersen (1917) states that “in this position, *not* cannot keep up its strongly stressed pronunciation; and through its weakening we arrive at the colloquial” sentence, as seen in (21f). Jespersen (1917) goes on to say that “it is possible that some new device of strengthening may at some future date be required to remedy” the extreme reduction in pronunciation of “don’t” in “I don’t know,”([d-nou], [dn-nou]) “I don’t mind,”( [dm-maɪnd][d-maɪnd])<sup>13</sup> and so on. Thus, in Jespersen’s Cycle, a main negative marker gets weakened; then, something else joins the sentence to support the negative marker; next, the original negative marker disappears, while the supporter takes over the role of “the negative proper”; then the new negative marker enters the cycle to get weakened.

One may wonder if this applies to Modern English. Repp (2009) finds what Jespersen (1917) argued applies to Germanic languages in modern days. Repp (2009) argues that adopting Jespersen’s Cycle to the status of negation markers gives plausible explanation for the interpretational differences between German and English in the construction with a negative marker in first conjunct and gapping in the second conjunct.

Although the argument in Jespersen (1917) and in Repp (2009) is about sentential negation marker in finite clauses, it is possible to consider that the negation marker *not* for *to*-infinitives has gone through a similar process, as *to* is a base-generated counterpart of finite tense. Infinitives in Old English were rich in inflections. Verbs in Old English, when used as nouns, had inflectional ending, *-an*. When this nominal verb was placed after *to*, which was a directional preposition, it was inflected for *-enne/-anne*. After losing a lot of inflections in the period of Middle English, the variation of nominal verbal endings was unified and became the present form: *to* with a bare verb. As mentioned above, *to* in infinitival clause is a head of TP, and in this sense, the negation marker for infinitives can be treated parallel to the sentential negation marker. Just like the placement of *not* had changed during the process from (21a) to (21f), the infinitival negation marker *not* may be in the slow process of moving away from an inflection-less item *to*, now that it has lost its original meaning of direction and that it does not have any specification of tense. Moreover, infinitival negation marker *not* itself may be in the weakening process at the same time, once it is moving away from its original position. It is in the phase of becoming a less strong element, which, in turn, may support a new negative marker that will come to exist in the future.

If this weakening has been in the process for the infinitival clause negation marker *not*, it is becoming something closer to adverbials to modify a bare verb. If this is the case in recent years, the traditional rule that specifies the placement of *not* for infinitives as a negation marker has started losing its tight grip and the infinitival negation marker *not* may follow the rules for adverbials. Then, this makes *not* less pressured in staying in front of *to*, which results in producing *to-not* infinitives more freely and more often. The existence of *never* as a VP negation adverbial can be a helper toward this change. However, the dominance of *not-to* infinitives, which is seen in Table 2 to 4, may be too powerful for *to-not* infinitives to catch up with, or it is still *to*-infinitives with the placement rule being the unchangeable standard. The cyclic change described in

Jespersen (1917) took such a long time span and it seems impossible to predict how this situation will turn out to be at this stage.

## 5. Conclusion

In this paper, I approached the phenomenon of increasing *to-not* infinitives in recent years with the idea that changing status of the elements involved in English speakers' mind may play a role in it. Although there is a standard grammatical rule to specify where to put the infinitival negation marker *not* in English, the other type of infinitives, *to-not* infinitives, has been increasing in frequency, especially since the 1990's. There has been a type of structure that is called split infinitives, and *to-not* infinitives are included among them. The purpose of producing split infinitives, at the risk of "being frowned upon," is to clarify the intention of the utterance and avoid awkward and clumsy constructions. While the frequency of split infinitives with adverbials stays in the same range, *to-not* infinitives have visibly increased its frequency in recent years. I argued that some possible cause behind this phenomenon involves two factors. One possible explanation is the existence of auxiliary-*not-not-V* constructions: the former *not* is a sentential negation marker, and the latter is a phrasal negation marker. The structure of *to*-infinitives may go through restructuring in the speakers' recognition, which results in the structure with *to* and VP rather than the original concept of the construction with *to* and an infinitival bare verb as a set. This makes it possible or easier for the speakers to put *not* as a phrasal negation marker in front of VP to negate the VP clause instead, as an infinitival negation marker. The other factor is Jespersen's Cycle about negation markers. As *to*-infinitives lack inflectional information, the Cycle may also apply to English infinitival negation marker *not*, and if this *not* has been in a weakening stage, it may have lost its clausal negator status and turned into verb supporting element, which is something closer to adverbials. Then the rule that had applied to the infinitival negation marker *not* will lose its power over the placement of *not* in infinitival clauses, and *not* can appear more freely in split infinitives, just like other adverbials.

## Notes

1. The sentences in (4) are from the entry of Split Infinitives in *Merriam-Webster Learner's Dictionary* on the Internet.
2. COCA is a corpus developed at Brigham Young University, which contains more than 560 million words of text, and is used by many researchers global wide. The data in COCA has been obtained from various sources such as over 100 different TV and radio programs, books, play and movie scripts, various genre of magazines, newspapers, and academic journals since 1990. The latest update was done in December 2017.
3. When searching the word string *not to*, there are phrases in which the word string *not to* is followed by noun phrases, such as, "not to me," "not to him," or "not to the extent that ...," and so on. These phrases are excluded from the number in the concerning tables. For example, the total frequency of *not-to* word order from 1990 to 1994 is 18695, while 888 *not-to-NP* strings are found among them.

Also, there are cases among *not-to-verb* order that have “*to not only/merely/just V but (also) V*” in general, “*to not to V*” in spoken sentences, and some other set phrases. *Not* in the first construction is not a sentential negation marker, and it is tied to *only* as part of a set phrase, and the same applies to other set phrases. The second construction can be just a slip of the tongue. Therefore, these cases are excluded from the data in Table 3.

4. COHA is the largest structured corpus of historical American English, developed by Brigham Young University. It contains over 400 million words from the 1810s to 2000s and its source varies just as those of COCA. Here again, in the Table 4, I excluded the word strings of “*not to + noun phrase*.” Also notice, as is seen from the descriptions of COCA and COHA, that their resources are not entirely identical. Therefore, the frequency output from these differs. There are missing numberings or redundant sentences in the two databases. I searched carefully, but if there are mistakes, the fault is entirely mine.
5. The remark in (6) follows the observation of the emergence of “what might be called a pro-infinitive.”
6. The brackets are mine.
7. In Huddleston and Pullum (2002), it is stated in the section where the examples in (9) are taken that the construction where an adverbial is placed between *to* and an infinitival verb “violates the prescriptive rule, however, so, one might seek to remedy that by placing the adverb to the left of *to*, [...]”. But this is ambiguous, [...]” In the following section of Current Usage, it is stated that “placement of a modifier after infinitival *to* is not uncommon in either speech or writing,” and that it is not just adverbs but some PPs and NPs that appear between *to* and an infinitival verb. With this, they conclude the section with the remarks that split infinitives can be employed for clarification or avoiding awkwardness, and that modifiers should be placed before *to* or at the end of the infinitival phrase in “careful or edited writing.”
8. This sentence is different from other examples in that *to* in this apparent *to*-infinitive belongs to a phrasal auxiliary “have to.” This sentence is included as an example of split infinitives, and other sites also include this kind of constructions. We will try and see if they are different from other *to*-infinitives in frequency.
9. Adverbials in adverbial-*to-verb* word order can be modifiers for the main verb. These are excluded from the data in Table 5.
10. For the convenience of reference, Table 5 is created on a spread sheet and pasted as pictures here. We must note here that among the search result, the frequency of the infinitive with *even* stands out. This may due to the functional difference between *even* and other adverbials that we observed in the chart: *even* is an intensifier of the action described by the infinitival verb and it does not really carry its own meaning unlike other adverbials in the table. This may play some role in the different result here.
11. Frequency adverbials, such as *always*, *usually*, or negative adverbials as seen above are rather limited in their placement in a sentence. This may anchor them to stay where they are traditionally placed.
12. Again, word strings, such as “You not not only learn...,” in spoken context returned from the search with COCA, are difficult in the judgment and excluded from the data.
13. These pronunciation examples are also from Jespersen (1917: 11).

## References

- Culicover, Peter W. (1982) *Syntax*, Academic Press, New York.
- Dahl, Östen (1979) "Typology of Sentence Negation," *Linguistics* 17, pp.79-106.
- Egawa, Taiichiro (1991) *A New Guide to English Grammar*, Kaneko-Shobo, Tokyo.
- Huddleston, Rodney and Pullum, Geoffrey K. (2002) *The Cambridge Grammar of the English Language*, Cambridge University Press, Cambridge.
- Iwamoto, Hiromichi (1998) "Yes, I Splits and Neg Heads! – The NegP Analysis Revisited,"  
 Research Reports of Kanagawa Institute of Technology Part A: Humanities and Social Science 13, pp.91-120.
- Jespersen, Otto (1917) *Negation in English and Other Languages*, Det Kgl. Danske Viedenskabernes Seleskab, Copenhagen.
- Jespersen, Otto (1938) *Growth and Structure of the English Language*, Basil-Blackwell, Oxford.
- Pollock, Jean-Yves (1989) "Verb movement, Universal Grammar, and the Structure of IP,"  
*Linguistic Inquiry* 20, pp.365-424, MIT Press.
- Quirk, Randolph, Sidney Greenbaum, Geoffrey Leech, and Jan Svartvik (1985) *A Comprehensive Grammar of English Language*, Longman, London.
- Radford, Andrew (2004) *Minimalist Syntax: Exploring the Structure of English*, Cambridge University Press, London.
- Repp, Sophie (2009) *Negation in Gapping*, Oxford University Press, Oxford.
- Wilson, Kenneth (1993) *Columbia Guide to Standard American English*, Columbia University Press, New York.

### Definition of 'Split Infinitive' Collins Dictionary

<https://www.collinsdictionary.com/dictionary/english/split-infinitive> (Retrieved September 7, 2017)

### Corpus of Contemporary American English

<https://corpus.byu.edu/coca/> (Retrieved September 27, 2018)

Corpus of Historical American English <https://corpus.byu.edu/coha/> (Retrieved September 27, 2018)

### Improve Your Writing, Faculty of Arts, University of Bristol,

[http://www.bristol.ac.uk/arts/exercises/grammar/grammar\\_tutorial/page\\_28.htm](http://www.bristol.ac.uk/arts/exercises/grammar/grammar_tutorial/page_28.htm)  
 (Retrieved September 8, 2017)

### Split Infinitives (June 20, 2016) Merriam-Webster Learner's Dictionary

<http://www.learnersdictionary.com/qa/Split-Infinitives> Retrieved September 13, 2017)

### Split Infinitives Oxford Living English Dictionaries

<https://en.oxforddictionaries.com/grammar/split-infinitives> (Retrieved September 7, 2017)