A study of the aspectual complements of 'begin' and 'start'

Xinzheng Zhao
Louisiana State University and Agricultural and Mechanical College, xzhao7@tigers.lsu.edu

Follow this and additional works at: https://digitalcommons.lsu.edu/gradschool_theses
Part of the Linguistics Commons

Recommended Citation

This Thesis is brought to you for free and open access by the Graduate School at LSU Digital Commons. It has been accepted for inclusion in LSU Master’s Theses by an authorized graduate school editor of LSU Digital Commons. For more information, please contact gradetd@lsu.edu.
A STUDY OF THE ASPECTUAL COMPLEMENTS OF ‘BEGIN’ AND ‘START’

A Thesis

Submitted to the Graduate Faculty of the
Louisiana State University and
Agricultural and Mechanical College
In partial fulfillment of the requirements of the degree of
Master of Arts

in

The Interdepartmental Program in Linguistics

By
Xinzheng Zhao
B.A., Tokyo Gakugei University, 2008
August 2010
Acknowledgements

I am obliged to Dr. Michael Hegarty, who is my major advisor, for his comments and advice. He always reached out his hands to help when I was confused and lost. But for his suggestions and guide, I would not have found my way out so quickly.

I will take this opportunity to thank Dr. Elisabeth Oliver and Dr. Mary J. Brody, too. Their suggestions and comments helped me improve my work greatly.

I will give my special thanks to my friends and classmates for their helpful advice and examples during my research.
Table of Contents

Acknowledgements .............................................................................................................. ii

Abstract ................................................................................................................................ iv

Introduction .......................................................................................................................... 1

Chapter 1 Freed’s (1978) Analysis ...................................................................................... 4
  1.1 Presupposition and Consequence ....................................................................... 4
  1.2 Event ...................................................................................................................... 5
  1.3 Aspectual Verb types ............................................................................................ 7
  1.4 Begin and Start ...................................................................................................... 10
  1.5 Keep and Continue ............................................................................................... 14
  1.6 Stop, Quit and Cease ............................................................................................ 18
    1.6.1 Stop and Quit ................................................................................................ 18
    1.6.2 Stop and Cease .............................................................................................. 22
  1.7 To V and V-ing ...................................................................................................... 25

Chapter 2 Research on the Aspectual Complements of Begin and Start ...................... 27
  2.1 The Distinction in Meaning ................................................................................. 27
  2.2 The Distinction in Frequency .............................................................................. 31

Chapter 3 Conclusion ......................................................................................................... 40

Bibliography ....................................................................................................................... 42

Appendix .............................................................................................................................. 43

Vita ......................................................................................................................................... 46
Abstract

The main purpose of this thesis is to study the aspectual complements of the aspectualizers begin and start. Aspectualizers are verbs that give aspectual readings to the sentence. I started with a summary of Freed’s (1978) analysis. In this summary, semantic differences among seven aspectualizers that take to V and V-ing complements were explained. The semantic distinction between to V and V-ing was also discussed. Following the summary, a brief research on aspectual complements was conducted. Based on Freed’s analysis, I first examined the difference in meaning and in frequency of occurrence between the to V and the V-ing complement of the two aspectualizers. My research revealed some interesting problems that Freed failed to address. These problems blur the difference between the to V and the V-ing complement of begin and start that Freed claims. Through the research, however, I failed to pinpoint the significant difference, too. More research on this issue should be done in the future.
Introduction

Complementation has received a great deal of attention. Various approaches have been used to study it and different groups of complement-taking verbs have been examined (Perlmutter, 1968, 1970 and Newmeyer, 1969a, 1969b). Complements are syntactic units used to complete a grammatical construction. The present work will be concerned with verbal or clausal complements occurring as the object of verbs. Aspectual complements are the objects of verbs used in their aspectual sense. For example, the verb *keep* is used in its aspectual sense in *John kept reading his books this morning*, but not in *John kept his books in a box*. Therefore the complement *reading his books* is an aspectual complement but not *his books*.

This thesis focuses on what Freed (1978) calls “aspectualizers”. Aspect is understood as the internal temporal structure of events, states, activities, etc. Jakobson (1957, p. 493) stated that “aspect deals with the temporal values inherent in the activity or state itself”. Freed defines aspectualizers as verbs that lend aspectual readings to the sentences that contain them. These verbs describe the temporal condition of the event, state or activity described by the complement and each of them has a particular temporal reference of its own. Freed’s inventory includes:

- begin
- resume
- cease
- start
- repeat
- finish
- continue
- stop
- end
- keep
- quit
- complete
Freed calls these verbs “aspectualizers” because sentences with these verbs bear aspectual readings which pertain to the beginning, the continuation, the repetition, etc., of an event or activity described by the verb’s complement. Aspectualizers take sentential complements, derived nominals, or primitive nouns as their objects. Freed considers that these verbs have influence on the semantic properties of their objects and that the objects/complements are the second arguments of these aspectual verbs. Sentences (1)-(3) are the examples.

(1) sentential complement

\[
\begin{align*}
\text{a. } & \quad \begin{cases} 
\text{NP} & \text{V}_{\text{asp}} \\
S_1 & \quad \text{(S}_2)_n
\end{cases} \\
& \quad \begin{cases} 
\text{NP} & \text{V}_{\text{asp}} \\
S_1 & \quad \text{(S}_2)_n
\end{cases} \\
& \quad \text{to V} \\
& \quad \text{(S}_2)_n
\end{align*}
\]

Linda started to write her second book.

\[
\begin{align*}
\text{b. } & \quad \begin{cases} 
\text{NP} & \text{V}_{\text{asp}} \\
S_1 & \quad \text{(S}_2)_n
\end{cases} \\
& \quad \begin{cases} 
\text{NP} & \text{V}_{\text{ing}} \\
S_1 & \quad \text{(S}_2)_n
\end{cases} \\
& \quad \text{X}
\end{align*}
\]

Linda started writing her second book.

(2) derived nominal

\[
\begin{align*}
\quad & \quad \begin{cases} 
\text{NP} & \text{V}_{\text{asp}} \\
S_1 & \quad \text{(V}_2)_n
\end{cases} \\
& \quad \begin{cases} 
\text{NP} & \text{V}_{\text{asp}} \\
S_1 & \quad \text{(V}_2)_n
\end{cases}
\end{align*}
\]

Bill started the conversation.
(3) primitive noun

\[
\begin{align*}
S_1 & \quad \text{NP} \quad V_{asp} \quad \text{NP}_{prim} \\
\end{align*}
\]

Barry started his new car.

(Freed (1978:2))

Of these three forms above, I will pay special attention to aspectualizers which take both \textit{to V} and \textit{V-ing} forms as their complements: \textit{begin}, \textit{start}, \textit{continue}, and \textit{cease}, as well as those which have a similar meaning: \textit{keep}, \textit{stop}, and \textit{quit}.

In Chapter 1, I will sum up the use of aspectualizers presented by Freed (1978). I will also discuss the semantic distinction between \textit{to V} and \textit{V-ing} complements. In Chapter 2, I will examine the semantic properties of the aspectual complements of \textit{begin} and \textit{start} by looking into regular texts like newspapers.
In this chapter, I will analyze seven aspectualizers with the complements of to V and V-ing complements. I will begin by explaining several terms about aspectualizers.

1.1 Presupposition and Consequence

The terms “presupposition” and “consequence” have been employed by several linguists and they provide many definitions. Keenan (1970) suggests that presuppositions are conditions which have to be met for a sentence to make sense. Karttunen (1975) refers to presuppositions as prior knowledge or background knowledge shared by the speaker and hearer. As for consequences, Keenan (1970) points out that they are what a set of sentences, or premises, logically entail. Here, I will introduce the concepts of presupposition and consequence referred to by Freed.

Sentences containing aspectualizers have predictable presuppositions and consequences. Freed defines presupposition as prior knowledge shared by speaker and hearer, as compared to what is conveyed by the speaker and learned by the hearer. In contrast, consequence is what the hearer learns after the utterance in a particular linguistic context. For instance, if the verb begin is used, both the speaker and the hearer will know that the event has not yet taken place before the beginning. This knowledge is presupposition. Only after the speaker finishes his utterance, the hearer will know what was begun, the result or consequence. In the following pages, I will compare the seven aspectualizers in terms of the semantic fact which can be obtained from the presuppositions and the consequences of the aspectualizers.
1.2 Event

Freed examines first the semantic properties of aspectualizers in terms of their effects on events. There is extensive work on events in the semantics of natural language, in both the linguistic and philosophical literature. Freed agrees with Vendler that an event indicates a change of state and, for the purpose of her analysis, she defines an event as the denotation of the complement of an aspectualizer verb used in an aspectual sense. Typically, the complement of an aspectualizer verb will indeed denote an event, although the possibility of state-denoting complements will be considered in Chapter 2 below. Recall sentences (1)-(3) from the Introduction, where the italicized phrases are events.

(1) a. Linda started to write her second book.
   b. Linda started writing her second book.

(2) Bill started the conversation.

(3) Barry started his new car.

The noun phrase in (3) as opposed to that in (2) is not an event because the verb start in (3) is not used in the aspectual sense. The same thing can happen to other verbs, for example the verb keep. Crying in (4) denotes an event, while the book in (5) does not because the verb keep in (5) is not used as an aspectualizer.

(4) The baby kept crying.

(5) You can keep the book as long as you like.

(Freed (1978: 26))
According to Freed’s analysis of aspectualizers, an event is segmental. An event has three time segments: the onset, the nucleus, and the coda. But not all events possess all of these segments. These three time segments will be explained in the paragraphs that follow.

The onset of an event is a temporal segment which takes place before the initial temporal part of the nucleus of that event. It is a preparatory stage necessary before the core (nucleus activity) of the event (or action) is actually initiated. The example given by Freed is if someone picks up a can opener, places it close to a can, but then puts the can opener down to do something else, this person has gone through the onset of “opening a can”. There are some possible cases in which only the onset of an event is referred to. (An example will be discussed in section 2.4) The onset varies from event to event, but the onset of a mental event or a planned event is less clear. For example, with a planned event, it is hard to tell whether the plan itself or an early preparatory stage of the actual event is the onset. In these cases, it is difficult to distinguish the onset from the initial period of the nucleus.

The nucleus has three stages: initial, middle, and final. During the nucleus, the event is in progress. If an event is interrupted after the initial stage of the nucleus, then it follows that an activity is initiated but there is no reference to duration and completion. After the final stage of the nucleus, the nucleus or the entire event is understood as being over.

Those events which are not considered completed even after the end of the nucleus have a segment defined as ‘coda’. A coda may not be always mentioned for the completion of an event. A terminating feature of the event may be used to complete the event, instead of a coda. Sentences (6)-(8) below are distinguished by referring to a final segment of the nucleus, a final segment plus mention of a terminal feature, and to the coda, respectively.
(6) Tom and Lynn ended their conversation.
   (Completeness of the conversation is not indicated.)
(7) Tom and Lynn ended their conversation with an argument.
   (The argument is the final feature of the event.)
(8) Tom and Lynn finished their conversation.
   (The conversation was completed.)

(Freed (1978: 35))

1.3 Aspectual Verb-types

Each aspectualizer is followed by particular aspectual verb-types. Vendler (1967) divides aspectual verbs into four types: ACTIVITIES, ACCOMPLISHMENTS, ACHIEVEMENTS, STATES, and Freed (1978) adds one more type to Vendler’s division—SERIES. In this section, these five types will be explained one by one.

ACTIVITY is an aspectual verb-type “which names a homogeneous ongoing event or process which is not temporally bound” (p.49) or sometimes is temporally bound only on the left-hand side. It names an event which contains the nucleus as its temporal segment. Some activities also have the onset. If V is an activity, NP be-prog VP is true during the nucleus. For example, snow and run are activity verbs. Snowing names a homogeneous ongoing event, so It is snowing is true throughout the period during which this can be said to be taking place. Therefore, snowing is an activity verb which contains only the nucleus. Running, on the other hand, is temporally bound on only the left-hand side. So running is an activity verb which names an event which contains the onset and the nucleus. Phil is running is true only during the nucleus of the event and not during the onset. That is, “Phil is running” is not true during the time when “Phil is starting to run” is true.

ACCOMPLISHMENT is an aspectual verb-type “which names an event that is temporally bound on the left-and-right hand sides and which has a definite
temporal ending.” (p.50) It has the onset, the nucleus, and the coda. If $V$ is an accomplishment, $NP \ be_\text{prog} \ VP$ is true only during the nucleus and $NP \ V\text{-ed} \ NP$ is true after the coda. For example, *write a dissertation* is an accomplishment verb phrase whose three time segments are presented in (9).

(9) a. onset
Alice started to write her dissertation.

b. nucleus
Alice is writing her dissertation.
Alice continued writing her dissertation.

c. coda
Alice finished writing her dissertation.

(Freed (1978: 50))

*Alice is writing a dissertation* is true only during the nucleus and *Alice wrote her dissertation* is true only after the coda.

STATE is an aspectual verb-type that “does not have an internal temporal structure.” (p.50) It is not an event. An event is defined as a change of state. States usually do not co-occur with aspectualizers. For example, *has curly hair* is a state. So sentences (10a)-(10c) are all anomalous.

(10) a. ?Pat started having curly hair.

b. *Pat continued having curly hair.

c. *Pat finished having curly hair.

(Freed (1978: 51))
However, Freed mentioned that certain states co-occur with specific aspectualizers in to Vform, but not in V-ing form. Sentences (11a) and (11b) are the examples.

(11) a. She started to be a woman.  

(Freed (1978:151))

b. ?She started being awoman.  

(Freed (1978:151))

ACHIEVEMENT is an aspectual verb-type “which names an event but an event which is not temporally segmentable” (p.51) and has no duration. It names events which cannot be segmented into an onset, a nucleus, and a coda; instead it names events which show transition of state. Like states, most achievements do not co-occur with aspectualizers. If V is an achievement, we can say It took ~ minutes to V, but it does not have as the consequence N V-ed for ~ minutes. For example, find keys is an achievement predicate. *Barbara found her keys for ten minutes. is not the consequence of It took Barbara ten minutes to find her keys.

The last verb-type SERIES is additional to these four types. It is an aspectual verb type “which has the temporal characteristics of an activity, an accomplishment, or an achievement (or some states), which is considered to occur repeatedly or habitually.” (p.53) So sentences which contain series have as a consequence NP V-ed repeatedly. For example, smoking is an activity verb. However, the consequence of the sentence, Ellen kept smoking despite the doctor’s orders is Ellen smoked repeatedly despite the doctor’s orders. Therefore, the verb smoking is there used as a series.

These verb-types are essential in explaining the use of aspectualizers from the next section on.
1.4 Begin and Start

In this section, I will compare the seven aspectualizers mentioned above. To begin with, let us take a closer look at aspectualizers which represent ‘initiation’ of events, begin and start. Both begin and start take sentential complements. They both take to V and V-ing complements as well. The examples are (12a)-(13b).

(12) a. Barbara began to study for her exams last week.
    b. Barbara began studying for her exams last week.
(13) a. Barbara started to study for her exams last week.
    b. Barbara started studying for her exams last week.

(Freed (1978: 69))

I begin by describing the semantic differences between the sentences with begin and start in terms of presuppositions and consequences. Sentences (12a)-(13b) presuppose that “the event named in the complement of the sentence was not underway prior to the ‘beginning’ or ‘starting’ of the event.” (p. 70) That is, the presupposition of (12a)-(13b) is (14).

(14) Barbara was not studying for her exams before last week.

(Freed (1978: 70))

However, their consequences are not identical. In (12a) and (12b) with begin, the nucleus or the characteristic activity of the event named in the complement has been initiated. So the consequence is (15) and/or (16).
(15) Barbara was studying for her exams last week.

(16) Barbara did some studying for her exams last week.

(Freed (1978: 70))

In the sentences with *start*, the situation is slightly different. A consequence of (13b) is (15) and/or (16). About (13a), however, we can have another reading.

(17) Barbara started to study for her exams last week but then she didn’t do any studying.

(Freed (1978: 71))

In (17), not the nucleus activity of the event named in the complement but only the onset of this event has taken place. A sentence with *begin to V* cannot have the same reading. The difference between *begin* and *start* is that *begin* refers to the nucleus activity of the event, while *start* refers to the onset of the event. So it is plausible to suggest that ‘starting’ is prior to ‘beginning’. This may be obvious from the acceptability of the sentences (18a) and (18b).

(18) a. Carter started to speak but was interrupted before she began.

   b. ?Carter began to speak but was interrupted before she started.

(Freed (1978: 72))

But with the *Ving* form, it may not matter whether *begin* or *start* is prior to the other.
Among the aspectual verb-types listed in Section 2.4, *begin* and *start* occur with activities, accomplishments, achievements, series and some states as shown in (19a)-(19e)

(19)

a. Activity
   
   The children \(\text{began}\) dancing around the room imitating animals.  
   \(\text{started}\)

b. Accomplishment
   
   Bill \(\text{began}\) painting the room last night.  
   \(\text{started}\)

c. Achievement
   
   They finally \(\text{began}\) to reach their destination after 14 hours of driving.  
   \(\text{started}\)

d. Series
   
   The administration \(\text{began}\) identifying pictures for the police.  
   \(\text{started}\)

e. State
   
   She \(\text{began}\) to hate him for his selfishness  
   \(\text{started}\)

(Freed (1978: 83))
However, not all achievements and states are acceptable, and possible states can occur only after to V complements. In this respect begin and start are treated in the same way.

It has been already shown above that start to V can have a different reading than begin to V, begin V-ing, and start V-ing. Furthermore, there is a significant difference between begin to V and begin V-ing (start V-ing). This may be true as far as the difference between to V and V-ing forms of complement is concerned. It will become clear by comparing (20a) with (20b) and (20c).

(20) a. Barry began to yawn.
   b. Barry began yawning.
   c. Barry started yawning.

(Freed (1978: 73))

According to what was said in section 2.4, yawn is either an activity or an accomplishment verb. (20a)-(20c) presuppose that yawning was not underway prior to beginning. That is, these sentences have (21) as presupposition.

(21) Barry was not yawning before.

(Freed (1978:73))

But when their consequences are considered, a difference will appear. (20a) with to V complement has as a consequence (22a), which says nothing about duration of yawning. On the other hand, (20b) and (20c) with V-ing form have (22b) as their common consequence.
(22) a. Barry yawned.
    
    b. Barry was yawnng.

(Freed (1978: 73))

(22a) implies that Barry yawned at least once, whereas (22b) implies Barry yawned repeatedly. That is, the distinction between (20a) and (20b,c) is “between at least one initiation of the characteristic activity of the event named by the verb yawn and an extended occurrence of the nucleus of the event.” (p.74)

This shows that begin and start with a to V complement can carry a repetitive reading, while these verbs followed by a V-ing complement have a durative reading. “The difference is between a SERIES of single events (of the same type) occurring at DIFFERENT TIMES and a SINGLE EVENT occurring continuously or for a prolonged duration at a GIVEN TIME.” (p.74)

The intermittent occurrence can be implied in a generic reading, whereas the extended occurrence is suggested in a durative reading.

Despite all the explanation above, the difference between to V and V-ing forms is subtle. Therefore it is possible that the difference does not matter in some cases.

1.5 Keep and Continue

Let us go on to aspectualizers which mean ‘continuation’, keep and continue. Both refer to the nucleus of the event and they are sometimes called imperfectivizers because they have an imperfective influence on the sentence and the verbs of the complements. The meanings of keep and continue seem to be alike, but native speakers of English do not think that they are synonymous. First, I will describe the difference between keep and continue.
Both *keep* and *continue* take the *V-ing* form as their complement and *continue* takes a *to V* complement as well. This is shown in sentences (23a)-(24b).

(23) a. Carol kept talking even though we asked her to be quiet.
    b. *Carol kept to talk even though we asked her to be quiet.
(24) a. Carol continued talking even though we asked her to be quiet.
    b. Carol continued to talk even though we asked her to be quiet.

(Freed (1978: 89))

According to the classification stated in section 2.4, the verb *talk* is an activity. Both *keep* and *continue* have durative readings and they may share the same consequences and presuppositions. The consequences and the presuppositions of both (23a) and (24a) are (25) and (26) respectively.

(25) Carol talked for an unspecified amount of time.
    (Freed (1978: 90))

(26) Carol had begun talking earlier (before we asked her to be quiet).
    (Freed (1978: 90))

But there is a major difference in continuity. (23a) seems to assert that Carol kept talking continuously, from the time we asked her to be quiet, to the utterance time. But (24a,b) are different: they allow that Carol may have quit talking when we asked her to stop, and then resumed shortly afterwards.

*Keep* and *continue* are similar in that they both take an activity as their complements but not an achievement unless it is a series. In other words, any
achievement occurring with *keep* or *continue* is automatically understood as a series. This is shown in sentence (27a) and (27b).

(27) a. Someone kept slamming the door all night.
   b. Someone continued slamming the door all night.
   (Freed (1978: 90))

*Slam the door* is an achievement, but in (27a) and (27b) it is interpreted as a series.

However, *keep* and *continue* are different in that *keep* usually does not take an accomplishment as its complement, while *continue* does. Compare sentences (28) and (29).

(28) a. Linda kept reviewing articles about Goytisolo.
   b. *Linda kept reviewing the article about Goytisolo.

(29) a. Linda continued reviewing articles about Goytisolo.
   b. Linda continued reviewing the article about Goytisolo.
   (Freed (1978: 91))

In (28a) and (29a), *reviewing articles* is a series, while in (28b) and (29b), *reviewing the article* is an accomplishment. An accomplishment refers to a single event, so *keep* can take it as its complement only when it can be interpreted as a series.

In short, *keep* and *continue* differ in that *continue* does not require continuity of the activity or series, while *keep* does, and the former can take an accomplishment as its complement but the latter cannot unless the accomplishment is interpreted as a series.
One more great difference between *keep* and *continue* is that *keep* takes only a *V-ing* complement but *continue* takes *V-ing* and *to V* complements. Of course there exists a difference between the two types of complement. It will be described in the following passages.

Both *continue V-ing* and *continue to V* presuppose that the event named in the complement was initiated earlier. However, the form of the presupposition is slightly different. Recall sentence (26), which is the presupposition of (24a). It is renumbered as (30a) here. (30b) is added as a presupposition of (24b).

(30) a. Carol had begun talking earlier (before we asked her to be quiet).
   b. Carol had begun to talk earlier (before we asked her to be quiet).

(Freed (1978: 92))

As mentioned in section 2.5, the difference between *begin V-ing* and *begin to V* is the durative reading versus the repetitive reading of the event. This difference carries over to the presuppositions shown in (30a) and (30b). Now recall sentence (25), which is the consequence of (24a). It is renumbered as (31a) here. The consequence of (24b) seems to be (31b) below.

(31) a. Carol talked for an unspecified amount of time.
   b. Carol talked repeatedly (even though we asked her to be quiet).

(Freed (1978: 93))

Freed mentioned that in sentence (24a), Carol was asked at a given time to be quiet, but ignored this and continued the activity (of talking) that was in progress at the time of the request. On the other hand, she continues, in sentence (24b) the ‘talking’
is not necessarily understood as a single ongoing activity but rather as intermittent or repeated talking. The distinction seems to correspond with one between begin/start V-ing and begin/start to V. V-ing implies a durative reading and to V a repetitive reading.

She further suggests that in spite of the awkwardness of the frame NP be-prog V-ing X, in general, the particular instance of this frame given by NP be-prog continuing V-ing X, such as She is continuing working is allowed. Because continue consistently refers to the nucleus of the event, this is not surprising.

1.6 Stop, Quit and Cease

The last set of aspectualizers consists of those which describe ‘cessation’ or ‘interruption’: stop, quit and cease. All of the three verbs take a V-ing form as their complement. Only cease also takes a to V complement. Example sentences are (32)-(34).

(32) As the state’s scare tactics became progressively more outrageous, we simply stopped worrying about being fired.

(33) As the state’s scare tactics became progressively more outrageous, we simply quit worrying about being fired.

(34) a. As the state’s scare tactics became progressively more outrageous, we simply ceased worrying about being fired.

b. As the state’s scare tactics became progressively more outrageous, we simply ceased to worry about being fired.

(Freed (1978: 109))

1.6.1 Stop and Quit

First, let us compare stop and quit, considering sentences (32) and (33) with regard to associated presuppositions and consequences. Both presuppose that the
event named in the complement was in progress prior to the ‘stopping’ or ‘quitting’. Thus the presupposition shared by (32) and (33) is (35) below.

(35) We were worrying about being fired before (or until) the state’s scare tactics became outrageous.

(Freed (1978: 110))

And they have as a consequence sentence (36) or (37).

(36) We worried about being fired (for a period of time).

(37) We did some worrying about being fired.

(Freed (1978: 110))

In addition, they have as a consequence sentence (38) as well.

(38) We are no longer worrying about being fired.

(Freed (1978: 110))

As for the presupposition and the consequence, stop and quit seem to be identical. But there exist other semantic differences between the two aspectualizers. The sentence with quit implies more complete or final cessation of the event named in the complement, and as such is awkward if temporally qualified. The sentence with stop has no such restriction and invites a reading of a possible resumption of the event in question.

Furthermore, stop and quit occur with different aspectual verb-types. Stop operates on an activity, whereas quit cannot take an activity unless it is interpreted
as a series. Consider sentences (39) and (40) where the complement verb is a series as compared to sentences (41) and (42) with an activity as the complement verb.

(39) Chantal stopped eating peanut butter when she went back to France.
(40) Chantal quit eating peanut butter when she went back to France.
(41) Chantal stopped eating when the phone rang.
(42) ?Chantal quit eating when the phone rang.

(Eating peanut butter in (39) and (40) is interpreted as a series, and in (41) and (42), an activity. Quit lends a reading of a permanent termination of the event named in the complement. Therefore, sentence (42) in which quit operates on an activity is awkward.

In addition, neither stop nor quit can occur with achievements unless they become series. Achievement terms name events which have no duration and cannot be said to have occurred until they are “achieved”. Therefore, it would be strange to refer to stopping or quitting an event that could not be presupposed as in process in the first place. Examples are (43a)-(44b)

(43) a. *His students stopped realizing what he meant.
   b. * His students quit realizing what he meant.
(44) a. After 10 years as an informer, the man stopped identifying pictures for the FBI.
   b. After 10 years as an informer, the man quit identifying pictures for the FBI.

(Freed (1978: 113))

(Freed (1978: 115))
Sentences (43a) and (43b) with the achievement verb *realize* are unacceptable. However, in sentence (44a) and (44b), the phrase *identifying pictures* is interpreted as a series, and thus it is quite comfortable between *stop* and *quit*.

There is one more difference between *stop* and *quit*. It is related to the nature of intentionality of *quit*. Compare sentences (45a) and (45b).

(45) a. *The sun quit shining.*
    b. The sun stopped shining.

    (Freed (1978: 114))

*Stop* can occur with both animate and inanimate subjects, but *quit* can occur only with animate subjects. Besides, *quit* awkwardly occurs with series if the sentence lacks volition on the part of the subject, while *stop* can comfortably occur in that case.

(46) a. *As Chou’s health deteriorated, he quit recognizing people.*
    b. As Chou’s health deteriorated, he stopped recognizing people.

    (Freed (1978: 115))

We cannot ‘recognize’ things voluntarily or intentionally. If the event involves volition, it works with *quit*, as shown in (47).

(47) As Chou’s health deteriorated, he quit visiting people.

    (Freed (1978: 115))
Based on the information that *quit* needs both animate subjects and voluntary events, we can conclude that *quit* includes a feature of intentionality as one of its semantic properties. *Stop*, on the other hand, does not have such a restriction.

It is interesting that *stop* can occur occasionally in the frame *NP be*_*prog* *V*asp *Ving X*. But the usage is more restricted than *continue*. It can appear in special contexts or fixed expressions as in *He is stopping smoking*.

### 1.6.2 *Stop and Cease*

Let us go on to check the difference between *stop* and *cease*. The greatest difference is that *stop* takes the *V*ing form as its complement, while *cease* can take the *to V* form as well. *Cease* presupposes that the event named in the complement had been occurring prior to the ceasing. The consequence of the sentence with *cease* is also the same as that of *stop*. Therefore, the presupposition of *cease* is (35), and the consequences are (36), (37), and (38). According to the comparison above, it seems that *cease* resembles *stop*. However, it appears to be different from *stop* in the same way as *quit*, that is, “the cessation of the complement event is definitive.”

(p.121) Compare sentences (48a) and (48b).

(48) a. *We ceased discussing the case until some new information could be obtained.*

   b. *We stopped discussing the case until some new information could be obtained.*

   (Freed (1978: 121))

We can stop something for a while and then resume it, but it is not natural that we cease something for a stretch of time and then resume it. This fact will also be
helpful in explaining why *cease* can occur with state verbs more often than other aspectualizers. It is because states of existence are not supposed to be resumed.

The difference between *cease V-ing* and *cease to V* is considered in a similar way as *begin, start* and *continue*. The *to V* form creates a repetitive or generic reading and the *V-ing* form carries a durative reading. However, this is not supposed to be a significant difference, as progressive can also carry generic reading. For example, in *John kept drinking alcohol even after his doctor ordered him not to*, the progressive form makes the sentence generic. When the complement verb is an activity, a punctual achievement, or an accomplishment in *V-ing* form, it has an iterative reading. In such cases, it seems similar to the *to V* form. The difference is that the *V-ing* form describes a series of events within one period of time, while the *to V* form describes a series of events occurring at different periods. This is true in the case of *cease*.

A sentence with *cease* presupposes prior occurrence. Thus, *V-ing* and *to V* complements can be compared in terms of presupposition. As for the *V-ing* form, “the event in question was occurring at the time, or up until the time of the cessation of the event.” (p. 123). With regard to *to V* complement, on the other hand, the named event “has been occurring off and on for a general and undetermined period of time.” (p.123) Compare sentences (49a) and (49b) below.

(49) a. Lacey ceased crying when she heard her parents come in the door.

b. ?Lacy ceased to cry when she heard her parents come in the door.

(Freed (1978: 123))
From sentence (49a), it follows that *Lacey was crying up until her parents came in the door*. So the associated sentence (49b) with *to cry* is strange. However, the sentence (49c) with a different time adverbial is acceptable.

(49) c. Lacey ceased to cry whenever she heard her parents come in the door.

(Freed (1978: 123))

Similarly, when the presupposition covers a wider time span, the *to V* form is quite acceptable.

(50) When his brothers were finally married and secure with their careers, etc., the difference between them ceased to matter.

(Freed (1978: 123))

In such a sentence as (50), “the *V-ing* form is less natural, though perhaps not ruled out.” (p.123)

The consequences are also different. With the *to V* form, the associated consequence surrounds a longer period of time and suggests that the event in question does not occur for some entire period. On the other hand, where the *V-ing* form occurs, it is only the specific event occurring at that time. So it is not implied that the same events will not take place in the future. Accordingly, the consequences for (49a) and (50) are (51) and (52) respectively.

(51) Lacy is not crying anymore because her parents came home.

(Freed (1978: 123))
(52) The differences between the brothers do not matter anymore.

(Freed (1978: 124))

There are other cases where *cease to V* is acceptable. As mentioned above, when a state occurs with *cease*, the *to V* complement is used, similar to the case of *begin*, *start* and *continue*. Also, when an adverb like *never* occurs with *cease*, *to V* form is possible.

The last suggestion of the distinction between *cease to V* and *cease V-ing* is length of the period.

(53) Barbara resolved that for the rest of the evening, she would cease

\[ \text{thinking} \]

about her exams

\[ \text{? to think} \]

(54) Barbara resolved that for the rest of her life, she would cease to

\[ \text{think} \]

about the horror that she had endured that week.

(Freed (1978: 124))

As presented in (53), the shorter the period, the more likely it is for the V-ing form to be taken. The longer the period, the better it is for the to V form as shown in (54).

1.7 *To V* and *V-ing*

As stated in the previous sections, only *start*, *begin*, *continue*, and *cease* can occur with both *to V* and *V-ing* forms. In general, the *to V* form creates a repetitive or generic reading which suggests “a REPETITION (or a series) of the event in question occurring at DIFFERENT MOMENTS throughout an unspecified stretch of time. In all cases the temporal nature of these is intermittent.” (p. 152)
other hand, the *V-ing* form carries a durative reading that refers to “the unspecified duration of a SINGLE EVENT” (p.152) occurring at the time.

Since the *to* *V* form refers to a series of event stretching into the past and future, it can refer to the future occurrence of the event. This is true of verbs like *remember* in *remember to* *V*, as opposed to *remember* *V-ing*. The verbs which only have a future reading can take only *to V* forms. For instance, *want*, *hope* and so on.

While *begin*, *start*, *continue* and *cease* can occur with *to V* forms, why can't *keep*, *stop*, and *quit* do so? The answer to this question has not been found yet.
Chapter 2
Research on the Aspectual Complements of Begin and Start

According to the analysis by Freed summarized in the previous chapters, there actually appear to be some distinctions between to V and V-ing complements. I first carried out some research concerning the distinctions by checking newspapers, magazines and a free online 400-million word corpus. In this chapter I will focus on the verbs begin and start and examine the difference in meaning and in frequency between to V and V-ing complements.

2.1 The Distinction in meaning

As already stated, the difference between to V and V-ing is that the former carries a generic or a serial reading, while the latter has a durative reading. Therefore, the to V form names a series of single events occurring at different times, so the intermittent occurrence is stressed. On the contrary, the V-ing form names a single event occurring continuously or for a prolonged duration at a given time, so the form suggests extended occurrence.

I did research about begin (began, begun) to V, begin (began, begun) V-ing, start (started, started) to V, and start (started, started) V-ing in terms of the above-mentioned distinctions, and looked into the differences. Four kinds of examples which show the application of Freed’s analysis are listed in the following passages.

First of all, the begin to V forms focus only on the initiation of the action and imply nothing about duration at a given time.

(55) McMillan first began to read at 16, during a job shelving books at the local library.

(The Guardian, May 26, 2001)
In (55), it does not follow that McMillan had been reading for some time. And (56) describes the external appearance of the stairs. Neither of them mentions what happened after the initiation of the nucleus activity. In (55) McMillan might or might not continue reading, and in (56) the stairs might continue ascending, or might just stop ascending further.

Second, some of the sentences with to V imply the intermittence of the action.

(57) The assembly clapped wildly: Harry started to clap, too, but stopped quickly at the sight of Nick’s face.

(Harry Potter and the Chamber of Secrets, p. 135)

(58) She began to explain, “There was this poet, in Italy…” He interrupted, “please don’t judge all poets.”

(The Brown Corpus N19-1680)

(59) Once or twice he began to say something, paused and then branched out to another subject which had no connection with the one before.

(British National Corpus)

In sentences (57)-(59), the events named in the complement were suspended.

Third, as stated in section 2.5, start to V can have a reading that only the onset of the event named in the complement has taken place and the characteristic activity of the event was not initiated. Sentences (60) and (61) are examples.
(60) He started to reach for his gun, but apparently thought better of it.

(The Brown Corpus BN12-0670)

(61) He started to get up but his knees gave under him.

(Cobuild on CD-Rom)

In sentence (60), he thought better of reaching for his gun, so he did not do it. And it follows from sentence (61) that he was not able to get up. In a typical use of this sentence, he prepared to get up from a chair by placing his feet on the ground, but then when he tried to transfer his weight to his legs, they gave under him. So only the onset not the nucleus of getting up was performed. No sentences with begin have the same reading.

Finally, some sentences with V-ing complements allude to duration at a given time as in (62) and (63).

(62) Mary Jane took the page from him and began reading it, moving her lips with the words.

(The Brown Corpus N19-1600)

(63) Big Hans began pouring whisky in the kid's mouth but his mouth filled without any getting down his throat and in a second it was dripping from his chin.

(The Brown Corpus K24-1460)

The expressions moving her lips with the words and in a second in (62) and (63) respectively imply the continuation of the characteristic activities of the reading and the pouring.
However, there exist cases in which the distinctive features between the to V form and the Ving form do not apply. First, some Ving forms allow the intermittence of the event. (64) and (65) are examples.

(64) When she began explaining how she rediscovers past lives, she was cut off by Esperide Ananas (Butterfly Pineapple)...


(65) Then Aibo began walking across the room, stopping every now and then to survey its surroundings.

(SCIENTIFIC AMERICAN, January 2001)

Furthermore, some to V forms imply a continuous action at a given time such as in (66).

(66) With great difficulty John clambered to his feet and started to run, sweat pouring down his face.

(The Brown Corpus K10-1730)

The verb run here is a left-side bound activity verb, and from the context we know that the activity happened at a given time, which is the case, according to Freed, for complements with a durative reading. On top of that, the adjoined adverbial phrase sweat pouring down his face implies that the sweating and the running happened simultaneously. All these clues indicate that it is more reasonable to interpret the complement to run as one with a durative reading.

As already mentioned in Chapter 1, the difference between the to V and the Ving forms is subtle. So there are cases or contexts where the difference between
these does not matter. In fact, in many sentences I read, there are no clear
distinctions between begin/start to V and begin/start V-ing.

2.2 The Distinction in Frequency

There is another fact in the use of begin/start to V and begin/start V-ing. I
narrowed down complement verbs employed by Freed to eight: rain, walk, write,
read, come, arrive, believe, and love. The number of occurrences of to V and V-ing
forms varies from verb to verb. Table 1 and table 2 (see Appendix pp. 43-44)
represent which form, to V or V-ing, appears more frequently after the verbs begin
and start. The verb type name in the parentheses under the sample verbs shows the
sense in which the verb is used. However, some verbs can be multi-categorized. For
example, the verb walk, which is an activity verb on its own, can be used as an
accomplishment verb in phrase walk a mile. The accomplishment verb write, for
another example, just like run, is an activity verb by itself. Typical examples such
as those that follow were picked out after all the data examples were examined one
by one.

It is hard to conclude from the data shown in the tables which form is
predominant as frequency varies from verb to verb. Therefore no difference between
the two kinds of complement in terms of frequency was found.

The data in the tables show that the state verbs believe and love actually
occur in V-ing form, though according to Chapter1, state verbs occur only in to V
form.

As for begun and started (p.p.), the verb complement of them is prone to take
the to V form.

As stated in Chapter1, only continue and stop can occur in the frame NP be-
prog Vasp V-ing X. This predicts that begin and start should never or rarely show up
in this form. The prediction is verified by my research work.
This brief research, however, revealed some problems of more interest. According to Freed’s classification of verbs, achievement verbs, such as notice, realize, see etc., name instantaneous events which cannot be segmented into onset, nucleus and coda. For example, It is awkward to say *John began recognizing his old friend, *John continued recognizing his old friend, or *John finished recognizing his old friend. In some cases, it seems to be possible to say that John takes some time to recognize his old friend. For example, if John has not met his old friend for thirty years and one day he heard someone call his name in the street, he might not be able to recognize the friend immediately but after a few minutes he might remember his name and who the old friend was. In this special case, the recognizing event seemingly has as its onset the short period of time before John remembers who the friend was, and thus the event is segmentable. However, this explanation is wrong because what John did in the several minutes that led up to retrieval of his memory about his friend is not the onset of the event but the preparatory stage for the event to happen. Thus, we can say It took a few minutes for John to recognize his old friend but we cannot say *John recognized his friend for a few minutes, because the verb recognize marks a sharp change that is extremely hard, if not impossible, to sub-divide. However, Freed also noticed that some achievement verbs, like discover and freeze, do occur with aspectualizers in such sentences as I started to discover the answer this morning and The pond began to freeze last night. She explains that discovering and freezing here are related to an activity, which means the events are achieved after a process over a certain period of time, just like accomplishments, in some sense, instead of a sudden transition. Freed then argues that if an achievement verb phrase is used as a series can occur as complements to aspectualizers because the whole series, as opposed to a single event, possesses the onset. For example, the verb phrase lose one’s glasses in Gerry kept losing his
glasses is a series. In this case, the aspectualizer is operating on a verb which names the entire series of events and not on a verb which names a single instance of that event. When considered as a whole, the series has an onset and it can occur with start as in *Gerry started losing his glasses.*

As far as Freed’s series idea is concerned, Dowty (1978) claims that not only with plural nouns but also with mass nouns when achievement verbs occur, they bear the properties of activity verbs. He gives the following examples.

(67) John discovered \(\{\text{fleas on his dog} \quad \text{for 6 weeks.}\) \{\text{crabgrass in his yard}\}

(68) John met interesting people on the beach all summer.

(69) Water leaked through John’s ceiling for six months.

(Dowty (1978: 63))

It is also quite easy to understand (67) and (68) with Freed’s series idea because the plural nouns phrases *fleas on his dog, crabgrass in his yard* and *interesting people* denote series. However, we can see in (69) that a mass noun can also give rise to a series of events. In that case, water just leaked repeatedly for six months. Now we can conclude from Freed and Dowty’s analyses that achievement verbs can be aspectual complements when they co-occur with plural nouns and mass nouns. Therefore we can change (69) to (70).

(70) Water began to leak through John’s ceiling six months ago.
Let’s return to Freed’s analysis. She pointed out that verbs like *freeze, fade, fall asleep*, etc., behave more like activity verbs than achievement verbs and they can occur with a limited number of aspectualizers like *start* and *begin*. These verbs are labeled as “gradual” verbs by Dillon (1977). Dillon suggests that there is another kind of achievement verb as compared to “gradual” verb, which he labels as “sharp” verbs such as *see, hear, notice*, etc.. Freed claims that if an achievement verb is related to a state, which is referred to as a “sharp” verb by Dillon, then it cannot occur with aspectualizers. She took the verb *lose* as an example. *Pat lost his umbrella* is related to the state named in *Pat has/had an umbrella*. Accordingly, *Pat started to lose his umbrella* does not occur.

However, Freed contradicted herself here. If Gerry can lose his glasses repeatedly, as she mentioned above, then why can’t Pat lose his umbrella repeatedly? In other words, *Gerry lost his glasses* can be related to a state just in the same way as *Pat lost his umbrella* is. Then why is *Gerry started losing his glasses* possible but not *Pat started to lose his umbrella*? Pat can certainly lose his umbrella, replace it, and then lose that umbrella and replace it, and so on, in a series. If this is the case, *Pat started to lose his umbrella* is surely allowed. In fact, it is the possessives in the two sentences that permit the interpretation that a set of things performing the same function can be possessed in a series, one after the other.

Thus we have *Pat was always losing his train ticket when we traveled in Japan*. So I hypothesize that “sharp” verbs can occur with the aspectualizers *start* and *begin*. I randomly picked out five state-related “sharp” verbs: *lose, see, notice, realize* and *forget* and checked their behavior as aspectual complements. Table 3 (see Appendix p. 45) and the following examples show the details.
In addition to plural nouns, mass nouns in the data, there are other cases in which “sharp” achievement verbs can be the aspectual complements of *begin* and *start*. I just picked out a few of the examples as shown in the following list.

I. ...Laney began to lose track of what day it was

II. By about 1990 I had grown so alienated from art that I began to lose the ability to make my work anymore.

III. As they talked quietly in his room, she started to see the man she used to know.

IV. When they were entering the gulf they started seeing the blue whale.

V. Brenda started noticing a change in the first week.

VI. Belinsky began realizing that his future was no longer promising.

From the examples above we see that “sharp” verbs paired with accountable singular nouns can be complement to aspectualizers *begin* and *start*. Let us take IV and V as examples. In IV, the visual of the single blue whale came to each person one by one as they were entering the gulf. So the plural pronoun *they* created a series context. In V, Brenda might notice a change every day or repeatedly at another frequency in the first week. So the prepositional phrase *in the first week* provides the context for a series.

However, when an event is a pure achievement, it cannot be the complement of *begin* and *start*. For instance, we cannot say *Joe started to lose his favorite glasses this morning* because *his favorite glasses* denotes a particular a pair of
glasses and *this morning* denotes he lost his glasses just one time. In this case, the series reading is blocked.

Now we know that a “sharp” achievement predicate, whether state-related or not, can be aspectual complements to aspectualizers *begin* and *start* only when something in the sentence or the context generates a series reading.

Another problem my research revealed is the one about the role of STATE verbs within the complement. Freed (1978: 51) claims that although certain states occur with some aspectualizers in their to V form, they never occur as a V-ing complement, such as *The vase started sitting on the shelf*. Newmeyer (1969a, 71) also insists that *begin* and *start* can occur only with the continuing activity verbs, “which denote a non-instantaneous non-perceptual activity over which the subject has conscious control. In this class are verbs like *eat, cook, read, write, swim, dance, act, study, drill, sing, and play*. He simply denies the possibility of occurrence of STATE verbs as complement of the aspectualizers. Taylor explains (1977) why stative verbs do not occur in the present progressive tense. He mentions that statives are true at moments and non-statives are only true at intervals, whereas the function of the progressive is to indicate that a certain moment falls within an interval at which the verb is true, though the verb is not true of that moment itself. However, the research I did showed that stative verbs do occur in their V-ing form as aspectual complements, at least, of *begin* and *start*. How can we possibly account for this phenomenon? I would like to address this problem by introducing Dowty’s (1978) observation and leaving it for later discussion.

Dowty (1978) finds that the progressive is acceptable with certain stative verbs and exemplifies them as follows.
What Dowty observed is a little different from what this paper deals with. The verbs mentioned above are statives because the subjects are inanimate ones lacking agency. If the subjects are the ones of agency, the verbs will be treated as activity verbs according to Freed. But these verbs are statives in these contexts and they are in present progressive forms. Dowty explains that all the verbs are used to denote positions of the human body. When predicated of humans, they are typically volitionally controlled. Thus their use with inanimate subjects is a metaphorical derivative of their original use. This seems to be true. Some adjectives and nominals which obviously express state can occur with progressive copular verbs when they are used to show “volition” or “intention” of the subject, as shown in the following examples.

(72) a. John is being polite when his teacher is present.

b. Max was being a hero that day before the girl he liked.

c. Mary is being ignorant whenever she is asked about the truth of the murder.

Now we might hypothesize that progressive stative verbs can be complements of aspectualizers begin and start, as long as they are verbs that can be consciously controlled such as believe and love. I name this kind of stative verbs as volitional verbs, and other stative verbs than volitional verbs as non-volitional verbs. I
randomly chose four volitional verbs: *hate, like, doubt, trust* and three non-volitional verbs: *understand, know, resemble*, and checked their behavior as aspectual complements by consulting corpus and other resources. Table 4 shows the results. (see Appendix p. 45)

It seems from the result that there is no difference between volitional verbs and non-volitional verbs, as both kinds of verbs occur in their progressive form as the complement of *begin* and *start*. Although some verbs like *like* and *know* have no progressive complement tokens in the corpus, it doesn’t mean that they don’t occur. From other resources, I found the following examples.

(73) a. Workers began knowing and understanding their organization
and knowing and understanding their place in their organization.

(March 17, 2010 *An Essay on Fellowship*, Ezine Articles)
b. What did Helmuth and his friends do when they began knowing
the truth?

(*The Boy Who Dared* by Susan Campbell Bartoletti)
c. She was a little shy at first, but she began liking the forest
animals.

(*The Frog and the Squirrel* by Halie Parker)

My hypothesis was obviously negated by the result of the research. However, upon a second look into these verbs, we can find that all these verbs, volitional or non-volitional, become Dillon’s “sharp” achievement verbs when they co-occur with *begin* and *start*. This is because of the nature of the two aspectualizers which propose that the state named in the complements has not yet begun. The result indicates change of state. Although what is named in the complement is not an
event, the aspectualizers bring about the change of state. In other words, the aspectualizers act as converters that turn a state into a complement with event properties. Whether this is true or not, the difference between $to \ V$ and $V\text{ing}$ complements, like “sharp” achievement verbs, cannot be detected because both forms have a durative reading and neither of them has the onset, nucleus, and coda segments.
Chapter 3
Conclusion

Freed advanced the study of aspectual verbs and their complements by proposing that an event can be segmented into onset, nucleus and coda. She noted that \textit{start} and \textit{begin} differ in that \textit{start} can make reference to the initial part of the onset of the event named in its complement, whereas \textit{begin} makes reference to the initial part of the nucleus of this event. She also noticed that \textit{to V} complements can be interpreted a generic over events in the future, as in \textit{remember to VP}.

However, the difference she found between the generic reading of \textit{to V} complements and the durative reading of \textit{V-ing} complements is not significant. As a matter of fact, \textit{V-ing} complements can carry a generic reading. For example, \textit{V-ing} complements in the \textit{keep V-ing} structure indicate a repeated or intermittent occurrence of an event like the sentence below shows.

(74) John kept smoking though his doctor told him not to do so.

Freed also makes wrong suggestions about achievement verb complements of \textit{begin} and \textit{start}. She suggests that gradual verbs, like \textit{freeze}, co-occur with the two aspectualizers but state-related sharp verbs or verb phrases, like \textit{lose his umbrella}, do not. She further mentions that series-related sharp verbs or verb phrases, like \textit{lose his glasses}, occur with \textit{begin} and \textit{start}. However, my research reveals that whether or not the achievement verbs or verb phrases are state-related does not matter. Occurrence depends on the context. If the context generates a series reading, then achievement verbs can occur with the two aspectualizers.
Another problem my research reveals is the one about the state verb-type used as a complement. Freed claims that even if states occur as aspectual complements in some cases, they never occur as *V-ing* complements but only as *to V* complements. I first hypothesized that progressive stative verbs can be complements of aspectualizers *begin* and *start*, as long as they are verbs that can be consciously controlled such as *believe* and *love*. However, the result falsified my hypothesis. Then I found that *begin* and *start* behave like converters that turn a state into a complement with event properties. This helps to explain why states also occur as *V-ing* complements.
Bibliography


# Appendix

Table 1

<table>
<thead>
<tr>
<th></th>
<th>begin(s)</th>
<th>began</th>
<th>begun</th>
<th>beginning</th>
</tr>
</thead>
<tbody>
<tr>
<td>rain</td>
<td>$to V_{23}$</td>
<td>$V\cdot ing\ 1$</td>
<td>$V\cdot ing\ 15$</td>
<td>$V\cdot ing\ 2$</td>
</tr>
<tr>
<td>(activity)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>walk</td>
<td>$to V_{115}$</td>
<td>$to V_{264}$</td>
<td>$to V_{10}$</td>
<td>(only) $to V$</td>
</tr>
<tr>
<td>(activity)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>write a(n)/the N</td>
<td>$to V\ 1$</td>
<td>$V\cdot ing\ 8$</td>
<td>$V\cdot ing\ 32$</td>
<td>$V\cdot ing\ 8$</td>
</tr>
<tr>
<td>(accomplishment)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>read a(n)/the N</td>
<td>$to V\ 5$</td>
<td>$V\cdot ing\ 2$</td>
<td>$V\cdot ing\ 9$</td>
<td>$V\cdot ing\ 1$</td>
</tr>
<tr>
<td>(accomplishment)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>come</td>
<td>$to V_{97}$</td>
<td>$V\cdot ing\ 26$</td>
<td>$V\cdot ing\ 108$</td>
<td>$V\cdot ing\ 9$</td>
</tr>
<tr>
<td>(achievement)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>arrive</td>
<td>$to V_{21}$</td>
<td>$to V_{101}$</td>
<td>$to V_{18}$</td>
<td>(only) $to V$</td>
</tr>
<tr>
<td>(achievement)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>believe</td>
<td>$to V_{80}$</td>
<td>$V\cdot ing\ 3$</td>
<td>$V\cdot ing\ 7$</td>
<td>$V\cdot ing\ 1$</td>
</tr>
<tr>
<td>(state)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>love</td>
<td>$to V_{11}$</td>
<td>$V\cdot ing\ 0$</td>
<td>$V\cdot ing\ 3$</td>
<td>$V\cdot ing\ 0$</td>
</tr>
<tr>
<td>(state)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>start (s)</td>
<td>started</td>
<td>started (p.p.)</td>
<td>starting</td>
</tr>
<tr>
<td>----------------</td>
<td>-----------</td>
<td>---------</td>
<td>----------------</td>
<td>----------</td>
</tr>
<tr>
<td>rain (activity)</td>
<td>to V 39</td>
<td>to V 64</td>
<td>to V 12</td>
<td>to V 42</td>
</tr>
<tr>
<td></td>
<td>V-ing 27</td>
<td>V-ing 38</td>
<td>V-ing 6</td>
<td>V-ing 0</td>
</tr>
<tr>
<td>Walk (activity)</td>
<td>to V 223</td>
<td>to V 203</td>
<td>to V 2</td>
<td>to V 33</td>
</tr>
<tr>
<td></td>
<td>V-ing 309</td>
<td>V-ing 591</td>
<td>V-ing 1</td>
<td>V-ing 2</td>
</tr>
<tr>
<td>write a(n)/the N (accomplishment)</td>
<td>to V 8</td>
<td>to V 18</td>
<td>to V 1</td>
<td>to V 4</td>
</tr>
<tr>
<td></td>
<td>V-ing 23</td>
<td>V-ing 58</td>
<td>V-ing 3</td>
<td>V-ing 0</td>
</tr>
<tr>
<td>read a(n)/the N (accomplishment)</td>
<td>to V 6</td>
<td>to V 26</td>
<td>to V 1</td>
<td>to V 6</td>
</tr>
<tr>
<td></td>
<td>V-ing 20</td>
<td>V-ing 49</td>
<td>V-ing 4</td>
<td>V-ing 0</td>
</tr>
<tr>
<td>come (achievement)</td>
<td>to V 146</td>
<td>to V 148</td>
<td>to V 36</td>
<td>to V 182</td>
</tr>
<tr>
<td></td>
<td>V-ing 274</td>
<td>V-ing 451</td>
<td>V-ing 22</td>
<td>V-ing 6</td>
</tr>
<tr>
<td>arrive (achievement)</td>
<td>to V 11</td>
<td>to V 18</td>
<td>to V 10</td>
<td>to V 8</td>
</tr>
<tr>
<td></td>
<td>V-ing 28</td>
<td>V-ing 57</td>
<td>V-ing 5</td>
<td>V-ing 0</td>
</tr>
<tr>
<td>believe (state)</td>
<td>to V 51</td>
<td>to V 27</td>
<td>to V 8</td>
<td>to V 65</td>
</tr>
<tr>
<td></td>
<td>V-ing 54</td>
<td>V-ing 21</td>
<td>V-ing 0</td>
<td>V-ing 0</td>
</tr>
<tr>
<td>love (state)</td>
<td>to V 5</td>
<td>to V 8</td>
<td>to V 0</td>
<td>to V 3</td>
</tr>
<tr>
<td></td>
<td>V-ing 16</td>
<td>V-ing 8</td>
<td>V-ing 0</td>
<td>V-ing 0</td>
</tr>
</tbody>
</table>
Table 3

<table>
<thead>
<tr>
<th>Asp</th>
<th>V</th>
<th>lose</th>
<th>see</th>
<th>notice</th>
<th>realize</th>
<th>forget</th>
</tr>
</thead>
<tbody>
<tr>
<td>began</td>
<td>to V168</td>
<td>V-ing 60</td>
<td>to V578</td>
<td>V-ing 101</td>
<td>to V189</td>
<td>V-ing 52</td>
</tr>
<tr>
<td>started</td>
<td>to V71</td>
<td>V-ing 96</td>
<td>to V276</td>
<td>V-ing 264</td>
<td>to V31</td>
<td>V-ing 25</td>
</tr>
</tbody>
</table>

Table 4

<table>
<thead>
<tr>
<th>V</th>
<th>began</th>
<th>started</th>
</tr>
</thead>
<tbody>
<tr>
<td>hate</td>
<td>to V 19</td>
<td>to V 11</td>
</tr>
<tr>
<td>like</td>
<td>to V 12</td>
<td>to V 23</td>
</tr>
<tr>
<td>doubt</td>
<td>to V 60</td>
<td>to V 15</td>
</tr>
<tr>
<td>trust</td>
<td>to V 15</td>
<td>to V 10</td>
</tr>
<tr>
<td>understand</td>
<td>to V 216</td>
<td>to V 31</td>
</tr>
<tr>
<td>know</td>
<td>to V 23</td>
<td>to V 7</td>
</tr>
<tr>
<td>resemble</td>
<td>to V 23</td>
<td>to V 7</td>
</tr>
</tbody>
</table>
Vita

Xinzheng Zhao grew up in the town of Chaoyang, Liaoning Province, China. He earned a Bachelor of Arts in English education in Tokyo Gakugei University in 2008.

Xinzheng’s interest in aspectual complements started in 2008 when he was studying in Japan. After he graduated from the university, Xinzheng decided to major in linguistics. Xinzheng studied linguistics systematically in Louisiana State University. He plans to continue his research of the aspectual complements of *begin* and *start*. He hopes to be a teacher of English in the future.