

# THE EFFECT OF SEMANTIC CONSTRAINTS AND FREQUENCY UPON L2 ACQUISITION OF ENGLISH MIDDLE CONSTRUCTION BY CHINESE LEARNERS OF ENGLISH

Gao Yusong

Northwest Normal University

## Abstract

The present study is intended to investigate the effects of semantic constraints and frequency upon L2 acquisition of English middle construction by Chinese learners of English . 90 Chinese learners of English and 24 native speakers of English participated in the study . An Acceptability Judgment Task ( AJT ) was developed to elicit the participants' acquisitional behavior . The results reveal that both semantics and frequency operate in L2 acquisition of English middle construction . In addition , the contrastive behavior between the advanced learner group and the native speaker group suggests that the two factors , though both at work , have different impact upon L2 learners and the adult native speakers . It seems that frequency has a stronger impact upon the native speakers than on the learner groups .

## Key words

semantics ; frequency ; middle construction ; L2 acquisition

## 1 . Introduction

The acquisition of argument structure has long been recognized as a fundamental issue in language acquisition research ( Bowerman 1988 ; Brooks & Tomasello 1999 ; Fisher 1996 ; Gleitman et al . 2005 ; Pinker 1989 ) . A central question revolving around the issue is , how the language learner is able to become productive in his use of verb argument structure , and yet avoid overgeneralization errors . The question is crucial in the sense that most syntactic constructions have constraints on their extensions ( Brooks & Tomasello 1999 ; Levin & Rappaport 2005 ; Pinker 1989 ) . With the English middle construction ( e . g . , The book reads well . ) , for instance , verbs like close and read undergo middle formation , but verbs like fear and reach fail to license the construction . What puzzles researchers is that how the language learner comes to the awareness that only a portion of verbs can be used in a particular construction , as shown in the case of middle construction . A number of proposals have been put forward that attempt to untangle this puzzle . One proposal is that language learners are conservatives ( see Bowerman , 1988 for a detailed comment on this proposal ) . They never generalize beyond the positive input they have been exposed to . However , this is empirically false , as both L1 and L2 learners were found to produce overgeneralization errors in their acquisition of argument structure ( see Lord 1979 ; Pinker 1989 for L1 learners' errors , and see Juffs 1996 ; Montrul 2000 for L2 learners' errors ) . It is logically impossible either , as it is unlikely that for any verb , language learners will encounter all its possible syntactic frames in the input ; neither are all syntactic possibilities of a particular verb properly represented in textbook materials for L2 learners ( Juffs 1998 ) .

Another account is that L2 learners make use of semantics to learn the argument structure of a verb . The basic assumption behind this proposal is that there exists a strong correlation between the lexical properties of predicates and the syntactic structures in which they may appear ( Goldberg 1995 ; Hale &

Keyser 2002 ; Levin & Rappoport 1995 , 2005 ; Pinker 1989 ). Language learners , therefore , need not learn syntactic structures of verbs on an item by item basis , but rather make generalizations on the basis of the regular correlation . Overgeneralization errors are caused by learners incomplete knowledge of a verb . Once they learn the semantic constraints on a particular construction and correctly establish the meaning of a verb , these errors would disappear .

The third proposal is a usage based account . It argues that language acquisition is a data driven probabilistic learning process which “ reflect [ s ] the probabilities of occurrence of form function mappings ” ( Ellis 2002 : 144 ). Acquisition of argument structure , like acquisition of any other linguistic items , is regarded as an associative learning process of the distributional characteristics of the language input . Frequency , therefore , is a crucial determinant and distributionally regular , high frequency items are among those acquired earliest ( Mathews et al . 2005 ). Language learners first learn how to use verbs in syntactic constructions on a verb by verb basis ( Tomasello 1992 ). They use verbs only in syntactic patterns in which they ve heard them used previously and do not generalize frequently to other verbs . They sometimes overgeneralize as “ one shot innovations created under discourse pressure ” ( Brooks et al . 1999 : 1326 ). These errors are overcome by using entrenchment and preemption ( Braine et al . 1995 ; Brooks et al . 1999 ; Brooks & Tomasello 1999 ). The basic idea of entrenchment is that the frequent encounter of a verb in one attested construction causes the learner to draw a probabilistic inference that the verb does not appear in other constructions ( see also Ambridge et al . 2008 ). In other words , the more frequently the child hears a verb in a particular structure ( i. e. , the more solidly its usage is entrenched ) , the less likely he will extend that verb to any novel construction with which they have not heard the verb used . Preemption refers to “ the idea that if a child has learned to use a particular linguistic form to express a particular meaning , this knowledge will tend to block his usage of another form to express the same meaning ” ( Brooks et al . 1999 : 1326 ). For instance , if a child hears The magician made the rabbit disappear , but never hears The magician disappeared the rabbit , he may infer that disappear does not occur in a simple transitive construction . Over time , the repeated occurrence of disappear in periphrastic causative constructions in situations involving direction causation may prevent the child from using disappear in the simple transitive construction . Entrenchment and preemption are assumed to work together . The former promotes the latter “ by increasing the child s awareness of how individual verbs are used in alternative constructions ” ( Brooks et al . 1999 : 1326 ).

With special emphasis on the role of frequency , the usage based account forms a contrast with the ideas proposed by semantics approach ( Pinker 1989 ). In studies of L1 acquisition , empirical evidence lends support to both proposals ( see Brooks et al . , 1999 ; Mathews et al . 2005 ; Theakston 2004 for the effects of frequency , see Lidz et al . 2004 ; Marcotte 2005 for the effects of semantics ). Previous research on L2 acquisition of argument structure , however , is mainly conducted along the semantics approach suggested by Pinker ( 1989 ) , Levin & Rappoport ( 1995 , 2005 ) , and Hale & Keyser ( 2002 ). The effect of frequency on L2 acquisition of argument structure , on the other hand , is less investigated . Moreover , more recent studies suggest that the semantics approach and the usage based approach are not mutually exclusive ( Brooks & Tomasello 1999 ; Ambridge et al . 2008 ). In L1 research of argument structure acquisition , it has been found that both semantics and frequency play a role in child s acquisition of argument structure ( Brooks & Tomasello 1999 ; Ambridge et al . 2008 ). In L2 acquisition research , however , few attempts have been made to take semantics and frequency into account in explaining L2 acquisition of argument structure . The present study , therefore , represents an effort along this line of research . It aims to investigate the effect of frequency and semantics upon L2 acquisition of English middle construction ( henceforth MC ) by Chinese learners of English . English MC is chosen as the target structure for the following two reasons . For one thing , L2 learners of English were shown to have difficulty in their acquisition of the structure ( Balcom 1995 , 1997 , 1999 , 2003 ; Connors & Ouellette 1994 ) , but empirical studies of L2 acquisition of English MC are relatively scant . The question as to how L2 learners acquire English MC remains answered . For another , some properties of the construction enable us to dissociate the effect of semantics and frequency upon L2 acquisition of English MC , as will be shown in the following sections . More specifically , the present study attempts to address the following two questions : 1 ) Do semantic constraints upon English MC have any impact upon Chinese learners acquisition of English MC ? 2 ) Does frequency have any impact upon Chinese learners acquisition of English MC ?

To address the two research questions, we first provide a brief introduction to the linguistic properties of English MC, with particular emphasis on the semantic constraints upon its formation. Then the predictions based either on the effect of semantic constraints or frequency will be discussed. This is followed by the formulation of the specific research hypotheses. Fourthly, an empirical study was conducted to test these hypotheses. And finally, we will discuss the findings obtained.

## 2. Middle Construction in English

### 2.1 Properties<sup>1</sup> of English Middle Construction

Typical examples of what are commonly regarded as MC are presented in (1) below.

- (1) a. This book reads easily. (Goldberg & Ackerman 2001 :799)  
 b. The lake fishes well. (Yoshimura & Taylor 2004 :295)  
 c. The pen writes fluently. (Adapted from Hoekstra & Roberts 1993 :218)  
 d. This kind of glass breaks easily. (Rappoport 1999 :149)  
 e. This kind of glass breaks often. (Rappoport 1999 :150)  
 f. No Latin text translates easily for Bill. (Stroik 1992 :131)

It can be seen from the examples in (1) that English MC at least displays the following properties:

- It usually appears in simple present tense and denotes generic events. That is, it either has a property/capacity reading [e.g., (1a-d)] or a habitual reading, as in (1e).<sup>2</sup>
- It takes active form but has passive-like meaning.
- The subject of the construction is a non-agent argument that would normally be mapped to the object (e.g., (1a, d)) or adjunct positions (e.g., (1b-e)).
- MCs formed with agentive verbs usually denotes an arbitrary agent that is semantically present but syntactically suppressed.
- It generally requires the modification of certain adverbs like easily and well or other types of adjunct.
- It can contain a for sb prepositional phrase, as in (1f), which introduces the agent of the event concerned.

As to the classification of English MCs, Lemmens (1998) draws a distinction between transitive and ergative middles. The former refers to MCs formed with agentive verbs (e.g., read, cut), whereas the latter refers to MCs formed with transitive ergative verbs (e.g., open, drown). The difference lies in the fact that transitive middles necessarily suggest an agent, whereas ergative middles may create confusion in terms of whether there is an agent, as shown in (2).

- (2) a. The book reads easily.  
 b. The cat drowns easily. (Adapted from Lemmens, 1998 :6)

In (2a), reading implies an agent (e.g., a human being); in (2b), however, drowning may not necessarily involve an agent.

### 2.2 Semantic Constraints upon English Middle Construction

Although English MC is extensively investigated, no consensus has been reached as to the semantic constraints upon English MC. Affectedness, for instance, is argued to be a semantic constraint upon English MC (Hoekstra & Roberts 1993; Levin 1993; Pinker 1989). This constraint stipulates that only verbs that signify an effect (i.e., change of location or state) undergo MC formation. However, there is substantial evidence showing that affectedness is neither a necessary condition nor a sufficient condition for an MC to be legitimate. As shown in (3), verbs denoting affectedness may not undergo middle construction on the one hand, and verbs without indication of affectedness indeed make good MC on the other (see Gao, 2008; Yoshimura & Taylor for a detailed discussion of the problems with affectedness constraint).

- (3) a. \*Small cities destroy easily. (Rappoport 1999 :150)  
 b. The car handles well, even on wet roads. (Gadsby 1995 :645)

Though the views on the semantic determinants of English MC are divided, the following two semantic constraints are argued to be the necessary conditions for an MC to be legitimate. The first is the aspectual constraint. Aspect concerns the internal temporal structure of an event a verb denotes. It has been recognized that verbs individuate and name events (Levin & Rappoport 2005; Vendler 1967). Events are essentially temporal (Croft 1998) and verb meanings have aspectual and temporal structures (Vendler 1967). According to Vendler (1967), verbs or the events they denote can be divided into four types in terms of their internal temporal structure. These include stative, activity, accomplishment and achievement. Vendler's four-way typology, according to Comrie (1976), can be characterized by three pairs of semantic properties: stative vs. dynamic, telic vs. atelic, and punctual vs. durative. The first pair is about whether there is any action or change. The second pair is about whether an action has a natural endpoint, and the third one is about whether an action or change can last for a period of time. These are summarized in Table 1.

Table 1. Semantic Features of Aspectual Classes

	Dynamic	Telic	Punctual
Statives (STA)	-	-	-
Activities (ACT)	+	-	-
Accomplishments (ACC)	+	+	-
Achievements (ACH)	+	+	+

It can be seen from the Table that statives are non-actions that lack dynamics or change (e.g., I know him), sharing the semantic features [-Dynamic], [-Telic] and [-Punctual]. Activities represent ongoing events without any definite termination (e.g., John is pushing the cart), with the features [+Dynamic], [-Telic] and [-Punctual]. Accomplishment refers to an ongoing event with a termination (e.g., John repaired the machine yesterday), indicative of the features [+dynamic], [+Telic] and [-Punctual]. Achievements denote events that have an instantaneous endpoint (e.g., The cup broke), with the features [+dynamic], [+Telic] and [+Punctual].

Following Vendler's (1967) classification of verbs, not a few researchers propose that verbs of activity and accomplishment undergo middle formation, whereas stative and achievement verbs do not (Fagan 1992; Klingvall 2003; Zwart 1997). This explains why the sentences in (4) are acceptable, but those in (5) are ill-formed.

- (4) a. The car handles well, even on wet roads.  
 b. This bread cuts easily. (Pinker 1989:106)
- (5) a. \*The answer knows easily. (Hoekstra & Roberts 1993:194)  
 b. \*Anniversaries forget easily. (Hoekstra & Roberts 1993:201)

Verbs like handle and cut in (4) are verbs of activity or accomplishment and license grammatical MCs, while verbs such as know and forget in (5) are stative or achievement verbs which fail middle formation. In sum, for a verb to undergo MC formation, it should share the following two semantic properties [+Dynamic, -Punctual].

Another identified constraint concerns the nominal argument a verb takes. The standard view on the nominal subject of MC is that it is the internal argument which is moved out of the original object position into the subject position for case reasons (Stroik 1992). Thus, the nominal subject remains a patient, like the nominal subject of passive. However, a number of researchers (Fagan 1992; Gao 2008; Oosten 1977; van Voorst 1988; Yoshimura & Taylor 2004) argue that the patient argument in MC appears to play an agent-like role in the sense that the inherent properties of the nominal argument have to be construed as responsible for the occurrence of the event involved. This explains the asymmetrical behavior of buy and sell. Sell forms a legitimate middle, but buy does not, as shown in (6).

- (6) a. The book sells well.  
 b. \*The book buys well. (Yoshimura & Taylor 2004:298)

The ill-formedness of (6b) is attributed to the fact that the inherent properties of book, though

facilitative of its selling ,are not responsible for its buying . Responsibility ,therefore ,is argued to be a constraint upon MC formation .

The above discussion summarizes the major properties of English MC and explores the constraints upon the construction . It is suggested that for a MC to be legitimate ,it has to satisfy two semantic constraints . The aspectual constraint indicates that only verbs of activity and accomplishment undergo MC formation . Moreover ,the responsibility constraint suggests that the inherent properties of the nominal subject have to be responsible or conducive to the occurrence of the event involved .

### 3 . Effects of Frequency and Semantics upon L2 acquisition of English MC

#### 3 .1 Effects of Frequency upon L2 acquisition of English MC

Given that the goal of the present study is to explore whether semantics and frequency influence L2 acquisition of English MC ,it is crucially important for us to dissociate the effects of verb semantics and verb frequency . That is ,we have to provide clear evidence that some learner behavior can be attributed only to the effects of semantics while some other behavior is mainly the results of frequency effect . Only in this way can we be able to characterize the relationship between the two factors . This section ,therefore ,aims to explore the potential learner behaviors that can be predicted on the basis of either the influence of frequency or influence of semantics .

The common practice of research on the role of frequency in language acquisition is to include verbs of different frequency and examine whether verbs of high frequency are acquired earlier than verbs of low frequency . In some studies nonce verbs are included to serve as words of zero frequency ( Ambridge et al . 2008 ) . However ,this practice is not without problems . It has been shown in the previous studies that the children use some verbs in a construction earlier and more frequently than other verbs although these words frequency level is similar . Goldberg et al . ( 2004 ) ,for instance ,examined the data from the Bates Corpus and found that children s early use of a specific construction was dominated by use of the construction with a particular verb . For instance ,use of the intransitive motion construction VL ( verb + location ,as in the fly buzzed into the room ) is mainly dominated by use of the construction with the verb go ( accounting for 54 % of children s use of the construction ) . This cannot be explained by word frequency alone because the three verbs go ,get ,and come are all high frequency words ( 0-500 word level ) . The reason for this ,according to Goldberg et al . ( 2004 ) ,is that the verb go is used by parents most frequently ( 39 % ) in VL construction and children thus associate the meaning of the verb go with VL construction .

Naigles & Hoff-Ginsberg ( 1998 ) found that syntactic diversity is another factor that influences children s acquisition of argument structure . Syntactic diversity refers to the fact that some verbs can be used in more syntactic structures than others . Language learners usually first extend the verbs they hear used in many different syntactic environments . The reason for this ,according to Naigles & Hoff-Ginsberg ( 1998 ) ,is that “ each additional syntactic frame has the potential to provide additional semantic information ” ( p . 101 ) and “ the more frames in which a verb is heard ,the more distinctive it will be from other ,related verbs ,and the earlier ( or more easily ) it will be acquired ” ( p . 117 ) . In sum ,more diverse frames provide more opportunities for a learner to learn the shades of meaning of a verb . In this sense ,syntactic diversity can be viewed as an aspect of frequency ,or in Naigles & Hoff s words ( 1998 : 113 ) ,“ in order to appear in multiple syntactic frames a verb must be produced multiple times ” .

The above mentioned acquisitional behaviors suggest that frequency is more than word frequency level itself . Factors such as consistent use of certain verbs in a construction and syntactic diversity may cause a verb ( or some verbs ) appear more frequently in certain construction(s) than other verbs . In this respect ,English middle construction provides us with an ideal testing ground in which the effect of frequency in terms of syntactic diversity can be investigated . Frequency ,therefore ,is operationalized as syntactic diversity in the present study . English middle ,as discussed above ,can be divided into transitive ( i . e . ,MCs formed with agentive verbs ) and ergative middles ( i . e . ,MCs formed with ergative verbs ) . Unlike agentive verbs ,transitive ergative verbs can also undergo anticausative construction ( 7c ) ,as shown by the contrastive behavior of the verb break and cut in ( 7 ) and ( 8 ) .

- (7) a . John broke the window .  
 b . The window breaks easily . ( middle )  
 c . The window broke . ( anticausative )
- (8) a . John cut the bread .  
 b . The bread cuts easily . ( Middle )  
 c . \* The bread cut . ( anticausative )

In terms of syntactic diversity , the ergative verbs allow more intransitive constructions than agentive verbs . Moreover , it can be seen that MC and anticausative construction share a surface similarity . That is , the subject of both constructions is a non-agent argument , and the main verb is in the active form . And both were encoded by using the structure Subj ( non-agent ) V ( active ) . Since ergative verbs undergo both anticausative and middle constructions , it is plausible to argue that ergative verbs are more frequently used in Subj ( non-agent ) V ( active ) structure than transitive verbs . For instance , although read and open are verbs of the same frequency level , the frequency for the verb open to go into Subj ( non-agent ) V ( active ) structure is much higher than the verb read . Logically , language learners would have more contact with this structure formed with ergative verbs . Following Naigles & Hoff-Ginsberg's (1998) claim that verbs used in a more diverse set of structures are acquired earlier than verbs used in fewer structures , it can be predicted that L2 learners , especially less advanced learners , would acquire MCs formed with ergative verbs earlier than MCs formed with agentive verbs provided that the word frequency for the two types of words is kept the same . Longitudinally speaking , as L2 learners move towards the target language grammar , they would acquire MCs formed with agentive verbs as well .

### 3.2 Effects of semantics upon L2 acquisition of English MC

As suggested in the first section , MC formation is susceptible to the aspectual constraint . Stative and achievement verbs fail to license English MC . Comparatively speaking , however , the former are more semantically incompatible than the latter with English MC . Recall that for a verb to license grammatical MC , it has to satisfy two semantic properties : [ +Dynamic] and [ -Punctual] . Stative verbs have neither of the properties , but achievement verbs shares one of them ( i.e . , [ +Dynamic] ) . If the semantics is at work in L2 acquisition of English middle construction , one would expect that MCs formed with stative verbs are more likely to be rejected by L2 learners than MCs formed with achievement verbs provided that the tokens of the two types of verbs are similar in word frequency . By contrast , if frequency is at work and frequency of the token verbs of statives and achievements is manipulated to be the similar , L2 learners would judge MCs formed with the two verb types equally unacceptable .

Another constraint on MC formation is the responsibility constraint which stipulates that for an MC to be legitimate , the inherent properties of the nominal subject have to be construed as responsible for the occurrence of the event involved . In other words , the nominal subject has to be construed as an agent-like argument . A closer look at English MC will show that the inherent properties of some nominal subject are more easily construed to be agent-like than others . Of all MC types , instrument MC ( i.e . , MCs whose subject plays the instrument role ) is more likely to be construed to be responsible for the occurrence of an event , as shown in (1c) , repeated below as (9) for the convenience of exposition .

- (9) The pen writes fluently .

Compared with other non-agent nominals , instrument is more agent-like ( Schlesinger 1989 ) , "acting as an intermediary in the event named by the verb" ( Levin 1993 :81 ) , as in (10) below .

- (10) a . The crane loaded the truck .  
 b . The hammer broke the window . ( Levin 1993 :80 )

The following prediction , thus , can be made if semantics guide L2 learners in their acquisition of English MC . Cross-sectionally , one would expect that L2 learners , especially less advanced learners , are more likely to judge instrument MCs acceptable . Longitudinally , their acceptance of MCs ( including instrument MCs ) will increase with advancement of their English proficiency . However , a usage-based model would make no such prediction since no evidence suggests that this type of MC is more frequent than MCs formed with other agentive verbs .

## 4 . Research Hypotheses

Recall that two research questions are put forward in Section One to examine whether L2 acquisition of English MC is susceptible to the influence of both semantics and frequency . In reference to the predictions made in the previous section ,the two research questions can be formulated as two particular research hypotheses :

Hypothesis 1 :L2 learners are susceptible to the influence of the semantic constraint upon English MC . More specifically ,they are more likely to reject MCs formed with stative verbs than MCs formed with achievement verbs . For the same reason ,they are more likely to accept instrument MCs than MCs formed with agentive verbs .

Hypothesis 2 :L2 learners are susceptible to the frequency effect (in the sense of syntactic diversity) . More specifically ,they are more likely to accept MCs formed with ergative verbs than MCs formed with agentive verbs .

## 5 . The Empirical Study

### 5 .1 Participants

90 Chinese learners of English and 24 native speakers of English participated in the study . All Chinese participants were students from two universities in China . Among them were 30 freshmen majoring in English ,30 sophomores majoring in biology or chemistry ,and 30 juniors majoring in English . At the time of investigation ,they had been in the university for about one month (freshmen) ,one year and a half (sophomores) ,and two years and a half (juniors) respectively .

Since L2 proficiency was one of the variables for investigation ,the Chinese participants English proficiency was measured by using a test consisting of two components :a 30 item Vocabulary and Structure component and a 20 item Cloze component . Each correct choice was awarded one point and no point was given to incorrect choice . Thus ,the maximum score one could obtain was 50 points . All the test takers were required to complete the test within 35 minutes . One -way ANOVA was run to test whether the mean difference between groups were significant . The results indicate that the three groups were significantly different from each other in L2 English proficiency (  $F = 413 .17$  ; $df = 2 ,87$  ; $p = .000$  ) . The results of post hoc test (Scheff) shows that Advanced Group scored significantly higher than both Intermediate Group ( Mean Difference = 11 .33 , $p = .000$  ) and Low level Group ( Mean Difference = 21 .73 , $p = .000$  ) ,and Intermediate Group scored significantly higher than Lower level group ( Mean Difference = 10 .40 , $p = .000$  ) . It can be concluded that the participants represented three distinct levels of L2 -English proficiency .

Twenty four native speakers of English were recruited as controls . Among them 19 were either students or staff members from a university in British Columbia ,Canada ,and the rest (4 from the United States ,and 1 from Britain ) were teachers of English in the researcher s school .

### 5 .2 Instrumentation

An Acceptability Judgment Test (AJT) was developed to elicit the participants knowledge of English MC . The participants were asked to judge the acceptability of a total of 106 sentences . Their responses were measured on a 5 point Likert scale ranging from - 2 (totally unacceptable) to 2 (completely acceptable) ,with -1 (mostly unacceptable) ,0 (sounds odd but acceptable) and 1 (mostly acceptable) in between . The order of sentence presentation was randomized so that sentences of a similar type would not appear sequentially .

Of the 106 sentences ,64 sentences are the target sentences (i .e . ,middle) ,the rest of 42 are fillers . These fillers consist of a variety of English structures such as expletive structure ,adjectival structure , compound structure and complex sentence frames . These fillers were included to increase the structural diversity of the test items ,which ,in turn ,would help to disguise the target sentences . It has to be pointed out that AJT was designed to investigate the impact of a number of factors upon L2 learners acquisition of English MC (e .g . ,L2 learners sensitivity towards a range of verb classes with respect to

English MC ). However, considering the purpose of the present study is to test the effects of frequency and semantics upon L2 acquisition of English MC, test items in AJT which are used to examine other factors than semantics and frequency will be discussed here. The test items relevant to the present study are categorized into the following types.

To test L2 learners' judgment of illicit MCs formed with stative verbs and achievement verbs, 12 MC-like sentences were created. These sentences were further divided into three categories: two types of stative verbs and one type of achievement verbs. More specifically, STA and PSYSUB stand for two types of stative verbs. The former consists of three cognitive verbs (e.g., know as in (11a)) and one possession verb (i.e., own). The latter (e.g., like as in (11b)) are four verbs of stative psych verbs.

Eight achievement verbs are put in two categories in this study. PER (e.g., hear as in (11c)) refers to English perception verbs (verbs denoting sight, sound, touch, taste and smell) of achievement type, and ACH represents other achievement verbs than perception verbs (e.g., reach as in (11d)).

- (11) a. \*The truth knows easily. (STA)  
 b. \*Hollywood films like easily. (PSYSUB)  
 c. \*Eiffel Tower sees most clear from this window. (PER)  
 d. \*The top of the mountain reaches with great difficulty. (ACH)

Moreover, to examine whether L2 learners are sensitive to the responsibility constraint, 15 MC sentences were created, which can be further divided into three types. More specifically, four legitimate MCs formed with agentive verbs are put in the category of AGENTI, another four formed with ergative verbs are in the category of ERGATI, still another four are instrument MCs (henceforth INSTRU), as exemplified in (12a), (12b), and (12c).

- (12) a. The book sells easily. (AGENTI)  
 b. The window opens easily. (ERGATI)  
 c. The knife cuts well. (INSTRU)

The word frequency of the target verbs is manipulated in the AJT design since frequency is a major factor under investigation in the present study. Verbs of high frequency were chosen as the target verbs (below 2000 word frequency level). More specifically, STA, ACH, and PER each contain three verbs of 0-500 word frequency level and one verb of 500-1000 word frequency level. PSYSUB consists of one verb of 0-500 word frequency, two verbs of 500-1000 word frequency, and one verb of 1000-2000 word frequency. ERGATI and INSTRU each contain one verb of 0-500 word frequency, one verb of 500-1000 word frequency, and two verbs of 1000-2000 word frequency. AGENTI is comprised of two verbs of 0-500 word frequency, one verb of 500-1000 word frequency, and one verb of 1000-2000 word frequency. Admittedly, although all the target verbs are verbs of high frequency, the four groups do not exactly match with each other in terms of word frequency. Compared with other three illicit MCs, PSYSUB contains one verb of 1000-2000 word frequency, which makes this type lower in frequency than the other three types. However, as will be shown in 5.3, inclusion of this verb does not confound the frequency effect. With regard to the three legitimate MC types, AGENTI appears to be higher in frequency than ERGATI and INSTRU because it contains more verbs of 0-500 word frequency. This manipulation is made deliberately to test the effect of word frequency and the effect of frequency in terms of syntactic diversity (cf. 3.1).

### 5.3 Procedures

**Chinese Participants** A proficiency test was first administered to a larger sample of Chinese learners of English than the subjects participating in the study two weeks prior to the data collection sessions. Then the students who met our subject selection criteria participated in the tests. It took them approximately 20 minutes to finish all the items.

**Native speakers of English** The test for the native speakers was administered by the researcher and his research assistant. More specifically, the researcher administered the tests to the five participants who taught English in a university in west China at the time of investigation, and his research assistant administered the test to the other 19 native speaker participants in Canada. All the participants completed

the test at their residence ,office ,or a quiet study room in the school library ,accompanied by the researcher or his assistant .It took participants approximately 20 minutes to complete all the test items .

#### 5.4 Results

We first report on the results of the participants performance on four illicit MC types (i.e. ,STA , PSYSUB , ACH , PER ) to examine the effect of semantics . Then the results concerning their performance on three legitimate MC types (i.e. , AGENTI , ERGATI , and INSTRU ) would be presented to test the effect of frequency and semantics .

Table 2 below presents the mean scores and standard deviations obtained by the four participant groups for judging the acceptability of the MCs formed with stative and achievement verbs .It can be seen that ,in general ,the three Chinese groups were reluctant to accept these types of MCs . More specifically ,the low level groups mean scores for PSYSUB ,PER ,STA ,and ACH are around zero , showing that they are not certain about their grammaticality . The intermediate group scored lower than the low level group on STA ,PSYSUB ,and ACH (all below zero ) ,but higher than them on PER . The advanced learners and the native speakers scored below zero in all these MC types ,showing that they correctly rejected all the illicit MCs .

Table 2 . Means and standard deviations of the AJT performance on 4 subtypes of MC by four participant groups

	Low	Intermediate	Advanced	Native
	Means /SD	Means /SD	Means /SD	Means /SD
STA	.0583 / .6813	- .208 / .9937	- .7167 / .7507	-1 .656 / .3745
ACH	.1333 / .5443	-0750 / .9029	-4167 / .7232	-1 .313 / .4848
PSYSUB	-.0417 / .7908	- .1000 / .014	- .7222 / .7223	-1 .6354 / .4543
PER .	- .0667 / .8855	- .2593 / .9144	- .3917 / .8296	-1 .500 / .5265

To further examine if the observed differences were statistically significant ,a two -way ANOVA (mixed design ) ,with proficiency level as a between subject variable and aspectual constraint as a within -subject variable ,was run . The results are presented in Table 3 .

Table 3 . Effects of Proficiency and Aspectual Constraint on Performance on Four Types of MCs [ Results for Two -way ANOVA ( Mixed Design ) ]

Source	SS	df	MS	F	p
Aspectual constraint ( A )	4.823	3	1.608	4.831	.003
Proficiency Level ( B )	160.108	3	53.369	40.264	.000
A x B	4.455	9	.495	1.487	.151

As can be seen from the Table ,the interaction between aspectual constraint and proficiency level is not significant [ F ( 9 ,110 ) = 1 .487 ,p = .151 ] ,indicating that the pattern of performance across the four types of MCs was similar in the four participant groups .

The main effect of proficiency is significant [ F ( 3 ,110 ) = 40 .264 ,p = .000 ] . Post hoc Tukey test (see Table 4 ) shows that the native speaker group performed significantly better than all three learner groups ,and that the advanced group performed significantly better than low level and intermediate groups . The low level and intermediate groups did not differ significantly from each other .

Table 4 . Tukey Test for Judgment of MCs in AJT by Four Participant Groups

	Intermediate	Advanced	Native
Low	.0518	.583 * * *	1.547 * * *
Intermediate	.531 * *	1.495 * * *	
Advanced			.964 * * *

\* \* p < .01 ; \* \* \* p < .000

The effect of aspectual constraint is also significant [ F ( 3 ,110 ) = 4 .831 ,p = .003 ] . Pairwise

comparisons of the means (see Table 5) reveal that the mean scores obtained by low level and intermediate groups on these verb types do not differ significantly, the only exception being the intermediate learners performance on PER and STA (the mean difference reaches the level of significance). The intermediate learners better performance on STA than on PER suggest that intermediate learners started to realize that stative verbs are more unlikely with MCs than achievement verbs.

Advanced learners performed significantly better on STA and PSYSUB<sup>4</sup> than on PER, and better on STA than on ACH, as shown by the positive mean differences. No significant difference was found between STA and PSYSUB, and between PER and ACH. This suggests that advanced learners were more accurate at stative verb than at achievement verb.

Native speakers performed well in all four types (i. e., all means are below -1). Comparatively speaking, they performed significantly better on the two stative verb types than on the two achievement verb types.

Table 5. Mean Differences of L2 Learners Performance on Four illicit Types of MCs.

	Low -Level	Intermediate	Advanced	Native
PER vs . ACH	-.200	.334	.025	-.188
PER vs . STA	-.125	.468 *	.325 **	.156 *
PER vs . PSYSUB	-.025	.359	.331 *	.135 *
ACH vs . STA	.075	.133	.300 *	.344 ***
ACH vs . PSYSUB	.175	.025	.306	.323 ***
STA vs . PSYSUB	.100	-.108	.006	-.021

\*\*\* p < .001 ; \*\* p < .01 ; \*p < .05

To summarize, the following patterns emerged from the above analysis of the four participant groups performance on AJT. First of all, although all learner groups were reluctant to accept illicit MCs, they were less accurate than the native speakers in their performance, as shown by the higher scores they obtained in STA, PSYSUB, PER, and ACH. Second, advanced learners performed more accurately than low level and intermediate learners, suggestive of the effect of L2 proficiency. Thirdly, of all illicit MC types, MCs formed with stative verbs appear to be more easily rejected than those formed with achievement verbs. Although no significant difference was found between low level learners performance on the four types of MC, intermediate learners started to realize that stative verbs were more unlikely with MCs than achievement verbs. This tendency was more obvious in the performance of the advanced learners and native speakers. This lends strong support to the claim that the participants, be the L2 learners or the native speakers, were sensitive to the semantic determinants of English MC and aware that statives were more incompatible with MC than achievement verbs.

Table 6 shows the participants performance on AGENTI, INSTRU, and ERGATI. It is clear that there are both similarities and differences between the learner groups and the native speaker group. The most obvious similarity is that all the four groups scored higher in INSTRU and ERGATI than in AGENTI. The striking difference is that the three learner groups scored highest in INSTRU, second highest in ERGATI, and lowest in AGENTI. By contrast, the native speakers scored highest in ERGATI, second highest in INSTRU, and lowest in AGENTI.

Table 6. Means and Standard Deviations of the AJT Performance on Three Subtypes of MC by Four Participant Groups

	Low	Intermediate	Advanced	Native
	Means /SD	Means /SD	Means /SD	Means /SD
AGENTI	.2583 / .0494	.7000 / .003	1.2083 / .7659	1.1563 / .6115
INSTRU	.8167 / .8904	1.0417 / .8810	1.6083 / .6252	1.4792 / .3721
ERGATI	.7750 / .6136	1.0333 / .7761	1.2333 / .7683	1.7604 / .3721

To further examine if the observed differences were statistically significant, a two-way ANOVA

(mixed design) , with proficiency as a between subject variable and frequency as a within subject variable ,was run .It has to be pointed out that there are indeed two within subject independent variables involved here . The first is frequency with two levels :ERGATI represents high frequency (in terms of syntactic diversity) while AGENTI and INSTRU represent low frequency since transitive ergative verbs can license both middle and anticausative constructions while agentive verbs only allow middle construction . Another factor is semantics with two levels :INSTRU represents MCs whose nominal subject is more easily construed to be responsible for the occurrence of event while the other two types represent MCs whose subjects are less easily construed to be responsible for the occurrence of event . Therefore ,the effect of semantics will also be investigated although our major interest here is in the effect of frequency . The results were presented in Table 7 .

Table 7 . Effects of Proficiency and Frequency on Performance on Three Types of MCs [ Results for Two - way ANOVA ( Mixed Design ) ]

Source	SS	df	MS	F	p
Frequency ( A )	11.394	2	5.697	20.088	.000
Proficiency Level ( B )	38.694	3	12.898	10.274	.000
A x B	4.132	6	.689	2.428	.027

It can be seen that main effect of proficiency level is significant [ F ( 3 ,110 ) = 40.264 ,p = .000 ] . Post hoc LSD test (see Table 8 ) shows that the native speaker group and the advanced learner group performed significantly better than the low level and intermediate groups . No significant difference was found between the native speaker group and the advanced learner group ,between the low level and intermediate groups .

Table 8 . LSD Test for Judgment of MCs in AJT by Four Participant Groups

	Intermediate	Advanced	Native
Low	-.3083	-.7333 ***	-.8486 ***
Intermediate	-.4250 *	-.5403 **	
Advanced			-.1153

\*\*\*p < .05 ; \*\*p < .01 ; \*p < .000

The effect of frequency is also significant [ F ( 2 ,110 ) = 20.088 ,p < .000 ] ,indicating that the participants performance on the three MC types are significantly different . The interaction of proficiency by frequency is also significant [ F ( 6 ,110 ) = 2.228 ,p < .027 ] . Further post hoc tests were conducted to investigate the interactive effect . Although the results ,in general ,pattern in the same direction for all groups ,some between -MC type comparisons did not reach significance for all groups (see Table 9 ) . The advantage for high frequent ERTATI over low frequent AGENTI did not reach significance for the advanced learners . Moreover ,the difference between high frequent ERGATI over low frequent INSTRU was not significant for low level group ,intermediate group and the native speaker group . This suggests that although frequency has significant impact upon the participants performance ,it cannot account for all learner behaviors . The participants better performance on ISNTRU than on AGENTI can be attributed to the effect of semantics ,indicating that the participants come to the awareness that instrument argument can be more easily construed as responsible for the occurrence of event concerned than patient argument .

Table 9 . Mean Differences of L2 Learners Performance on Three MC Types

	Low -Level	Intermediate	Advanced	Native
AGENTI vs . INSTRU	-.558 **	-.342 *	-.400 ***	-.323 *
AGENTI vs . ERGATI	-.517 *	-.333 **	-.025	-.604 ***
INSTRU vs . ERGATI	.0417	.0083	.375 ***	-.281

\*\*\* p < .001 ; \*\* p < .01 ; \* p < .05

To summarize ,the participants better performance on ERGATI than on AGENTI constitutes strong evidence for the claim that frequency (syntactic diversity in this case) has significant impact upon the participants judgment of English MC . However ,their better performance on INSTRU than on AGENTI

lends support to the argument that the participants were susceptible to the effect of semantic constraint of English MC as well. These findings seem to suggest that both frequency and semantics have significant impact upon the participants' judgment of English MC, which will be discussed in great detail in the next section.

## 5.5 Discussion and Conclusions

It has been pointed out in Section One that the semantics approach and the usage based account are not mutually exclusive. More recent studies (Ambridge et al., 2008) have shown that neither the usage-based account nor the semantics approach can provide a satisfactory account for learners' acquisitional patterns. The findings of the present study strongly support this claim<sup>5</sup>.

Consistent with the prediction based on the effect of semantics, the participants, particularly the less advanced learner groups, were more accurate at INSTRU than at AGENTI. Further, they were less tolerant of illicit MCs formed with stative verbs than MCs formed with achievement verbs. These effects can be due only to the semantics. First of all, if semantics were not a factor, one would expect that the participants' judgment of all MCs formed with agentive verbs would be the same, regardless of whether the nominal subject is the patient or instrument. Second, if overgeneralization errors were mainly overcome by using the mechanism of entrenchment, as argued by the usage-based approach, the participants would judge all illicit MCs equally unacceptable. Since the target verbs of stative and achievement in the present study are similar in terms of word frequency, their usage would be similarly entrenched and in turn the well attested usage would equally block the participants' use of these verbs in MC. As a result, their judgment of these illicit MCs would be similar. Contrary to this prediction, however, the advanced learners and the native speakers were more accurate at illicit MCs formed with stative verbs than MCs formed with achievement verbs. These findings lend strong support to the assertion that the participants were sensitive to the semantic determinants of English MC. The strong correlation between semantics and argument structure is not only a descriptive fact, but also a factor that plays a significant role in acquisition of argument structure. Both L2 learners and the native speakers of English were shown to make use of the semantic constraints upon English MC to determine whether a particular verb can undergo English MC.

Consistent with the prediction based on the effect of frequency (syntactic diversity), all participants judged MCs formed with ergative verbs (ERGATI) more grammatical than MCs formed with agentive verbs (AGENTI). Recall that although these target verbs are similar in terms of word frequency, ergative verbs allow more intransitive structures than agentive verbs. L2 learners, therefore, had more frequent contact with ergative verbs in Subj (non-agent) V (active) structure, which in turn led them to be more accurate at MCs formed with ergative verbs. This is consistent with the usage-based assertion that distributionally regular, high frequency items are among those acquired earliest (Mathews et al., 2005).

Noteworthy is also the contrastive behavior between the advanced learners and the native speakers. Among the three legitimate MCs, the advanced learners scored highest at INSTRU, second highest in ERGATI, and lowest in AGENTI. By contrast, the native speakers scored highest at ERGATI, second highest in INSTRU, and lowest at AGENTI. Analysis of two-way ANOVA suggests that the advanced learners performed significantly better on INSTRU than on ERGATI. However, no significant difference was found between INSTRU and ERGATI for the native speakers, although the latter was scored numerically higher than the former. This finding indicates, in a sense, that semantics and frequency exert different impact upon L2 learners and native speakers. It appears that the native speakers are more susceptible to the frequency effect. The tendency demonstrated on the part of the native speakers is consistent with previous studies. For instance, previous studies (Featherston 2005; Kempen & Harbusch 2003) have found that, when rating sentences that are equally grammatical, native speakers were more accurate in sentences that contain high frequency items. This finding is also consistent with the previous studies which found that L2 learners and the native speakers employed different strategies in their grammaticality judgment. Davies and Kaplan (1998), for instance, found that L2 learners were more likely to make use of strategies such as guessing, operationalizing learned rules, translation, and analogy.

The pedagogical implications of the present study for English teaching and learning are twofold. For one thing, our finding reveals that some errors that L2 learners committed can be attributed to their inaccurate understanding of the semantic constraints upon the English MC. It is, therefore, suggested that the instructors should take a more careful consideration of the syntactic properties of verbs and help learners sensitize the semantic determinants of particular structures. For another, it has been shown that the learners' reluctance in accepting MCs formed with agentive verbs is partially due to their infrequency in L2 input. Instructors are suggested to provide the learners with more opportunities to learn the middle usage of these verbs.

To conclude, the findings show that both semantics and frequency operate in L2 acquisition of English middle construction. If only semantics has an effect on this process, then participants should perform better on instrument MCs than other types of MCs and better on illicit MCs formed with stative verbs than MCs formed with achievement verbs. Conversely, if frequency is the only factor at work, participants should perform better in MCs formed with ergative verbs than other types of MCs. However, their better performance on instrument MCs and ergative MCs than on agentive verbs provides strong evidence that both semantics and frequency were at work in L2 acquisition of English MC. Moreover, the contrastive behavior between the advanced learner group and the native speaker group seems to suggest that the two factors, though both at work, have different impact upon L2 learners and the adult native speakers. Comparatively speaking, frequency has a stronger impact upon the native speakers than on the learner groups. However, more rigorous research design should be employed to tease apart the respective impact of semantics and frequency upon the learner group and the native speaker group.

#### Notes

1. The sentences used to exemplify particular constructions in this dissertation come from two sources. Most of them are quoted from literature, whose sources are usually indicated in the bracket following the examples. However, when the same example appears the second time in the dissertation, its source will not be mentioned any more. Another number of exemplar sentences were made by the author. However, the grammaticality of these sentences was consulted with at least two native speakers of the language. Furthermore, most English made-up examples are the testing items in the acceptability judgment task used in the empirical study. Their grammaticality is based upon the intuitive judgment of 24 native speakers of English.
2. Middles usually appear in the present tense with a generic reading, but this does not mean that they can never express specific events. For instance, the following sentence is regarded as acceptable and expresses a specific actual event: Grandpa went out to kill a chicken for dinner, but the chicken he selected didn't kill easily. The present study does not take these exceptions into account and assumes that the English middle construction denotes genericity.
3. A closer scrutiny of the linguistic data, however, provides clear evidence that the two identified constraints are only necessary, but not sufficient conditions, as shown in the sentence \*English acquires easily. The verb acquire is an accomplishment verb, and the properties of English (e.g., phonology, lexis, and syntax) may facilitate the process of acquisition. However, the ill-formedness of the above sentence suggests that there exists further restriction upon MC formation. The focus of the present study is to examine the effects of the two well-attested constraints upon L2 learners, leaving the exploration of other constraints for further research.
4. As discussed in Section 5.2, PSYSUB is a bit lower in terms of frequency than other three types. The fact that the participants performed similarly on PSYSUB and STA (two types of stative verbs) indicates that the slight frequency difference does not significantly impact the participants' behavior.
5. The two anonymous reviewers pointed out that L1 might play a role in Chinese learners' acquisition of English MC. There was indeed some evidence for L1 influence in our study. For instance, even some of the advanced learners accepted illicit MCs whose Chinese counterparts are grammatical, indicative of L1 influence. However, since the primary goal of the present study is to examine the effects of semantics and frequency, the effect of L1 would not be discussed in further detail in the present article. Moreover, L1 influence fails to provide a satisfactory account of the learner behaviors under investigation in the present study. For instance, MCs formed with stative verbs are ungrammatical in Chinese. If L1 influence were a major factor, Chinese learners should have correctly rejected them. But the fact is that they tend to accept them. In addition, MCs formed with agentive verbs are grammatical in Chinese. If L1 influence were overriding, Chinese learners should have correctly accepted them. The results, however, show that some of Chinese learners were uncertain about the grammaticality of this type of MC. In our view, these learner behaviors can be better characterized by taking semantics and frequency into account. This also explains why L1 was not taken to be a major factor in the present study.

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## Appendix

### Acceptability Judgment Task (AJT)

#### A Test of English Grammar

## 考试说明

在这部分,请你根据自己的语感来判断下列句子是否符合英语表达。如果你认为在合适的语境中你会使用或听到别人使用这个句子,说明该句是可以接受的英语句子。反之,如果在任何语境中你都不会使



- ( )15 The answer knows without any difficulty .
- ( )16 The bike ( 自行车)rides well by youngsters .
- ( )17 The window opens easily .
- ( )18 His explanation sounds reasonable .
- ( )19 He spoke so quickly that I didn't listen what he said .
- ( )20 He will be given another chance .
- ( )21 This story believes easily .
- ( )22 When the light turns green ,you can walk across the street .
- ( )23 Weird ( 怪异的)noises hear well at night .
- ( )24 The top of the mountain reaches with difficulty .
- ( )25 The bus drivers strike ( 罢工)made it impossible for us to get to work .
- ( )26 The match ( 比赛)wins easily for the Chinese team .
- ( )27 English learns easily .
- ( )28 Money loses easily on the bus .
- ( )29 These books read well for middle school students .
- ( )30 The car drives smoothly for experienced ( 有经验的)drivers .
- ( )31 I have never known her to arrive on time .
- ( )32 The suitcase ( 手提箱)carries well .
- ( )33 The shaver ( 剃须刀)shaves well .
- ( )34 Such houses build easily .
- ( )35 These books buy easily for me .
- ( )36 His words doubt easily .
- ( )37 It rained so hard that we couldn't go out for a walk .
- ( )38 Cotton shirts ( 棉衬衫)wash easily by everybody .
- ( )39 This answer finds easily .
- ( )40 Night falls earlier in winter .
- ( )41 The car drives easily .
- ( )42 Unpleasant things forget quickly .
- ( )43 She's fond at taking snacks ( 小吃、点心)between meals .
- ( )44 The book reads well .
- ( )45 E-mails receive very conveniently ( 方便地)for people .
- ( )46 The course book( 教科书)teaches well .
- ( )47 Unpleasant things forget quickly for him .
- ( )48 The stroller ( 婴儿推车)pushes well for young mothers .
- ( )49 By no means ( 决不)will I allow him to go swimming alone ( 独自).
- ( )50 These mistakes notice easily .
- ( )51 These shirts sell quickly .
- ( )52 Hollywood ( 好莱坞)films like easily .
- ( )53 John's talent ( 天赋、才能)envies easily .
- ( )54 The boat sinks easily .
- ( )55 Paris has been well known about its famous monuments( 纪念馆) , beautiful music , and wonderful restaurants ( 餐馆).
- ( )56 The bread cuts well .
- ( )57 The car drives smoothly ( 平稳地).
- ( )58 The house was built last year .
- ( )59 Money spends quickly in homebuilding ( 建房).
- ( )60 Little kids amuse easily .
- ( )61 The songs of Bob Dylan are very popular among young people ,who regard him as more superior ( 优秀)to other musicians .
- ( )62 Chickens frighten easily .
- ( )63 These stamps ( 邮票)collect easily for us .
- ( )64 The ceiling ( 天花板)of the house touches easily .
- ( )65 This guitar ( 吉他)plays well by professional players ( 专业吉他手).
- ( )66 The sun appears earlier in summer than in winter .

- ( ) 67 My father has tried many times to give off smoking ,but he can t seem to give it up .
- ( ) 68 Mary fears easily .
- ( ) 69 This article understands well .
- ( ) 70 His life has never been changing these years .
- ( ) 71 This kind of hard cheese cuts easily for skillful ( 熟练的、灵巧的)cooks .
- ( ) 72 The ship sinks purposefully ( 故意地).
- ( ) 73 It was between 1830 and 1835 when the modern newspaper was born .
- ( ) 74 These mistakes correct easily .
- ( ) 75 The ball kicks well .
- ( ) 76 This mistake arises from a misunderstanding .
- ( ) 77 The knife cuts well .
- ( ) 78 The price of TV set drops quickly these days .
- ( ) 79 The two coins looked so much alike that it was difficult to tell ( 分辨)one from the other .
- ( ) 80 The trouble was caused by your sister .
- ( ) 81 The car drives skillfully ( 熟练地、灵巧地).
- ( ) 82 It will freeze quickly once the air temperature ( 气温)drops below zero .
- ( ) 83 He angers easily .
- ( ) 84 The house cleans to welcome guests .
- ( ) 85 Glass cups break easily .
- ( ) 86 The pen writes well .
- ( ) 87 The stroller ( 婴儿推车)pushes well .
- ( ) 88 Childhood friends don t meet easily .
- ( ) 89 This article understands well for middle school students .
- ( ) 90 These books buy easily .
- ( ) 91 Such things happen every month .
- ( ) 92 John annoys easily .
- ( ) 93 E -mails receive very conveniently ( 方便地).
- ( ) 94 This guitar ( 吉他)plays well .
- ( ) 95 Cotton shirts( 棉衬衫) wash easily .
- ( ) 96 Money spends quickly for everybody in homebuilding ( 建房).
- ( ) 97 Wet ( 湿的)clothes don t dry very quickly in these rainy days .
- ( ) 98 These stamps ( 邮票)collect easily .
- ( ) 99 The match ( 比赛)wins easily .
- ( ) 100 The Mountain sees most clear after rain .
- ( ) 101 Aluxurious villa ( 豪华别墅)doesn t own easily .
- ( ) 102 The room smells badly .
- ( ) 103 Small towns destroy easily .
- ( ) 104 This Canon printer ( 佳能打印机)prints well .
- ( ) 105 The cake tastes sweet .
- ( ) 106 The book reads easily .