The Compatibility of English Semantically Atypical Adverb-adjective Combination: Chinese Learners of English in Taiwan

Chia-Lin Hsieh

National Taiwan Normal University

Present study centers on the discussion of English rarely found adverb modifications, like *tragically boring* and *intensely excited* as we are curious about how people with different language backgrounds, i.e. English native speakers and Chinese learners, respond to them. English-congruent Chinese combination is included as it is used to investigate whether Chinese learners tend to be influenced by their L1 in judging atypical lexical combinations. Furthermore, learners' proficiency level is considered as one plausible factor that could affect responses and is thus taken into discussion. The results in current study show that Chinese learners' percentage of acceptance (of these atypical combinations) is higher than English native speakers. Besides, Chinese learners respond identically to both English items and English-congruent Chinese items in two third of the thirty items (67%), which implicitly suggests L1 influence. Thirdly, as English proficiency increased, the judgment is more similar to English native speakers, while L1 influence does not decrease as proficiency level rises. In conclusion, current study argues that firstly, Chinese learners of English tend to be more creative than English native speakers in responding to atypical adverb-adjective combination; secondly, Chinese L1 would interfere with learners' judgments and finally, proficiency level is an index in terms of the similarity to English native speakers' judgments, but it cannot eliminate learners' L1 influence on atypical lexical word combinations.

Keywords: atypical word combination, L1 influence, proficiency level, semantic compatibility

1. Introduction

It has been widely studies on L2 learners' acquisition of formulaic expressions (Biskup, 1992; Bahns & Eldaw, 1993; Granger, 1998; Howarth, 1998; Bonk, 2002; Wray, 2002; Nesselhauf, 2003, 2005; Gyllstad, 2005; Laufer & Waldman, 2011). Preceding studies on fixed or restricted word formation use the word, "collocation", Benson et al. (1986) divides collocation into two types: grammatical collocation[1] and lexical collocation[2]. All lexical collocation examined in previous works focus on formulaic or restricted word formation; however, current study aims to investigate

[1] Grammatical collocation refers to the combination between the content word and the function word (or clauses).

[2] Lexical collocation only involve content words, such as verb-noun collocation (cf. the study of Zhang, 2004; Nesselhauf, 2003; Laufer & Waldman, 2011 on verb-noun collocation), verb–object collocation (cf. Howarth 1998), adjective-noun collocation (cf. Siyanova & Schmitt, 2008), adverb-adjective collocation (Granger, 1998; Leśniewska and Witalisz, 2007).

grammatically well-formed but semantically incompatible free combination, i.e. atypical adverb-adjective combination. Different from previous research on formulaic sequences, Leśniewska' and Witalisz (2007) take atypical (non-frequent or non-occurring) L1-congruent adverb-adjective combinations to explore the phenomenon of L1 transfer. Their results indicate that when judging grammaticality of English uncommon word formation, learners do not base L1-L2 congruence and they would be "neither more willing to accept them nor more willing to reject them" (p.42), indicating that L1 do not show significant impact on Polish advanced learners' acquisition of English and thus further "semantic justification" would be needed. The present study will explore whether semantic factors affect learners' decisions on the grammaticality judgments of adverb-adjective combination [3] and whether any constraint can explain for their perception of atypical phrasal formation. Besides, current study recruits not only Chinese learners at different proficiency levels but also English native speakers so as to examine and to compare different language users' responses.

2. Review of the literature

To examine whether there was an underlying mechanism crucial in explaining L2 learners' judgments on rare word formation, the inclusion of theoretical account of semantics was important on the ground that conflicts of word meanings or incompatibility of components of words would implicitly influence our perception (or even production) on grammaticality. In the following part, decompositional analysis of lexical words in adjacent position was reviewed. In addition, relevant studies on (either free or somewhat restricted) word combination were summarized below.

[3] The focus is not on typical or formulaic word combinations, and the word, combination, will replace collocation in discussing the current study later.

2.1 Theoretical framework

Katz and Fodor (1963) proposed an analyzing method, known as semantic feature analysis, which could be used to decompose (or segment) the meanings of individual lexical word. The classic example provided in their study was the decomposition of the noun, *bachelor,* which involved four readings.

(1) Bachelor – noun →

A. (Animal) – (Male) – [young fur seal when without a mate during the breeding time]
B. (Human) – [who has the first or lowest academic degree]
C. (Human) – (Male) – [who has never married]
D. (Human) – (Male) – [young knight serving under the standard of another knight]

(Katz and Fodor 1963: 186)

The features in parentheses were argued as syntactic features by Chomsky (1965) with additional binary distinction- "just as each phonological segment is a set of specified phonological feature" (p.48). According to Chomsky's (1965) idea, the features of *girl* could be decomposed into [+Common] → [+Count] → [+Animate] → [+Human] → [+Female]. Contradicted to Chomsky's idea, McCawley (1968) argued that the feature mentioned above, like [+Female] should be semantic feature as verbs in English would not select the words syntactically with feminine subjects because there is no syntactically specified feminine subjects in English, for instance, *girls* would and *flowers* were not marked syntactically with gender but each carried distinct semantic meanings (cf. Resnik, 1993: 42).

When it comes to phrasal or sentential level, sensible word formation would be constrained under selection restriction rules which specified "the necessary and sufficient condition for a semantically acceptable argument" (Resnik, 1993: 42). The conflict of semantic features in adjacent words was considered to be ungrammatical due to their violation of selection restriction. A canonical example was *colorless green*

ideas sleep furiously (Chonsky, 1965: 116). Furthermore, Rensnik (1993) pointed out that the disagreement on what kind of constraints selection restriction was, existed. Chomsky (1965) regarded selection restriction as syntactic constraint while McCawley (1968) considered it as semantic constraint.[4] Overall, except for metaphorical readings, violation of selectional constraint would lead to unacceptability or ungrammaticality of sentences.

Arnold, Bower & Bobrow (1972) studied semantic compatibility of lexical items. They adopted nonsensical disyllabic words whose meanings were given arbitrarily and these nonsensical words were placed under sentence frames which contain either semantically compatible or incompatible words. Their aim was to explore if semantic compatibility would function as an aid to associate recall of these nonsensical disyllabic words. In their study, it showed that the incompatibility of lexical items resulted in lower comprehensibility and also it revealed that selection restriction rule played a crucial role as participants tend to recall better when the nonsensical words fitted to sentence frame containing words of compatible meanings. They indicated that semantic features and selection restriction rule would affect people' perceptions on sentences largely.

2.2 Empirical Study

Previous research on collocation shed some lights on the discussion of lexical word combination as they offered insights on learners' knowledge about restricted word formation which could be taken as a comparison with atypical lexical word combination examined in present study and thus, the review of preceding works on collocation would be included in the review.

[4] Since the discussion about the nature of selection restriction was not the main concern of current study, please refer to McCawley (1968, 1971) who argued against and Kuroda (1969) who argued for Chomsky's position.

Collocation in preceding studies was taken in a slightly different way. Nizonkiza (2011) discussed three kinds of commonly adopted views. Firstly, frequency-based perspectives denoted the "co-occurrence of words in a certain span" (Nesselhauf, 2003: 224). Secondly, phraseological viewpoints referred to "a type of word combination" (Nesselhauf, 2003: 224) in either restrictive or fixed manner.[5] The third view reconciled the above two, i.e. frequency-based and phraseology-oriented collocation, as Nizonkiza (2011) mentioned, the two approaches were "additionally include one or two elements of the other tradition among their defining criteria" (p.119). The review below involved study took the third approach.

Granger's (1998) study explored advanced French learners' writing from Internal Corpus of Learner English by examining the adverb-adjective collocation. In his study, the modifier or amplifier, i.e. adverbs, was divided into two types: "maximizer, expressing the highest degree such as *absolutely, entirely…,* and booster, merely express the high degree such as *deeply, strongly, highly*…" (1998: 149). Their production data showed that learners overuse *completely, totally,* but underuse *highly*. The reason for the overuse was because there were French congruent counterpart, *completement* and *totalement* for *completely* and *totally*, respectively. The overall results indicated that French learners tended to use less prefabricated patterns than English native speakers did and that when learners adopted collocation in their writing, these word combinations mostly were congruent to their L1, showing that L1 transfer in learners' collocation was valid. Supporting Granger's (1998) results on learners' L1

[5] In this view, collocation could be further categorized into three groups (Nesselhauf, 2003: 224-227; Wang & Shaw, 2008: 204-205) depending on the degree of fixedness. The first type was the most bound expression, idioms, defined as adjacent words mutually selected each other and appeared as a frozen expression such as *kick the bucket, pull one's leg* etc. The second type referred to collocations, mainly interpreted as the restricted relation of the two lexical words. As Wang & Shaw (2008) mentioned, this type "usually have one item used in a non-literal sense, often a specialized or figurative sense (205)," for instance, *take a picture*, *reach a goal*, etc. The final category, free combination/collocation, contained arbitrary constraints or non-restriction on the combination of lexical words, for instance, the verb, *play*, could collocate with *a card, a game, piano*, etc.

transfer, Laufer & Waldman (2011) examined English writings of Hebrew L2 learners at three different proficiency levels and compared learners' performances with English native speakers. They found that among 47 recurrent errors produced by L2 learners at different proficiency levels, 42 of them had L1 word-for-word-correspondence, indicating L1 influence on learners' collocation performances. They suggested that unlike native speakers who processed combined words through prefabricated pattern, learners "constructed messages from individual words" (p. 665). Moreover, they found intermediate and advanced learners produced deviant collocations more often than beginners, and this was explained by proficient learners' overconfidence on their second language.

Contradicted to the claims of L1 influence made by Granger (1998) and Laufer & Waldman (2011), Wang & Shaw (2008) investigated English written essays of advanced Chinese and Swedish learners by focusing on the collocation of high frequency verbs, like *do, make, have*, from corpus of Chinese and Swedish learners of English, respectively. They divided the collocated word, i.e. noun, into either free collocation or restricted collocation and showed that learners tend to produce more errors in restricted collocation. As Nesselhauf (2003) had pointed that restricted collocation had less L1 congruent correspondence, Wang & Shaw (2008) proposed that L2 learners would be thus influenced less by their L1 in restricted collocation because less L1-L2 congruence could be found. They further argued that since L1-L2 congruency was few in nature, the most underlying reason for higher error rate in restricted collocation was not L1 influence but language distance between source language and target language. They argued that learners of longer language distance to English, like Chinese made fewer errors than learners of closer language distance, like Swedish because Chinese learners influenced by their L1, which was more distant, tended to be more conservative while Swedish learners, whose L1 was more close to

English, would be more creative. Based on this logic, it implied that when making grammaticality judgments of atypical lexical word combination, Chinese learners having longer language distance (and being more conservative) than English native speakers, might tend to reject the lexical combinations more often (compared to English native speakers). The implication was worthy of investigation in current study.

The literature reviewed above mainly focused on production tasks, to be more specifically, writing tasks selected from the corpus. Leśniewska' and Witalisz (2007) explored the receptive knowledge of advanced Polish learners of English by conducting grammaticality judgment. They varied frequency and congruency of tasks items, which ranges from frequently occurring adverb-adjective collocation like *extraordinarily talented* and its Polish congruence, *niezwykle utalentowany,* to non-occurring L1 and L2 ones like *profusely talented* and its Polish lexical equivalent, *obficie utalentowany*. Their results showed that L1-L2 congruency did not play a role when Polish learners judged the grammaticality of the new word combination and concluded that L1 influence was absent in their study, whose outcomes conflicted with Biskup's (1992) study where Polish learners showed L1 influence. Whether their outcomes was due to the asymmetric nature of L1-L2 congruency was worth pondering, but as had been mentioned previously by Wang & Shaw (2008) that language distance could be one factor influencing L1 transfer, current study would explore if oriental language like Chinese would have different results from European language like Polish and whether L1 influence in the atypical lexical combinations were prominent in Chinese.

2.3 Research questions

The current study contained mainly the following questions: Firstly, since the

current study took a perception approach by examining the atypical adverb-adjective combinations, were there any distinct performances in Chinese learners and English native speakers? Could L1 transfer be found in the study? Besides, did language proficiency play a crucial role in learners' perception on atypical word formation?

3. Methods

Following Leśniewska and Witalisz's (2007) study on adverb-adjective combination, present study took grammaticality judgment in our tasks. The reasons for the method we adopted, as proposed by Leśniewska and Witalisz's (2007), were that firstly, rare word combination were not easily found by analyzing learners' actual writing data, secondly, the ability to make grammaticality judgment was an "integral part of one's language competence in L1 and L2" (p. 35) and it also provided a chance to probe into "the meta-linguistic knowledge that users might never display in free production" (35). Besides, one possible counter-factor in examining production data from corpus would be that it was hard to know if there were studious learners who would looked up the collocation (online) dictionary while writing their essays or papers and thus analyzing their writings may not reflect their actual knowledge on collocation or word combination. In addition, our goal aimed to investigate the atypical or non-occurring word formation, and hence, the production tasks seem less likely to provide sufficient data for our study.

3.1 Participants

Subjects were divided into three groups. Forty Chinese learners of English separated into two groups by English proficiency levels were in our target groups and 22 English native speakers were in control group. The first Chinese group contained participants with advanced proficiency level who were either junior or senior

English-major University students from National Sun Yat-Sen University in Taiwan and from National University of Kaohsiung in Taiwan and the intermediate group were non-English major freshman currently studying in National Sun Yat-Sen University. Each participant received a small gift as an appreciation to their contribution.

3.2 Data selection

Adverbs used in the present study were of two types: manner adverb, like *pleasantly, happily, madly,* and degree adverb, like *completely, largely, greatly*. The source of the manner adverbs were partly from Ansell (2002, chapter 25) and partly from Leśniewska' and Witalisz's (2007). Degree adverbs were from Harraps (1989, chapter 5) and from Leśniewska' and Witalisz's (2007). Adjectives in this study, based on the adjective taxonomy of Frawley (1992), described human propensity, i.e. mental state like *excited* and behavior like *talented* and *boring*.[6] There were four adjectives and each sentence paired with each adjective. The four adjectives were combined with both manner and degree adverbs arbitrarily, and the adverb-adjective combinations were placed under four sentence frames because we had four adjectives. Two sentence frames, that is, the sentences containing *boring* and *talented* were consulted from the study of Leśniewska and Witalisz (2007). The test sentences were shown below.

(1) Sentence with **manner adverb**-adjective combination:
*(a)Good thing you didn't make it to the lecture, it was **tragically boring.***
*(b) Today, John feels **happily excited** because his favorite movie star will visit Taiwan.*
(2) Sentence with **degree adverb**-adjective combination:
*(a)Good thing you didn't make it to the lecture, it was **completely boring.***
*(b)Today, John feels **intensely excited** because his favorite movie star will visit*

[6] Cf. Dixon 1982, 1991, for adjectives classification and also Quirk et al 1994, chapter 5, for adjective taxonomy based on semantic features.

Taiwan.

The task items contained 17 manner adverb-adjective and 13 degree-adjective combination; in total, thirty test sentences. It should be noted that among the 17 manner adverbs, only two, *pleasantly boring* and *negatively excited*, were semantically **in**compatible with their adjective.

One of our research questions involved the issue of L1 transfer, and thus, Chinese task items were also used and these items were direct translation from English ones. As has been indicated by Leśniewska and Witalisz (2007), there was no completely matched translation from one language to another; therefore, the direct translation of English to Chinese might be a bit odd, but still comprehensible. Note that only Chinese learners had to answer both English and Chinese task items. When participants were doing the tasks, they were told to follow their intuition.

All of the English adverb-adjective combinations were examined under British National Corpus (BNC), Corpus of Contemporary American English (CCAE) and Oxford Online Dictionary (OOD). Among the thirty, only three combinations were found in the corpus; however, all of the three occurred below 10 times among 100 million in English National Corpus and below 10 times in Corpus of Contemporary American English and were regarded to be atypical combination; the twenty-seven were non-occurring adverb-adjective combination and were thus not found in BNC, CCAE and OOD.

4. Results and Discussion

The central questions in current study explore Chinese learners' perception on atypical adverb-adjective combinations. Firstly, the study investigate Chinese learners' overall judgments and make comparison between learners and English native speakers, i.e. group effect (discussed in 4.1), and secondly, it involves proficiency level as the

possible factor in atypical word formation, i.e. proficiency effect (discussed in 4.2).

4.1 Group effect

To investigate the judgment on atypical adverb-adjective combination of Chinese learners and compare the overall responses produced by the control group, Table 1 below shows the result. Before making further interpretation, it shall be noted that there are two adverb-adjective combinations in English task items receiving highest rejection rate compared to other 28 items. They are *pleasantly boring*, rejected by 91% English native speakers and by 95% Chinese learners, and *negatively excited*, rejected by all English native speakers and by 92.5% Chinese learners. The reason being for the high rejection rate could be because of the conflicting semantic features between manner adverbs and adjectives, in other words, the violation of selection restriction on phrasal combination. For instance, *excited* can be decomposed into [+Human attribute] → [+Mental state] → [+Mood] → [+Optimistic] whereas *negatively* would be decomposed into [+Human attribute] → [-Optimistic]. The conflicting feature, [Optimistic] in *negatively* and *excited* violates selection restriction, and therefore, it is regarded by all English learners and most Chinese learners as ungrammatical. The two task items were excluded in the overall responses for not spoiling the overall results.

Table 1:
Chinese learners' and English native speakers' responses on all English items

Subjects / Total	Chinese learners		English native speakers	
	Yes	No	Yes	No
Mean average	50.8%	49.2%	45.7 %	54.3%

As shown by Table 1 above, Chinese learners tend to accept more atypical

adverb-adjective combinations than English native speakers do, which contradicts the study of Wang & Shaw (2008) which claimed Chinese learners were more conservative in terms of restricted collocation. Table 1 shows that English learners are less creative in accepting atypical lexical combination. Besides, in terms of manner adverbs, Chinese learners (54.8%) tend to accept atypical combination more often than English native speakers (49.7%) do. The result supports Laufer & Waldman (2011) indicating that learners "disregarded restrictions on word combinations may suggest that, unlike NSs, learners construct messages from individual words rather than from prefabricated patterns" (p.665).

There are four possibilities of responses between Chinese learners and English native speakers as shown in Table 2 below.

Table 2:
Four possible combinations of responses (Note: there are three English items in a tie and are not considered)

English manner adverbs	English speakers: YES	English speakers: NO
Chinese learners: YES	9/ 30 (%)	3/30 (%)
Chinese learners: NO	4/30 (%)	11/30(%)

There are totally seven differences between the judgments of Chinese learners and of English native speakers: four of the seven, i.e. *hellishly boring*, *tragically boring*, *hopelessly violent*, and *enormously excited* that English native speakers consider being correct while Chinese learners do not, and three of the seven, i.e. *cleverly talented, intensely excited,* and *highly violent* that English speakers consider being incorrect but Chinese learners regard as correct combinations. Exploring Chinese learners' responses on English-congruent Chinese task items shed some lights on this discrepancy between Chinese learners and English native speakers' judgments. Among the seven distinctive responses, it is found that except *tragically boring* and

highly violent, Chinese learners' responses toward the rest five (71.4%) are consistent in English adverb-adjective and English-congruent Chinese adverb-adjective combination. For instance, *cleverly talented* is not acceptable by 86.4% English native speakers, while it is not regard as deviant by 70% Chinese learners because its Chinese correspondent, *you* "possess(有)" *cong-ming* "cleverly(聰明地)" *cai-neng* "talented(才能)", is acceptable by 67.5% Chinese learners. Chinese learners' responses to English and Chinese items reveal that learners' L1 will affect their L2 judgments, and thus learners of oriental language like Chinese, though distance to English in terms of language family, show L1 influence in their acquisition of L2. Besides, compared to English native speakers, Chinese learners' responses demonstrate their higher willingness to accept atypical combination, whose outcomes differ from those of Wang & Shaw (2008) where they found Chinese learners were more conservative in their production.

As for the two items, *tragically boring* and *highly violent*, Chinese learners accept them (55% in the former and 62.5% in the latter), while they do not consider their Chinese counterpart to be acceptable. It is plausible that Chinese learners' low acceptability in Chinese correspondent of *highly violent* and *tragically boring* is because of the non-congruency/equivalency of Chinese lexical adverb-adjective combination with English adverb-adjective combination. Besides, it is found in Granger's (1998) study that French learners of English tend to combine *highly* with various types of adjectives compared to English native speakers. This could be true because 25 out of 40 Chinese learners (62.5%) accept *highly violent* while only 45.5% English native speakers find it acceptable. Concerning the overuse of *highly*, it is possible that English native speakers consider it as a constrained word which can only appear with certain adjectives, but learners fail to perceive the implicit hidden knowledge.

4.2 Proficiency effect

To explore if proficiency level plays a role in L2 learners' perception, we approach this from two dimensions: firstly, whether Chinese advanced learners' judgments will be similar to English native speakers and secondly, whether difference between advanced and intermediate Chinese learners exists.

Table 3:
The overall percentage on the grammaticality judgments of English native speakers and of Chinese learners at different proficiency levels

Subjects / Proficiency level	Chinese learners		English native speakers	
	Yes	No	Yes	No
Intermediate	53%	47%	45.9 %	54.1%
Advanced	48.8%	51.2 %		
Total (mean average)	50.9%	49.1%		

Comparing Chinese advanced learners with English native speakers, both groups shows similar tendency in atypical adverb-adjective combination, that is, English native speakers' and Chinese learners' responses in No are higher than Yes. Wang & Shaw (2008) suggested that due to language distance, Chinese learners would have high rejection rate; however, English native speakers' rejection rate is even higher (in fact, the highest among the three groups) and this suggests that English native speakers use "prefabricated pattern" often.

Chinese intermediate learners' perceptions are distinct to English native speakers, that is, the former have more Yes responses than No responses while the latter gives more No responses. It is possible that Chinese intermediate learners tended to be "more creative." We can only conclude that learners with different proficiency levels demonstrate judgment differences, but cannot reach a conclusion that all Chinese

learners were more conservative as Wang & Shaw (2008) suggested. It is plausible that because Wang & Shaw (2008) did not take proficiency level into account, and they jumped into conclusion that all Chinese learners were conservative in their responses.

Comparing Chinese intermediate learners and Chinese advanced learners' perceptions on the semantic compatibility of lexical words, Chinese advanced learners are similar to the perceptions of English native speakers which implies that as the proficiency levels increase, learners' perceptions/ judgments would be more approximate to English native speakers. However, it shall be noted that it is not plausible to say that as proficiency level increases, L1 influence becomes weaker.

Table 4: The comparison of Chinese learners' responses in English and Chinese items (Note: responses in tie are not considered in data below)

Similarity	English and Chinese items responses	Advanced	Intermediate
Similar responses to Chinese and English items	English items: Yes and Chinese items: Yes; English items: no and Chinese items: no	20/30 (67%)	20/30 (67%)
Dissimilar responses to Chinese and English items	English items: Yes but Chinese items: no	8/30 (26.6%)	3/30 (10%)
	English items: no but Chinese items: no	1/30 (3.3%)	2/30 (6.7%)

Table 4 above reveals that Chinese advanced learners are still under their L1 influence even though their perceptions on English atypical word combinations are more approximated to English native speakers.

Furthermore, compared Chinese intermediate learners' responses (whose overall acceptability is above 50%) with Chinese advanced learners (whose overall acceptability is below 50%), the outcomes did not match the results shown in Laufer'

& Waldman's (2011) production-based study which indicated learners with higher proficiency levels was more confident and made more errors; rather, Chinese advanced learners in the receptive task make less errors and are comparatively more conservative than intermediate learners. It is possible that the distinct results may be due to the nature of methods, i.e. atypical word combination versus typical collocation. In the work of Siyanova & Schmitt (2008) who conducted both production and perception task showing that advanced Russian learners could produce well but perceive bad, their results were distinct to Laufer & Waldman (2011), which argues advanced learners produce worse than intermediate learners, and also the current study which argues advanced learners perceive better than intermediate ones. Therefore, it could be method difference, i.e. atypical versus typical word combination rather than task type distinction, i.e. production and perception, leading to dissimilar outcomes in Laufer' & Waldman's (2011) paper and the present study.

5. Conclusion

Two main research questions are proposed in the current study, that is, whether Chinese learners of English would be influenced by their L1 and whether Chinese learners with different proficiency levels show distinctive results to each other and to English native speakers. The overall percentage of Chinese learners' identical responses in both English and Chinese tasks reaches 74.2% (excluding answer in a tie) and the rest 25.8%, except the case of *highly violent*, could be explained by semantic compatibility. That is, Chinese learners' L1 will interfere with their L2 when making grammaticality judgments on English-congruent Chinese adverb-adjective combination, which contradicts Leśniewska' and Witalisz's (2007) study which did show L1 influence on Polish learners of English. The results show that even though "semantic justification" (Leśniewska and Witalisz, 2007) can explain some of Chinese

learners' responses, learners' L1 knowledge wield stronger power on learners' judgments.

The present study further shows that compared with Chinese intermediate learners, advanced learners' responses show similar tendency to English native speakers. It is showed that proficiency level is one crucial factor affecting Chinese learners' responses in making grammaticality judgments on atypical word combination. Further study could examine if proficiency level will also causes Chinese learners' distinct responses in typical word formation by production and perception task.

There are some limitations in the current study required further adjustment. Firstly, the two tasks are placed in sequence, so Chinese Learners may be able to refer English and Chinese sentences to-and-for. Secondly, context (or sentence frame) may influence the judgment of English items and the match between the word combination and context should be in a better control.

Reference

Ansell. Mary. (2002). *English Grammar*: *Explanations and Exercises.* Retrieved from http://www.fortunecity.com/bally/durrus/153/gramdex.html.

Arnold, P., Bower, G. H., & Bobrow, S. (1972). Mediated semantic compatibility in associative learning. *Journal of Verbal Learning and Verbal Behavior*, 11, 239-242.

Bahns, J., & Eldaw, M. (1993). Should we teach EFL students collocations? *System*,21, 101–114.

Biskup, D. (1992). L1 fluence on learners' rendering of English collocations: A Polish/German empirical study. In P. J. L. Arnaud & H. B´ejoint (Eds.), *Vocabulary and applied linguistics*, 85–93. London: Macmillan.

Benson, M., Benson, E., & Ilson, R. (1986). *The BBI dictionary of English word combinations.* Amsterdam: John Benjamins.

Bonk, W. J. (2000). Testing ESL learners' knowledge of collocations (Report No. FL 801 384). (ERIC Document Reproduction Service No. ED442309).

Chomsky, N. (1965). *Aspects of the theory of syntax.* Cambridge, MA: MIT Press.

Frawley, William (1992). *Linguistic Semantics*. Hillsdale, N.J.: Erlbaum.

Granger, S. (1998). Prefabricated patterns in advanced EFL writing: Collocations and formulae. In A. P. Cowie (Ed.), *Phraseology: Theory, analysis and applications*, 145–160. Oxford: Clarendon Press.

Gyllstad, H. (2005). Words that go together well: Developing test formats for measuring learner knowledge of English collocations. In F. Heinat & E. Klingval (Eds.), *The Department of English in Lund: Working papers in linguistics*, 5, 1–31.

Howarth, P. (1998). The phraseology of learners' academic writing. In A. P. Cowie (Ed.), *Phraseology: Theory, analysis, and applications*, 161–186. Oxford: Oxford University Press.

Harrap's English Grammar. (1989). [retrieved 10, Jan. 2012, Retrieved from http://maralboran.org/web_ing/Grammar-Harrap/index.htm.

Laufer Batia & Tina Waldman. (2011). Verb-Noun Collocations in Second Language riting: A Corpus Analysis of Learners' English. *Language Learning* 61;2, 647–672.

Le´sniewska, J., & Witalisz, E. (2007). Cross-linguistic influence and acceptability judgments of L2 and L1 collocations: A study of advanced Polish learners of English. *EUROSLA Yearbook*, 7, 27–48.

Katz, J. J. & Fodor, J. A. (1963). *The structure of a semantic theory.* Language 39, 170-210.

McCawley, J. D. (1968). The role of semantics in a grammar. In E. Bach and R. T. Harms, (Eds.), *Universals in linguistic theory*. Holt, Rinehart and Winston, N. Y.

McCawley, James D. (1971). Interpretive Semantics Meets Frankenstein. *Foundations of Language* 7, 285-96.

Nesselhauf, N. (2003). The use of collocations by advanced learners of English and some implications for teaching. *Applied Linguistics*, 24, 223–242.

Nizonkiza Déogratias. (2011). The relationship between lexical competence, collocational competence, and second language proficiency. *English Text Construction* 4:1, 113–146.

Nesselhauf, Nadja. 2005. *Collocations in a learner corpus.* Amsterdam: John Benjamins.

Dixon, Robert M. W. 1982. Where Have All the Adjectives Gone? In: Robert M. W. Dixon, *Where Have All the Adjectives Gone? and Other Essays in Semantics and Syntax* . Berlin-Amsterdam-New York: Mouton, pp. 1-62.

Dixon, R. M. W.. (1991). *A new approach to English Grammar, on Semantic Principles*. Oxford: Clarendon Press.

Resnik, P. (1 9 9 3). *Selection and Information: A Class-Based Approach to Lexical Relationships.* Ph.D. thesis, University of Pennsylvania. (f t p : / / ftp. cis. upenn, edu/pub/ircs/tr/93-42, ps. Z).

Siyanova, A., & Schmitt, N. (2008). L2 learner production and processing of collocation: A multi-study perspective. *Canadian Modern Language Review*, 64, 429–458.

Wray, A. (2002). *Formulaic language and the lexicon*. Cambridge: Cambridge University Press.

Wang, Y., & Shaw, P. (2008). Transfer and universality: Collocation use in advanced Chinese and Swedish learner English. *ICAME Journal*, 30, 201-232.

Zhang Jun Li Wenzhong. (2004). An Analysis of Errors in the Verb-noun Collocation Pattern in COLEC. *Foreign Language Education*.

Department of English,
National Taiwan Normal University
Taipei, TAIWAN
Chia-lin Hsien: bay76y@hotmail.com

臺灣英語學習者對英文非典型副詞-形容詞語意相容性探究

謝佳琳

國立臺灣師範大學

本研究藉由使用中文的英語學習者和英語為母語者，對於英文罕見副詞修飾語，像是 tragically boring 和 intensely excited，以及對中文相對應之詞語，像是悲劇般的無聊(tragically boring)和強烈地興奮(intensely excited)做語法性之判斷(grammaticality judgment)。值得探討的是，以中文為母語的英語學習者在判斷英文罕見副詞和形容詞詞組是否受到第一語言的影響(L1 transfer)。此外，英文精通程度(proficiency level)對於英語學習者在判斷英文罕見副詞和形容詞詞組是否有差異也是本研究討論的要點。結果顯示英文學習者英文罕見詞組較英語為母語使用者高；此外，英文學習者在回答英文罕見副詞和形容詞詞組與其中文相對應之詞語中，三分之二(67%)的回應為一致，這顯現了第一語言對英語學習者的影響。在語言精通程度上，英文程度較高者與英語為母語使用者判斷較為相似，但第一語言之影響(L1 transfer)不會受到英文程度的高低而下降。本研究提出以中文為母語的英文學習者相較於英語為母語者，在英文罕見詞組上接受程度較高，且英語學習者在判斷合語法性上會受其母語的影響；此外，英語精通程度的不同，雖然是判斷學者習在英語使用是否更為接近英語母語使用者的指標，但英文程度的差異，並無法消除第一語言對英語學習者在判斷英文罕見詞組上的影響。

關鍵詞: 非典型詞組，第一語言影響，語言精通程度，詞意相容性