Mastery of collocations is one of the native like features of the target language, and collocation has been the focus in English teaching, one of which is amplifier collocation. Previous studies have analyzed how English amplifier collocations are used differently by native speakers and Chinese EFL learners from a linguistic perspective, i.e., how L1 structure influence Chinese EFL learners’ L2 collocation use. However, when language is perceived as the product of culture, different languages may influence perceptions of people from different cultures. Therefore, the study examines whether the different use of English amplifier collocation by native speakers and Chinese EFL learners results from their different perceptions of it, which are influenced by L1. In this regard, studies of L1 influence are not limited within linguistic domain, but can be better understood in sociocultural contexts. Because of constraints of different language structures, the researcher hypothesized Chinese speakers, rather than English speakers, are less conscious about scalar and non-scalar distinction of words being collocated by amplifiers. Thirty five Chinese native speakers and 30 English native speakers
participated in this study. Both offline (Grammaticality Judgment Test, GJT) and online measurement (Think-Aloud Protocols) were used to elicit participants’ responses. The GJT helps the researcher investigate whether these English and Chinese participants’ actual behaviors in judgments mirror their language structures. This think-aloud protocols look into if speakers’ thoughts are subject to constraints of their native language structures. The results showed evidence to support this hypothesis that different language structures may influence the thought of English and Mandarin speakers, especially degrees of their awareness in amplifier collocations. It may also explain Chinese learners’ difficulties in English amplifier collocation. This study thus has both theoretical and pedagogical implications.

**Keywords:** Collocation Teaching, Linguistic Relativity, Socio-Cultural Linguistics, Acculturatio
1. Introduction

It is believed that mastery of collocations is one of the native like features of the target language (Kukulska-Hulme, 2000), and collocation has been the focus in English teaching, one of which is amplifier collocation (Kennedy, 2003). Previous studies (Tang, 2010) have analyzed how English amplifier collocations are used differently by native speakers and EFL learners from a linguistic perspective, i.e., how L1 structure influence Chinese EFL learners’ L2 collocation use. However, when language is perceived as the product of culture, different languages may determine or influence perceptions of people from different cultures (Whorf, 1956). In other words, it is also important to examine whether the different use of English amplifier collocation by native speakers and Chinese EFL learners possibly results from their different perceptions of it, which are influenced by L1. In this regard, studies of L1 influence are not limited within linguistic domain, but can be better understood in sociocultural contexts. This view expands the discussion of L1 per se to the relationship between learners’ L1 and their perception from a sociocultural perspective.

2. Literature Review

(1) Amplifier Collocation and Second Language Learning

Amplifiers are degree words that “express degrees of increasing intensification upwards from an assumed norm” such as “absolutely, completely, really, and very” (Kennedy, 2003: 469), or “operate on certain linguistic elements to magnify the degree of intensification or to amplify certain qualities” (Tao, 2007: 5-6). They can be further subdivided into maximizers and boosters based on the degree of intensification. Their differences lie in that degree of magnification by boosters is less signified than that of maximizers; maximizers differ from boosters in that maximizers indicate the absolute degree rather than the relative degree of words (Quirk et al., 1985); maximizers are often used to modify non-scalar words, while boosters are used for scalar words (Wang and Chen, 2007). Common maximizers include totally, entirely, absolutely, and completely, while boosters may include badly, clearly, and deeply.
There are some studies comparing amplifier collocations or degree words used by English and Mandarin speakers. For example, Wang and Chen (2007) conducted a corpus-based study to investigate Chinese students’ use of certain English amplifier collocations. The results show that more proficient learners use more collocational tokens of maximizers and imply different developmental stages exist in English learners’ learning of amplifier collocations. Amplifiers are often represented as adverbs indicating degree of intensification. Tang (2010) conducted a corpus-based study to investigate collocations following certain degree adverbs by Chinese learners of English and native English speakers. The results show that Chinese learners’ use of collocation pattern is more random, and the frequency of their typical collocation use is low. Based on these studies, however, we cannot precisely decide to what degree the role played by L1 and culture. It is therefore necessary for researchers to investigate amplifiers or degree words in Mandarin.

(2) Features and Structures of Chinese Amplifiers

Amplifier is regarded by researchers as the subsystem under intensifier (Greenbaum and Quirk, 1990). Meng (2008) compared English and Chinese intensifiers and found both similarities and differences exist between them. For example, intensifiers in both languages can modify various word classes and degrees. However, the notion of absolute adverb and relative adverb is different between English and Mandarin in terms of the extent and classification. Absolute adverbs in English usually modify bounded heads with either maximum or minimum degree scale, such as absolutely right; relative adverbs shows various degree between two ends and usually modify unbounded heads, such as very good. In Mandarin, the boundary between absolute adverbs and relative adverbs are vague and complex, except for some absolute adverbs like wánquán 完全. Meng gave one example that gèng 更 (classified as absolute adverb by Lin and Guo, 2003) and Hen 很 (classified as relative adverb) can modify both absolute heads yōuxiù 優秀 (Excellent) and gradable heads měi lì 美麗 (Beautiful). In this respect, the function and lexical meaning of intensifiers relies on different linguistic contexts, and they can serve as both absolute adverbs and gradable adverbs. These findings suggest that the structures of amplifier or degree words may be different between English and Mandarin, and this could be reflected in the collocation...
use by Chinese learners of English. One more interesting question is whether these differences in languages shape speakers’ understanding of the notion of amplifier or degree words. If this is the case, Chinese students’ unexpected amplifier collocation in the target language needs to be treated as the product of culture, rather than linguistic incompetence.

Despite the fact that no researchers has proposed any systematic classification of Mandarin amplifiers, Lin and Guo (2003) listed 85 most frequently used Mandarin intensifiers, which are divided into absolute degree adverbs and relative degree adverbs, each being subdivided based on their different degrees from extremely high to low, as shown in Table 1.

Table 1: Classification of Degree Adverbs in Chinese

<table>
<thead>
<tr>
<th>Category</th>
<th>Subcategory</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Absolute Adverbs</td>
<td>1-1 Extremely High</td>
<td>最，最為，完全</td>
</tr>
<tr>
<td></td>
<td>1-2 High</td>
<td>更，更加，更為，更其，越，更發，備加，愈，愈加，愈發，愈益，越加，格外，益發，還</td>
</tr>
<tr>
<td></td>
<td>1-3 Medium</td>
<td>較，比較，較為，還</td>
</tr>
<tr>
<td></td>
<td>1-4 Low</td>
<td>稍，稍稍，稍微，稍為，稍許，略，略略，略為，些微，多少</td>
</tr>
<tr>
<td>Relative Adverbs</td>
<td>2-1 Extremely High</td>
<td>太，極，極為，極其，極度，極端，至，至為，頂，過，過於，過份，份外，萬分</td>
</tr>
<tr>
<td></td>
<td>2-2 High</td>
<td>頗，頗為，頗為，尋常，深為，滿，實，夠，多，多少，殊，特，大，大為，何等，何其，尤其，無比，尤為，不勝</td>
</tr>
<tr>
<td></td>
<td>2-3 Medium</td>
<td>不大，不太，不很，不甚</td>
</tr>
<tr>
<td></td>
<td>2-4 Low</td>
<td>有點，有些</td>
</tr>
</tbody>
</table>

Note. This table is cited from Lin and Guo (2003, p. 74).

We can define Mandarin maximizers and boosters based on two facts (Quirk et al., 1985; Kennedy, 2003). First, maximizers indicate absolute degree of words, and express greater degree of intensification. Second, boosters indicate relative degree of words, and express less degree of magnification. Therefore, following the two criteria mentioned above to define maximizers and boosters, maximizers in Mandarin should fall into category 1-1, and boosters into 2-2, theoretically. Three maximizers (zuì 最, zuìwéi 最為, zuìjù 最極, zuìjùwéi 最極為, zuìjùzhě 最極其)
(3) Language, Culture, and Thought

Whorf’s (1956) linguistic determinism holds that differences in languages determine how people from different cultures think. In other words, one’s thinking is constrained by his language, which is a product of culture. Although the strong version of linguistic relativity hypothesis that structure of a language determine how its speaker perceive the world, has been abandoned by many researchers nowadays, the weak version claiming that a language influences rather than determines its speakers’ predisposed worldview or behaviors, as claimed by Boroditsky (2001) that “Although the strong linguistic determinism view seems untenable, many weaker but still interesting formulations can be entertained.” Two important claims were mentioned in the linguistic relativity hypothesis (Wardhaugh, 2010). The first claim suggests that speakers would find it easier to talk about something if his or her language covers certain words to describe it, while it is more difficult for speakers whose language lack these words. The second claim is that speakers would be more aware of certain difference in their environment if their language makes distinctions about it, than those whose language does not.

As one of the early studies, Berlin and Kay (1969) claimed that a hierarchy exists among basic color terminologies across different cultures. They suggested that the hierarchy of basic color terms in each language reflects the world view of different cultures, and this study shows universals in the notions of color among 98 languages. In addition to different naming of terms, differences of syntactic structure in languages also lead researchers to test this hypothesis. For example, in Lucy’s (1992, 1996) study, he showed that different structures and ways of pluralization for nouns in English and Yucatec Maya influence how speakers of each language perceive the numbers of objects differently.

The differences of language structures between English and Mandarin have been explored by researchers to see whether language shapes thought. Bloom’s (1981, 1984) study found that different systems of counterfactual marking in Chinese and English lead to different ways of perception about it, as revealed in most Chinese students’
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difficulty in counterfactual questions. More recently, Boroditsky (2001) analyzed the concept of time by Mandarin and English speakers, and the researcher hypothesized that their different perceptions result from different language structures. It is suggested that English tends to describe time as horizontal, while Mandarin describes it as vertical. These different views of time within languages also show how speaker of each language perceive time. These studies supported the hypothesis that language influences thought and pinpointed that some different language structures in English and Mandarin affect each speaker’ perception.

3. Purpose of the Study

It was found that in Mandarin, unlike English, both absolute and relative adverbs can modify words with absolute heads and gradable heads, since the boundary between them is vague (Meng, 2008). This study is to examine whether this different language structure between English and Mandarin may lead to different perceptions of amplifier collocation for each speaker. Therefore, the relationship between Mandarin/ English structure and Mandarin/ English speakers’ perception of amplifiers was tackled. The researcher hypothesize that because of different language structures, Mandarin speakers, rather than English speakers, are less conscious about scalar and non-scalar distinction of words being collocated by amplifiers. If this hypothesis is true, it can provide supporting evidence for the weak version of linguistic relativity hypothesis. It may also explain why Chinese learners often have difficulties in mastering English amplifier collocation. In other words, this study has both theoretical and pedagogical implications.

4. Method

(1) Participants

Thirty five Chinese native speakers and 30 English native speakers participated in this study. These 35 Chinese speakers are college students, including 18 males and 17 females, all with their first language being Mandarin. The mean age for them to start learning English as a second language is 9.2, and they have learned English for 12.2
years averagely. The 30 English native speakers include 11 males and 19 females. Their average age is 26.3 years old. They were invited to answer questions in this study. Participants were eliminated when there are not native speakers of Mandarin or English, and when they failed to complete all the questions.

(2) Instruments
In order to test participants’ awareness of scalar and non-scalar distinction of words being collocated by amplifiers, both offline and online measurements were used in this study. The grammaticality judgment test (GJT) was used as the offline measurement. Both Mandarin and English speakers were invited to judge grammaticality and naturalness of 27 sentences written in their first language with intuition, i.e., Mandarin speakers read 27 sentences in Mandarin, and English speakers read 27 sentences in English. These 27 sentences contain amplifier collocations consisting of three maximizers and six boosters in Mandarin and English (see Appendix). The nine targeted amplifiers in Mandarin include three maximizers (zuì, zuìwéi, wánquán) and six common boosters (hěn, fēicháng, tèbié, xiāngdāng, shīfēn, pō). In English, three maximizers (completely, entirely, and absolutely) and six boosters (very, really, particularly, considerably, highly, and extremely) were also chosen in this study. These amplifiers were chosen because they are frequently used by both speakers and this could prevent participants’ judgment of sentences as unnatural due to their unfamiliarity with certain amplifiers. Both scalar and non-scalar words were collocated with each amplifier to test participants’ judgment of grammaticality. The author used Academia Sinica Balanced Corpus of Modern Chinese (ASBCMC) to decide the targeted words in Chinese amplifier collocation design. First, the nine Mandarin amplifier collocations were analyzed with ASBCMC. Based on the collocation frequency of these nine amplifiers, the author then looked for the possible targeted words that are able to be collocated. These results show that most of the amplifiers collocate with positive associations more often than negative ones, except wánquán (although wánquán can still collocate with certain positive words). Chen (2009) also suggests that the collocated words by degree adverbs were mainly classified into three types, including positive, negative, and neutral according to human psychological needs. Chen argues that the degree adverbs in Mandarin collocate with positive and neutral
associations much more frequently than negative associations. Considering the acceptability of targeted words collocated by the nine amplifiers, the author chose words that are common and have positive connotations in ASBCMC to minimize the occurrence of unexpected test items that were perceived against how Mandarin speakers normally speak by participants. These words include měilì 美麗 (Beautiful), chénggōng 成功 (Successful), zhèngquè 正确 (Right), hǎo 好 (Good) and their English counterparts are also common in daily communication and often collocated with amplifiers in British National Corpus (see more results in Kennedy, 2003). On the other hand, think-aloud protocols were used as the online measurement in the study. During participants’ answering process, their responses were recorded and transcribed later for analysis. The use of GJT can help the researcher investigate whether these English and Chinese participants’ actual behaviors in judgments mirror their language structures. Think-aloud protocols, on the other hand, look into if speakers’ thoughts are subject to constraints of their native language structures.

(3) Procedure

In the beginning, participants were asked to give background information, including their age, first language, and so on. Participants read each testing sentence on a computer screen one sentence at a time and advanced to the next sentence by pressing the spacebar. Before entering the 27 experimental sentences, participants were taught how to read the sentences and how to control the slide. They were given the 3 primer sentences as practice, and told to judge whether the sentence is grammatical or not by pressing Y as Yes, and N as No as fast as they can. Once they moved on to the next slide, they were not allowed to go back to change their answer. At the same time, participants were asked to report how to make their decisions during the process. This self-reports were recorded so that the researcher could identify the part that participants considered ungrammatical or weird. Participants’ responses were calculated and presented with percentage for comparison.
5. Results and Discussion

(1) Mandarin Speakers’ Knowledge in Amplifier Collocation

Hypotheses of linguistic relativity were tested with both offline and online measurements. Meng (2008) argued that in Mandarin, both absolute and relative adverbs can modify words with absolute heads and gradable heads. The first section thus analyzed whether Mandarin speakers have more freedom in amplifier collocations with scalar and non-scalar associations, and whether they are less aware of this distinction. Sentences from 1 to 9 include Mandarin maximizer collocations with both scalar and non-scalar words, and sentences from 10 to 27 focus on Mandarin boosters. Participants must judge whether each sentence is grammatical, and if they think some sentences are problematic, they are required to explain why. Only explicit explanations for ungrammatical sentences that are related to amplifier collocations are considered violation of the rule of scalar and non-scalar collocations. The results are presented in Table 2.

<table>
<thead>
<tr>
<th>Mandarin maximizers</th>
<th>Targeted words</th>
<th>Scaler/non-scalar of targeted words</th>
<th>Perceived as grammatical</th>
<th>Perceived as ungrammatical</th>
</tr>
</thead>
<tbody>
<tr>
<td>zuǐ</td>
<td>zhèngqué</td>
<td>Non-scalar</td>
<td>100%</td>
<td>0%</td>
</tr>
<tr>
<td>méíli</td>
<td></td>
<td>Scalar</td>
<td>100%</td>
<td>0%</td>
</tr>
<tr>
<td>chénggōng</td>
<td></td>
<td>Non-scalar</td>
<td>100%</td>
<td>0%</td>
</tr>
<tr>
<td>zuǐwéi</td>
<td>zhèngqué</td>
<td>Non-scalar</td>
<td>100%</td>
<td>0%</td>
</tr>
<tr>
<td>méíli</td>
<td></td>
<td>Scalar</td>
<td>100%</td>
<td>0%</td>
</tr>
<tr>
<td>chénggōng</td>
<td></td>
<td>Non-scalar</td>
<td>100%</td>
<td>0%</td>
</tr>
<tr>
<td>wánquán</td>
<td>zhèngqué</td>
<td>Non-scalar</td>
<td>94%</td>
<td>6%</td>
</tr>
<tr>
<td>méíli</td>
<td></td>
<td>Scalar</td>
<td>3%</td>
<td>97%</td>
</tr>
<tr>
<td>chénggōng</td>
<td></td>
<td>Non-scalar</td>
<td>97%</td>
<td>3%</td>
</tr>
</tbody>
</table>

Mandarin boosters

| hén                 | hǎo             | Scalar                              | 100%                     | 0%                        |
| méíli               |                | Scalar                              | 100%                     | 0%                        |
| zhèngqué            |                | Non-scalar                          | 100%                     | 0%                        |
| fēicháng            | hǎo             | Scalar                              | 100%                     | 0%                        |
| méíli               |                | Scalar                              | 100%                     | 0%                        |
| zhèngqué            |                | Non-scalar                          | 100%                     | 0%                        |
| tèbié               | hǎo             | Scalar                              | 100%                     | 0%                        |
| méíli               |                | Scalar                              | 100%                     | 0%                        |
| zhèngqué            |                | Non-scalar                          | 100%                     | 0%                        |
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Table 2: Mandarin Speakers’ Judgment of (un)Grammatical Collocations

<table>
<thead>
<tr>
<th>Mandarin maximizers</th>
<th>Targeted words</th>
<th>Scaler/non-scalar of targeted words</th>
<th>Perceived as grammatical</th>
<th>Perceived as ungrammatical</th>
</tr>
</thead>
<tbody>
<tr>
<td>xiăngdâng</td>
<td>hǎo</td>
<td>Scalar</td>
<td>97%</td>
<td>3%</td>
</tr>
<tr>
<td></td>
<td>měilì</td>
<td>Scalar</td>
<td>100%</td>
<td>0%</td>
</tr>
<tr>
<td></td>
<td>zhèngqüè</td>
<td>Non-scalar</td>
<td>100%</td>
<td>0%</td>
</tr>
<tr>
<td>shǐfēn</td>
<td>hǎo</td>
<td>Scalar</td>
<td>86%</td>
<td>14%</td>
</tr>
<tr>
<td></td>
<td>měilì</td>
<td>Scalar</td>
<td>100%</td>
<td>0%</td>
</tr>
<tr>
<td></td>
<td>zhèngqüè</td>
<td>Non-scalar</td>
<td>100%</td>
<td>0%</td>
</tr>
<tr>
<td>pō</td>
<td>hǎo</td>
<td>Scalar</td>
<td>97%</td>
<td>3%</td>
</tr>
<tr>
<td></td>
<td>měilì</td>
<td>Scalar</td>
<td>94%</td>
<td>6%</td>
</tr>
<tr>
<td></td>
<td>zhèngqüè</td>
<td>Non-scalar</td>
<td>89%</td>
<td>11%</td>
</tr>
</tbody>
</table>

As shown in table 2, Mandarin speakers perceive that two maximizers (zuì and zuiwéi) can collocate with both scalar and non-scalar words, since both collocation types were perceived natural and grammatical. Participants’ reports were as follows:

“zuì zhèngqüè, zuì měilì, and zuì chénggōng sounds ok for me, and I use these expressions very often in my life. They describe certain states with the highest degree or level…” (M5);
“zuiwéi měilì is grammatical and it refers to the most beautiful person. zuiwéi chénggōng is also grammatical, and it refers to someone who is the most successful…” (M21);
“I think all of them are correct because these three phrases, like zhèngqüè, měilì, and chénggōng can collocate with zuì and zuiwéi…” (M27).

However, it seems that the maximizer wánquán cannot collocate with all scalar words in Mandarin. For example, only 3% Mandarin speakers perceive wánquán + měilì (beautiful) as grammatical. Some students reported:

“wánquán zhèngqüè and wánquán chénggōng, like zuì zhèngqüè and zuì chénggōng, are grammatical to me, but as for wánquán měilì, it sounds weird…” (M7);
“I don’t think wánquán can work with měilì, because měilì is about someone’s look, and no one’s look is 100% perfect without flaws. However, wánquán
works fine with zhèngqūè and chénggōng because it is possible to have a 100% correct answer and a 100% successful person…” (M11).

From these reports, it shows that Mandarin speakers did not perceive the line between scalar and non-scalar associations particularly when encountering zuì and zuiwéi. However, some of them were aware of this line by pinpointing that certain scalar words, like měili, do not indicate an absolute concept.

Moreover, participants generally perceive boosters can collocate with both scalar and non-scalar words, since both collocation types were considered grammatical by the majority. For example, fēicháng + hǎo was perceived by native speakers as grammatical. Some students reported:

“I think fēicháng can collocate with hǎo, měili, and zhèngqūè since we use fēicháng to indicate a certain degree of these associations for different meanings…” (M2);

“Although the meanings of hǎo, měili, and zhèngqūè are different, when they collocate with hěn, their meanings are slightly different because of intensification…” (M12);

“The meaning of hěn, fēicháng, xiāngdāng, and some other words here are the same to me, so they should be able to collocate with similar associations…” (M32).

These reports indicate that Mandarin speakers focused on the semantic aspect, rather than the scalar and non-scalar line of these associations. In other words, the function of these boosters is to modify and strengthen word meanings, regardless of the nature of these words. Besides, for some Mandarin speakers, the degrees between boosters are also vague and they become synonyms when comprehended. Overall speaking, except the maximizer wánquán, Mandarin speakers are less conscious of the line between scalar and non-scalar associations being collocated by amplifiers.

(2) English Speakers’ Knowledge in Amplifier Collocation

The second section analyzed whether English speakers perceive amplifier
collocations with scalar and non-scalar association distinctions, and whether they are more aware of this distinction than Mandarin speakers. Similar grammatical judgment of 27 sentences by English speakers was conducted, including three maximizers and six boosters, as shown in table 3.

<table>
<thead>
<tr>
<th>Table 3: English Speakers’ Judgment of (un)Grammatical Collocations</th>
</tr>
</thead>
<tbody>
<tr>
<td>English maximizers</td>
</tr>
<tr>
<td>---------------------</td>
</tr>
<tr>
<td>Completely</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Entirely</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Absolutely</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>English boosters</td>
</tr>
<tr>
<td>Very</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Really</td>
</tr>
<tr>
<td></td>
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<tr>
<td></td>
</tr>
<tr>
<td>Particularly</td>
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<td></td>
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<tr>
<td>Considerably</td>
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<tr>
<td>Highly</td>
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<td></td>
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<tr>
<td>Extremely</td>
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<td></td>
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<tr>
<td></td>
</tr>
</tbody>
</table>
In table 3, it shows that English speakers tended to associate maximizers *completely* and *entirely* with non-scalar words, not scalar words. As for *absolutely*, it seemed acceptable for English speakers to collocate with both non-scalar and scalar words. One participant mentioned: “*Absolutely, for me, is a word that can work with all three adjectives here. It makes these adjectives sound more powerful and emphasized...*” (E6).

As for English speakers’ perception of boosters, most boosters tended to collocate with non-scalar words, rather than scalar words. For example, participants tended to think collocations were more grammatical when *very*, *really*, *particularly*, *considerably*, *highly*, and *extremely* associated with *beautiful* than *right*. Some students reported:

“*Very good and very beautiful sound ok to me, but I’m not sure about very right. It is a bit awkward...*” (E12);

“*I use considerably for something of a certain level, like good and beautiful. But how can we tell the level of right or blue?*” (E13);

“*It is either right or wrong. I won’t say highly right. But highly beautiful is fine with me...*” (E22).

Some exceptions were also observed, as in *highly good*. Though *good* is a scalar word, most English speakers considered *highly good* ungrammatical. Generally speaking, there is a tendency for English speakers to collocate maximizers with non-scalar associations, and boosters with scalar ones. From English speakers’ think-aloud protocols, it also shows that they were more aware of the line between scalar and non-scalar associations being collocated. For example, some words can work with boosters but not with maximizers since the former can be measured by degrees. This result echoes English speakers’ performance in table 3 that 90% and 94% of English speakers perceived maximizers *completely/ entirely* + scalar word (*beautiful*) as ungrammatical. The six English boosters were perceived by 83%-97% English speakers as ungrammatical when they collocate with the non-scalar word (*right*). On the other hand, 100% Chinese speakers stated maximizers *zuì* and *zuìwéi* can collocate with both scalar and non-scalar words, as shown in table 2. The only one exception was *wánquán* + *měilì*, perceived as ungrammatical by 97% speakers. The comparison of scalar/ non-scalar awareness between English and Chinese speakers became more obvious in
booster collocation since 86%-100% Chinese speakers showed that the six Mandarin boosters can collocate with both scalar and non-scalar words.

(3) Whorfian Hypothesis in Amplifier Collocation

Generally speaking, based on these results from offline and online measurement, Mandarin speakers are less conscious about scalar and non-scalar distinction of words being collocated by amplifiers than English speakers. This result may be due to the fact that a clear boundary between words with absolute heads and gradable heads is absent in Mandarin, not in English. Besides, it seems that Wang and Chen’s (2007) definition of amplifier collocations that maximizers modify non-scalar words, and boosters modify scalar words may not hold true in the different language system beyond English, and thus may not be a universal phenomenon. Moreover, different language structures may also lead their speakers to have different degrees of awareness of certain features in the environments. As suggested by Wardhaugh (2010) that speakers have stronger awareness of certain differences when their language makes distinctions about it. According to this claim, the reason why Mandarin speakers showed less awareness about the line between scalar and non-scalar associations collocated by amplifiers in the judgment task and protocols may be due to their language structure. On the other hand, English maximizers indicate the absolute degree rather than the relative degree of words (Quirk et al., 1985). This language structure may influence speakers’ thought and a clearer scalar/ non-scalar distinction may be rooted in English speakers’ mind. Therefore, compared with Mandarin speakers, English speakers could be more aware of this distinction and what should be collocated.

The results of the study seem to support the weak version of Whorfian hypothesis that language shapes thought. This view also has implications for English language teaching, as presented in Bloom’s (1981, 1984) study. Bloom suggested that many Chinese learners of English cannot master counterfactual questions because Chinese and English have different counterfactual marking systems that shape speakers’ thoughts in different ways. Some findings in this current study may explain why Chinese learners’ use of English amplifier collocation pattern is random (Tang, 2010). One of the possible reasons is that Mandarin speakers are less aware of scalar and non-scalar boundary of associations when collocated, and this less awareness may result
from the language structure of its speakers. Unlike English speakers, Mandarin speakers tend to focus more on semantic values of words being collocated by amplifiers, and less on whether these words are scalar or not. Influenced by L1, therefore, Chinese learners of English’s amplifier collocations use may seem more random than native English speakers. In this regard, language (L1) shapes thought, and thought also shapes language (L2) use. Fan (2009) argues that the ways native speakers and English learners acquire collocations are different in that the former acquire collocations “subconsciously and gradually as they grow up in their speech community” (p. 111), while the latter learn to use collocations mostly in the classroom. The sociocultural context, such as speech community, is often related to one’s culture and language use. However, the speech communities of EFL learners may be often ignored, and these learners are required to understand the speech community of native speakers and learn the target forms in the classroom. Wang and Chen (2007) argued that the number and variety of amplifier use increase as Chinese learners’ English proficiency advances, and it is thus possible that these high proficient English learners have more access and capability to the norms in the speech community by native speakers.

Some factors constrain the generalizability of this study. For example, most targeted words chosen to collocate with the amplifiers in this study have positive connotations, and this may influence participants’ collocation judgment. Moreover, although the present study indicates the tendency that different amplifier structures between Mandarin and English may influence their thoughts, it should be noted that this result cannot account for all the amplifier collocation use by Mandarin and English speakers in real life since the study investigates “what speakers believe they should say” instead of “what people actually do say” in amplifier collocation (Golato, 2003: 111). In other words, the purpose of this study is to investigate Mandarin and English speakers’ awareness and knowledge of scalar/ non-scalar distinction in amplifier collocation. What speakers know about the scalar/ non-scalar distinction in collocation knowledge may not always be consistent with their collocation use because of the influence of other factors. For example, Lo argues that hěn is able to collocate with words that have agreed meaning shared by people but not with the words that have different pictures for individuals. This view indicates the constraints other than scalar/ non-scalar distinction in collocation by hěn. Besides, shǐfēn hǎo or highly good may be considered unnatural
by some speakers because there are already established words carrying the same meaning (e.g. excellent, outstanding, 优 and 卓越). Chang (2009) also shows that some degree adverbs in Mandarin are apt to associate with monosyllabic words and others collocate with disyllabic words. This argument may explain why 十分美好 is more natural than 好 for some Mandarin speakers.

In real communication, amplifier collocation use is also influenced by many other factors. Lakoff (1975) believed that amplifier use is related with power relation. Amplifier use is also related to socioemotional factors (Guiller and Durndell, 2006). For example, amplifiers were found used more often in agreement than disagreement by women (Tao and Xiao, 2006). In this regard, certain amplifiers (e.g. absolutely) may collocate both scalar and non-scalar words by English speakers because collocation use involve speakers’ intention and other sociopragmatic factors, i.e., “the social perceptions underlying participants’ interpretation and performance of communicative action” (Rose and Kasper, 2001: 2). Accordingly, maximizers like “absolutely” sometimes function to convey certain sociopragmatic meaning of the speaker and collocate both scalar and non-scalar words in some contexts. The speakers may thus have more concerns in amplifier collocation than the scalar/non-scalar distinction.

6. Conclusion

The focus of this study is to investigate whether different language structures between English and Mandarin lead to different perceptions of amplifier collocation for each speaker. The results showed that different language structures between English and Mandarin may influence each speaker to think differently, especially degrees of their awareness in language use. According to the findings in the present research, Mandarin speakers tend to collocate boosters with both scalar and non-scalar associations in terms of their semantic meanings. Mandarin speakers’ less consciousness about the scalar/non-scalar line is also found in maximizers with the exception of 完全. On the other hand, a pattern that English speakers often associate maximizers with non-scalar words and boosters with scalar words is discovered in both the GJT and think-aloud protocols. Consequently, Chinese EFL learners’ more random amplifier collocation usage may reflect their perceptions of it. The study does not merely analyze
L1 structure and L1 influence, but also renders a view of how one language structure shapes the thought of its speakers. Once language is considered a product of culture, language learning is more like an acculturation process than an encoding or decoding process. It is therefore suggested that, when learners fail to follow the targeted form, teachers need to recognize whether it is the product of sociocultural factors or linguistic incompetence.
Appendix

Sample Sentences in the Grammatical Judgment Task
(For Mandarin Speakers)

1. 這一題她的答案是最正確的
2. 她在班上是最美麗的女生
3. 賈伯斯被許多人認爲是最成功的企業家
4. 他的意見在我們之中是最為正確的
5. 在他的心中母親是最美麗的
6. 他的事業在同學中是最為成功的
7. 你這次所做的決策是完全正確的
8. 你的母親是個完全美麗的女人
9. 我們的作戰完全成功
10. 你哥哥是個很好的老師
11. 她今天看起來很美麗
12. 這位演講者的說法很正確
13. 他的舞跳得非常好
14. 他的服裝非常美麗
15. 他的判斷非常正確
16. 這星期天氣特別好
17. 從山上看到的風景特別美麗
18. 他的政治判斷總是特別正確
19. 這顆蘋果的品質看起來相當好
20. 這幅畫看起來相當美麗
21. 你的判斷力相當正確
22. 今天的天氣十分好
23. 這個國家的夜景十分美麗
24. 你在這事的處理上十分正確
25. 這道菜嚐起來味道頗好
26. 這本書的封面頗美麗
27. 他對時事的評論頗正確

(For English Speakers)

1. You are completely right about this
2. She is a completely beautiful woman
3. He is a completely successful businessman
4. Dr. Wu was entirely right about the issue
5. The scenery is entirely beautiful to me
6. His business is entirely successful now
7. She is absolutely right in that situation
8. We know Jane is an absolutely beautiful girl
9. He is seen as an absolutely successful president
10. Mr. Wang is a very good professor
11. You are very beautiful today
12. His decision is very right
13. Her dance is readily good
14. Her costume is readily beautiful
15. His judgment is readily right
16. The weather this week is particularly good
17. The view from the window is particularly beautiful
18. His answer to the question is particularly right
19. The quality of this CD is considerably good
20. She is a considerably beautiful woman
21. His answer is considerably right
22. The reputation of this restaurant is highly good
23. Hong Kong is a highly beautiful place
24. His dealing with this problem is highly right
25. The pizza tastes extremely good
26. This famous painting is extremely beautiful
27. His knowledge about elephants is extremely right
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Does Language Shape Thought?:
Chinese and English Speakers’ Conceptions of Amplifier Collocations

Language Relativism:
Chinese and English Speakers’ Conceptions of Amplifier Collocations

方挺

摘要

搭配词一直以来为英語教學的重点之一，對搭配词的精通與熟練則被視
為接近以英语為母語人士能力的指標，而增強搭配詞為搭配詞類別中的一
類。文獻曾報告以中文為母語的英語學習者在英語增強搭配詞的使用上與英
語母語人士不同。然而，此外顯比較只能看出其英語增強搭配詞使用差異可
能源於個別母語之不同，意即不同第一語言(中文與英文)對英語增強搭配詞
使用的影響，但是卻無法看出不同第一語言如何相互影響以中文為母語者與
以英文為母語者對其不同語言的内在認知。根據 Whorf (1956)，語言為社會
文化之產物，而不同的語言結構亦可能會影響語言使用者的想法或認知。因
此，本研究目的在於探討以中文和英語為母語者對其語言中的增強搭配詞在
認知上是否因爲語言的不同而有差異，若此因爲不同語言結構而造成的認知
差異存在，或許可解釋為何中文母語的英語學習者在英語搭配词使用上，與
英語母語者有使用上的不同。

與先前研究不同，由於語言與社會文化密不可分，本研究從單一的外顯
語言使用之比較作延伸，以 Whorf 提出的觀點為基礎，進而探討中英文在社
會文化情境下如何影響其使用者內在認知。研究者根據中英文增強搭配詞結
構不同，提出假設：相對於英語母語者，中文母語者對於增強詞後搭配語級
別的差異較無意識。

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三十五位中文母语者与三十位英语母语者参与本研究，即时与非即时测量法同时施测于实验参与者。所有参与者接受语法性测验，判断其母语增益搭配词是否合乎语法规则，研究者借此了解参与者的判断是否与其语言结构规则存在差异。参与者在判断时，同时要求即时有声思考，藉以了解其对语言结构之内在认知想法。

研究结果支持本研究假设，即中文的结构差异影响其为母语者的思考，特别是对增益搭配词级别的意识程度。此发现可解释为何中文母语英语学习者对增益搭配词学习感到困难，故本研究同时具有理论上以及教学上的启示。

关键词：搭配词教学、语言相对论、社会语言学、文化适应