

A longitudinal study on the extent of Mandarin influence on the acquisition of English

Yuxiu, HU, South University of Science and Technology of China

Although the existence of L1 transfer is not so much of a controversy any more, the extent to which L1 influences L2 acquisition is still debatable. To address this issue, the present paper reports on an empirical study. 48 pieces of English composition written by 48 native Mandarin speaking students were collected and analyzed for the current study. The following results were obtained: (1) among 477 errors occurring in 48 pieces of composition, 266 errors were committed due to the influence of Mandarin, the L1; (2) tense errors, tense inconsistency and verb form errors occur most frequently, with the percentage of L1 influence on them coming up to about 80%, 98% and 45% respectively; and (3) the area in which L1 has the most profound influence is within grammar or syntax, rather than within lexis.

Keywords: L1 transfer; Interlanguage; Second Language Acquisition; Contrastive Analysis; Error Analysis

1. Introduction

L1 influence is a widely accepted common feature in the study of Second Language Acquisition. In the literature on language acquisition, few, if any, opposing voices to the existence of L1 influence have been heard. Many linguists have studied the relationship between L1 and L2 acquisition (Wang, 2014). However, the extent to which L1 influence accounts for students' production errors still remains at a surprising level of confusion (Jarvis, 2000).

In some studies, errors produced by language learners have been divided into interlingual and intralingual errors, although some researchers admit that there is no clear line between these two kinds of errors. They define interlingual errors as errors that can be traced back to L1 interference, and intralingual errors as errors that can be attributed to the process of second language acquisition (SLA). Little success has been achieved using this interlingual/intralingual classification to sort out L1-influenced errors. For example, extra use of "the" is very common in Chinese students' output. We can say that this error is due to the lack of the article system in Chinese, so

this is an interlingual error. However, we can also say that it is due to overgeneralization of the article rule in English, in this case it would be an intralingual error. As the main focus of the current study and to provide an alternative and a more effective approach to error classification, a model is proposed in this paper to systematically classify errors into four groups. L1-influenced errors can then be clearly filtered out among different groups of errors.

2. Background

According to Jarvis (2000, p. 246), "Perhaps no area of second language research has received as much attention and remained as elusive as the influence of the first language (L1)." Among different areas of confusion in Second Language Research, such as when, where and in what form L1 influence manifests itself, the extent of L1 influence is one with considerable discrepancy ranging from an almost negligible 3% to a striking 51% (Ellis, 1985, pp. 28-30), which is probably partially due to differences in experimental design such as differences in language level, learners' age, and L1-L2 typological proximity according to Ellis (Jarvis, 2000). Ellis (1985) listed the percentage of interference errors reported in different studies (Table 1). Among the studies listed in Table 1, some concentrated on lexical errors, some studied learners' speech, and some analyzed learners' compositions.

Table 1

Percentage of Interference Errors in Different Studies

Study	Percent (%)	Type of learners
Grauberg (1971)	36%	First language German-adult, advanced
George (1972)	33% (approx)	Mixed First language-adult, graduates
Dulay & Burt (1973)	3%	First language Spanish-children, mixed level
Tran-chi-chau (1974)	51%	First language Chinese-adult mixed level
Mukattash (1977)	23%	First language Arabic-adult
Flick (1980)	31%	First language Spanish-adult, mixed level
Lott (1983)	50% (approx)	First language Italian-adult, university

Teachers and researchers could find out what problems a language learner has by observing and analyzing his/her errors made in the process of acquisition of a second language. Corder (1981) classified errors into systematic errors which are usually called errors of competence, and non-systematic errors which are performance errors that could be corrected (See also Salmani Nodoushan, 2007a,b,c; 2009). Along the same lines, Brown (1994) defines them as follows: a mistake refers to a performance error that is either a random guess or a "slip" in that it is a failure to utilize a known

1 system correctly; an error is a noticeable deviation from the adult grammar of
2 a native language (Brown, 1994, p. 205). Accordingly, the distinction between
3 errors and mistakes is actually the distinction between competence and
4 performance. Some linguists have criticized this distinction between errors
5 and mistakes since we could not easily tell the difference between an error
6 and a mistake. Gao (2002) believes that performance errors occurring in the
7 process of second language acquisition can be systematic, and even become
8 fossilized. Gao (2002) says that not all performance errors in foreign language
9 learning are slips, and this kind of errors is very common among Chinese
10 English learners. In some studies (LIKEWHICH ONES? GIVE SOME CITATIONS
11 HERE), mistakes/errors were pointed out to the learner, the learner was then
12 asked to correct them. Even though learners could correct them by
13 themselves, some authentic errors may be lost and some features of errors
14 might be missing as well. And next time the same mistakes/errors may be
15 made again because of L1 influence. So errors and mistakes were not
16 distinguished in this study. Any production which deviates from the standard
17 grammar taught in Harbin is taken an error. It is believed that observing,
18 analyzing and classifying all these errors could reveal something important
19 about the system operating within the learners. Anyway, before laying out the
20 model and the argument, it is useful to briefly review the relevant literature
21 here.

22 CA and EA are two types of data analyses that researchers have used in an
23 attempt to better understand the second language acquisition process
24 (Larsen-Freeman & Long, 1990). Although they were discredited during the
25 1970s and 1980s, they have been revitalized by significant works in the past
26 decade, especially in works such as Odlin (1989), Kellerman (1995), and
27 James (1998), as stated in Chan (2004). CA and EA have been investigated
28 with renewed vigor. Zhang (2003) investigates how language transfer has an
29 effect on language learning by conducting an error analysis of college
30 students' writing in Mainland China. Ohata (2004) examines some of the
31 characteristic phonological differences between Japanese and English based
32 on CA, and points out several problematic areas of pronunciation for Japanese
33 learners of English. With the help of CA and EA, Chan (2004) presents
34 evidence for syntactic transfer from Chinese to English that occurred among
35 Chinese ESL learners in Hong Kong; Na (2005) examines syntactic errors in
36 Vietnamese-English translation. Chen (2006) examines whether a computer
37 assisted instruction (CAI) tutorial program had an impact on the English as a
38 Foreign Language (EFL) grammar skills of beginning EFL language learners
39 through CA and EA. Yamashita and Jiang (2010) studied Japanese EFL
40 learners' use of L2 (English) collocations by analyzing the errors and
41 performance speed in a cloze test. Yuan (2014) investigated the occurrence of
42 L1 (Chinese) features found in learners' L2 (English) written productions,

especially in terms of the usage of English prepositions. Besides L2 influence on the acquisition of L1, the combination of CA and EA has also been applied to the study of the acquisition of L3. In Cai and Cai (2015), a close examination was made on the L1 (Chinese) and L2 (English) transfer patterns among 20 English majors in their early acquisition of L3 French passé composé.

In this study, CA and EA are used as a synthesis to explore Mandarin influence on the learning of English, with each method complementing the other in creating a better understanding of the learning situation. EA was not used to check on the predictions made by CA, but to inform CA of errors that really occurred, while CA was used as an ancillary procedure to help EA find out whether the common errors made by the participants are mainly due to the differences between Mandarin and English. CA was not used to predict errors but to explain errors.

Needless to say, not all errors are easily identified. First, some errors, known as global errors (Burt & Kiparsky, 1972), are diffused in the sentence or in context that contains them (James, 1998). Second, it is not easy to locate errors consistently (James, 1998). James (1998) gives an example (i.e., **Her wet lips gently kissed the sleeping child*) to show the dilemma. Is it an error of misselection of wet, or a failure to select moist? According to James (1998), Burt and Kiparsky suggested that we should locate errors in what the learners did say and identify errors by reference to L2, so we should locate and describe the error in the example as a misselection of wet. Third, it is not easy to decide what “chunk” of language around the error should be identified (Lennon, 1991). Lennon suggested some criteria at the lexical realization level as follows (1991, p. 187):

1. For morphological error, the identity must extend over the whole word.
2. For prepositional choice error, the identity must extend over the whole prepositional phrase.
3. For article errors, the identity must extend over the noun phrase.
4. For errors of noun phrase pre- and post- modification, in general, the identity must extend over the whole verb group.
5. For errors involving clause linkage, word order within the clause, and sentence structure, the identity should extend over the whole unit or units involved.
6. For errors of lexical choice, differences in inflectional morphology do not prevent two lexical choice errors from being tokens of a single error.

On the issue whether we should count types or tokens, that is whether we should count repeated occurrences of the same types of errors, Lennon (1991) suggests that if the repetition is not a lexical replica of a prior error, it

1 could be counted as a distinct error.

2 It has been widely accepted that one has to classify the errors produced by
3 learners in order to analyze learners' errors systematically. However,
4 classification of errors has been very controversial (Gui, 2005). Rough
5 classification may be easily attained consistently, but this is not good for
6 analyzing learners' errors since little information on the errors is provided. A
7 detailed classification tends to put errors into different groups of errors, and
8 overlapping errors may occur (Gui, 2005). In this study, errors were classified
9 in as detailed a manner as possible, and so long as no overlapping occurred.
10 When overlapping was found, they became subtypes of the same
11 classification.

12 There are different error classifications for different research purposes in the
13 literature. Paskewitz (1999) uses 46 classifications for a study of recurrent
14 errors in the spoken and written English of native Cantonese speakers. Zhang
15 (2003) came up with 12 categories of errors: Adj./Adv., part of speech, word
16 order, preposition, genitive, modal verb, article, pronoun, inappropriate main
17 verb choice, overuse of one verb, incorrect use of verb, and tense and aspect.
18 James (1998) suggests seven classifications. For lexical errors, he suggests
19 five classifications: formal misselection, misformations, distortions, confusion
20 of sense relations, and collocational errors. For grammar errors, he suggests
21 two sub-classifications: morphology errors and syntax errors including
22 phrase structure errors, clause errors, sentence errors and intersentence
23 errors (e.g., cohesion). Yang (2005) designs a multi-dimensional system for
24 error tagging and proposes 36 classifications on the dimension of error types.

25 Nevertheless, Selinker (1972) introduced the term interlanguage to refer to
26 learners' versions of the target language (TL). On the way to TL, a learner
27 passes through a sequence of intermediate grammars, interlanguage, which is
28 attributive to L1 grammar, L2 grammar and a learner's instinctual syntactic
29 hypothesis (Selinker, 1972; Salmani Nodoushan, 2010). The initial hypothesis
30 constituted by the learners is based largely on the L1 grammar. As the
31 learners receive more and more L2 grammar, they revise their hypotheses on
32 the L2 grammar (Selinker, 1972). A learner's interlanguage has its own
33 features which are distinct from both L1 grammar and L2 grammar. It may
34 contain features of both L1 and L2 to varying proportions. According to Yip,
35 "In principle, then, the IL phenomenon could be attributed to transfer, to
36 creative construction in accordance with language universals or to some
37 combination of these factors" (1995, p. 19).

38 **3. The classificatory model**

39 In order to classify an error in terms of language influence and finally sort out
40 L1 influenced errors, basically, we need to answer the question of whether the

error can be traced back to or be explained by L1. When thinking about this question, we should take the influence of absent structures in L1 into consideration too, as shown in the model depicted in Figure 1.

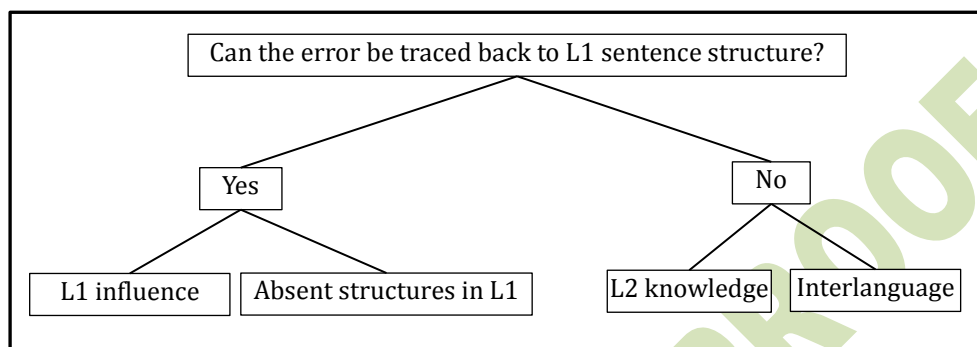


Figure 1. L1-oriented approach to error classification.

First, if the answer is yes, the error can be traced back to or be explained by L1. From the model, we can see that there are two kinds of L1 influences under 'Yes'. When the structure of the error occurring exists in L1 but absent in L2, it is influenced by L1 structure. For example, Mandarin learners often use "because" and "so" at the same time in one sentence, but native-English speakers use only one of them in each sentence. That is, the "because . . . so" structure exists in L1 (Mandarin) but is absent in L2 (English), so when a Chinese learner of English uses this structure in his/her English production, s/he is being influenced by his/her L1 (Mandarin). There exists another kind of L1 influence which is easily forgotten. In the structure of an error, what is missing is actually absent in L1. Let's take the null subject as an example. In Mandarin, it is licit to leave out the subject of a sentence, because Mandarin is a pro-drop language. As long as you have a topic in the sentence, a subject is not necessary. However, in English, a sentence must normally have a subject; otherwise, it is ungrammatical. We are, of course, talking about formal written English here. It is very common that one cannot find the subject in the sentences produced by Chinese students of English. Another example is the article system. There are no articles in Chinese. The usage of articles is thus a big problem for Chinese learners of English. Error types such as lack of articles, extraneous articles, and lack of definiteness are very common in the production of Chinese students. Among these errors, lack of definiteness is influenced by Chinese. For example, in Mandarin we say:

Chinese: 我爱吃苹果 (wo ai chi pingguo)

Lit: *I like eat apple.

Trans: I like to eat the apple.

1 However, in English there must be an article before 'apple' to show the
2 definiteness of the noun apple, or we can use the plural form 'apples'.
3 Influenced by Mandarin sentence structure, Chinese students produce
4 sentences like **I like eating* (or just *eat*) *apple*. This kind of sentence is clearly
5 influenced by L1. We cannot deny the influence of L1 just because the
6 structure is absent in L1.

7 Second, if the answer is No; the error cannot be traced back to L1. The errors
8 can then be further classified into two more groups: L2-influenced errors, and
9 interlanguage errors. If some errors can be traced back to or be explained by
10 L2, they are L2 influenced errors. Two kinds of errors were considered as L2
11 influenced errors in this study. The first type is mixed-up errors. Here is a
12 sample sentence found in the data: *I am happy very much*. In English, very
13 much is an adverbial of degree used to modify verbs, while very is used to
14 modify adjectives and functions as an adverbial of degree too. The student
15 mixed up the two adverbials of degree and chose a wrong one, so the sentence
16 is influenced by English sentences like *'I like him very much'*. Structures in the
17 second type of errors must exist in L2. For instance, the structure **let sb to do*
18 *sth'* was found in the data. It's influenced by the structure *'Vt sb to do sth'*
19 which exists in English but not in Mandarin. L2 influenced errors in this study
20 are different from intralingual errors which are often divided into
21 overgeneralization errors, incomplete application of rules, and false concepts
22 hypothesized (James, 1998). Overgeneralization of *the* occurred in the data,
23 and it happened because of zero contrast (*the* is absent in Mandarin) and the
24 semantic complexity of English articles. Errors of this kind were classified as
25 interlanguage errors since both Mandarin and English contributed to the
26 overgeneralization of *the*.

27 Two kinds of errors were categorized as interlanguage errors. Some errors
28 can neither be traced back to L1 nor to L2. Such errors are actually
29 interlanguage errors constructed creatively by learners (e.g., *It can eats up*
30 *most of noise*). It cannot be traced back to Mandarin, because of the lack of
31 inflection in Mandarin. There should be no morphological change for 吃 (i.e.,
32 *chi* meaning *eat*) in Mandarin. In English, too, there should be no
33 morphological change for *eat* when it appears after a modal verb, so it is the
34 student's interlanguage error. Sometimes we can see traces of both L1 and L2
35 in a sentence. In such cases, errors is classified as interlanguage errors.
36 Having outlined the classificatory model, I now proceed to describe how it
37 was applied to the study corpus.

38 4. Application of the model

39 There are different uses of the common term 'transfer' in different studies in
40 which topics and approaches are different. In the present study, the term

'transfer/influence' is restricted to production which leads to errors (i.e., negative transfer). This study first examined error types and frequencies in the English writings of 48 native Mandarin speakers in a high school in Harbin, capital city of Heilongjiang province of China, and then classified them in terms of error causes with the application of the model.

4.1 Participants

The subjects of the study were 48 Mandarin-speaking students studying in a High School in Harbin where Mandarin is used as the medium of instruction. All of the students were brought up and educated in Harbin, and had been studying English for nearly four years. They were similar in terms of age and L2 exposure, and they spoke the same L1, Mandarin, which is widely spoken in Harbin. Classroom teaching was the main way for these students to learn English, and English is absolutely a foreign language in Harbin. English can be called L2 for these students, because Mandarin is their L1 and because English is learned after Mandarin by most students in Harbin. These students would sit the National College Entrance Examination in two years in which English is one of the top three decisive subjects.

4.2 Procedure

The data for this study were collected from a Grade 1 class in a High School in Harbin. In the class, students sit in four groups, so I gave each group one topic and let them write compositions in class without referring to any books. They were required to write around 110 words as they usually do. Four of the topics include '*I love winter*', '*I have a dream*', '*my summer vacation*' and '*a complaint letter to a shop manager about bad service by one of his shop assistants*'. Altogether, 48 sample compositions were collected.

The assumption was that sometimes learners do not mean to say what they seem to say. As Corder (1974) mentioned, it is always possible to misinterpret a well-formed sentence. According to Corder, "Recognition of error is thus crucially dependent upon correct interpretation of the learner's intentions" (1974, p. 126). Marginal errors were discussed with some English teachers in Harbin. For the first time, errors had been detected and associated with a description as to why they were wrong. Then based on error types/categories used by other studies and my own data, the errors detected were checked for the second time and put into 28 categories. With error tags, the frequency of each error type was counted. These are indicated in Appendix 1. What English teachers in Harbin teach is Standard English grammar, and classroom teaching is the main way for Harbin students to learn English, so sentences like "I go see him" were seen as errors. Nevertheless, different people may have different ideas on errors. An error judged by one person may not be seen

as an error by another. For instance, proponents of World Englishes (e.g., Brown & Salmani Nodoushan, 2015) who nurture non-native standards in lieu of native-speaker models may not take the above example as an error. In order to be consistent, all the errors are detected by the author, herself a Mandarin-speaking user of English and a former English teacher in Harbin (See Appendix 1).

Appendix 1 shows the distributions of frequencies and percentages of errors in the data. The total number of errors committed in 48 compositions is 477. Based on the error taxonomy above, each type of errors has been analyzed with the help of the model described in section 3 above and grouped further into three types: L1 influenced errors, L2 influenced errors, and interlanguage errors. Let us take Tense as an example—because it occurred most frequently in the data. Among all the errors appearing in the data, this group of errors has the highest frequency. It appears 70 times in total. Within this group, different types of tense and aspect errors were detected, and the cause of each error was suggested in light of the classificatory model (See Section 3). More details are presented in Table 2.

Table 2
Details of Tense Errors

Error type	<i>f</i>	Reason	Location ¹
present tense for past simple tense	56	L1	3; 10; 17; 23; 25; 32; 34; 39; 40; 43; 46
past progressive tense for past simple tense	3	IL	4; 29; 48
past progressive tense for present tense	1	IL	29;
past perfect tense for past simple tense	3	IL	6; 11
past simple tense for perfect tense	1	IL	11
past simple tense for present tense	2	IL	37
present perfect tense for past simple tense	1	IL	48
future tense for present tense	2	IL	44
future tense for past simple tense	1	IL	25

In the English compositions, there were two tense forms: the present and the past, which were indicated by the form of the verb. Mandarin, on the other hand, has no tense marking. Mandarin sentences express the idea of time using context clues, chronological order in narration, or different adverbials of time. Moreover, Mandarin lacks the comprehensive morphological process of 'inflection' (Gao, 2000). The function of inflection is fulfilled by function words such as "了" (or *le*) in Mandarin. Chinese has a so-called semantic-based tense while English has a syntactic-based tense (Huang, 1984). In Appendix 1, we can see that most of the tense errors were made because the present tense was used where the past tense should have been used in the context. Take the following examples:

(1) a. *I have a dream when I'm a child. I want to be the richest man of the world.

b. wo you yige mengxiang dang wo shi ge haizi. Wo xiang...
I have a dream when I am a child. I want to...

In sentence (1), the past tense should have been used, so the verb form should have been in the past tense form, but in Mandarin, the concept of past time is not expressed by tense but by semantics. As determined by the context of the sentences, the events happened in the past. This English sentence is just a translation from the corresponding Mandarin sentence as shown in (1)b. We can trace the error back to the learner's L1 (i.e., Mandarin), so such errors were classified as L1 influenced errors. One may argue that the present tense can be used for narrating a story that happened in the past in English for the purpose of making the narrative more vivid. However, this form of narration is restricted to people of poor education and it is essentially a spoken device even in its more accomplished uses by the highly educated (Cattell, 1969). The participants for the current study were trained not to use this form, and this form of narration is marked as error in their examinations. Some teachers don't even teach this form of usage to their beginning learners since beginning learners may get confused by this rule; it is postponed until they reach a threshold level of English competence. Nevertheless, some students had used past perfect where past tense should have been used. Take the following example.

(2) *I also ate the flesh fish. They were really delicious. The flesh tast was still in my memery. I had got through five beautiful day in Dalian.

The student was narrating what she did in her summer vacation. If the sentence underlined had been influenced by Mandarin, then it should have been in present tense, so the answer to the question "Can the error be traced back to L1?" is a definite 'no'. In English, past perfect is used to refer to an action which happened before another action in the past or before a particular time in the past. In the context of the above example quoted from the corpus, the last sentence, too, should have been in the past tense because it had happened in the past, and because the student had not indicate that it had happened before another action in the past. The student wanted to use perfect tense to show that the action lasted for five days and it happened in the past, so she used past perfect tense. This error cannot be traced back to English grammar either. It is a misunderstanding of past perfect tense in English, and the product of an intermediate grammar hypothesized by the student. This may confirm the Aspect Hypothesis, which refers to the

beginning learners' tendency of using verbal morphology to mark lexical aspectual distinctions—e.g., states VS. dynamic events (Andersen, 1991; Anderson & Shirai, 1996; Weist, Wysocka, Witkowska, Buczowska, & Konieczna, 1984). As to the other types of tense errors, they derive from students' intermediate grammar too. For purposes of brevity, they will not be analyzed one by one here.

5. Results

With the help of the model, all types of errors were classified in terms of language causes, and the influence of Mandarin was sorted out and calculated.

Table 3
Occurrence Percentages

Error type	L1 F	L2 F	IL F	Total	L1%	L2%	IL%
Adverbial	1	1	0	2	50%	50%	0%
Article	12	1	27	40	30%	3%	68%
Blending	0	1	1	2	0%	50%	50%
Collocation	2	0	2	4	50%	0%	50%
Comparison	2	0	5	7	29%	0%	71%
Conjunction	12	0	1	13	92%	0%	8%
Countability	1	3	2	6	17%	50%	33%
Disagreement	26	0	0	26	100%	0%	0%
Extraneous be	0	0	7	7	0%	0%	100%
Individual errors	0	0	2	2	0%	0%	100%
Misformation	2	1	1	4	50%	25%	25%
Misselection	1	29	0	30	3%	97%	0%
Part of speech	8	0	25	33	24%	0%	76%
Predicate omission	11	0	1	12	92%	0%	8%
Preposition	12	11	4	27	44%	41%	15%
Pronoun	6	2	4	12	50%	17%	33%
Redundancy	2	0	1	3	67%	0%	33%
Sentence fragment	8	0	2	10	80%	0%	20%
Spelling	0	22	0	22	0%	100%	0%
Subject omission	15	0	0	15	100%	0%	0%
Subjunctive mood	7	0	0	7	100%	0%	0%
Substitution	0	0	13	13	0%	0%	100%
Tense	56	0	15	70	80%	0%	21%
Tense inconsistency	52	0	1	53	98%	0%	2%
There be	1	1	0	2	50%	50%	0%
Transitivity	6	2	2	10	60%	20%	20%
Verb form	17	6	15	38	45%	16%	39%
Voice	5	0	0	5	100%	0%	0%
Total	266	80	132	477	56%	17%	28%

As shown in Table 3, out of 477 errors in 48 samples of composition written by first year High School students in Harbin, 266 errors were committed due to Mandarin influence. The percentage of Mandarin influenced errors is 56%,

that is, half of the errors committed by the participants were influenced by Mandarin. Among 28 types of errors categorized in this study, the causes for all voice errors, subjunctive mood errors, subject omission errors, and disagreement errors were of Mandarin influence. Although the occurrence frequency of some types of errors (such as voice errors) is low, they are still worthy of note, because their low occurrence frequency may be related to the topics and genres of the compositions. For errors with high occurrence frequency, Mandarin influence is high too. The percentages of Mandarin influence on tense, tense inconsistency and verb form is 80%, 98% and 45% respectively. Mandarin influence is less than 5% in misselection, and it is 0% in the following types of errors: extraneous 'be', blending, individual errors, spelling and substitution. Among these Mandarin influence less dependent and independent errors, nearly all of them are related to lexis; only 8 out of 74 errors are related to sentence structures. It seems that Mandarin influences grammar acquisition much more than it does lexis acquisition. The major impact that Mandarin has on the acquisition of English in Harbin is thus more on grammar or syntax than on lexis.

6. Conclusion

The role of the first language is still on the agenda of second language acquisition research (Mitchell & Myles, 2004), and the issue of to what extent the first language influences the acquisition of L2 has puzzled L2 researchers. Although some studies have addressed the issue, the classification of L2 errors in terms of causes is either unclear or unstated, many of them being based on the dichotomous classification of interlingual versus intralingual errors—a distinction that is very hard to make empirically.

This study has proposed an alternative classification model which, hopefully, can systematically and clearly classify errors in terms of language causes. L1 influenced errors can be filtered out effectively and the influence of absent structures in L1 is taken into consideration and included in the model. With the help of the model, we learn that 56% of errors in the data at hand are caused by interference from Mandarin. This paper adds to the few studies, if any at all, so far conducted on the extent of L1 influence. The model proposed in this study and the findings of this study may be seen as providing insights into L1 influence on L2 learning in general. Pedagogically, based on the model and the findings, we can try to minimize negative transfer of L1 in second language teaching and learning. For example, according to the study, we know that Harbin students make different numbers of errors in different categories. Tense and verb conjugation constitute two areas where Harbin students have greatest difficulties and thus commit most of their errors in English around these. Teachers in Harbin could thus pay more attention on the teaching of tense and verb conjugation to help students. There is a controversy as to

1 whether native English speakers should be recruited as teachers to teach
2 English grammar in settings where English is learnt as a second language.
3 According to the data and the study, one could be of the conviction that, all
4 else being equal, local native L1 speakers would be more competent in the
5 teaching of English grammar. In the case of the current study, with such a high
6 percentage of the influence of Mandarin on the acquisition of English, English
7 teachers should know Mandarin very well so as to know what difficulties their
8 students have, and to help students overcome the negative influence of
9 Mandarin. Of course, the validity of this statement still awaits further studies
10 on different subjects in different environments, and such a research
11 orientation is called for.

12 The study has appreciably improved the classification of errors. The model
13 proposed in this study helps resolve the dilemma of having to make
14 questionable distinctions between interlingual and intralingual errors. The
15 extent of L1 influence on the acquisition of L2 has been measured in terms of
16 percentages based on sound empirical grounds, with the help of the adopted
17 model. The model and the findings of this study may be seen as providing
18 insights into the role of L1 in general; for instance, this study has highlighted
19 the influence of absent structures in L1 on L2. Similar studies can be carried
20 out in different geographical locations to broaden the picture. In particular, it
21 is hoped that this study would help to improve English language learning and
22 teaching in Harbin and other parts of China.

23 **Notes:**

- 24 1. Each piece of composition was labeled with a number, so each type of error could
25 be located in the data for later reference, and the important thing here is that the
26 location of each type of error can indicate the distribution of errors.

27 ***The Author***

28 Dr. Yuxiu Hu (Email: huyx@sustc.edu.cn) received her PhD degree in
29 Linguistics from The University of Hong Kong. She is currently a Lecturer at
30 South University of Science and Technology of China. She holds a BA degree in
31 English education and an MA degree in Linguistics. She had been an English
32 teacher at a college in Harbin, Heilongjiang Province of China. Her research
33 interests mainly focus on second language acquisition, syntax, and computer-
34 mediated communication.

References

- Andersen, R. W. (1991). Developmental sequences: The emergence of aspect marking in second language acquisition. In T. Heubner & C. A. Ferguson (Eds.), *Crosscurrents in Second Language Acquisition and Linguistic Theories*, (pp. 305-324). Amsterdam: John Benjamins.
- Andersen, R. W., & Yasuhiro, S. (1996). The primacy of aspect in first and second language acquisition: The pidgin-creole connection. In W. C. Ritchie & T. K. Bhatia (Eds.), *Handbook of Second Language Acquisition*, (pp. 527-570). San Diego, CA: Academic Press.
- Brown, H. D. (1994). *Principles of language learning and teaching*. Englewood Cliffs, N.J.: Prentice Hall Regents.
- Brown, J. D., & Salmani Nodoushan, M. A. (2015). Language testing: The state of the art (An online interview with James Dean Brown). *International Journal of Language Studies*, 9(4), 133-143.
- Cattell, N. R. (1969). *The new English grammar: A descriptive introduction*. Cambridge, Mass.: MIT Press.
- Cai, H. S. & Cai, J. (2015). An exploratory study on the role of L1 Chinese and L2 English in the cross-linguistic influence in L3 French. *International Journal of Language Studies*, 9(3), 1-30.
- Chan, Y. (2004). Syntactic transfer: Evidence from the interlanguage of Hong Kong Chinese ESL learners. *The Modern Language Journal*, 88(1), 56-74.
- Chen, L. (2006). The effect of the use of L1 in a multimedia tutorial on grammar learning: An error analysis of Taiwanese beginning EFL Learners' English essays. *Asian EFL Journal*, 8(2), online.
- Corder, S. P. (1974). Error analysis. In J. P. B. Allen & S. P. Corder (Eds.), *The Edinburgh course in Applied Linguistics*, (pp. ??-??). CITY: PUBLISHER.
- Corder, S. P. (1981). *Error analysis and interlanguage*. Oxford: Oxford University Press.
- Ellis, R. (1985). *Understanding second language acquisition*. Oxford: Oxford University Press.
- Gao, M. C. F. (2000). *Mandarin Chinese: An introduction*. Oxford: Oxford

- 1 University Press.
- 2 Gao, Y. (2002). *Contrastive analysis and error analysis*. Beijing: Beihang
3 University Press.
- 4 Gui, S. C. (2005). *Introduction to corpus-based analysis of Chinese learner*
5 *English*. [Yang, Hui Zhong, Chun Shi, Gui & Da Fu, Yang, 2005]. Shanghai:
6 Shanghai Foreign Language Education Press.
- 7 Huang, T. L. (1984). *A contrastive analysis of English and Chinese*. Unpublished
8 PhD Dissertation, The University Microfilms International.
- 9 James, C. (1998). *Errors in language learning and use: Exploring error analysis*.
10 London & New York: Longman
- 11 Jarvis, S. (2000). Methodological rigor in the study of transfer: Identifying L1
12 influence in the interlanguage lexicon. *Language Learning*, 50(2), 245-
13 309.
- 14 Kellerman, E. (1995). Crosslinguistic influence: Transfer to nowhere. *Annual*
15 *Review of Applied Linguistics*, 15, 125-150.
- 16 Larsen-Freeman, D., & Long, M. H. (1990). *An introduction to second language*
17 *acquisition research*. London: Longman.
- 18 Lennon, P. (1991). Error: Some problems of definition, identification, and
19 distinction. *Applied Linguistics*, 12(2), 180-196.
- 20 Liu, J. L. (2004). *A study of transfer errors in English writing*. Unpublished
21 master's thesis. Jilin University.
- 22 Mitchell, R., & Myles. F. (2004). *Second language learning theories*. London:
23 Edward Arnold.
- 24 Na, P. (2005). Errors in the translation of topic-comment structures of
25 Vietnamese into English. *Asian EFL Journal*, 7(3), Online.
- 26 Odlin, T. (1989). *Language transfer: Cross-linguistic influence in language*
27 *learning*. Cambridge & New York: Cambridge University Press.
- 28 Ohata, K. (2004). Phonological differences between Japanese and English:
29 Several potentially problematic areas of pronunciation for Japanese
30 ESL/EFL learners. *Asian EFL Journal*, 6(4), Online.

- Paskewitz, P. F-X. (1999). *A corpus-based study of recurrent errors in the spoken and written English of native Cantonese speakers*. Unpublished master's thesis. The University of Hong Kong.
- Richards, J. C. (1971). Error analysis and second language strategies. *Language Sciences*, 17, 12-22.
- Salmani Nodoushan, M. A. (2007a). On adopting a cognitive orientation in EFL writing classroom. *Journal on Educational Psychology*, 1(1), 15-18.
- Salmani Nodoushan, M. A. (2007b). Thinking on the write path. *Training Journal*, May 2007, 37-40.
- Salmani Nodoushan, M. A. (2007c). Error treatment in the EFL writing class: Red pen method versus remedial instruction. *Journal of Educational Technology*, 4(3), 53-58.
- Salmani Nodoushan, M. A. (2009). Identifying sources of bias in EFL writing assessment through multiple trait scoring. *The Modern Journal of Applied Linguistics*, 1(2), 28-53.
- Salmani Nodoushan, M. A. (2010). The Interface between interim assessment and feedback: An opinion paper. *Journal on Educational Psychology*, 4(3), 1-8.
- Selinker, L. (1972). Interlanguage. *International Review of Applied Linguistics*, X, 209-30.
- Wang, Z. M. (2014). Review of the influence of in L2 acquisition. *Studies in Literature and Language*, 9(2), 57-60.
- Weist, R., Wysocka, H., Witkowska, K., Buczowska, E., & Konieczna, E. (1984). The defective tense hypothesis: On the emergence of tense and aspect in child Polish. *Journal of Child Language*, 11, 347-374.
- Yamashita, J., & Jiang, N. (2010). L1 influence on the acquisition L2 collocations: Japanese EFL users and EFL learners acquiring English collocations. *TESOL Quarterly*, 44(4), 647-668.
- Yang, D. F. (2005). Xue xi zhe yu liao ku: Cuo wu biao zhu yu duo wei du fen xi. [Learner corpus: Error tagging and multi-dimension analysis]. In *Ji yu CLEC yuliao ku di Zhongguo xue xi zhe Ying yu fen xi*. [Corpus-based analysis of Chinese learner English]. Shanghai: Shanghai wai yu jiao yu

1 chu ban she.

2 Yip, V. (1995). *Interlanguage and learnability: From Chinese to English*.
3 Amsterdam: John Benjamins.

4 Yuan, H. C. (2014). A corpus-based influence of L1 on EFL learners' use of
5 prepositions. *Theory and Practice in Language Studies*, 4(12), 2513-
6 2521.

7 Zhang, W. T. (2003). Analysis of interlingual and intralingual errors made by
8 college students. *Teaching English in China*, 12.

Appendix 1: Error information

Error types	Description	f	Total %	L1 %
Adverbials	Usage of adverbials			
Articles	Article errors; e.g. extraneous "the" in "the cigarettes are bad for your health"	2	0%	50%
Blend	Blending two structures together; e.g. a typical Chinese meal <i>comprises of</i> ...	40	8%	30%
Collocation	Correct grammar, improper combination; e.g. <i>learn knowledge</i>	2	0%	0%
Comparison	Errors involving comparative and superlative degree; e.g. make Chinese people richer than other countries .	4	1%	50%
Conjunction	Conjunction errors including lack of conjunctions and extraneous conjunctions; e.g. lack of conjunction in "In the winter, you can skating, ¹ make snow-men."	7	1%	29%
Countability	Uncountable nouns as countable nouns or vice versa; e.g. I saw a beautiful <i>cloth</i> with red color.	13	3%	92%
Disagreement	Including disagreement in number; e.g. Every year thousands of <i>visitor</i> come here. and morphological disagreement between subjects and predicates, e.g. It <i>include</i> Asia, Europe and Africa.	6	1%	17%
Extraneous "be"	Extraneous "be" before predicate verbs; e.g. This is made me very angry.	26	5%	100%
Individual errors	Errors that occur only once	7	0%	1%
Misinformation	Phrases or words created/made up by learners; e.g. (1) I <i>get bed</i> and go to see my friends. (2) I want to become an <i>athletor</i> . (3) Improper choice of right word class; e.g. I'm <i>interesting</i> in it. (2) select the wrong form of a word with different forms; e.g. I got up about six o'clock, and I was run around my house. (3) wrong choice among words which are similar in form or the same in pronunciation; e.g. I eat much <i>foot</i> . I want to <i>by</i> something. (4) Choosing a wrong one among words which are near synonyms or antonyms; e.g. I <i>cost</i> a lot of money buy shoes.	2	0%	0%
Misselection	Grammatical functions are realized by wrong lexical categories; e.g. it stands for <i>happy</i> .	4	1%	50%
Part of speech	There are no predicates in sentences; e.g. There are no war and hungry. Smiles ^a on every people's face.	30	6%	3%
Predicate omission	Errors involving prepositions including wrong prepositions, lack of prepositions and extraneous prepositions; e.g. (1) <i>In</i> the vacation, I often talk with my friends. (2) ^a The last day of that vacation, I ate sth good. (3) <i>In</i> everytimes, ...	33	7%	24%
Preposition	Errors involving pronouns including lack of relative pronouns and wrong case of pronouns; e.g. ^a Winter is coming means snow is coming.	12	3%	44%
Pronoun	Correct grammar but redundant components. E.g. These old people looked exactly like <i>small</i> children.	12	3%	50%
Redundancy	Syntactically broken sentences which can not be corrected by one revision. E.g. She told me <i>haven't</i> the coat which I need.	3	1%	67%
Sentence fragment	Spelling errors excluding derivational and inflectional changes of words. E.g. <i>'crazy'</i> for <i>'crazy'</i>	10	2%	80%
Spelling	There is no subject in a sentence. E.g. After this season, ^a is spring, ^a is a new beginning of a new year.	22	5%	0%
Subject omission	Errors occur in subjunctive mood e.g. If I <i>am</i> a bird, I <i>want</i> to fly all over the world.	15	3%	100%
Subjunctive mood	(1) using a broad word; language learners don't know the accurate words, so they just use a broad word or they use an item known to be incorrect but which shares some semantic features in common with the correct item; e.g. " <i>worm</i> " for "silkworm" (Liu, 2004).	7	1%	100%
Substitution	E.g. I <i>finished</i> some problems. (2) paraphrasing; e.g. <i>You'd better let this assistant lose job</i> . (3) PinYin and Chinese characters.	13	3%	0%
Tense	Tense errors. E.g. I <i>have</i> a dream when I'm a child.	70	15%	80%
Tense inconsistency	Correct tense at the beginning but becoming wrong afterwards (most of them are past tense inconsistency). E.g. When I was seven years old, I had a dream. I dreamt that I <i>have</i> magic.	53	11%	98%
"There be"	Errors occur in "There be" sentences. E.g. two predicates found in the structure: (1) <i>There is</i> a very very old man called "happy" <i>lives</i> in the snow. (2) <i>There isn't have</i> the size which you want.	2	0%	50%
Transitivity	Using a transitive verb as a intransitive verb or vice versa, including omission of objects. E.g. I became a little angry and answer I couldn't find ^b .	10	2%	60%
Verb form	(1) Verb form problems-gerund, participle, infinitive and original form. E.g. I love <i>play</i> basketball. (2) using non-finite verb form for finite verb form or vice versa. E.g. I know that winter <i>coming</i> .	38	8%	45%
Voice	Errors in voice form and use. E.g. we can do a lot of things that can't <i>do</i> in other seasons.	5	1%	100%