CHINESE SPEAKERS' ACQUISITION OF ENGLISH CONDITIONALS: ACQUISITION ORDER AND L1 TRANSFER EFFECTS

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ABSTRACT

This study examines how the syntactic complexity of English conditionals and first language transfer influence Chinese ESL learners' acquisition order of conditionals. The differences in English and Chinese conditional constructions are presented in the paper. Brown's (1973) *Cumulative Complexity* principle is employed to determine the syntactic complexity of six conditionals: present factual, past factual, future predictive, present counterfactual, past counterfactual, and mixed-time-reference counterfactual conditional. O'Grady's (1997) *Developmental Law* is used as the theoretical framework for predicting the acquisition orders of the *if*-clause and the main clause of English conditionals. A written cloze test simulating oral conversations is used to elicit the production of English conditionals from 20 native-speakers of English and 36 adult Chinese speakers, and the answers from both groups are compared. The results of Chinese participants' production did not support the predicted acquisition orders in the research hypotheses. Nor could the implicational scaling of acquisition order be established due to the low reproducibility. The results of a two-way repeated-measures ANOVA show an interaction of the conditional type and clause type factors. Moreover, systematic variations in the learners' production provide evidence of L1 transfer effects, such as an over-production of certain forms, and a preference for smallest rule changes in the passage from one developmental stage to the next one. It is important to be aware of how these L1 transfer effects interact with the syntactic complexity factor in Chinese participants' production of English conditionals, so better instruction of English conditionals can be achieved.

Conditional constructions reflect the human capacity to contemplate various situations and to infer consequences on the basis of known or imaginary conditions. Linguists doing descriptive studies have assumed that every human language has a method of forming conditional sentences, and they have found that conditionals do exist in many languages, such as Classic Greek, English, German, Latin, Chinese, and others (Traugott, Meulen, Reilly, & Ferguson, 1986). However, Celce-Murcia and Larsen-Freeman (1999) reported that learners of English as a second language (ESL) have difficulties in acquiring English conditionals due to the syntactic and semantic complexities embedded in conditional constructions.

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Some researchers believe that the *understanding* of the human mechanism of constructing and comprehending conditionals "provides basic insights into the cognitive processes, linguistic competence, and inferential strategies of human beings" (Traugott et al., 1986, p. 3). The aim of this paper is to investigate English as a Second Language (ESL) learners' development of linguistic competence in terms of their acquisition of English conditionals. I hope the findings can suggest implications for ESL instruction of conditionals. I will begin with a cross-linguistic analysis of conditionals in English and Chinese, which differ greatly from each other in linguistic representation.

The typical English conditional construction is *if p, then q* (Traugott et al., 1986). The *if*-clause (IF-C) is the *antecedent*, in which the speaker states the condition of reasoning, and the *then*-clause is the *consequent* in which a speaker states the outcome of inferences (Traugott et al., 1986, p. 5). The word *then* can be omitted without distorting the meaning of a conditional sentence, so I will use the term *main clause* (MC) to refer to the consequent of a conditional. In English conditionals, the time of events (i.e., in the past, present, or future) and the truth-value (i.e., factual, possible, counterfactual) of reference are represented explicitly by the following three grammatical features of the verb phrases (VP) in both the IF-C and the MC: (a) the past tense form, (b) the perfect aspect form, and (c) the existence of modals, such as *will, may*, or *can*. In this paper, I use [± past], [± perfect], and [± modal] to represent these grammatical features. The preceding + or – markers symbolize the existence or absence of the features in the verb phrases.

Table 1 shows a frequency ranking of the VPs in eight types of conditional patterns, coded for the three grammatical features. These eight conditional types, reported to appear most frequently in English, are presented in the ranking of their frequency in speech from the highest to the lowest (Hwang, 1979, cited in Celce-Murcia & Larsen-Freeman, 1999, p. 557). Hwang (1979) analyzed English writing (357,249 words) and speech (63,746 words) that represented various discourse types. She found that among the 70 conditional tense-modal patterns that naturally occurred in writing and speech, the first seven types in Table 1 (A-G) made up two-thirds of all conditional sentences in her corpora.

Table 1
The Frequency Ranking of Conditional Sentence Types in Hwang's (1979) Corpus Research

Conditional structure	Terminology[a]	Grammatical features of VP in IF-C and MC
A. *If* +present tense, present tense.	Generic factual	If [–past]…, [past]…
B. *If* + present tense., *will/be going to* present tense.	Future (predictive)	If [–past]…, [+modal]…
C. *If* + past, *would/might/could*	Present hypothetical or counterfactual	If [+past]…, [+modal] [+past] …
D. *If* + pres., *should/must/can/may*	Explicit inference factual or future with weakened result	If [–past]…, [+modal]…
E. *If* + *were/were to, would/could/might*	Present or future hypothetical or present counterfactual	If [+past]…, [+modal] [+past]…
F. *If* + *had*+ *-en/have*+ *-en, Would/could/might* + *have* + *-en*	Past counterfactual	If [+past] [+perfect]…, [+modal] [+past] [+perfect]…
G. *If* + pres*., would/could/might*	Future with weakened result	If [–past]…, [+modal] [+past] …
H.[b] *If* + past, *would/could/might* + *have* + *-en*	Past counterfactual	If [+past]…, [+modal] [+past] [+perfect]…

Note. Table 1 was adapted from *The Grammar Book* (Celce-Murcia & Larsen-Freeman (1999, p. 557). The order of these eight conditional types is based on the frequency order in the speech data. Generic factual conditional has the highest frequency.

[a]Terminology used in Celce-Murcia and Larsen-Freeman's book (1999, p. 557)

[b]Structure H. accounted for 2.2% in the written corpus, so it is included in Table 1 because it listed all patterns which respectively consisted of more than 2% of all conditional sentences in speech or written corpora.

Notice that the past tense form is used for the IF-C of the present factual conditional, and the past perfect tense is used for the past counterfactual conditional. These situations are called *backshifting of tense*, which means the "use of a morphologically past tense with present (or future) time reference and of pluperfect with past time reference" (Comrie, 1986, p. 94). Comrie (1986) notes that backshifting is a common phenomenon in Indo-European and European-area languages in conditionals with a high degree of hypotheticality, such as counterfactual conditionals. Also notice that in counterfactual conditionals, there is a modal *would/could/might* in the MC, but not in the IF-C. As a result, a speaker usually needs to have good linguistic competence in English to master backshifting, the non-parallel of modals in both clauses, and the inflection of verb tense in conditionals. Given this, it is reasonable that Celce-Murcia and Larsen-Freeman (1999) suggest that acquisition of the English tense-aspect system, the modal auxiliaries, and

negation is a prerequisite for ESL/EFL learners to acquire the full range of English conditionals.

Conditionals in Mandarin Chinese, on the contrary, do not solely rely on the grammatical features of VP to make a distinction in the time reference or truth-value of events (Li & Thompson, 1981). Table 2 shows the differences in the linguistic representation of Mandarin Chinese conditionals. In English conditionals, the degree of hypotheticality, such as factual, hypothetical, or counterfactual, is indicated by different patterns of tense and modality in the VP in English. Chinese conditionals, in contrast, have only one verb-tense pattern to express different degrees of hypotheticality. It is obvious from Table 2 that Mandarin does not use the [past] feature to construct counterfactuals. Li and Thompson stated that in a Chinese conversation, the hearer infers the exact type of conditional message "from the proposition in the second clause, and from his/her knowledge of the world, and of the context in which the sentence is being used" (1981, p. 647). Table 3 summarizes the five major types of conditional constructions in Mandarin Chinese. Aside from the lack of verb-tense (Table 2), Chinese does have *if*-words for conditional, such as the words *ruguo* and *yashi* in Table 3 (Wu, 1994, p. 155).

Table 2

Mandarin Representation of a Conditional Sentence and Its Interpretation in English

Example:	(conditional clause)	ruguo	ni	kan	dao	wo	meimei,
		if	you	see	arrive	my	younger sister,
	(main clause)	ni	yiding	zhidao	ta	huaiyun	le.
		You	certainly	know	her	pregnant	(perfective aspect suffix)
Interpretation:							
Reality prediction: If you see my younger sister, you'll certainly know that she is pregnant.							
Hypothetical: If you saw my younger sister, you would know she was pregnant.							
Counterfactual: If you had seen my younger sister, you would have known that she was pregnant.							

Note. Table 2 was adapted from Li and Thompson's *Mandarin Chinese: A functional reference grammar* (1981, p. 647)

Table 3

The Five Major Types of Chinese Conditionals

Conditional Clause (i.e., IF-clause)	Consequent Clause (i.e., main clause)
1. The typical conditional *Ruguo/Yaoshi* ("if")…,	*Jiu* ("then")…
2. Optional "if," with clause-final particle *Ruguo/Yaoshi…dehua* (clause-final particle),	*Jiu* ("then")…
3. No "if" …,	With adverbial conjunction *jiu* in the MC *jiu* ("then")…
4. No linking element, with a pause between the two clauses…,	…
5. Negative in one or both clauses *Not/no*…,	*Not/no*…

Note. Linking elements in Chinese conditionals usually appear in pairs. For example, *ruguo* ("if") is the linking element in the IF-C, and *jiu* ("then") is the corresponding linking element in the MC. (Table 3 adapted from Wu, 1994, p. 155).

Moreover, the following four devices also help to clearly deliver counterfactual messages in Chinese: *temporal references, aspect markers, negators,* and *rhetorical interrogatives* (Chen, 1988; Wu, 1994). Temporal references are the most essential linguistic devices in Chinese counterfactual conditionals. They are lexical words that express time, such as the words equivalent to *two days, now,* or *yesterday* (Wu, 1994, p. 167). Examples in (1a) and (1b) in Table 4 show how a single temporal reference word, *zuotian* (i.e., " yesterday"), changes the sentence from a future predictive to a past counterfactual conditional (Wu, 1994, p. 168). The word *yaoshi* is an *if*-word in Chinese, which leads the IF-C of a conditional. Another important temporal reference word is *zao* (i.e., "earlier than," or "a long time ago"). It is usually used with the aspect particle *le* in the MC to express counterfactuality. An example is (2b) in Table 4.

The typical Chinese aspect marker for counterfactuality is a verbal particle *le,* which marks the completion of an action as shown in (2a) in Table 4. When the particle *le* is used together with the temporal reference word *zao* in the MC of a conditional, the combination makes that conditional sentence a counterfactual one. For example, only the particle *le* in the MC, with *zao* in the same clause, can turn a future predictive conditional (2a) into a counterfactual conditional (2b) in Table 4 (Wu, 1994, pp. 172-173).

Table 4

The Major Linguistic Devices of Chinese Counterfactual Conditionals and Examples

1.	Temporal reference words: (e.g., *zuotian*, or *zao*.)
	(1a) Yaoshi ni bang ta, ta hui qu de.
	If you help him, he will go *de* (clause-final particle).
	"If you help him, he will go."
	(1b) Zuotian, yaoshi ni bang ta, ta hui qu de (particle).
	Yesterday, if you help him, he will go *de*.
	"Yesterday, if you had helped him, he would have gone."
Ps:	*De* is a clause-final particle
2.	Aspect marker *le*
	(2a) Huo yaoshi dao le, wo jiu tongzhi ni.
	Goods if arrive *le*, I will notify you.
	"If the goods arrives, I will notify you."
(2b)	Huo yaoshi dao le, wo zao jiu tongzhi ni le.
	Goods if arrive *le*, I early would notify you *le*.
	"If the goods had arrived, I would have notified you long ago."
Ps:	*Zao* is a temporal reference words
3.	Negators
(3a)	Yaoshi/Ruguo ni bu bang ta, ta zao jiu fangqi le.
	If you not help him, he earlier would give up *le* (aspect marker).
	"If you had not helped him, he would have given up long ago."
(3b)	Zuotian, yaoshi/ruguo ni bu bang ta, ta jiu fangqi le.
	Yesterday, if you not help him, he would give up *le*.
	"Yesterday, if you had not helped him, he would have given up."
4.	Rhetorical interrogatives
	Yaobushi wo, ta hui you jintian?
	If not for me, he would be today?
	"If it were not for me, could/would he be what he is now?"

Note. Example sentences are adapted from Wu's (1994) book.

The third major device in Chinese counterfactual is the negator *bu* (i.e., "not"), which modifies the *if*-words *yaoshi* or *ruguo*, or the verb in the *if*-clause (IF-C). An example can be seen in (3) (Table 4) (revised from Wu, 1994, p. 177). Examples (3a) and (3b) show how the combination of the negator *bu* and a temporal reference word *zao* ("a long time ago") in (3a) or *zuotian* ("yesterday") in (3b) construct counterfactual conditionals. The last linguistic devices in Chinese counterfactuals, the *rhetorical interrogatives*, are unique to Chinese. They appear in the form of rhetorical questions in the MC as illustrated in (4), and the IF-C is usually negative (Wu, 1994, p. 182).

Given the above evidence, Wu (1994) argued that English and Mandarin Chinese use different levels of linguistic devices to express counterfactuality. English counterfactuals

depend on the linguistic features at the syntactic level, such as the verbs of subjunctive mood. Chinese, on the other hand, relies on the lexical, syntactic, and discourse levels. The temporal reference words are on the lexical level; the negation and the rhetorical interrogatives are on the syntactic levels. However, Wu did not define which level the aspect marker *le* was.

Wu's (1994) arguments were supported by her cross-linguistic study on the use of counterfactual conditionals in English and Mandarin Chinese newspapers and spontaneous speech. Wu collected written data in 1992 from a Chinese newspaper published in Taiwan, *the United Daily News*, and from an English newspaper published in the US, *the New York Times*. She also collected naturalistic speech data of both languages from everyday conversation, lectures, radio, and TV programs.

Table 5

Grammatical markers of counterfactual examples in Chinese and English newspapers and speech data collections (Adapted from Wu, 1994, p. 229)

	Chinese		**English**	
Grammatical Markers	Newspaper	Speech data	Newspaper	Speech data
	n = 62	*n* = 53	*n* = 100	*n* = 67
1. Subjunctive verbs	0.00 (0)	0.00 (0)	1.18 (118)	1.54 (103)
2. If-words	0.40 (25)	0.62 (33)	0.48 (48)	0.63 (42)
3. Time reference words	0.32 (20)	0.55 (29)	0.20 (20)	0.13 (9)
4. Negators	0.42 (26)	0.72 (38)	0.26 (26)	0.43 (29)
5. Aspect markers	0.07 (4)	0.32 (17)	0.00 (0)	0.00 (0)
6. Discourse markers	0.35 (22)	0.58 (31)	0.28 (28)	0.08 (8)

Note 1. Table entries are ratios of grammatical markers per counterfactual sentence in each language and source. Actual numbers of grammatical markers are in parentheses (quoted from the original table in Wu, 1994, p. 229)

Note2. The descriptive statistics of the five grammatical markers in Table 5 are selected from a total of eight grammatical markers in Wu's (1994) original table. I only selected the markers that are discussed in my paper.

The results in Table 5 showed that the percentages of the linguistic devices used in English and Chinese counterfactual conditionals differed (Wu, 1994, p. 229). Notice that subjunctive verbs appeared only in English counterfactual conditionals, and aspect markers were used exclusively in Chinese (Table 5). Also, whereas the percentage of *if*-words was almost the same in Chinese as in English, the Chinese newspaper used a higher percentage of time reference words, negators, and discourse cues than the English newspaper to express counterfactuality. The speech data showed an even greater difference between English and Chinese conditionals in the use of linguistic devices at

different levels. In addition, the percentages of these linguistic devices or markers in the oral production of Chinese conditionals were higher than those in the written data from the Chinese newspaper.

From the above linguistic analyses and the results from Wu's study (1994), it is obvious that Chinese conditionals are very different from English ones in terms of linguistic representation and use. Given these differences, the question arises of whether the structure of a language influences the way its speakers think, as suggested in the *Sapir-Whorf hypothesis* (Bloom, 1981). To be more specific, do the differences in the representation of conditionals between Chinese and English cause the native speakers (NS) of these two languages to have different abilities to reason counterfactually? Scholars have been debating this issue with evidence from empirical studies over the past few decades (Bloom, 1981, 1984; Au, 1983, 1984; Liu, 1985; Wu, 1994). I do not want to describe their arguments and studies in detail because those studies all assessed the comprehension ability of English and Chinese counterfactual conditionals. My study, however, intends to assess the production ability of Chinese ESL learners. Thus, I only briefly describe how the results of these Sapir-Whorf hypothesis studies. Empirical studies showed that despite the differences in the linguistic representation of English and Chinese counterfactual conditionals, speakers of these two languages were equally competent to reason counterfactually in their native languages (Au, 1983, 1984; Liu, 1985; Wu, 1994). In addition, the linguistic differences did not hinder bilingual Chinese speakers from making inferences from Chinese or English counterfactual conditionals (Au, 1983, 1984).

On the basis of the above empirical studies, I suggest that the difficulties Chinese ESL learners have in learning English conditionals are due to the syntactic complexity of these structures, rather than the learners' failure to do conditional reasoning in English. Therefore, I want to investigate how the syntactic complexity of English conditionals influences Chinese learners' *interlanguage* production of English conditionals. The term *interlanguage* (IL), introduced by Selinker in 1972, refers to a linguistic system constructed by learners out of the target language input they have experienced (Larsen-Freeman & Long, 1991). In other words, IL is the product of interaction between the learner's first language (L1) and the target language (TL) input. Larsen-Freeman and Long suggested IL development is governed by the following principles (1991, p. 81):

1. ILs vary systematically
2. ILs exhibit common accuracy orders and developmental sequences
3. ILs are influenced by the learner' L1

Systematic variation of ILs means that the non-target variations found in the interlanguage productions can be predicted and explained by "the effect of situation,

linguistic context, degree of planning, or some other identifiable cause" (Larsen-Freeman & Long, 1991, p. 82). Interlanguage production with systematic variation can be improved through instruction. It is valuable to recognize the error types, acquisition orders, and developmental sequences of learners in order to gain a better understanding of learners' internal syllabuses in instructed second language acquisition (Larsen-Freeman & Long, 1991).

Schachter (1983) defines the term *language transfer* as "a constraint on the nature of the hypotheses language learners are inclined to make about the L2 (second language)" (Larsen-Freeman & Long, 1991, p. 97). Some researchers prefer using "cross-linguistic influence" (Sharwood Smith, 1983, cited in Larsen-Freeman & Long, 1991), a more theory-neutral term, to refer to a wide range of phenomena in which ILs are influenced by learners' L1. Situations of language transfer or cross-linguistic influence include "interference, positive transfer, avoidance, borrowing, over-production (of certain L2 forms) and L2 -related aspects of language loss" (Larsen-Freeman & Long, 1991, p. 97).

Zobl (1982) claimed that language transfer does not alter the normal developmental sequences, but that it may modify the pace of passage through the developmental sequences. Also, simpler forms usually modify more complex forms. Zobl suggested that one of three phenomena would happen in IL development. First, a delay may occur in the restructuring of forms that is necessary for learners to proceed to the next developmental stage. Second, learners may extend the scope of their present developmental structure, so there is a situation of over-production of certain forms. Third, learners may look for development that involves the smallest possible rule change.

Berent (1985) examined the role of *markedness* in the acquisition order of English conditionals by 55 adult ESL learners from different L1 backgrounds in a cross-sectional study. This cross-sectional study also examined learners' "developmental differences" (Berent, 1985, p. 342), so the participants fell into the advanced level, and the low-advanced level. The determination of participants' levels was based on a combination of a reading test, a grammar test, a free composition, and an oral interview. Berent's operational definition of the theoretical construct *markedness* was the difficulty order of producing verb forms in a fill-in-the-blank test. The results of a repeated-measures ANOVA showed a hierarchy of accuracy order in the production test from the highest to the lowest as follows: real conditionals, unreal conditionals, and past unreal conditionals. In Celce-Murcia and Larsen-Freeman's terms, these structures are *future predictive, present counterfactual* or *hypothetical*, and *past counterfactual conditionals*.

However, there are two problems in Berent's assessment material for ESL learners' production of English conditionals. First, the production test was a discrete-point fill-in-the-blank test, in which participants fill in the verb form in the IF-C or the MC of a

conditional according to the clue given by the verb in the other clause as shown in (1) and (2) (Berent, 1985, p. 343).

(1) If you explained your question, he would answer you.

(2) She would send you a gift if she liked you.

Though the tokens were randomly assigned, revealing the verb forms in either of the clauses may still cause a learning effect. For instance, participants may have noticed the verb form revealed in the main clause of one unreal past conditional, and then been reminded of the proper verb form in the target main clause of the following unreal past conditional. Secondly, there was no meaningful context for each question, the hypothetical or present counterfactual conditionals in (1) and (2) can also be interpreted as past factual conditionals. It is not necessary to produce the modal *would* if (1) is a regular factual conditional.

Moreover, the term *markedness* is widely used in various contexts, such as typology, syntax, semantics, morphology, or discourse, and it has different meanings depending on the context in which it is used. However, Berent did not specify the context in which this term was used in his paper. It is possible he used the term *markedness* in the same way as the one used in linguistic typology research. The reason was that Berent used Greenberg's (1966) and Comrie's (1976) linguistic typological analysis to explain the how the markedness of VP in conditionals affected learners' accuracy order on the fill-in-the-blank production test. For example, the verb forms in real conditionals are indicative (e.g., *carry, will lose*), while those in unreal and past unreal conditionals are subjunctive (e.g., *stole, had heard*) and conditional (e.g., *would catch, would have told*) (cf. Khlebnikova, 1973, adapted in Berent, 1985). Greenberg (1966, cited in Berent, 1985, p. 360) indicated that the indicative is less marked than the hypothetical modes and that present tense form is more unmarked due to "zero expression" of a tense marker. Also, Comrie (1976, cited in Berent, 1985, p. 361) observed that "more marked forms tend to have more 'morphological material.' "

Eckman's (1996) *Markedness Differential Hypothesis* (MDH) proposes that L2 difficulty can be predicted on the basis of the differences between learners' L1 and L2, and the markedness relationships that hold within those areas of difference. He specifically defined the meaning of markedness as follows (1996, p. 198):

> If the presence of a structure p in a language implies the presence of some other structure, *q*, but the presence of *q* in some language does not imply the presence of *p*, then structure *p* is marked relative to structure *q*, and structure *q* is unmarked relative to structure *p*.

Eckman also emphasized that "markedness refers to the relative frequency or generality of a given structure across the world's languages" (p. 198). He wrote, " Thus,

markedness, in the sense used by the MDH, is not a matter of judgment or conjecture; it is an empirical matter" (p. 201).

However, I have not found any published linguistic typology research article that shows the markedness ranking of the syntactic representation of the English conditionals that are frequently taught in ESL or English as a foreign language (EFL) classes. These conditionals include present factual, future predictive, present counterfactual, past counterfactual, and the mixed-time-reference counterfactual conditional. The last conditional type usually is used to hypothesize that an unrealized condition in the past might lead to a consequence that is contrary to the present reality. Therefore, in this paper, I do not use Eckman's MDH to predict Chinese ESL learners' difficulties in acquiring English conditionals. Instead, I will use Brown's (1973) *Cumulative Complexity* principle to operationalize the syntactic complexity that may pre-determine the acquisition order of the above English conditionals.

O'Grady (1997) defined the Cumulative Complexity principle as follows[1]: "X is cumulatively more complex than Y if X involves everything that Y does plus something else" (p. 349). According to O'Grady (1997) the number of grammatical features encoded in the morphemes can operationalize the construct of relative difficulty. For example, *were* is more difficult than *–s* because the latter involves only the concept of plurality, whereas the former encodes plurality and past tense. In this study, three grammatical features of the VP in English conditionals— [past], [perfect], and [modal] —are employed to present the syntactic complexity. For example, the IF-C of present counterfactual conditional has one grammar feature [+past], whereas the IF-C of present factual conditional does not have any grammar feature (i.e., [–past], [–perfect], [–modal]). Therefore, the former is more cumulatively complex than the latter.

The theoretical construct *acquisition order* in the study is operationally defined as the ranking of the IF-C or the MC across several conditionals, which is revealed in learners' accuracy in producing the verb forms in the IF-C or the MC. I separated the acquisition order of English conditionals into the ranking of the IF-C and the ranking of the MC, so that there is clear cumulative complexity of the verb-phrase (VP) across several conditional types.

O'Grady (1997) explained how the syntactic complexity of L1 or L2 structures influence learners' developmental stages or acquisition order. Based on Brown's Cumulative Complexity principle, O'Grady restated the weaker version of the

[1] O'Grady actually gave the definition of *cumulative complexity* in 1987 (see O'Grady, 1987, p, 195), but he revised both definitions of *cumulative complexity* and *the developmental principle* in another book (see O'Grady, 1997, p. 349).

Developmental Law as follows[2]: "If X is cumulatively more complex than Y, X cannot emerge before Y (all other things being equal)" (1997, p. 353). According to O'Grady (1997, p. 349), "all other things" includes frequency, perceptual salience, and communicative importance.

Purpose

The aim of this paper is to investigate how the syntactic complexity of English conditionals influences Chinese learners' interlanguage (IL) production of English conditionals. The following IL phenomena will be examined: acquisition order of different conditional types, systematic variations, and L1 transfer effects. This study will differ from Berent's study in several important ways. Firstly, participants in the study are all ESL learners of the same L1 background, Mandarin Chinese, so I can observe any L1 transfer effect in the learners' IL production.

This study also differs from Berent's study in the assessment material. A new written cloze test with dialogue passages was used to assess Chinese participants' accuracy in producing different English conditionals. Hence, the VPs will be elicited in meaningful contexts. Conditionals are highly context-based structures, in which the time reference and truth-value of antecedent and consequent of a conditional sentence depend on the context. In addition, the test is designed to avoid the learning effect that might have happened in Berent's study.

Moreover, there is a wider range of English conditionals examined in this study than in Berent's (1985) study. Berent investigated the acquisition order of three conditionals, but my study investigates six conditional types. Five of them are frequently emphasized in ESL or EFL instruction of conditionals, and they are included in various ESL or EFL grammar materials. These five conditional types are present factual, future predictive, present counterfactual, past counterfactual, and mixed-time-reference counterfactual conditional. The sixth type is past factual conditional. Although it is not emphasized in instruction, past factual conditional is a good counterpart of present factual in terms of syntactic complexity. Three grammatical features— [past], [perfect], and [modal] —are employed to present the syntactic complexity of these six conditionals as shown in Table 6. The examples are quoted from various sources (No.1-4 from Celce-Murcia and Larsen-Freeman, 1999, pp. 549-551; No.5a from Yule, 1998, p. 126).

These six conditional types also differ distinctly from each other with respect to their functions in the following manner: differences in time reference (present, past, and

[2] Actually, O'Grady (1987, p. 195) first proposed the "Developmental Principle," which was defined as follows: "A rule or representation A will emerge after a rule or representation B if A is cumulatively more complex than B." Then, in order to account for the discrepancy between this principle and some empirical findings, he revised the Developmental Principle and proposed the "Developmental Law" (1997, p. 353).

future), and in truth-value of statements world (factual, possible, counterfactual) with comparison to the actual world. Therefore, there should be little chance that participants will be confused by the functions of any two conditional types in the assessment.

Table 6
The Six English Conditional Types Assessed in the Study

Conditional type	Grammatical features of verb in IF-C	Grammatical features of verb in MC
1. Present factual If I wash the dishes, Sally dries them.	[–past]	[–past]
2. Future predictive (strong prediction) If it rains, I will stay home.	[–past]	[+ modal]
3. Past factual If Nancy said, "Jump!" Bob jumped.	[+ past]	[+ past]
4. Present counterfactual present If I were the President, I would make some changes.	[+ past]	[+ modal] [+ past]
5. Past counterfactual		
5a) If the challenger had focused on the economy, he would have been more successful.	5a) [+ past] [+ perfect]	5a) [+modal] [+past] [+ perfect]
5b) If the challenger focused on the economy, he would have been more successful.	5b) [+past]	5b) [+modal] [+past] [+ perfect]
6. Mixed-time-reference counterfactual (MTRC) (unreal past leads to unreal present situation)		
6a) If I had grown up in Paris, I would speak French.	6a) [+ past] [+ perfect]	6a) [+ modal]
6b) If I grew up in Paris, I would speak French.	6b) [+ past]	6b) [+ modal]

Finally, this study also differs from Brown's (1973) study in its theoretical framework. The Cumulative Complexity principle will be used to account for the syntactic complexity of conditionals. O'Grady's (1997) weaker version of the Developmental Law is the theoretical framework for the prediction of Chinese speakers' acquisition order of English conditionals. The conditional types selected in this study reflect a hierarchy of syntactic complexity among them, so learners' accuracy decreases with the increase of syntactic complexity. To be consistent with Cumulative Complexity principle (O'Grady, 1997), the cumulative complexity of the conditionals is separated into the complexity order of the IF-C and that of the MC. Therefore, the prediction of acquisition order is also divided into a prediction for the IF-C and one for the MC of English conditionals.

This study addresses the following research questions:

1. What is the acquisition order of the if-clause across the six English conditional types by adult Chinese speakers?
2. What is the acquisition order of the main clause across the six English conditional types by adult Chinese speakers?
3. Are the actual acquisition orders of the two clauses the same as predicted with the Developmental Law (O'Grady, 1997)?
4. Is there any L1 transfer effect in the production of English conditionals?

The predicted acquisition orders of the IF-C and the MC are based on the number of [+] features in the VP of each clause. With reference to Brown's (1976) Cumulative Complexity and O'Grady's (1997) Development Law, I hypothesize that the more features embedded in the IF-C or the MC of a conditional type, the more complex it is, and the more difficult it is for Chinese ESL learners to acquire that conditional type. As shown in Table 6, neither future predictive (Type 2) nor present factual conditional (Type 1) has the [+past], [+perfect], or [+modal] features in the IF-C, so these two types should be the easiest to acquire. The results of Hwang's research (1979, cited from Celce-Murcia and Larsen-Freeman, 1999, p. 557) in Table 1 showed that both past perfect tense and simple past tense are frequently used by NSs in the IF-Cs of past counterfactual (Table 1). In some colloquial English dialects, the simple past tense (*were, did*) is used as the substitute for the past perfect tense (*had been, had done*) in the IF-C to express the unreal past condition. I also found similar results from ten NSs' production in a pilot study. Consequently, the IF-Cs of past factual and mixed-time-reference counterfactual conditional (5b & 6b in Table 6) share the same feature [+past] with those of present counterfactual (Type 4) and past factual (Type 3) conditionals. These four types should be equally difficult to acquire.

As for the MC, present factual (Type 1) does not have any [+] features, so it should be the easiest to acquire. Future predictive (Type 2), with one [+modal] feature, is in the second place. Past factual (Type 3) also has one feature [+past] so it is in the equal ranking position as future predictive. Both the MCs of present counterfactual (Type 4) and mixed-time-reference counterfactual (Type 6) use [+modal] and [+past] features to express a consequent that does not happen at the time of speaking or writing. These two types (Types 4 and 6) follow after future predictive and past factual on the ranking of MC acquisition. The MC of past counterfactual (Type 5) has three features, the highest number among all types, so it is the most difficult and the last to be acquired. Therefore, the acquisition orders of the IF-C and the MC across the six conditional types are predicted and shown in the first two research hypotheses. If the above two hypotheses are supported, then the Developmental Law is supported.

Finally, I hypothesize that evidence for an L1 transfer effect can be found in production, and it will appear in any of the three situations as described by Zobl. For example, one might expect that Chinese ESL learners would tend to use simple past tense, instead of the past perfect tense, in the IF-C of past counterfactual and of mixed-time-reference counterfactual conditionals. The reason is that in doing so, learners make the smallest possible rule change in the acquisition passage from the IF-C of present counterfactual conditional, which use simple past tense, to the IF-C of the other two counterfactual conditionals in the study.

The three hypotheses are stated as follows:

1. The acquisition order of the IF-C of the six conditional types is described as: Type 1 = 2 > 3 = 4 = 5 = 6 (Present factual > Future predictive > Past factual = Present counterfactual = Past counterfactual = Mixed-time-reference counterfactual)
2. The acquisition order of the MC of the six conditional types is as follows: Type 1 > 2 = 3 > 4 = 6 > 5 (Present factual > Future predictive = Past factual > Present counterfactual = Mixed-time-reference counterfactual > Past counterfactual)
3. The evidence for an L1 transfer effect is found in the IL production of English conditionals when any of the following three phenomena (Zobl, 1982) occurs: (a) A delay in the restructuring of forms that is necessary for learners to proceed to the next developmental stage; (b) over-production of certain forms; (c) the smallest possible rule change in the passage from one developmental stage to the next one.

METHOD

Participants

There were two groups of participants. The first group included 20 NSs of English who at the time of the study had been enrolled in a college or had received a Bachelor's degree. Their demographic data are summarized in Table 7. NSs' answers elicited from the test were regarded as the desired target answers for the 30 test items and were compared with those produced by Chinese ESL learners. More than half of them were enrolled in University of Hawai'i at Manoa (UHM) when they took the test. None of them were majoring in ESL, Linguistics, or English. Seven had some experience teaching ESL and the length of teaching varied from one month to 132 months with an average length of 38 months. All of the NS participants were US citizens, but there was great

diversity the hometowns where they acquired English as an L1. I wanted to avoid any possible bias in NSs' answers due to differences in regional dialects.

Table 7
Twenty English Speakers' Demographic Information

Demographic categories	Number of people (*n*) (Total *N* = 20)
Gender	Female = 11; male = 9
Student status	Graduate student = 11; undergraduate = 1; non-student = 7
TESL experience	None = 13 1 month = 1; 4 months = 1; 6 months = 1; 24 months = 1; 36 months = 1; 60 months = 1; 132 months = 1 Average length of TESL = 38 months (*n* = 7)
Hometown (State)	*n* = 1 => CA, CO, DE, MA, MO, NJ, OR, TX *n* = 2 => HI, NY, PA *n* = 3 => CL *n* = 3 => many places (because family moved a lot)

The second group of participants consisted of 36 Chinese speakers from UHM, Kapiolani Community College (KCC), and Hawaii Pacific University (HPU). Twelve of them were male, and 24 were female. The majority of participants received EFL education until they graduated from high school in Taiwan or Mainland China. Their demographic information was obtained from a questionnaire and is summarized in Table 8. Eighteen Chinese participants were graduate students, and the other 18 were undergraduate students. None of them were majoring in Linguistics, English, or ESL.

Among them, six people had never taken the Test of English as a Foreign Language (TOEFL) because HPU does not require students to take the TOEFL. The other 30 participants were reported to fall in the following ranges: TOEFL 600 or above (*n* = 14),

Table 8
Thirty-six Chinese participants' demographic information

Demographic categories	Number of people (*n*) (Total *N* = 36)
Gender	Female = 24; Male = 12
School enrolled	UHM = 29; KCC = 2; HPU = 5
Student status	Graduate student = 18; undergraduate = 18
TOEFL scores	TOEFL 600 or above = 14; TOEFL 550-599 = 7; TOEFL 500-549 = 8; TOEFL 450-499 =1; Have never taken TOEFL = 6
Length of residency in the US	More than 6 years = 2; 4-6 years = 2; 2-4 years = 10; 1-2 years = 11; less than 1 year (but more than 6 months) = 11
ESL courses (language courses) taken	15-10 courses = 3; 6-9 courses = 4; 5 courses = 3; 4 courses = 1; 3 courses = 3; 2 courses = 4; 1 course = 1; None = 17

550-599 (*n* = 7), 500-549 (*n* = 8), and below TOEFL 500 (*n* = 1). Hence, there was a range of participant English proficiency levels as reflected in their TOEFL scores, which is good for establishing an implicational scale. Notice that only Chinese speakers with TOEFL scores above at least 480 were chosen to participate in the study. The reason is that the English conditionals in the study are usually taught to intermediate or low-advanced learners, not to beginners. However, English proficiency level, reflected in TOEFL scores, was not an independent variable because this study did not investigate whether or how English proficiency level influenced the ESL learners' acquisition of English conditionals. More than half of the participants (*n* = 17) had never taken any ESL courses in the US, while some others had taken more than 10 courses (*n* = 3). Participants who had taken six or more ESL courses were either currently enrolled at HPU or had previously studied at HPU before transferring to KCC or UHM. ESL instruction might have increased participants' overall competence in English, but it is unclear whether conditional constructions were taught in these ESL classes.

Finally, the length of residency in the United States is summarized in Table 8. Some participants combined both the length of residency before and after they took TOEFL. All of the participants had resided exclusively in the US for at least six months. Almost one-third of participants had been in the US for six months to one year (*n* = 11), whereas another one-third had stayed for one to two years (*n* = 11), and yet another one-third for 2-4 years (*n* = 10). Two participants had resided in the US for four to six years, and the other two had been in the US for more than six years. Length of residency in the US was used to estimate the length of the Chinese participants' exposure to English outside of formal language instruction. The data showed that there was a balance in selecting participants with different lengths of exposure to English.

Materials

It is very difficult to elicit all six types of conditionals from naturalistic speech data. To do so, a written test with four dialogue passages was developed to simulate oral conversation contexts (see Appendix A). Each of the passages was a casual conversation between two speakers. This test was designed to elicit the verb-phrases (VPs) people might use in conditionals in simulated oral conversations. Participants had to produce VPs in both the IF-Cs and the MCs of the conditional sentences according to the hints of time reference and truth-value in the dialogues. Thus, the potential problem of learning effect, which may have occurred in Berent's (1985) study, was controlled in the present study. The test also included natural contextual clues in the given dialogues, unlike Brenet's study, which had only discrete-point fill-in-the-blank questions.

There were five questions for each of the six conditional types, so there was a total of 30 test-questions, excluding items included to distract examinees from the purpose of the test. Each question had two blanks for filling VPs, so there were a total of 60 test items. The base verbs were provided in brackets preceding the blanks. There were explicit temporal adverbs or clues of time reference in the contexts to remind participants of the temporal value of the target conditional sentences.

Moreover, four out of the five questions for the present factual conditional (type 1) avoided using the single third person as the subject in the IF-C and MC. This study only aimed at exploring how layers of modal and verb-tense inflections cause difficulties for ESL learners to acquire conditionals. Therefore, subject-verb agreement was not used as a variable that determines the complexity of VP of conditionals. In addition, there were nine items designed to distract the examinees from the purpose of the test—all of which were related to tense or aspect of verbs in sentences other than the target conditional types. There were two examples of non-target sentences at the beginning of each section, which functioned as warm-up exercises. Before taking the test, all participants were asked to read and sign a written consent form that briefly explained the research purpose of the test. There was no time limit for taking the test.

Coding of the Production by NSs of English

First, the 20 NSs' answers were coded according to the coding system presented in Table 9. One conditional sentence was a question with two test items in IF-C and MC, and the coding of these two clauses was separated. I scored an item with a coding response number that corresponded with the target form.

Refer to Question number 22 (Q 22) as an example. If the produced answers (underlined ones) were "If you <u>came</u> to my place last Sunday night, you <u>could have seen</u> an awesome movie," then I marked the answer in the MC with the coding number 5a (No. 5a). The reason for coding it in this way was that the produced VP was the same as the target form in the MC of the past counterfactual conditional. Likewise, I marked the answer in the IF-C with the coding No. 5b because the simple past tense was used in the IF-C of the same conditional sentence. Although both past tense and past perfect tense are acceptable in the IF-C of past counterfactual and mixed-time-reference counterfactual conditionals, I marked these two forms with different coding numbers. The reason for coding in this way was so that the NSs' percentages of using these two forms in the IF-C could be compared with those in the Chinese participants' production. On the other hand, if an answer was obviously inaccurate according to the given context, I marked it with the coding No. 11. Finally, the form *would have* + *-en* sometimes replaced the formal form *had* + *-en* in some NSs' colloquial English; I have not found any published article

discussing whether this usage is widely accepted or not. Therefore, I marked such an answer with the coding No. 12, which meant that this usage was not inaccurate but the acceptability had not yet been determined.

Table 9
The Coding System of the English NSs' Answers in the Test

No.	Time-reference and truth value	Expected verb-tense pattern
1	Present factual	If +present, present /should/must/can/may
2	Future predictive	If + present, will/be going to
3	Past factual	If + present, will/be going to
4	Present counterfactual	If + past/were, would/could/might
5a	Past counterfactual	(5a) If + had+ -en, would/could/might + have + -en
5b		(5b) Use past tense in IF-C of past counterfactual => If + past/were, …
6a	Mixed-time reference counterfactual (Unreal past affects the present)	(6a) If + had+ -en, would/could/may
6b		(6b) Use past tense in IF-C of Type 6 conditional => If + past/were,…
11	Non-target answer	Non-target answer in IF-C or MC
12	Possibly acceptable expression (not written in any grammar book)	Use would have + -en in IF-C of Type 5 or Type 6 conditionals => If + would have + -en,…

Data Analysis of NSs' Production

After the 20 NSs' answers were coded, they were entered into a chart. I summed up the number of people who produced the same answers on each test item and calculated the percentage. Next, I obtained the mode of the answer pattern in each test item, which was defined as the coding number with the highest percentage. The mode of each item was regarded as the target answer to which the 36 Chinese participants' answers were compared.

Scoring of the Chinese Participants' Production

As described above, the 36 Chinese participants' answers were compared with those of the 20 NSs. Yule (1998) pointed out that there is a tendency in contemporary spoken English for the verb form *was* to replace the standard subjunctive form *were* for the *BE-Verb* in the IF-C of counterfactual conditionals. I also found evidence of such a tendency in the NSs' production.

There were 30 conditional sentences in which both the IF-C and MC had blanks for filling in the verb phrases (VP). In other words, there were 30 test items for the MCs of all six conditionals, and 30 test items for the IF-Cs. One point was given for a correct

answer on each test item. The total score for the MCs was separated from that of the IF-Cs, so the highest possible total score a person could get from either the IF-C or the MC production was 30 points. Also, a person could get at most five points from the IF or the MC of a conditional type subset. On the other hand, half a point was deducted from the one point given to a VP that had accurate tense but an inaccurate verb-tense inflection. The reason was that the past tense or past participle inflection reflects knowledge of the syntactic complexity of conditionals. Half a point was also deducted for non-target-like use of a modal in the given context. For instance, among the 15 test items of counterfactual conditionals, only the MCs of test item No. 22 and No. 26 allowed for the use of *could* in the given semantic contexts. All of the other 13 items allowed only *would* or *might* as modals. Finally, I was not sure of the acceptability of some seemingly non-target answers produced by Chinese participants, so I asked four out of the 20 NSs to check those answers. They also explained why certain answers were acceptable or unacceptable.

Data Analysis of Chinese Participants' Production

After the Chinese participants' production was scored, Cronbach alpha was used to estimate the reliability of the test. The scores of the IF-C and the MC of each conditional sentence were combined, so each test-question had, at most, two points. The reason for doing so was that the two clauses were semantically dependent on each other, so they should be treated as one item in the analysis of test reliability.

In addition, a two-way repeated-measures ANOVA (analysis of variance) was used to examine whether the two within-groups variables—six conditional types, and two clause types (IF-C vs. MC)—had any effect on the scores. The significance level was set at 0.05. When there was any significant main effect for the conditional type factor, a Bonferroni post-hoc comparison test was conducted to examine which type had a significantly higher or lower mean than the others. In addition, a means plot was created to visualize the significant interaction effects for the conditional types by clauses.

I also checked whether an implicational scale of the acquisition order for the IF-C or the MC of the six conditional types could be established. Participants were regarded as having acquired the IF-C or the MC of a conditional type if they got at least a 70% accuracy rate for the verb phrases. This meant the cut-point score was 3.5 points for the acquisition of the IF-C or the MC of each conditional type. Ideally, the threshold for the mastery of a conditional type in this test should be as high as an 80% accuracy rate since the test was a written one, and participants had more time to produce the target verb phrases than to do so in a spontaneous oral production. However, I decided to use a threshold of a 70% rather than an 80% accuracy rate because there were only 5 points for

the IF-C or the MC of each conditional type and half a point could be deducted for any non-target like past tense or past participle form, or non-target like use of a modal. With a threshold of 80%, participants who had acquired the MC of past counterfactual might be misjudged as not acquiring that conditional type if they produced a single wrong modal or past participle in addition to a non-target verb phrase. Consequently, I set the cut-point at the 70% accuracy rate (3.5 points per conditional type), so that the participants were regarded as having acquired the IF-C or the MC of a conditional type even though they had produced a wrong VP, in addition to a wrong modal or wrong inflection of the simple past tense/past participle verb form.

To estimate the dependability of setting the cut-point at 70% or at 80% accuracy rate, I estimated the phi (lambda) dependability index (Brown 1996, pp. 216-218). The phi (lambda) dependability index, $\phi(\lambda)$, is usually used to indicate how consistent the classification in mastery or non-mastery is. In addition, it has "sensitivity to the degrees of mastery and non-mastery along the score continuum" (Berk 1984b, cited in Brown, 1996, p. 216) and can be calculated using a single test administration.

Finally, I calculated the percentage of non-target like systematic variations in Chinese participants' production, so that I might find evidence of L1 transfer effects. I defined systematic variation as a non-target-like answer pattern produced by a participant on at least three out of five test items of the same conditional type. I summed up the numbers of participants who produced the same error patterns and calculated the percentage.

In addition, I estimated the percentages of answers in which simple past tense was used in the IF-C of past counterfactual and mixed-time reference counterfactual conditionals. Those answers were coded as 5b or 6b (see Table 7). Although the simple past tense is acceptable in the IF-C of these two conditional types, the high percentage of such usage is evidence that L2 learners simplify the grammar rule that is more difficult than that in their L1. Therefore, the percentages of Chinese participants' coding No. 5b and 6b answer patterns were compared with those in English NSs' production.

RESULTS

Production by Native-Speakers of English

Most of the twenty NSs' answers were consistent with the tense patterns of conditionals described in prescriptive grammar books (Celce-Murcia & Larsen-Freeman, 1999; Yule, 1998). However, a few alternative patterns were found in some NSs' production, such as using *would have+ -en* in the IF-C of past counterfactual conditionals.

Table 10 shows a summary of the mode and average percentage of NSs' answers for each conditional type by clause. The percentage of each mode for each conditional type by IF-C or MC is an average percentage on the basis of 5 test items per conditional type. 5b and 6b patterns were not the modes for the IF-C in Type 5 and Type 6 conditionals, but I wanted to show what percentage of NSs yielded past tense (5b/6b) rather than past perfect tense (5a/6a) in the IF-C to express conditions that did not happen in the past.

Table 10
Summary of English NSs' Answers for Subset (Conditional Type by Clause)

Time-reference and truth value	Clause	Mode of answers (Coding No.)	Average % of mode $N = 20$
1. Present factual	IF-C	1	96%
	MC	1	96%
2. Future predictive	IF-C	2	98%
	MC	2	95%
3. Past factual	IF-C	3	100%
	MC	3	100%
4. Present counterfactual	IF-C	4	97%
	MC	4	99%
5. Past counterfactual	IF-C	5a	66%
	MC	5a	99%
	IF-C	5b	*30%
6. Mixed-time reference counterfactual	IF-C	6a	79%
	MC	6a	95%
	IF-C	6b	*21%

Chinese ESL Learners' Production

The test reliability coefficient (Cronbach alpha) was 0.8407. Table 11 shows the descriptive statistics for including the mean and standard deviation for each conditional subset (conditional type by the IF-C or the MC). This result was based on the scoring criterion that simple past tense was as acceptable as past perfect tense in the IF-Cs of Types 5 and 6 conditionals.

The descriptive statistics (Table 11) indicate that the accuracy order of the IF-C across conditional types was as follows: past counterfactual > mixed-time reference counterfactual > past factual > present factual > future predictive > present counterfactual. The accuracy order of the MC across conditional types was as follows: past factual > future predictive > mixed-time-reference counterfactual > present factual counterfactual > present factual > past counterfactual.

Table 11
Descriptive Statistics of scores of each subset (Conditional type by Clause)

Type	Conditional	Subset	Accuracy order		Mean	*SD*	*N*
			IF-C	MC			
1	Present factual	IF-C	4th		3.917	1.296	36
		MC		5th	2.681	1.178	36
2	Future predictive	IF-C	5th		3.778	1.339	36
		MC		2nd	3.833	1.404	36
3	Past factual	IF-C	3rd		4.069	1.070	36
		MC		1st	4.472	0.845	36
4	Present counterfactual	IF-C	6th		3.056	1.264	36
		MC		4th	2.736	1.795	36
5	Past counterfactual	IF-C	1st		4.486	0.945	36
		MC		6th	1.806	1.880	36
6	Mixed-time reference	IF-C	2nd		4.153	1.126	36
	counterfactual	MC		3rd	2.944	1.625	36

Results of Two-Way Repeated-Measures ANOVA

The results of the two-way repeated-measures ANOVA (Table 12) showed that there were significant main effects for both conditional type ($F = 10.695$, $df = 5$, $p < .001$) and clause factors ($F = 44.671$, $df = 1$, $p < .001$). In addition, there was a significant interaction effect for the two factors ($F = 17.457$, $df = 5$, $p < .001$).

Table 12
Two-way Repeated-Measures ANOVA: Within-Subjects Main Effects Source Table (Six Conditional Types by Two Clauses)

Source	Sum of Squares	*df*	Mean Square	*F*	*p*	Eta^2
Conditional type (6 types)	87.892	5	17.578	10.695	.001	.234
Error	287.629	175	1.644			
Clause (IF-C VS Main-C)	74.584	1	74.584	44.671	.001	.561
Error	58.437	35	1.670			
Conditional type by Clause	113.350	5	22.670	17.457	.001	.333
Error	227.254	175	1.299			

Table 13 shows the means for conditional type and clause factors independently. As for the differences among the six conditional types, Bonferroni pair-wise comparisons indicated that past factual conditional (Type 3) was significantly higher than all others but the future predictive (3> 1, 4, 5, 6). The other significant differences between pairs of

conditional types were as follows: Type 2>5; 6>4. Moreover, although the mean of IF-C was significantly higher than that of MC, the interaction effects between the clauses and the conditional types required more attention.

The means plot in Figure 1 and the actual means of each subset (i.e., a combination of a clause and a conditional type) in Table 11 together show a clear picture of the interaction effect of the two independent factors. By looking at the means plot vertically, it appears that it is easier for the Chinese ESL learners to produce the IF-Cs than the MCs in present factual, past counterfactual, and mixed-time reference conditionals. The means of the MCs were lower than those of the IF-Cs in all conditional types except for future predictive and past factual.

Table 13

Summary Statistics of Means by Conditional Type and Clause Factors Independently

Conditional type	Mean	Std. Error	Order of means	Clause	Mean	Std. Error
1	3.299	.166	4th	IF-C	3.910	.109
2	3.806	.203	2nd	MC	3.079	.145
3	4.271	.143	1st			
4	2.896	.213	6th			
5	3.146	.167	5th			
6	3.549	.165	3rd			

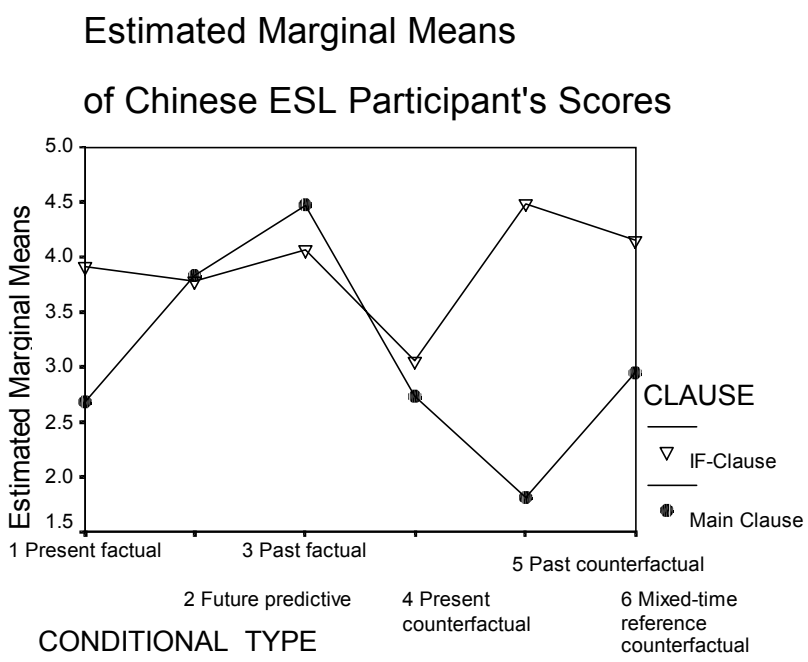

Figure 1. Means plot of the interaction effect for conditional type by clause factors.

By looking at the means plot horizontally, the results show that the means of the MC were the highest in the past factual and the lowest in the past counterfactual. There was no big discrepancy in the means of the MC between present counterfactual and mixed-time reference counterfactual conditionals. In fact, the verb-tenses in the MC of these two conditional types are the same because both the MCs function as expressing the speaker's imagination of the consequences that do not obtain at the time of speaking. On the other hand, participants in general scored much lower in the MC of past counterfactual than the other two counterfactual conditionals.

The mean ranking of the IF-C (Figure 1) was very different from that of the MC. The mean of the IF-C was the highest in past counterfactual and the lowest in present counterfactual. There was no significant difference among the means for the past factual, present factual, and future predictive conditionals. The difference between the past counterfactual and mixed-time reference counterfactual was not significant. However, the mean of the MC was noticeably lower in the present counterfactual conditional than in the other types.

Implicational Scaling

The phi (lambda) dependability index, $\phi(\lambda)$, was estimated first to check how dependable the cut-point for the implicational scaling would be. The results showed that

$\phi(\lambda)$ was 0.74 when the cut-point had been set at 70%, while $\phi(\lambda)$ was 0.80 for a cut-point at 80%. A 0.06 difference in $\phi(\lambda)$ means that there is no serious loss in the dependability of the cut-point if I lower the threshold of acquisition from an 80% accuracy rate to a 70% one.

I tried to set up implicational scales to show the acquisition order of the IF-C and the MC across the six conditional types. The implicational scales shown in Table 14 and Table 15 were based on the scoring criterion that both the past perfect tense (e.g., *had done*) and the simple past tense (e.g., *did*) were acceptable in the IF-Cs of the conditional Types 5 and 6, based on the NS responses. Table 14 shows that the ranking of total numbers of Chinese participants acquiring the IF-Cs of the six conditional types was as follows: 5 > 6 = 3 = 1 = 2 > 4. However, the coefficient of reproducibility (C_{rep} = 0.88) was not higher than the general criterion (C_{rep}= 0.90) (Hatch, & Lazaraton, 1991, p. 210). Nor did the coefficient of scalability *(*C_{scal} = 0.574) pass the threshold *(*C_{scal} = 0.60) (Hatch, & Lazaraton, 1991, p. 212). Therefore, an implicational scale of the IF-C acquisition order could not be established.

Table 15 shows that the ranking of total numbers of people acquiring the MCs of the six conditional types was as follows: 3 > 2 > 6 = 4 > 5 = 6. The coefficient of reproducibility (C_{rep} = 0.87) was not higher than the cut-off criterion of reproducibility although the coefficient of scalability *(*C_{scal} = 0.65) passed the threshold of scalability. Therefore, the implicational scale of the MC acquisition order could not be established.

Table 14

Implicational Scale for Acquisition of If-Clause (IF-C) of Six English Conditional Types

Participant ID	5 IF-C	6 IF-C	3 IF-C	1 IF-C	2 IF-C	4 IF-C	Total types
1	1	1	1	1	1	1	6
9	1	1	1	1	1	1	6
10	1	1	1	1	1	1	6
16	1	1	1	1	1	1	6
25	1	1	1	1	1	1	6
3	1	1	1	1	0	1	5
19	1	1	1	1	0	1	5
2	1	1	1	1	1	0	5
7	1	1	1	1	1	0	5
8	1	1	1	1	1	0	5
11	1	1	1	1	1	0	5
13	1	1	1	1	1	0	5
30	1	1	1	1	1	0	5
31	1	1	1	1	1	0	5
35	1	1	1	1	1	0	5
36	1	1	1	1	1	0	5

34	1	0	1	1	1	0	4
23	1	1	0	1	1	0	4
26	1	1	0	1	1	0	4
14	1	1	1	0	1	0	4
18	1	1	0	0	1	1	4
17	0	0	1	1	1	0	3
6	1	1	0	1	0	1	4
15	1	1	0	1	0	1	4
20	1	1	0	1	0	0	3
28	1	0	1	1	0	0	3
12	1	1	1	0	0	1	4
32	1	1	1	0	0	1	4
4	1	1	1	0	0	0	3
29	1	0	1	0	1	0	3
24	1	0	1	0	0	0	2
21	1	1	0	0	1	0	3
27	1	1	0	0	0	0	2
5	1	0	0	0	1	0	2
22	1	0	0	1	0	0	2
33	0	0	1	0	0	0	1
Total participants	34	28	26	25	23	12	

Note 1. Coding No. "1" in the scale means acquisition of a target conditional type, whereas "0" means failure to acquire the target type. Threshold of "acquired the target tense in the target conditional type" is defined as 70% accuracy in answers. Each of the IF-C and main clause of one conditional type has 5 blanks People who get 3.5 points or above are regarded as having acquired the target type. The ranking of total numbers of people acquiring the if-clause (IF-C) of the six conditional types: 5>6>3>1>2>4

Note 2. In this scale (Table 12), there are 26 errors.

Maximum marginals = 34+28+25+24+20+24 = 155

1. Coefficient of reproducibility = 0.88
2. Minimum marginal reproducibility = 0.718
3. Percent improvement in reproducibility = 0.162
4. Coefficient of scalability = 0.57

Note 3. Coding number in Table 14 and Table 15.

1. Present factual conditional
2. Future predictive conditional
3. Past factual conditional
4. Present counterfactual conditional
5. Past counterfactual conditional
6. Mixed-time-reference counterfactual conditional

Table 15

Implicational scale of acquisition of main-clause (MC) of six English conditional types

Participant ID	3 MC	2 MC	6 MC	4 MC	1 MC	5 MC	Total types
9	1	1	1	1	1	1	6
17	1	0	1	1	1	1	5
2	1	1	1	1	0	1	5
7	1	1	0	0	1	1	4
36	1	1	1	1	1	0	5
14	1	1	1	0	1	0	4
34	1	1	1	0	1	0	4
35	1	1	1	0	1	0	4
1	1	1	1	1	0	0	4
10	1	1	0	1	0	1	4
16	1	1	0	1	0	1	4
5	0	1	1	1	0	0	3
13	1	0	1	1	0	0	3
32	1	0	1	1	0	0	3
4	1	1	0	1	0	0	3
18	0	0	1	1	0	0	2
8	1	1	1	0	0	1	4
11	1	1	1	0	0	1	4
25	1	1	1	0	0	0	3
3	1	0	1	0	1	0	3
31	1	1	0	0	1	0	3
19	1	1	0	0	0	0	2
20	1	1	0	0	0	0	2
26	1	1	0	0	0	0	2
28	1	1	0	0	0	0	2
33	1	1	0	0	0	0	2
23	0	1	0	0	0	0	1
29	0	1	0	0	0	0	1
30	0	1	0	0	0	0	1
6	1	0	0	1	0	0	2
12	1	0	0	1	0	0	2
21	1	0	0	1	0	0	2
22	1	0	0	0	0	0	1
24	1	0	0	0	0	0	1
27	1	0	0	0	0	0	1
15	0	0	0	0	0	0	0
Total participants	30	24	16	15	9	8	

Note. The hierarchy of total numbers of people acquiring the main clause of the six conditional types is 3>2>6>4>1>5. In this scale, there are 28 errors. Maximum marginals = 25+24+16+17+26+28 = 136

1. Coefficient of reproducibility = 0.87
2. Minimum marginal reproducibility = 0.63
3. Percent improvement in reproducibility = 0.24
4. Coefficient of scalability = 0.65

Table 16 shows the percentage of systematic variation in Chinese participants' production of English conditionals. *Systematic variation* is defined as an answer pattern that occurs at least three times in a total of five test items. Notice that the majority of Chinese participants used simple past tense in the IF-Cs of past counterfactual (56%) and mixed-time-reference conditionals (53%). This usage is acceptable in English as explained previously in the paper. In Table 16, except for variation numbers 1 and 2, all the other variations were non-target-like usages. The most frequent non-target error type was the use of *would + verb* in the MC of past counterfactual conditionals (47%). Other major systematic variations are listed in the following order based on the percentage of participants who produced these error types: *will* + verb in the MC of present factual conditional (44%), *will* + verb in the MC of present counterfactual conditional (39%), and *will* + verb in the MC of mixed-time-reference counterfactual conditional (28%). The above four non-target like variations occurred systematically in half to one-third of Chinese participants' production. For the percentages of other minor variations, please refer to Table 16. I will explain how these variation patterns show L1 effects in the Discussion section.

Table 16

Percentage of Systematic Variations in Chinese Participants' Production of English Conditionals

Systematic variation	*N*	%
1. past tense in the IF-C of mixed-time-reference counterfactual	20	56%
2. past tense in the IF-C of past counterfactual	19	53%
3. *would* + verb in the MC of past counterfactual	17	47%
4. *will* + verb in the MC of present factual	16	44%
5. *will* + verb in the MC of present counterfactual	14	39%
6. *will* + verb in the MC of mixed-time-reference counterfactual	10	28%
7. *would* + verb in the MC of future predictive	7	19%
8. present tense in the IF-C of present counterfactual	7	19%
9. *would* + verb in the MC of present factual	4	11%
10. past tense in the IF-C of future predictive	4	11%
11. Past tense in the IF-C of present factual	4	11%
12. past perfect tense in the IF-C of past factual	4	11%
13. Simple past tense in the MC of past counterfactual	3	8%
14. *would have* + *-en* in the MC of mixed-time-reference counterfactual	3	8%
15. *would have* + *-en* in the MC of present counterfactual	2	5%

Note. Systematic variation is defined as an answer pattern that occurs at least three times in a total of 5 test items. Except for variation No. 1 & 2, all the other forms are not acceptable in that given linguistic and semantic contexts in the test.

DISCUSSION

With a Cronbach alpha of 0.84, the test has good reliability. Although implicational scales (Tables 14 and 15) for the acquisition order of the IF-C and the MC across six conditional types could not be established, Table 14 and 15 did indicate several phenomena. First, learners who acquired the IF-C of the future predictive conditional (Type 2) usually also acquired the present factual conditional (Type 1). Also, learners who acquired the IF-C of Type 6 also acquired Type 5. These connections are reasonable because the IF-Cs of Types 1 and 2 share the same grammatical features, and the IF-Cs of Type 5 and 6 have the same form and function. Therefore, I suggest that ESL teachers should teach Types 1 and 2 together. Also, learners seem to be able to learn Type 6 better after they acquire the Type 5 conditional. However, the binding relation between the two conditional types was much weaker in the MC as shown in Table 15.

The results of the two-way repeated measures ANOVA showed that there were significant main effects for both conditional type and clause (Table 12). However, the significant interaction effects between these two factors deserve more attention. The means plot for the interaction effect shown in Figure 1 illustrates that the acquisition order of the MC was different from that of the IF-C across the six conditional types. Notice that whereas participants did better in the MC of the future predictive than the MC of the past counterfactual conditional, there was a completely opposite acquisition order in the IF-C of these two conditional types. In fact, participants scored lowest in the MC of past counterfactual conditional, but they did best in the IF-C of the same conditional type. The same situation occurred in mixed-time-reference counterfactual conditionals (Type 6). Although the mean for the MC of Type 6 was lower than those of Types 2 and 3, the mean for the IF-C of Type 6 was higher than the other conditionals except for past counterfactual. Also, notice that participants scored high in the IF-C of present factual conditionals but they did not do well in the MC.

As a result, the ANOVA results did not support the two hypotheses that predicted the following acquisition orders of the IF-C and the MC across conditional types: (for the IF-C) conditional type 1 = 2 > 3 = 4 = 5 = 6; (for the MC) type 1 > 2 = 3 > 4 = 6 > 5. The interaction effects between conditional type and clause led to the following acquisition orders as illustrated in Figure 1: (for the IF-C) conditional type 5 > 6 = 3 = 1 = 2 > 4; (for the MC) type 3 > 2 > 6= 4 > 1 > 5.

It seems that the acquisition order of the IF-C or the MC cannot be predicted or explained by syntactic complexity alone. A close look at systematic variation (Table 16) indicated that there was strong evidence of L1 transfer effects. The syntactic complexity of English conditionals and the L1 effects together appear to have influenced Chinese ESL learners' acquisition orders of conditionals in several ways.

First, Chinese participants tended to prefer the smallest possible rule change in the passage from one developmental stage to the next one. For example, the percentage of the use of simple past tense in past counterfactual (53% of participants) and mix-time-reference counterfactual conditionals (56%) by Chinese participants was much higher than that by NSs of English (21% for mixed-time-reference and 30% for past counterfactual conditional). In other words, when Chinese ESL learners' acquisition progressed from present counterfactual to past counterfactual conditional, they preferred to use the same simple past tense in the IF-Cs for both counterfactuals. However, such reluctance to make a rule change might cause a delay in the restructuring of forms that is necessary for learners to proceed to the next developmental stage, which is another L1 transfer effect. An example was that 47% of Chinese participants systematically used the form *would*+ verb*,* instead of the correct form *would have +-en*, in the MC of past counterfactual conditionals. The preference for using the VP forms of the present counterfactual conditional in the past counterfactual conditional stage might have hindered these learners' pace of advancement in the developmental stages.

The MC of future predictive conditional had only one feature [+modal] in the VP, so it was easier to acquire than past counterfactual and mixed-time-reference counterfactual conditional, both of which required two features (i.e., [+modal] and [+past]). The MC of past counterfactual, with the most number of features ([+modal] [+past] [+perfect]), remained the most difficult one to acquire.

However, the number of grammatical features alone could not account for the acquisition order of the MC. The over-production of the form *modal + verb* in the MC across all conditionals affected the acquisition order. The best example was that 47% of Chinese participants added the modal *will* in the MC of present factual conditional (Q11, Q13, and Q20). Consequently, the mean of the present factual conditional was much lower than the mean of any other conditional that allowed a modal in the VP of the MC.

Not every participant used the tense of the modal correctly. Table16 shows that many participants used *will,* instead of the correct modal *would*, in the MCs of the present counterfactual (39% of participants) and the mixed-time-reference counterfactual conditional (28%) even though they used the right past tense in the IF-Cs of the same counterfactual sentences. The cause of these variations may be the influence of the temporal adverb *now* in the MCs of these two counterfactual conditionals. As mentioned previously, time reference words are the most important cues speakers used to determine the time reference of Chinese conditionals. Therefore, although some Chinese participants used past tense in the IF-Cs of past counterfactual and mixed-time-reference counterfactual conditionals, they tended to use the [–past] modal *will* in the MCs of these

two counterfactual conditionals when a present temporal reference word *now* appeared in the same sentence.

In contrast, some other participants (seven people) replaced the modal *will* with *would* in the MC of some future predictive conditionals (Q 12, Q21, and Q23). The context of these conditionals was that one speaker was informing or making suggestions to the other speaker. Maybe some Chinese participants thought it was more polite to use *would* than *will* in these contexts, but the four NSs of English, with whom I consulted about any problematic answers of Chinese participants, commented that *would* was not acceptable in Q12, Q21, and Q23.

The MC of the past factual conditional allowed both simple past tense and *would* +verb forms, and such flexibility in forms helped learners to score high in the test. The form *would* + verb was acceptable in some test items of the past factual conditional MC when the speakers described frequently occurring events in the past. For instance, "If my parents had three days off work, they would take me to neighboring islands for a trip."

It is more difficult to explain the acquisition order of the IF-C across the six conditionals. When the past tense was acceptable in the IF-Cs of the three counterfactual conditionals in this study, the means of these conditionals should have been equal or close to equal. However, Chinese participants did much better in the IF-Cs of the past counterfactual (Type 5) and the mixed-time-reference counterfactual conditional (Type 6) than in the present counterfactual conditional (Type 4). Table 16 shows that seven participants produced the present tense in the IF-C of the present counterfactual, and 16 people used *will* +verb in the MC of the same conditional type. I found that participants made such errors most frequently in Q2, Q14, and Q15. They did not seem to understand the truth-value of the statements in these conditional test-questions. For example, some participants did not know that the verb *imagine* usually leads to a hypothetical or counterfactual conditional. As a result, the mean of the present counterfactual conditional was much lower than the other two counterfactual conditionals.

Four participants, however, used the simple past tense in the IF-C of present factual and future predictive conditionals. It is possible that these variations might be generated from either the non-mastery of the tense system, or from the misunderstanding of the truth-value of the antecedent in the IF-C. Participants seemed to have less difficulty in recognizing the truth-value and temporal reference of the antecedents (i.e., IF-Cs) of conditional Types 5 and 6 than those of the other four conditionals. Therefore, Chinese participants scored higher in the IF-Cs of Types 5 and 6 conditionals than in the other conditional constructions.

CONCLUSION

The ability to compose conditionals reveals the ability to interpret the time references of events in context, then to hypothesize what occurred or might have occurred in the past, or what may happen now, or what will arise in the future. Whereas the linguistic representations of Chinese and English conditionals differ distinctly, the structural differences do not cause either Chinese or English L1 speakers to have superior reasoning abilities to the speakers of the other language. Therefore, I suggested that Chinese ESL learners' difficulties in acquiring English conditionals were due to the syntactic complexity of the target structures. However, the results of data analysis showed that the syntactic complexity factor alone could not predict or explain the acquisition order of six conditional types revealed in a written cloze test that simulated oral conversations. There was strong evidence of L1 transfer effects as described in my fourth hypothesis, and these L1 transfer effects interacted with the syntactic complexity factor in Chinese participants' production of English conditionals.

Given the above findings, I suggest several implications for ESL or EFL instruction of conditionals for Chinese speakers. Firstly, I agree with the suggestion in Celce-Murcia and Larsen-Freeman (1999) that acquisition of the English tense-aspect system and the modal auxiliaries is a prerequisite for ESL/EFL learners to master English conditionals. Secondly, instructors should help learners to be aware of the temporal reference cues at the lexical, syntactic, or discourse levels, so that learners can make better judgments of the temporal references of antecedents and consequences. Also, learners may prefer to keep using the verb tense they have acquired even when they proceed to learn a more complex construction. Learners may also extend one acquired form to other contexts. Thus, teachers should assist learners in making the best use of these two strategies, yet teachers should also help them to avoid possible delays in the passage through developmental stages. Finally, it is important for teachers to recognize how L1 transfer effects may interact with the embedded structural complexity of English conditionals, so that they can diagnosis participants' error types, adjust their instruction method, and assist learners to quicken their pace of acquiring target structures.

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APPENDIX A
A SAMPLE OF TEST WITH ANSWER KEY

Where:

1. Present factual conditional: Q 7, 11, 13, 20, 30
2. Future predictive: Q 10, 12, 19, 21, 23
3. Past factual conditional: Q 3, 4, 8, 17, 27
4. Present counterfactual: Q 1, 2, 9, 14, 15
5. Past counterfactual: Q 6, 16, 18, 22, 26
6. Mixed-time-reference counterfactual: Q 5, 24, 25, 28, 29

Thank you for participating in this test

1. It's very important that **you write down the FIRST answer that comes to mind**
2. Please **DO NOT go back to correct the answers** you have written.
3. Please **DO NOT discuss the questions with other people** when you are doing the test.
4. If possible, please use a colored pen rather than a black pen or pencil.
5. Please write down how long it takes you to complete the test

Please <u>fill in the blank</u> according to the context and the hints in the ( )

<u>Example</u>

A: Some of us are going to Starbucks for coffee after work. Can you come?

B: Maybe. I have a training session today, but the coach (be)_____*was*___ sick last time. Unless he (cancel) __*cancels*_ the training again today, I don't think I can join you guys.

1. (Mary and Emma are chatting in a cafe)

Mary: You seem upset. What's wrong?

Emma: I have some problems. My boyfriend has invited me to have Thanksgiving dinner with his family next week, but I hate turkey.

Mary: **[Q1]** Well, if I (be)___were__you, I (just go)<u>would just go</u>_____ for dessert.

Emma: That's a good idea. The other problem is more serious. I can't stand my housemate Grace anymore. She never cleans up the mess in the kitchen after she's done.

Mary: **[Q2]** If I (live)_____<u>lived</u>_____with someone like her, I (talk)_____<u>would talk</u> to her about the problem.

Emma: Well, I (try)__<u>tried</u>__ to do that once, but she just said she (be)_____<u>was</u>_____ too busy to clean up the kitchen. She's been irresponsible ever since I met her.

[Q3] When we were classmates in high school, she often (copy)___copied_____ my homework if I (finish)___finished___ it earlier than her. Luckily, we aren't classmates anymore, but it's unlikely she will change.

Mary: Why don't you just move to another place?

Emma: It's not that easy. Grace's mother is my mom's best friend. **[Q4]** When I was a little kid,

Grace's mother always (take) took___care of me if my parents (go) t_____went__away for a few days. When Grace and I left home for college, both of our mothers asked me to take good care of her. **[Q5]** If they (not ask)_____hadn't asked / didn't asked me to do that, I (not live)_____wouldn't live / wouldn't be living___with her now.

Mary: That's really a tough problem.

2. (A news reporter is interviewing a 16-year old girl, Anna, who brought a lost purse to the Honolulu Police Station.)

Reporter: Anna, could you please tell us where you (find) _____found_____Mrs. Yamamoto's purse last Sunday?

Anna: Well, my brother and I found it on Waikiki beach. **[Q6]** Actually, if we (not build) hadn't built / didn't build_ a sand castle on the same spot. I (not notice) ___wouldn't have noticed_____that purse.

Reporter: Mrs. Yamamoto said she really appreciated your returning her purse along with the $3000 cash in it. Did you have a hard time making the decision to return the money?

Anna: Frankly, yes. My dad (be)___has been_____out of work for five months, and my mom is a housewife. Three thousands dollars would have helped us a lot, so at first, it seemed like God sent the money to us. But I remembered what my parents always told me: **[Q7]** "If some things (not belong)___don't belong____to you, you (not keep)____don't keep /shouldn't keep / must not keep_ them." They also said, "Helping others is the source of joy." **[Q8]** When I was a kid, my mom always (encourage)_____encouraged___ me to help some elder neighbors if they (need) ___needed_____ someone to mow the yard or to carry grocery bags.

Reporter: Anna, your parents have really taught you well. Unfortunately, not everyone is as honest and kind as you. **[Q 9]** If everyone (be)_____were_____like you, the world (be) would be_____a better place.

3. (Peter and Helen are at a bus stop in Waikiki)

Peter: These buses are so unreliable. I've been waiting for the No. 20 bus for more than 25 minutes! **[Q10]** I (be) will be late for my flight if I (not arrive) don't arrive at the airport by 9:00 am.

Helen: Would you like to share a taxi with me? I'm going to the airport, too.

Peter: Oh, thank you. You're a flight attendant, aren't you?

Helen: Yes, I am.

Peter: How do you usually get to the airport? Do you ever miss a flight?

Helen: **[Q11]** Well, I usually take the bus, but if the bus (be) is ten minutes late, I (take) take a taxi. I always do that because I can't miss a flight.

(Then, the two take a taxi and arrive at the airport. Peter is now at the check-in counter)

A: I'm sorry, sir. **[Q12]** This flight is overbooked. If all of the passengers who have checked in (show up) show up, there (be) will be no seats available for you.

Peter: That's outrageous. I have a confirmed reservation.

A: I know, but you've got to check in early. I'm sorry, but this is our company policy.

[Q13] If passengers (not check in) don't check in early enough, we (be) are unable to save seats for them.

(Peter waits for 3 hours and gets on the next flight. He is talking with a passenger next to him on the plane.)

George: Hi, Peter. What brings you to Hawaii? I thought you worked in Sydney.

Peter: Actually, I came here to attend an international conference. You know, it's just a business trip. I've been so busy these days. I wish I (have) had more free time.

George: Really? **[Q 14]** Have you ever imagined what you (do) would do if you (not need) didn't need to work for six months?

Peter: Yeah, that's easy. **[Q15]** If I (have) had a six-month vacation, I (travel) would travel around the world. Well, this is just an unrealistic dream.

George: You sound really busy. How is your company doing?

Peter: Good. We are making some profits these two years. What about you? What do you do now?

George: I'm a pilot for American Airlines. I'm on vacation now.

Peter: How did you get interested in being a pilot?

George: When my brother John and I were kids, our hobby was building model airplanes and pretending we were pilots. **[Q16]** If we (not be)___hadn't been/ weren't___ fascinated with flying in childhood, I (not decide) ___wouldn't have decided___ to become a pilot.

Peter: Does your brother fly, too?

George: No, he is a doctor now. He gave up his dream of flying and entered medical school after he failed to pass the physical exam for pilots. Somehow, I feel glad that he became a doctor, not a pilot. We were really competitive when we were kids. **[Q 17]** When we were in high school, if I (get)__got___an A in one subject, John (try)__try/ would try to___ get A's in two subjects. **[Q18]** If he (pass) __had passed___ that physical exam 15 years ago, I (try) __would have tried_____ to apply for a job at NASA after graduating from my college. Well, I'm glad I didn't have to get a job at NASA just in order to show that I was a better pilot than he.

Peter: By the way, did you hear that United Airlines recently gave all their employees a raise?

George: Yeah. **[Q19]** If I (not get)___don't get_____ a raise from my company next year, I (apply)_____will apply_____ for a job with United Airlines...

Peter: Sorry to interrupt you, George. Why are the flaps on that wing going up like that? Do you think it is normal?

George: Don't worry. The pilot uses them to control the airplane. **[Q20]** If the flaps on the wings (go up)__go up__, the wings (go down)_____go down_____a little. That way, the plane can change direction.. Oops, I think it's going to get bumpy up here.

Peter: Yuck. I (get)___get___ sick whenever there (be)____is_____ turbulence.

George: **[Q21]** If you (take)__take___some deep breaths, you (be)__will be_____fine.

Peter: Oh…I have a bad headache now.

George: Here, drink some juice. It will make you feel better. You can get awfully dehydrated on a long flight.

Peter [sighs]: There (be)_____are__still several hours before we (arrive)__arrive___in Sydney

4. (Ross and Joe are eating in a cafeteria)

Ross: Hey, where were you last Sunday night?

Joe: Home. I had to study for a French test on Monday.

Ross: **[Q22]** Well, if you (come)__had come / came__to my place last Sunday night, you (see)_____could have seen / would have seen_____ an awesome movie.

Joe: Yeah? What?

Ross: *Back to the Future*. It's about a teenager who travels back in time to his parents' high-school days. He changes his own future when he changes his parents' life in high school. At the end, he…

Joe: Wait-don't tell me the whole story. **[Q23]** There (not be)_won't be_ any reason for me to see it if you (tell) _tell_ me the ending now.

Ross: O.K. But have you ever thought about how things might be different? **[Q24]** I mean, imagine how different your life (be)_would be_ now if you (grow up)_had grown up /grew up_ in a different place?

Joe: Let's see. **[Q25]** If my family (not move) _hadn't moved / didn't moved_ to Hawaii, then I (live)_would live / would be living_ in Arizona now.

Ross: Arizona! Isn't that place like a big desert?

Joe: Well, I'm not sure. **[Q26]** But I know if I (spend)_had spent / spent_ my childhood in Arizona, not in Hawaii, then I (not learn)_couldn't have learned/ wouldn't have learned_ to surf when I was a kid.

Ross: That's true. Hawaii is such a nice place. I'm glad I was born and grew up here. **[Q27]** When I was a kid, if my parents (have)_had_ three days off work, they (take) _would take / took_ me to neighboring islands for a trip. We have done lots of fun stuff together like snorkeling, camping, hiking, and biking. **[Q28]** My family is great, but sometimes I think if I (be born)_had been born / was born / were born_ in Bill Gates' family, I (not need)_wouldn't need_ to do any part-time work now.

Joe [laughs]: Ha. Bill Gates is too young to be your father. Besides, he's a workaholic. Maybe he'll expect his children to work as hard as he does when they grow up.

Ross: Yeah. That's possible. By the way, how did you do on the French test?

Joe: I flunked. I wish I (not take)_hadn't taken_ that course. I'm afraid I'm going to fail.

Ross: You just don't study enough. I think you spent too much time watching TV earlier this semester. **[Q29]** If you (study)_had studied /studied_ hard earlier this semester, you (not need)_wouldn't need_ to worry about this course now.

Joe: That's easy for you to say. You always get A's.

Ross: Sometimes I don't. A's don't come automatically. **[Q30]** I usually (not get) _don't get_ A's if I (not study)_don't study_ hard.

Joe: Okay, okay. Let's not talk about studying anymore. I'm hungry, so let's get something to eat.

Time of completion: _____ minutes.

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