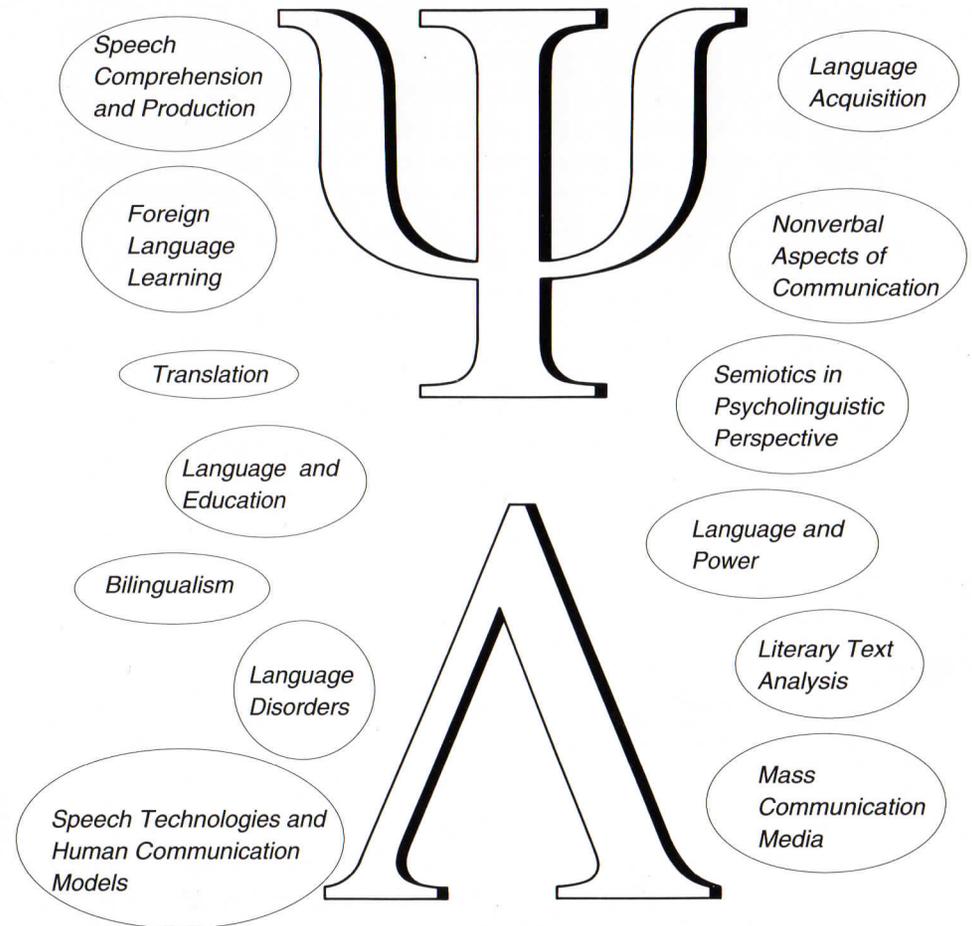


International Journal of PSYCHOLINGUISTICS

An Interdisciplinary Journal of Human Communication



Published by
Center for Academic Societies Japan
Osaka

INTERNATIONAL JOURNAL OF PSYCHOLINGUISTICS

An independent scientific journal published in cooperation with
The International Society of Applied Psycholinguistics (ISAPL)
The Japan Society of Speech Sciences (JSSS)
and AILA Commission of Psycholinguistics

The *International Journal of Psycholinguistics* is a forum for interdisciplinary studies throughout the world, devoted to theoretical and experimental research articles and their application to practical fields concerning speech comprehension / production, language acquisition, bilingualism, nonverbal aspects of communication and semiotics in psycholinguistic perspective, language disorders, speech technologies and human communication models, translation, foreign language learning, literary text analysis, mass communication media and other fields of human communication.

EDITOR-IN-CHIEF: Prof. Tatiana Slama-Cazacu (Univ. of Bucharest)
(Str. Moxa 10, Bucharest 78109, Romania)

EDITORIAL BOARD: Prof. Morio Kohno (Kobe City University of Foreign Studies,
9-1, Gakuen-higashi-machi, Nishi-ku,
Kobe 651-21, Japan)

Prof. Renzo Titone (Univs. of Rome and Toronto)
(Via Madesimo 22, Rome 00135 , Italy)

EDITORIAL COMMITTEE: Mohamed Sami Anwar (U.A.E. Univ.), Bruce Bain (Univ. Alberta), Katharine Butler (Syracuse Univ.), Hans Dechert (Univ. Kassel), Stig Eliasson (Univ. Uppsala), Hiroya Fujisaki (Science Univ. Tokyo), Penka Ilieva-Baltova (Univ. Sofia), Toshio Iritani (Tokai Univ.), Gabriele Kasper (Univ. Hawaii), Shigeru Kiritani (Univ. Tokyo), Eliane Koskas (Univ. Paris-Nanterre), Ilse Lehiste (Ohio State Univ.), Willem Levelt (Max-Planck Inst. Nijmegen), Ivana Markova (Univ. Stirling), Paula Menyuk (Boston Univ.), Giuseppe Mininni (Univ. Bari), Ernst Moerk (California State Univ.), Pierre Oléron (Univ. Paris-Descartes), Maria da Graça Pinto (Univ. Porto), Jan Prucha (Univ. Prague), Peter Robinson (Univ. Bristol), Yoshinori Sagisaka (ATR Japan), Leonor Scliar-Cabral (Univ. Sta. Catarina-Florianopolis), Miguel Siguan (Univ. Barcelona), Bernd Spillner (Univ. Duisburg), Marc Spoelers (Univ. Gent), Tatiana Ushakova (Inst. Psychol. Akad. Sci. Russia)

TECHNICAL SECRETARIAT: D. Kolf , K. Ogasawara, S. Yamane (Japan)
PUBLISHER SECRETARIAT: A. Fukuda (Japan)

Published by CENTER FOR ACADEMIC SOCIETIES JAPAN,
Senri Life Science Center Bldg. 14th Floor,
4-2, Shinsenri-higashi-machi 1-chome, Toyonaka-shi
Osaka 565, Japan. Tel. +81-6-873-2301 Fax. +81-6-873-2300

STUDIES AND RESEARCH

Topic prominence in the acquisition of Chinese existential sentences by English speakers

XIAOHONG WEN

Abstract

This study investigates the interlanguage structure of Chinese existential sentences produced by native English speakers. The canonical Chinese existential structure starts with a locative sentential topic, while English existential structure starts with a dummy subject "there". Thus, a native English-speaking learner of Chinese has to experience the typological difference in acquiring Chinese existential structure. This study compares and analyzes written sentences produced by 66 CFL students at three different levels, and 10 native Chinese speakers. The results of the study indicate that English-speaking learners acquired Chinese existential sentences at the early stages of their L2 acquisition. Their interlanguage was characterized by the topic-prominent feature. Two types of L1 transfer were observed in the subjects at the lower levels, yet frequency of the transfer is not statistically significant.

0. Introduction

A number of researchers have noted that interlanguage development is characterized by topic-comment rather than subject-predicate structure. Topic-prominence is an important feature in second language (L2) acquisition. (Rutherford 1983; Givón 1984; Fuller, Gundel, 1987; Sasaki 1990). Second language learners, independent of their first language, seem to rely more on pragmatic relations and functions than grammatical structures in early interlanguage development.

Rutherford (1983) investigated English language acquisition by Chinese, Japanese and Korean learners. English is typologically different from Chinese, Japanese and Korean. The former is subject-prominent whereas the latter are topic prominent (Li, Thompson 1976). Rutherford compared the composition of Chinese, Japanese, and Korean learners at different proficiency levels. The results of the study showed that in the course of L2 acquisition, learners gradually move from the topic-comment structure which is loosely organized by pragmatics toward target-like subject-predicate structures organized by syntax and morphology. Rutherford concluded that to produce topic-com-

ment structures at the early stage of L2 acquisition is a general tendency for learners, irrespective of mother tongue or target language.

Fuller and Gundel (1987) investigated the role of topic-comment structure in the acquisition of English as a second language by highly topic-prominent language speakers of Chinese, Japanese and Korean, and the speakers of Arabic, Farsi and Spanish, relatively less topic-prominent languages. They compared spoken narratives of their subjects with those of native English speakers. They discovered that all of their subjects produced more topic-comment sentences in their interlanguage narratives than did English speakers, irrespective of their first languages. Fuller and Gundel argued that L2 acquisition is generally characterized by an early topic-prominent stage, and topic-comment structure is a universal stage in interlanguage.

In the investigation of topic-comment structure in interlanguage, researchers frequently come across the difficulties of identifying the topic word of the sentence. Though Li and Thompson (1976) and other scholars (Givón 1979; Gundel 1988) attempted to define "topic", it is not easy to determine due to its elusiveness and the flexibility of the speech context where the data were collected. Sasaki's study (1990) seemed to have solved this problem. Sasaki investigated Japanese speakers' interlanguage constructions of English existential sentences with a locative sentential topic. The data collected were the written production of native Japanese-speaking students of ESL at a Japanese high school. The results of the study indicated that there was a close relationship between the levels of English proficiency and topic-comment structure. A general shift was found from topic-comment to subject-predicate structures as the English proficiency of the learners increased. The results of Sasaki's study is consistent with that of Rutherford's study (1983).

1.0. Purpose of the Study

1.1. The previous studies on topic-prominence in interlanguage all investigated the production of English as a second language (ESL) learners (Rutherford 1983; Fuller, Gundel 1987; Duff 1988, Sasaki 1990). The first languages of these ESL learners were all more topic-prominent than their target language, English. The results of the studies all indicated that their interlanguage, especially at the early stage, was characterized by the topic-prominent feature. However, it is not clear what

caused topic-prominence in the interlanguage of ESL learners. The possibilities include the direct transfer of learner's first language, the easiness of topic-prominent structures, or some pragmatic factors in second language acquisition. We cannot exclude typological transfer of the first language, since the first languages of ESL learners in the previous studies were all more topic-prominent than their target language (English). Thus, studies from the reverse direction are needed so that we can control the factor of first language transfer.

1.2. The present study investigates the interlanguage structure of Chinese existential sentences acquired by native English speakers. The canonical structure of Chinese existential sentence starts with a locative sentential topic. In comparison, English existential structure starts with the dummy subject "there". Thus, a native English-speaking learner of Chinese has to go through the typological difference in acquiring Chinese existential structure. The purpose of the present study is three-fold: (1) to discover how learners of Chinese move from a highly subject-prominent structure to a topic-prominent structure, (2) to investigate if there is a topic-prominent tendency in the interlanguage of English-speaking learners when they acquire Chinese existential structures, and (3) to investigate at what stage the feature of topic-prominence appears in their interlanguage.

2.0. The topic and Chinese existential structure

2.1. Li and Thompson (1976) proposed that languages differ in their strategies in constructing sentences according to the prominence of the notions of topic and subject. Languages with canonical sentence types of topic-comment form share a number of common properties. Other scholars (Givón 1979; Gundel 1988) also discussed the principles of topic-comment structure to define the specific nature of topic and topic-comment relations. For example, a topic always refers to something that is definite or generic, and is mutually understood by the speaker and listener. However, it is frequently difficult to determine which word is the topic of the sentence, especially in a speech context where the topic switches according to speaker's interest and language context. In addition, in a language which has both topic-prominent and subject-prominent sentences, the topic and subject of the sentence on the surface level may be identical. Sentence 1 is such an example. (Li, Thompson 1981)

1. I like to eat apples.

subject predicate
topic comment

In sentence 1, "I" is both the subject and the topic. Therefore sentence 1 does not present the typological differences between topic-prominent and subject-prominent languages in its surface structure.

2.2. Existential sentences present typological differences in the surface structure. In English, the canonical existential sentence has the construction of dummy subject (there) + predicate + locative, whereas in Chinese, the construction is radically different: topic (locative) + comment. Li and Thompson (1976) noted that sentences with non-referential subjects never occur in topic-prominent languages, but only in highly subject-prominent languages. The topic in a Chinese sentence is at the beginning of the sentence. The canonical existential sentence in Chinese starts with a topicalized locative as in sentences 2 and 3.

2. Locative + existential verb + NP.

(Zai) nage tushuguan you shiba zhang da zhuozhi.
(In) that library exist eighteen M. big tables.
There are eighteen big tables in that library.

3. Locative + positional verbs + aspect marker + NP.

(Zai) zhuozhi shang fang zhe san ben shu.
(On) table position lie aspect three M. books.
There are three books on the table.

In this study, we will use the criteria proposed in Li and Thompson (1981) to determine the topic word in Chinese sentences. Syntactically, a topic in Chinese is at the beginning of the sentence, and can be separated from the rest of the sentence by a pause. Semantically, a topic refers to something that is definite (sentence 2) or generic (sentence 4).

4. (Zai) tushuguan you henduo da zhuozhi

(In) library exist many big table.
There are many big tables in the library.

3.0. Methods

3.1. *Subjects* Seventy-six students in American universities and colleges participated in this study. Sixty-six subjects were learners of Chinese at three proficiency levels. Subjects at the low level learned Chinese for about one year. Subjects at the intermediate level learned Chi-

Table 1. Information of the subjects

Level	N	Average Age	Native language	Target language
Low	24	20	English	Chinese
Intermediate	24	21	English	Chinese
Advanced	18	23	English	Chinese
Chinese	10	31	Chinese	English

nese for about two years. Subjects at the advanced level learned Chinese for three or more years. Ten subjects were native Chinese speakers and studied at universities in the USA. The information on the subjects is presented in Table 1.

3.2. *Procedure* Subjects were given written instructions and asked to write eight sentences based on the eight noun phrases provided to the subjects by the researcher (see Appendix). The instructions included: "Below is the information of a town library. Please write eight sentences based on the given information. You may use the same sentence structure repeatedly. There are no relationships among the sentences you write. Please use 'that library' in every sentence that you write." The locative "that library" was used to elicit existential sentences, and also to help the researcher locate the topic of the sentence¹. The subjects were encouraged to write as fast as possible so that their writing would be spontaneous and natural. They were also encouraged to use the same structure as many times as possible, so that they would use the structure with which they felt most comfortable, and not be forced to use different structures for the sake of variation. The frequency of the structure used by the subjects provides a clue to what structure is the easiest and most preferred by students.

4.0 Results

4.1. The subjects produced 607 sentences based on the given information. Each subject produced 7.85 sentences on average. All the sentences are categorized into five types:

- Type I. Locative + Existential V + NP.
- Type II. Locative + Positional V + Aspect + NP.
- Type III. Existential V + NP + Locative.
- Type IV. NP + Locative.
- Type V. Non-existential sentences

Table 2 and Table 3 show the frequency numbers and the percentages of the productive sentence types respectively. Figure 1 shows the percentages of the five sentence types for the four proficiency levels. χ^2 was used to determine if there were significant differences among subjects of different proficiency levels, and differences between the production of learners of Chinese and native Chinese speakers. First, the results of χ^2 indicated that there was no significant difference among students of different proficiency levels with the frequencies of Sentence Types I, II, and V. However, there were significant differences among students at different proficiency levels with the frequencies of Sentence Types III and IV. Each of the five types of sentences is discussed below.

4.2. Type I. Locative + Existential Verb + NP.

5. Nage tushuguan you shiba ben Zhongwen shu.
That library exist eighteen M. Chinese books.
There are eighteen Chinese books in that library.

This type is a typical Chinese existential sentence. It has a topic-comment structure, and topic is a locative at the beginning of the sentence. Although Type I is grammatical in English, it is rarely used in

Table 2. Frequency of productive sentence types

Levels	Sentence types				
	I	II	III	IV	V
1	123	6	18	18	26
2	139	0	10	11	32
3	109	6	2	3	24
Native Chinese	66	4	2	0	8
Total	437	16	32	32	90

Table 3. Percentage of productive sentence types

Levels	Sentence types				
	I	II	III	IV	V
1	64.4	3.1	9.4	9.4	13.6
2	72.4	0	5.2	5.7	16.7
3	75.7	4.2	1.4	2.1	16.7
Chinese	82.5	5.0	2.5	0	10
Total	72.0	2.6	5.3	5.3	14.8

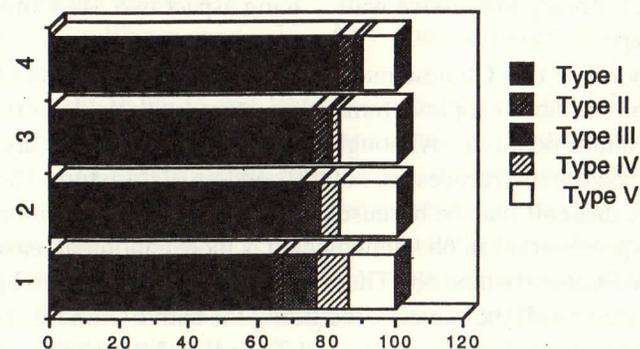


Figure 1. Percentages of productive sentence types by levels

1, CFL students at low proficiency level; 2, CFL students at intermediate level; 3, CFL students at advanced level; 4, Chinese native speakers

English. The frequency of Type I pattern is the highest among all the patterns produced by students of all proficiency levels: 72% of the total productive sentences (See Tables 2 and 3). The frequency of Type I for the first year students is 64.4% of their total production. χ^2 results indicated that there were no significant differences in producing Type I patterns among students at all proficiency levels. ($\chi^2 = 4.679$, $df = 3$, $P < .05$). Therefore, the results suggest that English-speaking learners of Chinese acquire the most canonical existential sentences at the early stage of their learning. No evidence of typological transfer was found in the production of the most canonical existential sentences by English-speaking learners of Chinese at any proficiency level.

4.3. Type II. Locative + Positional Verb + Aspect + NP.

Type II is a second canonical existential sentence in Chinese. The locative is the topic at the beginning of the sentence. The information (eight nouns) given to the subjects when they did the test can be used in either Type I or Type II patterns. Sentences 6a and b present both types respectively.

- 6a. Nage tushuguan you liangzhang Zhongguo ditu.
That library exist two M. Chinese map.
There are two Chinese maps in that library.
- b. Nage tushuguan de qiangshang gua zhe liangzhang Zhongguo ditu.

That library Possessive wall hang aspect two M. Chinese map.

There are two Chinese maps hanging on the wall of that library.

Both 6a and 6b are topic-comment structures with the locative at the sentence-initial position. Although semantically 6a and 6b are different, the semantic differences are not the concern of this study. Sentence 6b is more difficult than 6a because of the variations of positional verbs and the aspect marker in 6b. Sentence 6a is more canonical, easier, and used more frequently than 6b. Thus, sentence 6a, that is, Type I pattern, was preferred by all the subjects, including the native Chinese speakers. The frequencies of Type I is 72%, and Type II is 2.6% of the total production. On the other hand, first-year students already produced Type II sentences. This indicates that topic-comment structures of Chinese existential sentences appear at an early stage of interlanguage of learners of Chinese.

4.4. Type III. Existential Verb + NP + Locative.

This is another existential sentence with a topic-comment structure. The verb phrase is the topic because it shares the properties of the topic proposed by Li and Thompson (1981). It is in the sentence-initial position and can be separated from the rest of the sentence (the comment) by a pause or a pause particle. The locative is the comment in the sentence-final position. There is a pragmatic difference between Type III and Type I sentences, as presented in sentences 7 and 8 respectively. The topic in sentence 8 is a locative. The existence of the locative "that library" is already established in the discourse context. Sentence 8 can be used to answer the question of sentence 9, and can be extended into sentence 10.

7. You sanshiwu ben Zhongwen shu zai nage tushuguan.

Exist thirty-five M. Chinese book in that library.

There are thirty-five Chinese books in that library.

8. Nage tushuguan you sanshiwu ben Zhongwen shu.

That library exist thirty-five M. Chinese books.

There are thirty-five Chinese books in that library.

9. Nage tushuguan you shenme?

That library exist what?

What is there in that library?

10. Nage tushuguan you sanshiwu ben shu, haiyou shi ben

Zhongguo cidian.

That library exist 35 M. books, also exist ten M.

Chinese dictionary.

There are 35 books and 10 Chinese dictionaries in that library.

The topics in sentences 8, 9, 10 are identical, "that library". However, sentence 7 has a different topic. Thus, it is pragmatically inappropriate to use sentence 7 to answer the question of sentence 9 in a discourse context². Sentence 7 can be extended into sentence 11. The topic of sentence 11 is a verb phrase in sentence-initial position.

11. You sanshiwu ben Zhongwen shu zai nage

tushuguan, qizhong

Exist 35 M. Chinese books in that

library, among which

shiben shi guanyu Zhongguo lishide, ershiwu ben shi guanyu

10 M. be on Chinese history, 25 M. be on

Zhongguo wenhua de.

Chinese culture.

There are 35 Chinese books in that library, among which 10

books are on Chinese history and 25 on Chinese culture.

The word order of Type III parallels English existential structure as presented in sentences 12 and 13.

12. There are thirty-five books in that library.

13. You sanshiwu ben shu zai nage tushuguan.

Exist thirty-five M. books in that library.

Type III sentence is grammatical in Chinese. There were two possibilities when students produced Type III sentences. One is the direct translation of their first language to their target language. In this case, they produce the sentence with the same word order as that of their first language. The other possibility is to directly master the topic-comment structure with no transfer from their first language. The first possibility indicates that students use the direct translation strategy in acquiring the existential sentence. Since there is no dummy subject in Chinese, it is automatically left out. As a result of direct translation, the verb phrase is in the sentence-initial position and the locative is in the sentence-final position. The second possibility suggests that students are able to acquire the topic-comment structure at the early stage of their Chinese language acquisition.

The distribution of the frequency of Type III pattern is that the first-

year students produced the Type III pattern at the highest rate (9.4% of the total). As the proficiency level of the students increases, the frequency of producing Type III pattern decreases. The production of Type III by the second-year students is 5.2% and the third year is 1.4%. The results of χ^2 indicated that the frequency of Type III pattern produced by students of different levels differed significantly. ($\chi^2 = 9.567$, $df = 3$, $P < 0.05$). Thus, it appears that students at a low proficiency level were influenced by their first language in acquiring Chinese existential sentences. They sometimes used the direct translation strategy in producing Chinese existential sentences, though the percentage of these sentences is not large.

4.5. Type IV. NP + locative

14. Sanben fawen cidian zai nage tushuguan.
Three M. French dictionary in that library.
There are three French dictionaries in that library.

Type IV is a subject-predicate structure. It is grammatical but pragmatically inappropriate in Chinese. The subject of an existential sentence in Chinese must be definite or generic to be appropriately used in discourse contexts. Sentences 15a, b, and 16a, b demonstrate the definite and generic topicalization of sentences respectively.

- 15 a. Nide na sanben fawen cidian zainar ne?
Your that three M. French dictionary position where particle.
Where are your three French dictionaries?
b. Wode na sanben fawen cidian zai tushuguan.
My that three M. French dictionary in library.
Those three French dictionaries of mine are in the library.
- 16a. Fawen cidian zai neige tushuguan?
French dictionary in which library
French dictionaries are in which library?
b. Fawen cidian zai nage tushuguan.
French dictionary in that library.
French dictionaries are in that library.

The subject in sentence 14 is neither definite nor generic. Therefore, sentence 14 has to be changed into 15b or 16b to be used in real discourse contexts. Sentence 15b and 16b are topic-comment structures because both the sentence-initial phrases "Wode na san ben Fawen cidian" (those three dictionaries of mine) and "Fawen cidian" (French

dictionaries) meet the criteria of the Chinese topic proposed by Li and Thompson (1981), *i.e.*, definite or generic, and at the sentence-initial position. It seems that Chinese existential sentences have to be in topic-comment form to be pragmatically and appropriately used in the context of discourse. The native Chinese speakers did not produce any Type IV sentences. The subjects at the low proficiency level produced Type IV pattern most. The frequency of producing Type IV pattern is 9.4% of the total with the first-year subjects, 5.7% with the second-year subjects, 2.1% with the subjects at the advanced level, and 0 with the native Chinese speakers. The results of χ^2 indicate that there is a significant difference in the frequency of producing Type IV patterns among subjects at different proficiency levels ($\chi^2 = 8.622$, $df = 3$, $P < 0.05$).

As the proficiency level of the student increases, the frequency of producing Type IV pattern decreases. This phenomenon suggests that students are influenced by their first language at the early stage of acquisition of Chinese existential sentences. When students produced a Type IV pattern, they had the typological transfer of their L1 to L2. As a result of transfer, Type IV pattern is in subject-predicate form and pragmatically inappropriate in Chinese.

4.6. Type V. Except for the previous four types, all the rest of the sentences produced by the students belong to Type V. They are not existential sentences. Some of the structures of Type V are in topic-comment (sentence 17) form and the others are in subject-predicate form (sentence 18).

17. Zai nage tushuguan, wo kanle shiwuben riwen shu.
In that library, I read P. fifteen M. Japanese books.
I read 15 Japanese books in that library.
18. Nage tushuguan de zhuozhi, yizi dou hen dou.
That library particle table, chair all very many.
There are many tables and chairs in that library.

Type V sentences frequently appear after Type I sentences in the production of subjects, especially with the higher-level students. It seems that in discourse, students produce Type I patterns (the topic-comment structure) in the first few sentences and then switch to Type V patterns (the subject-predicate structures) as exemplified in sentence 19 a-d.

- 19a. Nage tushuguan you shiba ben Zhongwen shu.

- That library exist eighteen M. Chinese books.
There are 18 Chinese books in that library.
- b. Nage tushuguan you sanshiwu ben zazhi
That library exist thirty-five M. journals.
There are thirty-five journals in that library.
- c. Zai nage tushuguan wo yong san ben Fawen zazhi.
In that library I use three M. French journals.
I use three French journals in that library.
- d. Nage tushuguan maile liangzhang Zhongguo ditu.
That library buy P. two M. Chinese map.
That library bought two Chinese maps.

Sentences 19c and d both belong to Type V pattern. Sentence 19c is a topic-comment structure and 19d is a subject-predicate structure. Sentences 19 a-d seem to suggest that a discourse starts with establishing a topic. Once the topic is established (e.g. in sentences 19a-b), the focus switches to the new information relevant to the topic. That is why the sentences of Type I pattern are at the beginning of a discourse and followed by the sentences of Type V which do not focus on the topic any more.

5.0. Discussion

5.1. Preference of topic-comment formation

The written production of the subjects was classified into five types. The first three types are of the topic-comment structure of existential sentences. There were no significant differences among the students at different proficiency levels when they produced the most canonical existential sentences. In other words, the typical Chinese existential sentences appear at the early stage of Chinese L2 acquisition. Our tentative conclusion, therefore, is that the interlanguage of CFL learners is characterized by the feature of topic-prominence. The topic-comment form is preferred by English-speaking learners of Chinese even at the earlier stages of their L2 acquisitions.

This finding is consistent with the findings of Duff's study. Duff (1988) investigated the same topic addressed in this study, but in the reverse direction. Her subjects were Chinese speakers who were learning English in Chinese high schools. The results of her study indicated that (1) the interlanguage of the ESL learners at the low level is topic-prominent, and (2) as their English proficiency levels increase, the

topic-prominent feature in their interlanguage decreases.

Thus, the results of this study showed that it is easier for L2 learners to acquire the topic-comment structure than subject-predicate structure irrespective of the native and target languages of the learners. It seems that learners are first aware of the meaning rather than the grammatical function of a structure. Further, they are sensitive to the topic-comment structure and do not hesitate to use it even though the structure does not have a subject. In other words, it seems that they can easily let go of a syntactic structure of their native language and accept a pragmatics-based structure of their target language. In the different direction, Duff's study (1988) showed that it is difficult to let go of a semantic strategy to accept a subject-prominent structure.

Hence, we propose that meaning and pragmatic function play a stronger role than grammatical relations in the course of L2 acquisition. Especially at the early stage of L2 acquisition, learners rely on more semantic and pragmatic functions than syntactic relations. This proposition is consistent with Gass' argument that "there are universal language interpretation strategies, with semantics being a stronger one than syntax" (p.344). Gass conducted a bidirectional study to investigate the interaction of syntax, semantics, and pragmatics from the perspective of functional constraints on sentence processing. The results of her study showed that in moving from a syntactic-dominant language to a semantic-dominant one, learners had an "easier" task to accomplish than in reverse direction.

5.2. Underpinning of cognitive information processing theory and pragmatics-centered strategies

The underpinning of topic-prominence in interlanguage is the principle of cognitive psychology. Topic-prominence reflects the way human beings process information. A topic is the old information to which relevant new information will be added, categorized and organized. In information processing, the topic (the old information) does not take much attention and memory span; yet, since a topic is the ground and understood information, it has the priming effect of activating the new information (comment). Ausubel (1960) posited that new ideas can be usefully learned only to the extent that they can be connected to the already available propositions that provide ideational anchors. The topic, the old information, serves as the "advance organizer" to which

the new information can be related and retained. Thus, the topic-comment formation is an efficient way for categorizing, storing and retrieving information.

We can find evidence of the topic-comment feature in L1, L2, and Pidgin acquisition. Bates (1976) reported that as early as the two-word stage of L1 acquisition, children already use the topic-comment distinction. The pragmatic comment-topic order reflects more general attentional processes. Sasaki (1991) demonstrated the developmental precedence of a semantics/pragmatics-centered strategy over a syntax-centered strategy in L2 learners of English. He posited that the topic-comment formation is important because "organization of human knowledge and its retrieval mechanism naturally fits the formation of speech consisting of two terms: topic and comment" (Sasaki 1991, 60). Givón (1979) noted that the topic-comment form is predominant in Pidgin languages largely due to the necessity of communication and the natural process of information exchange. The findings of the present study suggest that when studied in the reverse direction, a similar conclusion can be drawn³.

Topic-prominence in interlanguage also reflects the nature of language and the pragmatics-centered strategies people use in daily communication. The value of a language is its function. In a discourse, we first establish the topic because it represents our interest and urgent concern. After the topic is clearly established, we add new information to the topic. Givón (1984) argued that the topic-comment formation represents the typical discourse pattern and the strategy of solving the most urgent problems. We can understand why the topic-prominence feature is characterized in interlanguage within the framework of pragmatics and the theories of information-processing strategies.

5.3. *Typological markedness*

Typological markedness in the area of lexical presentation is another explanation that accounts for why Chinese existential sentences are acquired at the early stages of L2 acquisition, with little evidence of L1 transfer. Hyldenstam (1987) predicted that if the element of L1 is marked and the corresponding element of L2 is unmarked, learners will prefer the unmarked form. In such a situation, transfer from L1 will be rare. Even if the marked element is transferred from L1, "it will not remain as a feature of the learner's interlanguage, since the correspond-

ing unmarked category in the target language will be easy to acquire". (Hyldenstam 1987, 68)

Before testing Hyldenstam's prediction, we need first to specify the reasons that Chinese existential structure is typologically unmarked. We will use Greenbergian approach (1966) to define the typological unmarkedness of Chinese existential sentences. The first criterion used to judge for cross-linguistic markedness is frequency. The lexical presentation of existential sentences in Chinese differs from English in that Chinese existential and possessive verbs have the identical form "you". Li and Thompson (1981) noted that "In most languages of the world, the same verb expresses both possession and existence, just as in Mandarin." (Li, Thompson 1981, 514) This suggests that Chinese existential sentences are unmarked because they occur with a higher frequency as with "most languages of the world" when compared to English.

The second criterion is neutralization. The meaning of the Chinese verb "you" is internally neutralized. The verb "you" presents both notions of existence and possession, and neither can be considered the "basic" meaning. Thus, "you" is a case of neutralization rather than polysemy. Based on these two criteria, we would assume that second language learners of Chinese would prefer few variations of the verb form "you". The results of the present study support this assumption and provide the evidence for Hyldenstam's prediction on typological markedness.

A number of studies in L2 acquisition from different perspectives suggest that pragmatics-based word order, as exemplified by Chinese existential sentences, is less marked than syntax-based word order. Huebner (1983) analyzed the data of the interlanguage of an adult acquiring English in a one-year longitudinal study, and reported that topic-comment form of speech overrode the syntax-based form when the two forms conflicted with each other. Duff (1985) investigated the written production of Japanese/Chinese learners of English. She found that the learners were greatly influenced by pragmatics-based sentence formation. These learners consistently transferred their L1 feature of topic-comment structures to their L2 writing in English, even though English is characterized by the feature of subject-predicate forms. Fuller and Gundel (1987) investigated the oral narratives from speakers of highly topic-prominent languages (Chinese, Japanese, and Korean) and less topic-prominent languages (Arabic, Farsi, and Spanish). The

results of their study showed that native speakers of less topic-prominent languages, such as Arabic, Farsi, and Spanish, as well as topic-prominent languages, such as Chinese, Japanese, and Korean, all employed topic-comment structures in their early stages of learning English.

Sasaki (1991) investigated English and Japanese interlanguage comprehension strategies. The results of the study suggested that there is a developmental precedence in a meaning-based comprehension strategy over a grammar-based one. The subject-predicate formation with rigid grammatical constraints on word orders is preceded by the topic-comment formation in the course of L2 acquisition.

In sum, the results of the present study and several previous studies in L2 acquisition all indicated that topic-comment patterns are indeed less marked, and appear in interlanguages at an early stage of L2 acquisition.

5.4. Two types of transfer

We found two types of first language transfer by students at lower-proficiency levels when they produced Type III and IV patterns. The frequencies of both Type III and Type IV indicated that there are significant differences between the students at the higher and lower levels. As the proficiency level of students increases, the frequencies of producing Type III and Type IV patterns decrease.

The transfer with Type III (Existential Verb + NP + Locative) is literally word order translation from the first language to the second language. Though Type III is in topic-comment form, it has the identical word order as English canonical structure when the dummy subject "there" is deleted (Sentence 7, 11). Another type of transfer is typological as indicated in Type IV pattern. Students at the lower proficiency level transferred the subject-predicate form of their first language and produced Type IV sentences which are grammatically correct yet pragmatically inappropriate (Sentence 14).

In the present study, the frequencies of producing Type III and IV patterns are much lower than Type I pattern (see Table 2). Therefore, our conclusion is that English-speaking learners acquire existential patterns at an early stage of their Chinese language acquisition. The two types of transfer are statistically insignificant and minor. Hyldenstam (1987) predicted that when the acquisition of the learner moves from the

marked category to the unmarked one, transfer is rare. Even if the marked category is transferred, it will not remain a feature of the learner's interlanguage, because the unmarked category in the target language will be easy to acquire. Thus, the results of this study support Hyldenstam's thesis.

The causes for transfer from the native language which is marked to the target language which is unmarked need to be further explored. In the present study, the limited production data seem to suggest that transfer was employed when students attempted to vary sentence patterns, or were greatly influenced by their L1 and used translation strategies. Further empirical studies are needed to discover why and in what situations the marked elements of L1 are transferred to unmarked elements of L2.

6. Conclusion

The results of this study indicate that English-speaking learners acquire Chinese existential sentences at the early stages of L2 acquisition. Two types of L1 transfer (direct word translation and typological transfer) exist in the production of the learners at lower proficiency levels. However, the frequency of the transfer is statistically insignificant. The results of this study further suggest that in the course of acquisition of Chinese existential sentences, the interlanguage of English-speaking learners is characterized by the topic-prominent feature. This finding is consistent with the findings of previous studies (Sasaki 1990; Fuller, Gundel 1987).

Topic-prominence in interlanguage development can be understood within the framework of pragmatics and the cognitive information processing theory. The nature of language lies in its communicative function. The topic-comment formation represents the efficient and typical pattern of human communication. In discourse, we first establish the topic. After the topic is clearly understood, new information on the topic is developed and organized. The topic-comment structure reflects the psychological way information is processed, that is, how information is categorized, stored and retrieved.

The results of this study also suggest that pragmatics-based topic-comment sentences are typologically unmarked, and thus, favored by L2 learners. This finding supports the principles of typological markedness and the theory of typological transfer proposed by Rutherford (1983) and Hyldenstam (1987).

The interlanguage of existential sentences by English-speaking learners of Chinese is topic-prominent. However, we are not able to infer this conclusion for the interlanguage of all L2 learners for two reasons. First, only one sentence pattern, *i.e.*, the canonical existential sentence was investigated in this study. Evidence from one sentence pattern is not a sufficient basis to formulate a general conclusion. More sentence structures should be examined. Second, the L1 of learners in this study is only one language, English. It is important to investigate the interlanguage of learners of more different native languages, especially the learners whose L1 is characterized by subject-predicate structures and whose target language features topic-comment structures.

Notes

- The empirical design of this study took Sasaki's study (1990) as its model. An attempt was made to control the topic of the sentence so that the researcher could easily determine the topic of the sentence when analyzing the data.
- Li and Thompson (1981) also pointed out that there is a pragmatic difference between the sentences a/b and c. In sentence b, the locative is in sentence-initial position and its existence must have already been established in the discourse context either linguistically or extra-linguistically. Thus, the sentence could be used to answer the question of sentence a. In sentence c, on the other hand, the topic is not a locative. Therefore the sentence is inappropriate to answer the question of sentence a. (Li, Thompson 1981, 511-12).
 - Yuanzi li zenma zhema chao?
Yard in how so noisy.
How come it is so noisy in the yard?
 - Zai yuanzi li you yizhi gou.
At yard in exist one dog.
There's a dog in the yard.
 - You yizhi gou zai yuanzi li.
Exist one dog in yard in
There is a dog in the yard.
- The subjects of the previous studies (Sasaki 1990; Fuller, Gundel 1987; Rutherford 1983 are among the others) are all ESL learners. Their first languages are all typologically more topic-prominent than their target language, English. This study is in the reverse direction from those previous studies; the subjects of this study are English speakers learning a topic-prominent language, Chinese. Yet, the results of this study are remarkably consistent with the results of the previous studies.

References

- Ausubel, D.P. 1960. The use of advance organizers in the learning and retention of meaningful verbal material. *Journal of educational psychology*, 51, 267-72.
- Bates, E. 1976. *Language and context: The acquisition of pragmatics*. New York, Academic Press.
- Duff, P. 1985. *Syntacticization of topic in Japanese and Mandarin students' English: A test of Rutherford's model*. Unpublished master thesis, University of Hawaii at Manoa.
- Duff, P. 1988. The progression toward subject prominence in the interlanguage of Chinese middle school students. Paper presented at the Second Language Research Forum, Honolulu, Hawaii.

- Fuller, J., Gundel, J. 1987. Topic-prominence in interlanguage. *Language learning*, 37, 1-18.
- Gass, S. 1987. The resolution of conflicts among competing systems: A bidirectional perspective. *Applied psycholinguistics*, 8, 329-350.
- Givón, T. 1979. From discourse to syntax: Grammar as a processing strategy. In T. Givón ed. *Syntax and semantics; Vol. 12 Discourse and syntax*. New York, Academic Press, 81-112.
- Givón, T. 1983. Topic continuity in discourse: An introduction. In T. Givón ed., *Topic continuity in discourse: A quantitative cross-language study*. Amsterdam, John Benjamins Publishing Co. 71-41.
- Givón, T. 1984. Universal of discourse structure and second language acquisition. In W. Rutherford ed. *Language universal and second language acquisition*. Amsterdam, John Benjamins Publishing Co., 109-136.
- Greenberg, J.H. 1966. *Language universals, with special reference to feature hierarchies*. (Janua Linguarum, Series Minor 59), The Hague, Mouton.
- Gundel, J.K. 1988. Universals of topic-comment structure. In M. Hammond, E. Moravcsik, J. Wirth. eds. *Studies in syntactic typology*. Amsterdam, The Netherlands: John Benjamins B.V.
- Huebner, T. 1983. Linguistic systems and linguistic change in an interlanguage. *Studies in second language acquisition*. 6(1), 33-53.
- Hyltenstam, K. 1987. Markedness, language universals, language typology, and second language acquisition. In C. Pfaff ed. *First and second language acquisition processes*. Cambridge, Newbury House Publishers, 55-78.
- Li, C., Thompson, S. 1976. Subject and topic: A new typology of languages. In C. Li ed. *Subject and topic*. New York, Academic Press, 457-498.
- Li, C., Thompson, S. 1981. *Mandarin Chinese: A functional reference grammar*. Berkeley, University of California Press.
- Rutherford, W. 1983. Language typology and language transfer. In S.M. Gass, L. Selinker eds. *Language transfer in language learning*. Rowley, Massachusetts, Newbury House Publishers, 358-370.
- Sasaki, M. 1990. Topic prominence in Japanese EFL students' existential constructions. *Language learning*, 40, 337-368.
- Sasaki, Y. 1991. English and Japanese interlanguage comprehension strategies: An analysis based on the competition model. *Applied psycholinguistics*, 12, 47-73.

Appendix

How many years have you learned Chinese? _____

Your native language is _____

Here is the information of a town library. Please write 8 individual sentences based on the information below. Write as fast as you can. You may use the same sentence structure as many times as you want. Be sure that the sentences you write are not related to each other. Please use the phrase "that library, nage tushuguan" in each of your sentences.

- eighteen Chinese books
- thirty-five magazines/journals
- three French dictionaries
- two maps of China
- fifteen Japanese books
- very many chairs
- twenty big tables
- three reading rooms.

Received: April 1, 1994

University of Houston
Department of Modern and
Classical Languages
Houston TX. 77204-3784
USA