A Corpus-based Study on Chinese EFL Learners' Use of Transitive Constructions with Neutral Participants

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Abstract—**Linguistic studies suggest that transitivity is a prototypical concept which is gradable, and different types of transitive constructions reflect different degrees of transitivity. As such, the flexibility of transitive constructions is difficult for Chinese EFL learners. The author seeks to study how Chinese EFL learners use a particular type of transitive construction, those with neutral participants (TCNP), to reveal Chinese EFL learners' conceptual features in using transitive constructions. The author selected three verbs in the study: *enter, join* and *reach*, then conducted a series of comparisons of their uses between a Chinese EFL learner corpus and a native learner. The author found that Chinese EFL learners' uses are different in a number of ways: they tend to rely more on the transitive pattern and use less intransitive and passive voice pattern, to use more animate entities as subjects, especially the first person pronouns, but to use more inanimate entities as objects. However, in the comparisons between different levels of Chinese EFL learners, we found that all Chinese EFL learners use these verbs similarly with no regard to their English levels, indicating that Chinese EFL learners have no conceptual change in English. The author argues that the constraining effect of the prototypical transitive construction leads to the different uses of TCNPs by Chinese EFL learners in comparison with native speakers.**

Index Terms—**neutral participants, transitivity, prototype, conceptualization, argument**

I. INTRODUCTION

The relationship between language and conceptualization has fascinated a number of scholars (Chomsky, 2005; Jackendoff, 1992; Lakoff & Johnson, 1999; Pinker, 2007; Putnam, 1979). It has been studied under various names such as language and mind, language and thought, language and cognition. Sapir (1921) and Benjamin (1956) argued that language shaped thought and that people who spoke different languages had different conceptual systems. Their ideas were later summarized as the Sapir-Whorf hypothesis with two versions (Kay & Kempton, 1984). While the strong version of absolute linguistic determinism and relativism has been rejected, the soft version has been generally accepted.

The transitive construction is an appropriate case for the study of EFL learners' conceptual systems. Transitive constructions occupy an important place in language. Næss (2007, p. 2) said that transitivity "plays a central role in almost any linguistic theory, and is generally assumed to describe a language-universal phenomenon". The importance of transitivity is also recognized by Hopper and Thompson (1982), "In many languages (and perhaps covertly in all languages) the transitivity relationship lies at the explanatory core of most grammatical processes". The central place of transitive constructions in language is reflected by its links with other constructions in language such as intransitive constructions (Dilin, 2008), the passive voice (Shibatani, 2006), and ergative constructions (Legate, 2012).

It is one of the basic linguistic constructions, and encodes basic human experiences (Goldberg, 1995, 2006), and it is fundamental to human conceptualization of the relationship between human beings and the world. In fact, the relationship between human beings and objects serves as the image-schema for transitivity with human beings as the agent and objects as the patient (Lakoff & Johnson, 1999).

At the same time, transitive constructions prove problematic for EFL learners as most English verbs are not consistent in their usages regarding transitivity (Yuhara, 2011). The current research arises out of the author's general concern with EFL learners' acquisition of transitive constructions, how EFL learners conceptualize transitivity in a

foreign language, and how it is coded into transitive constructions. In the current research the author puts his focus on one special case of transitive constructions: those constructions that take neutral participants (TCNP), for example: *He reached school, we entered college.* The author seeks to study the use of English transitive constructions by Chinese EFL learners, aiming not only at identifying how they use transitive constructions in English, but also revealing the conceptual factors involved in their use of English transitive constructions.

This research aims to examine the use of TCNPs by Chinese EFL learners, and to discover the features in their conceptualization of transitivity. Specifically, there are four research question designed to guide the current research.

1). What are the similarities and differences in the use of TCNPs between Chinese EFL learners and NSs of English?

2). What do the results of RQ 1 reveal about Chinese EFL learners' conceptual features in their uses of transitive constructions?

3). What are the similarities and differences in the use of English TCNPs between different levels of Chinese EFL learners?

4). What do results of RQ 3 reveal about different levels of Chinese EFL learners' conceptual features in their uses of transitive constructions?

II. LITERATURE REVIEW

Transitivity is argued to be a prototypical concept in that it is degradable, and a construction can be more or less transitive (Hopper, 1985; Hopper & Thompson, 1980, 1982; Langacker, 1987, 2008; Næss, 2007; Rozwadowska, 1988). Prototypical transitivity is expressed with destruction verbs such as *kill*, which causes the loss of life. Næss(Næss, 2007) argue that prototypical transitivity represents maximal distinction between the agent and patient, which can be characterized with three values:

Volitional [VOL]: whether participants volitionally carry out the action.

Instigating [INST]: whether participants instigate the action;

Affected [AFF]: whether participants are affected as a result of the action.

TCNPs are transitive constructions with neutral participants as objects. A patient is affected in a prototypical transitive construction, but there are some cases where the direct object taken by a transitive verb is conceptualized as unaffected, and this lack of affectedness leads to the deviation from the prototype. This kind of object is named as "neutral" by Næss (2007), and it is characterized semantically as [-VOL, -INST, -AFF] in contrast to the prototypical patient characterized as [-VOL, -INST, +AFF]. As can be seen, the only difference between them is whether they are conceptualized as affected or not.

Most neutrals are locations or settings which are conceptualized as participants and take the position of the object in a clause. Langacker (2008) argued that in a canonical transitive event, participants acquired the position of trajector and landmark (focal participants in an event as the primary and secondary focus), while locations and settings are the stage for the event to take place, playing the role of conceptual scope. But when the conceptual scope itself acquires the status of conceptual content, the conceptualization of transitivity deviates from the prototype with the settings being the landmark and the relationship between that of trajector and landmark in transitivity are in essence that between a participant and a setting. In a "archetypal conception" of transitivity, "participants interact with one another but merely occupy locations and settings" (Langacker, 2008, pp. 387-388). But in this deviation, settings are viewed as participants, a different conceptualization from ordinary situations. Langacker gave the following examples (p. 387):

a) The envelope contained his will.

b) The lecturer finally reached the end.

c) The train is approaching Chicago.

In all three sentences above, location is one of the focal elements, namely the landmark, which differs from a prototypical transitive construction in which locations are usually encoded as oblique elements in a sentence, for example, a prepositional phrase. However, they are not affected even though they are landmarks in transitive constructions. Neutrality is a property of participants in an event which is "not directly involved with the event either in terms of participating in its instigation or in registering its effect" (Næss, 2007, p. 102). Their deviation has impact on their syntactic behaviors, i.e., they cannot be passivized.

There are some verbs in English, which can take either a direct object or an oblique element, for example (taken from SUBWECCL),

a) You are facing challenges every day.

b) Many people are facing with the problem of losing job.

The syntactic difference between the two sentences above implies a difference in conceptualization. It should be noted that the feature of "affectedness" is subjective and gradable; therefore, it is subject to speakers' conceptualization. In the case of Chinese EFL learners, it is subject to them determining whether a patient is affected or not. Mental activities are all unconscious, and the purpose of this research is to reveal those unconscious activities in mind at least in part.

The different usage of "*face*" implies how Chinese EFL learners determine the degree of neutrality of the participants. When "*problem*" is conceptualized as more neutral, it is encoded into an oblique element, i.e., it is conceptualized as not interactive with other participants of the event, and "*problem*" comes as unexpected to the subject without the subject's awareness. This conceptualization conforms to the definition of neutrality, which is "the only category which is entirely

negatively defined; the only thing its members have in common is being neither volitional, nor instigating, nor significantly affected" (Næss, 2007, p. 106).

The words selected for concordancing are: *enter, join, reach.* They are used frequently both by native speakers and Chinese EFL learners, therefore.

III. MATERIALS AND METHOD

A. Corpus-based Method

As the present study is focused on the learners' conceptualization of transitivity, which is revealed in their linguistic productions, the author relies on the data from corpora to induce the conceptualization of transitivity by EFL learners. A comparison of different uses of TCNPs between a native speaker corpus and a Chinese EFL learner corpus, and between different levels of Chinese EFL learners will be performed to identify the conceptual similarities and differences.

Cognitive linguistics assumes an empiricist view committed to generalization, as Lakoff (1990, p. 53) stated, "a commitment to characterize the general principles governing all aspects of human language". Goldberg (2006) is especially concerned with how constructions are created as a result of generalization. In line with this empirical spirit, there are many studies done with a different methodology from mainstream generative linguistics, as Tries (2006, p. 3) observed. When compared to a large body of research in other paradigms within 20th century mainstream theoretical linguistics, much work within cognitive linguistics has already adopted a much broader and more balanced empirical perspective, one that does not rely solely on acceptability judgments of isolated or made-up sentences but also incorporates many other kinds of evidence. Although cognitive linguistics and generative linguistics are similar in their interest in the study of human mind, their views are different, and are often contradictory to each other at the most fundamental level of metaphysics and epistemology. Little wonder then that the methodologies they employ are different.

One problem in current EFL research is that most studies are done in a strictly controlled setting, with a limited number of participants; as a consequence, considering the complexity of reality, such research is limited in generalizability. Gass & Selinker (2008) called attention to this problem, "It is difficult to know with any degree of certainty whether the results obtained are applicable only to the one or two subjects studied, or whether they are indeed characteristic of a wide range of subjects (Gass & Selinker, 2008, p. 55). Ellis (2008, pp. 912-913) generalized three kinds of language-use data including naturally occurring samples, clinically elicited data and experimentally elicited data. Learner corpora are one kind of naturally occurring samples. As Granger (2009, p. 14) defined, they are "electronic collections of foreign or second language learner texts assembled according to explicit design criteria." Corpus–based research has a higher generalizability than clinically or experimentally elicited data because of its relatively large usage data and its natural usage environment. Granger (2009, p. 16) noted that "One of the main assets of learner corpus research is that it brings to the SLA field a much wider empirical basis than has ever previously been available."

B. The Learner Corpus

Transitivity, as a phenomenon of conceptualization rather than real events in the world, is expected to be encoded into linguistic forms for EFL learners and NSs. Both differences and similarities are expected. The different usages of EFL learners are not to be seen as errors in the current research, but indicating their conceptualizations which are different from those of NSs. To achieve the objectives of the current research, a native speaker corpus is required. A corpus is an inventory of usage events, and to compare an NNS corpus to an NS corpus can identify not only similarities and differences in the use of transitive constructions, it can also show the degree of similarities and differences. Learner language is different from the target language not because it is judged as grammatically incorrect, but because it feels unidiomatic. Granger (2009, p. 19) argued that "Researchers should make full use of this rich diversity rather than restrict themselves to one monolithic and monocultural norm as has all too often been the case in the past and indeed is still the rule where the norm is implicit rather than explicit".

To perform an effective NS (native speaker)-NNS (non-native speaker) corpus comparison, the learner corpus is the first to be determined. Due to rapid development in corpus linguistics, there are many different corpora available. SWECCL 2.0 was published in 2008, and it also contains both spoken data as well as written data, which were collected from both English major students and non-English major students from more than 20 universities between 2003 and 2007. The universities chosen were different from those in SWECCL 1.0.

This research will use the written component of SWECCL 2.0, namely, WECCL. It is a collection of 4,950 compositions written by students from more than 20 universities in China. Students are mostly English majors enrolled between 2003 and 2007, ranging from Level 1 to Level 4. Compositions are mostly argumentative essays, and there are 27 topics in total, one for expositive writing, and all others are for argumentative essays. In total, there are 4,680 argumentative essays with 1,207,968 tokens and 270 expository writings with 40,508 tokens. Both timed and untimed compositions are included with each occupying half the corpus.

So far the most often used targeted NS corpus is the Louvain Corpus of Native English Essays (LOCNESS), built by the Centre for English Corpus Linguistics at the Catholic University of Louvain, Belgium in 1998. It has been used in a number of studies (Flowerdew, 2010; Laufer & Waldman, 2011; Partridge, 2011; Van Rooy & Terbianche, 2009).

Including research done about Chinese EFL learners' use of English (Fang, 2013; Ping, 2009; Xu & Xiaotang, 2011; Zhang, 2010). LOCNESS contains 324,304 words. All compositions are native essays, which are both written in timed examinations and as homework, and cover such topics as social ethics, environment protection, education and arts. The length of each essay is about 500 words.

C.   Building SUBWECCL with Data Drawn from WECCL 2.0

WECCL 2.0 is a comprehensive learner corpus, and researchers can draw data from it and build sub-corpora according to their research purposes. For the present study, the author built a sub-corpus (SUBWECCL) about the same size of LOCNESS with about 0.32 million tokens. SUBWECCL is built in order to have a comparison with the LOCNESS, so the data is drawn from WECCL purposely:

1) The amount of the tokens is about the same as that of LOCNESS;

2) All compositions are argumentative essays, as those of LOCNESS;

3) Compositions written by students at same levels are chosen at random, and nearly the same amount of tokens is drawn from different levels, so that a comparison can be performed among different levels of Chinese EFL learners.

D.   Data Collection

As the author adopts a corpus-based method to examine the use of transitive constructions by Chinese EFL learners, the next issue is to identify the transitive constructions to be examined. Verbs are generally acknowledged to be the determining element in a transitive construction, the "determiner" for other elements (Chomsky, 1957; Goldberg, 1995; Langacker, 2008). Therefore, the identification of transitive constructions with neutral participants can be done through concordancing certain intransitive verbs. This type of transitive constructions take objects which are not affected in the whole event, so they are neutral as if they are not involved in the whole process. They are characterized as [-VOL, -INST, -AFF]. They possess none of the features of the three elements that characterize transitivity, so their position as objects in transitive constructions stands out from other kinds of objects.

We choose three verbs for study: *enter, join* and *reach*. They are selected based as they are among the most frequently used verbs in TCNP both in LOCNESS and SUBWECCL, therefore, their uses can reveal more about Chinese EFL learners' special features in the conceptualization of transitivity. All three verbs are similar in meaning in that they all refer to some kind of movement, and the location is conceptualized as another entity in the moving process, serving as the landmark of action. Landmark is exactly what characterizes the role of object conceptually which is otherwise encoded into language as oblique elements.

The software used for concordance is Antconc. It is a piece of free software that is widely used in corpus related studies. It can be downloaded from its homepage (http://www.antlab.sci.waseda.ac.jp/software.html). Its main functions include concordance, collocates, N-grams, wordlist and keyword list. Sinclair defined a concordance as "a collection of the occurrences of a word-form, each in its own textual environment" (1991, p. 32). All the usages of the node word (the word selected for concordance) can be displayed in vertical forms with its context, through which a word's linguistic behavior can be captured (This is known as Keyword in Context form or KWIC). Regular expressions are used in the searching for keywords so that a verb with all its inflected forms can be concordanced at once. For example, when the author searches for the use of "*kill*", the search expression is "\bkill\b\\bkills\b\\bkilled\b\\bkilling\b\\bKill\b\\bKilling\b", and all usages of "*kill*" will be shown in the concordance window. The display order can be re-sorted with Antconc to show usage patterns of a node word. After re-sorting the result according to the order on each side of node words, the researcher can count the arguments taken by the node word so that they can be classified and their frequency counted.

E.   Data Analysis

For all the three verbs, a series of concordances of different types of transitive constructions can be performed to identify similarities and differences in the use of transitive construction between a NS corpus and a NNS corpus.

The results will be compared between the two corpora of SUBWECCL and LOCNESS to discover the similarities and differences in the use of transitive constructions by Chinese EFL learners. The comparison will also be performed among Chinese EFL learners themselves to examine the conceptual development in a foreign language, as a conceptual system is developing with new experiences, in which language provides the indirect experiences (Lakoff, 1987).

This research is done on the basis of comparison between two corpora, the LOCNESS and the SUBWECCL, and between different levels of Chinese EFL learners. The procedures are summarized below:

Step 1: The selected verbs will be concordanced one by one in the two corpora;

Step 2: The result of concordancing for each verb will be classified into different patterns;

Step 3: For each verb, the frequency of different patterns will be counted in both corpora, and their frequencies will be compared to discover the similarities and differences between them;

Step 4: The arguments of each verbs will be categorized and compared; the shared subjects and objects are identified in blackened forms in each table.

Step 5: the comparison between different levels of Chinese EFL learners will be conducted next in the similar manner.

In a word, the syntactic structures as well as the arguments of the verbs concerned will be compared between the two corpora.

IV.   RESULTS

A.   Enter

There is no *passive voice* patterns used in both corpora but *intransitive* pattern is used more frequently in LOCNESS, which occurs only for four times in SUBWECCL.

TABLE 1
THE DIFFERENT PATTERNS OF *ENTER*

Patterns	LOCNESS		SUBWECCL	
	Frequency	Proportion	Frequency	Proportion
Transitive	37	74%	77	95%
Intransitive	13	26%	4	5%
total	50	100%	81	100%

In the selection of words for subjects, the first person pronoun is used much more frequently in SUBWECCL. Overall, human beings are more likely to be taken as subjects. The six shared words in the two corpora all refer to human beings: *he, man, people, child, who* and *you,* whereas other subject words are more diversified including non-human entities: *dissatificatioin, excrement* and *question* in LOCNESS, which are more peripheral in the category of the subject.

TABLE 2
THE SUBJECTS TAKEN BY ENTER

LOCNESS		SUBWECCL	
SUBJECTS	COUNTS	SUBJECTS	COUNTS
he	**4**	we	12
fighter	2	student	6
Hugo	2	they	6
man	**2**	I	5
Oreste	2	**you**	**4**
people	**2**	China	3
female	1	**child**	**2**
bachelor	1	everyone	2
Britain	1	**people**	**2**
Candide	1	all of us	1
car	1	green	1
child	**1**	**he**	**1**
couple	1	internet	1
dissatisfaction	1	**man**	**1**
eighteen	1	population	1
European	1	society	1
excrement	1	somebody	1
mother	1	**who**	**1**
novice	1		
question	1		
recipient	1		
she	1		
those who	**1**		
women	1		
you	**1**		

While all objects in both corpora are inanimate entities referring to locations, the words used are different. The most often used words are *relationship, sport* and *marriage* in LOCNESS, referring to an abstract position that can only be felt, whereas they are *university, college* and *school* (except *society*) in SUBWECCL referring to a concrete location that can be physically touched. The objects taken by *enter* is more likely to be metaphoric, suggested by the bigger amount of abstract object such as *service*, *indifference* and *work*.

TABLE 3
THE OBJECTS TAKEN BY ENTER

LOCNESS		SUBWECCL	
OBJECTS	COUNTS	OBJECTS	COUNTS
relationship	3	university	26
sport	3	society	16
marriage	2	**college**	**10**
party	2	school	8
program	2	WTO	4
town	2	century	2
Argos	1	netbar	2
bank	1	**career**	**1**
Britain	1	classroom	1
career	**1**	enterprise	1
city	1	it	1
college	**1**	library	1
coma	1	life	1
community	1	them	1
cycle	1	web club	1
homeland	1	word	1
house	1		
indifference	1		
address name	1		
military	1		
mind	1		
fight	1		
room	1		
service	1		
teen	1		
war	1		
work	1		
world	1		

B. Join

There is no passive voice pattern used in the two corpora and there are more uses of Transitive pattern in SUBWECCL

TABLE 4
THE DIFFERENT PATTERNS OF JOIN

Patterns	LOCNESS		SUBWECCL	
	Frequency	Proportion	Frequency	Proportion
Transitive	29	76.3%	15	88.2%
intransitive	9	23.7%	2	11.8%
total	38	100%	17	100%

More words referring to human beings are employed as subjects in SUBWECCL, among which, the 1st person pronouns are more frequently used. There are more inanimate subjects in LOCNESS.

TABLE 5
THE SUBJECTS TAKEN BY JOIN

LOCNESS		SUBWECCL	
SUBJECTS	COUNTS	SUBJECTS	COUNTS
Britain	5	**we**	**3**
he	**2**	they	2
Hugo	2	China	1
American	1	**he**	**1**
Candide	1	Hua Mulan	1
it	**1**	**it**	**1**
newspaper	1	manufacturer	1
people	1	**student**	**1**
student	**1**		
tunnel	1		
UK	1		
we	**1**		
woman	1		

Objects are mainly organizations in both corpora, as indicated by the three shared objects: party, army and group. But there are more human beings acting as objects in LOCNESS than in SUBWECCL. All the objects represent the virtual location that a person can locate himself in, including both the human organizations and activities, while the former are conceptually more deviating from locations.

TABLE 6
THE OBJECTS TAKEN BY JOIN

LOCNESS		SUBWECCL	
OBJECTS	COUNTS	OBJECTS	COUNTS
party	**8**	activity	3
community	3	association	2
market	3	**army**	**1**
army	**2**	effort	1
Europe	2	game	1
group	**2**	**group**	**1**
America	1	me	1
class	1	**party**	**1**
E.C.	1	practice	1
force	1	ring	1
it	1	school	1
KQED	1	WTO	1
organization	1		
upper end	1		
us	1		

C. Reach

Transitive pattern is the dominant pattern in both corpora, but *passive voice* pattern occurs less often in SUBWECCL than in LOCNESS.

TABLE 7
DIFFERENT PATTERNS OF *REACH*

Patterns	LOCNESS		SUBWECCL	
	Frequency	Proportion	Frequency	Proportion
Transitive	45	83.3%	34	87.2%
intransitive	1	1.9%	2	5.1%
passive voice	8	14.8%	3	7.7%
total	54	100%	39	100%

The subjects used are mainly human beings in both corpora, but *we* is used more frequently in SUBWECCL. Table 4.61 indicates that human beings are used more frequently as subjects in SUBWECCL than in LOCNESS, whereas inanimate entities in LOCNESS are used more often than in SUBWECCL.

TABLE 8
THE SUBJECTS TAKEN BY *REACH*

LOCNESS		SUBWECCL	
SUBJECTS	COUNTS	SUBJECTS	COUNTS
he	8	**we**	**7**
it	6	**they**	**4**
they	**4**	**child**	**2**
American	1	group	2
Candide	1	**you**	**2**
case	1	company	1
child	**1**	**all of them**	**1**
Clamence	1	feeling	1
country	1	I	1
dog	1	relationship	1
information	1	she	1
literature	1	technology	1
people	1		
quality	1		
reliance	1		
society	1		
student	1		
we	**1**		
you	**1**		

There are both human beings and inanimate entities used as objects in LOCNESS, but there are only inanimate entities as objects in SUBWECCL, among which *goal, conclusion, agreement* and *level* are all idiomatic collocating words for *reach*. Table 10 below shows that human beings are used as objects at 24.4% in LOCNESS, but none appears in SUBWECCL.

TABLE 9
THE OBJECTS TAKEN BY *REACH*

LOCNESS		SUBWECCL	
OBJECTS	COUNTS	OBJECTS	COUNTS
people	4	goal	6
stage	4	conclusion	4
level	**3**	agreement	3
top	**3**	**level**	**3**
age	**2**	**age**	**2**
compromise	2	**top**	**2**
it	**2**	achievement	1
point	2	apartment	1
reader	2	class	1
university	2	decision	1
state	1	destination	1
C	1	end	1
conclusion	1	field	1
court	1	impasse	1
triple digit	1	**it**	**1**
equality	1	potential	1
height	1	standard	1
hell	1	success	1
land	1	virtue	1
love	1	wish	1
many	1		
other	1		
proportion	1		
school	1		
shore	1		
teen	1		
them	1		
us	1		
year	1		

D. Comparison between Different Levels of Chinese EFL Learners

We see the differences in the use of TCNPs between Chinese EFL learners and native speakers, and then we check the uses by different levels of Chinese EFL learners. We find that transitive pattern is the predominant pattern across all three levels, indicating the similarity among them. The other two patterns are used very rarely, indicating their peripheral status for Chinese EFL learners.

TABLE 10
COMPARISON OF DIFFERENT PATTERNS AMONG DIFFERENT LEVELS OF CHINESE EFL LEARNERS

Patterns	Level 1		Level 2		Level 3	
	Frequency	Proportion	Frequency	Proportion	Frequency	Proportion
Transitive	35	95.1%	58	90.6%	33	91.7%
Intransitive	1	2.7%	5	7.8%	2	5.6%
Passive voice	1	2.7%	1	1.6%	1	2.7%
total	37	100%	64	100%	36	100%

We is the most frequently used subject across all three levels. There are four words occurring in all three levels: *we (us), they(them), you, I* and *student*, all referring to human beings and first person pronoun is heavily relied upon across all three levels. Besides, five words occur at two levels: *child, China, everyone, group* and *he*. The three levels are similar in their use of subjects.

TABLE 11
COMPARISON OF SUBJECTS AMONG DIFFERENT LEVELS OF CHINESE EFL LEARNERS

LEVEL 1		LEVEL 2		LEVEL 3	
SUBJECTS	COUNTS	SUBJECTS	COUNTS	SUBJECTS	COUNTS
we	**6**	**we**	**8**	**we**	**8**
they	**4**	**they**	**7**	child	2
you	**4**	**student**	**4**	China	2
I	**3**	China	2	**student**	**2**
child	2	**I**	**2**	he	1
company	1	people	2	**I**	**1**
everyone	1	**all of them**	**1**	internet	1
feeling	1	**all of us**	**1**	it	1
green	1	everyone	1	man	1
group	1	group	1	relationship	1
Hua Mulan	1	he	1	she	1
student	**1**	manufacturers	1	society	1
		population	1	technology	1
		somebody	1	**they**	**1**
		who	1	**you**	**1**
		you	**1**		

For the objects used by Chinese EFL learners, four words are used among all three levels: *university, school, college* and *society*, while the former three words refer to basically the same institution, the latter is a metaphorical use because there is no shape or concrete position of a *society*. Other eight verbs are used in two levels: *activity, agreement, conclusion, goal, it, level, netbar* and *WTO,* which are more metaphorical in meaning.

TABLE 12
COMPARISON OF OBJECTS AMONG DIFFERENT LEVELS OF CHINESE EFL LEARNERS

LEVEL 1		LEVEL 2		LEVEL 3	
OBJECTS	COUNTS	OBJECTS	COUNTS	OBJECTS	COUNTS
society	**5**	**university**	**19**	**society**	**5**
goal	4	**college**	**6**	**school**	**4**
university	**4**	**society**	**6**	conclusion	3
college	**3**	**school**	**3**	**university**	**3**
school	**2**	WTO	3	age	2
top	2	activity	2	century	2
achievement	1	agreement	2	level	2
agreement	1	association	2	WTO	2
apartment	1	goal	2	activity	1
army	1	conclusion	1	**college**	**1**
career	1	effort	1	decision	1
class	1	enterprise	1	destination	1
classroom	1	it	1	group	1
end	1	library	1	impasse	1
field	1	netbar	1	it	1
game	1	parties	1	life	1
level	1	potential	1	me	1
netbar	1	practice	1	ring	1
them	1	standard	1		
virtue	1	success	1		
web club	1	wish	1		
		word	1		

V. DISCUSSIONS

A. Syntactic Patterns

The common semantic feature of TCNP is that the objects usually serve as the context or surroundings rather than a patient, the endpoint of energy transfer.

Passive voice is seldom used, as indicated by the fact that both *enter* and *join* are not used in *passive voice* pattern in both corpora, and it occurs at a relatively smaller percentage with *reach*, which is used even less frequently in SUBWECCL, suggesting some mental effort required for such kind of conceptualization as the default way of conceptualization with TCNP is mainly active rather than passive. The location objectivized in TCNP is usually used as background, oblique element in a syntactic structure, so it is less prominent than trajector and landmark in conceptualization. The passivation is meant to emphasize the role of objects with correspondingly more attention, but to emphasize such an oblique backgrounded element is against the default way of conceptualization. They are naturally rarely used.

In both corpora, transitive use is the predominant form, suggesting the similarity of the conceptualization between Chinese EFL learners and NSs. Chinese EFL learners' such use is interesting because they do not mis-insert a preposition between the verbs and objects, as one might think they are prone to commit such errors. Chinese EFL

learners must have noticed the ungrammaticality of insertion of unnecessary preposition to avoid such errors. Usually the background is placed behind a preposition denoting the position. But TCNU can be used with such preposition.

Also item-based learning factor may be involved, as displayed by the high frequency of e*nter school, join army, and reach goal/conclusion*. These items help learners avoid the error of insert unnecessary prepositions between the verb and its object.

B. Arguments

Inanimate nouns are used as subjects more frequently in LOCNESS. With human beings subjects, more first person pronouns are used in SUBWECCL. Interestingly, the situation is just the opposite for the choice of objects. Except *enter*, the other two verbs take more human beings as objects in LOCNESS. While the subjects in SUBWECCL are predominantly human beings, the objects are mainly inanimate. Chinese EFL learners stick more to the prototypical role of agents and patients with less deviation from the transitive prototype.
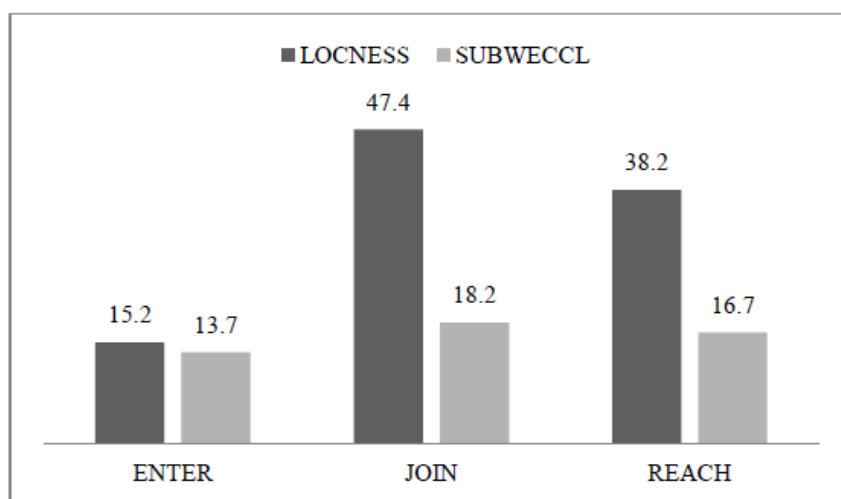

Figure 1 Percentages of the use of inanimate subjects

Obviously, the objects of such verbs are supposed to play the role of surroundings, describing a context or a location, which is either a location literally or metaphorically. Human beings are not the usual choice to fulfill this role. Further, human beings are supposed to be the subject carrying out the action instead of the passive role of object. That's why human beings as object seldom occur in TCNP. To conceptualize human beings as location needs to deviating from the prototypical patient, thus requires more mental effort than, say, words meaning locations literally. The transformation of human beings from an active person to a passive role of positioning cannot be readily used by Chinese EFL learners.

Except for *enter*, the other two verbs in this group have human beings as the object. Figure 2 indicates that Chinese EFL learners are less likely to use volitional entities as objects, fulfilling the role of landmark such as *join the army/army/us*, or *reach us/people/reader*.
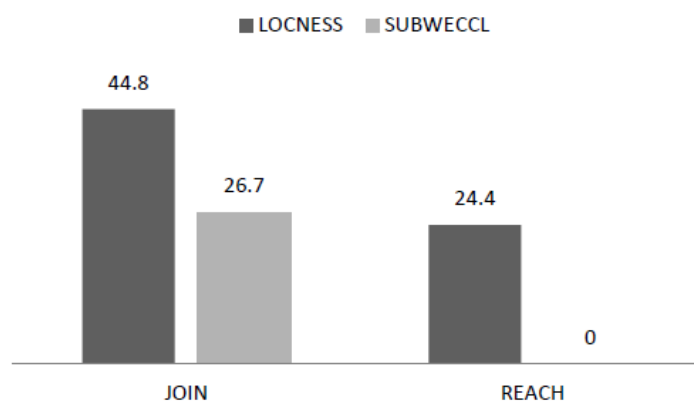

Figure 2 Percentages of the use of volitional objects

The three verbs are supposed to take locations as their objects, but their uses can be metaphorical when the location is conceptual rather than real. *Enter* is followed by two different kinds of objects: those referring to locations such as *university, college*, and those referring to abstract positions such as *relationship, sport, marriage*. The abstract objects can be seen as metaphorical extension from the more basic concrete locations. This kind of metaphorical are used both

in LOCNESS than in SUBWECCL but in different ways than they are used literally, suggesting the diversity of metaphorical conceptualization between Chinese EFL learners and NSs. In fact, the use of human beings as objects can also be considered as metaphorical in the sense that human beings are treated as locations. The diversified nature of metaphorical locations is in comparison with the relatively similar literal locations. It suggests the similar use of literal expressions and different use of metaphorical expressions.

C. Fossilization in L2 Acquisition of TCNPs

All three levels of Chinese EFL learners rely heavily on transitive pattern, and their choice of subjects is human beings, the prototypical agent. Their rare use of passive voice pattern is understandable as human beings acts as the moving participants in the event, and locations acts as an objectivized entity. The mover is naturally the primary focus and is accorded the status of subjects, whereas the location acts as the background which is the exactly the role of landmark. In passive patterns, the location acts as the trajector given most attention and mover is placed at the backgrounded position. It is against the human conceptual tendency. Therefore, the rare use of *passive voice* pattern is the natural result of L2 conceptualization. More frequent uses by NSs are the result of conceptual distortion of default conceptualization, requiring more mental effort that Chinese EFL learners are not ready to use, indicating the difficulty in acquiring the necessary conceptual competence even for advanced Chinese EFL learners.

Subjects used also show a similar pattern. As the verbs in this group all refers to movement, subjects are naturally all words for human beings, as displayed by the subjects occurring in all three levels: *we, they, you, I* and *students*. Chinese EFL learners tend to construct an event with human beings as the subject, especially with themselves as the starting points, therefore, the subjects are heavily relied on first and second person pronouns and *student* as they are student themselves.

Objects used are also similar, as the most frequently used objects are all words referring to a particular institution that they are familiar with, namely *school* (no matter it is *university, college*). *Society* also acts as kind of a school metaphorically as an extension of schools.

Overall, the three levels are similar in their using of TCNPs regarding both the syntactic patterns and arguments in TCNPs. The similarity of their choice of arguments is indicated by Table 16. The semantic feature of TCNP determines that deviation from it default use of SVO structure (in which human beings as subjects and location as objects) is difficult, which reduces the possibility for Chinese EFL learners' other uses.

TABLE 13
SIMILARITIES OF ARGUMENTS IN TCNP

Levels	subject			object		
	subjects used at three levels	total	percentage	objects used at three levels	total	percentage
Level 1	18	26	69.2%	14	35	40%
Level 2	24	35	68.6	34	58	58.7%
Level 3	13	25	52%	13	33	39.4%

One thing deserving attention is their rare use of *intransitive* pattern. Usually the use of location acts as landmark is followed by prepositions, which means that the Chinese EFL learners might follow this rule and insert preposition between intransitive verbs and their objects unnecessarily. The result indicates that all three levels of Chinese EFL learners use them correctly without intransitivizing them. We guess the reason is Chinese EFL learners' grammar monitor mechanism (Krashen, 1985), which alerts them when any linguistic usage deviates from the traditional conceptualization. As location acting as landmark are usually used with preposition, Chinese EFL learners find this type pf transitive verbs functions differently, therefore paying more attention to their linguistic behavior and avoid the insertion of preposition. The same fact can also explain why Chinese EFL learners use more intransitive pattern with ingestive verbs, as they act prototypically and they get negative feedback.

VI. CONCLUSION

The author argues that the features in Chinese EFL learners' use of TCNPs are the result of prototypical effects. The conceptual systems of both Chinese EFL learners and NSs are based on prototypes. While NSs are more flexible in adapting the transitive prototype to express their unique conceptualizations through conceptual devices such as the attention, profiling and perspective, leading to a flexible use of transitive constructions, Chinese EFL learners are more dependent on prototypes and are bound by them in conceptualization, leading to a more prototypical use of TCNPs. Chinese EFL learners' heavy reliance on prototypes can lead to fossilization in language acquisition. The binding power of prototypes is not just limited to the acquisition of transitive constructions, but has serious impacts on L2 acquisition as a whole. Consciously combating against the conceptual paradigm in L1 can serve to deconstruct existing prototypes and contributes to the goal of native-likeness in L2 acquisition.

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