CHAPTER 2

LITERATURE REVIEW

In this chapter, I will review the related literature. In section 2.1 the concept of interlanguage will be described. Then in section 2.2 the SLA theories related to interlanguage studies and my theoretical framework developed from these theories will be introduced. Next in section 2.3 some empirical studies regarding the topic structures in L2 learners' interlaguage will be reviewed. Finally in section 2.4 the summary of this chapter will be made.

2.1 The Concept of Interlangauge

The term "interlanguage" is coined by Selinker (1972), referring to both the internal system revealed by L2 learners at a single point in time and to the series of interconnected systems developed by L2 learners' progress over time. Alternatively, it is termed "transitional competence" (Corder, 1967) or "approximative system" (Nemser, 1971). Thus interlanguage, as the term reveals, is independent of L1 and L2. It is a dynamic process which starts from L1 and proceeds all the way to L2.

In contrast to the contrastive analysis (CA) tradition in the 1960s, which attributes learners' errors to differences between L1 and L2 and regards errors as old

L1 habits to be abandoned, the interlanguage position claims that learners' errors

reflect learners' current rules formulated via a hypothesis-testing process on the basis

of input data (Corder, 1981). Thus the concept of errors has been replaced by the term

'dialect (p.15)', in that every utterance of learners is rule-governed in their 'dialect'.

Also in contrast to error analysis (EA) in the 1970s, which replaces CA and

focuses only on the errors actually produced by L2 learners at a single point in time,

the interlanguage position also accounts for the correct responses of L2 learners, their

development over time, and their avoidance phenomena (Ellis, 1994).

According to Selinker (1972), three processes and three strategies are at work in

the interlanguage system:

1. <u>Language transfer process</u>: Some rules of the interlanguage may be transferred

   from learners' L1.

2. <u>Transfer of training process</u>: Some components of the interlanguage may be

   attributed to the special emphasis in the input made by the textbook or the teacher.

3. <u>L2 overgeneralization process</u>: the overgeneralization of L2 features.

4. <u>Strategies of second language learning</u>: The deliberate attempt of the learner to

   learn L2, such as rote repetition.

5. <u>Strategies of second language communication</u>: Learners adopt these strategies

   when they have difficulty in expressing their thoughts given the limited L2

knowledge.

6. <u>Strategies of simplification</u>: such as reducing two forms of present tenses to one.

Therefore, the source of interlanguage is not limited to L1 or L2. The

interlanguage system itself is also responsible for the outcome. That is, the concept

"interlanguage system" is similar to universal grammar (UG), or the language

acquisition device (LAD) proposed by Chomsky (1986). This interlanguage system

has to make sense of the input data and restructures itself whenever the input data is

found to be in conflict with the current interlanguage grammar.

In sum, unlike CA and EA, the interlanguage position renders L2 learners a more

active role of rule-creator, rather than a passive one of habit-carrier. Interlanguage as a

whole is rule-governed, systematic, and is constantly changing accompanied by the

exposure to input and the possible subsequent restructuring of the whole system.

Besides, not only correct and incorrect responses, but also production and

underproduction are to be considered in analyzing learners' interlanguage.

2.2 SLA Theories and My Theoretical Framework Developed from Them

The study of interlanguage in second language acquisition has been investigated

mainly from three perspectives: L1 influence (Lado, 1957; Corder, 1981; Schachter

and Rutherford, 1979; Rutherford, 1983; Selinker, 1983), the existence of UG

(Chomsky, 1981, 1986; White, 1989a; Cook, 1985), and the subset principle (Wexler

and Manzini, 1987; White, 1989b; Yip, 1995; Ayoun, 1996). In this section the three

theories and the relevant empirical studies will be introduced in section 2.2.1, 2.2.2,

and 2.2.3 respectively, and my theoretical framework developed from the three

perspectives will be described in section 2.2.4.

2.2.1 L1 Influence

According to the behaviorist theories on which CA is based, the main difficulty

of L2 learning is attributed to prior L1 knowledge (Brooks, 1960). The extent of

difficulty lies in the similarities and difficulties between L1 and L2. That is, when L1

and L2 features are equal, L1 positive influence will take place and facilitate L2

learning, but when L1 and L2 features are different, L1 negative influence will occur

and inhibit L2 learning. The positive influence comes in the form of positive transfer,

and the negative one in the form of negative transfer or avoidance (of L2 difficult

forms) or over-use (of L2 simple forms) (Ellis, 1994). Positive transfer is the

facilitative effect of L1 in L2 learning revealed by learners' fewer number of errors

and their faster rate of learning (Ellis, 1994). Negative transfer, on the other hand, is

the L1 properties shown in erroneous L2 production because of their deviance from

the target forms (Selinker, 1983). Avoidance is the underproduction of L2 forms due

to the perceived difficulty because of differences between learners' L1 and the L2;

over-use of L2 simple forms often results from avoidance of L2 difficult forms

(Levenston, 1971).

However, empirical studies have shown that the differences between L1 and L2 do not necessarily lead to difficulties in L2 learning, and in fact the similarities between them are problematic for learners; in addition, structural equivalence between L1 and L2 do not necessarily induce positive transfer either (Larsen-Freeman and Long, 1991). L1 is found to influence SLA in more complex ways. Namely, L1 transfer generally interacts with developmental processes, and is constrained by various kinds of linguistic markedness (pp.106-107).

As for developmental processes, L1 transfer is promoted when L1 features conform to developmental errors (Zobl, 1980), but is reduced when L1 features are strongly dissimilar to them. The promotion of L1 transfer is reflected in the delayed progress of a developmental stage, and the reduction of L1 transfer is shown in the higher speed of passage through a developmental sequence.

As for markedness, unmarked forms are more transferable than marked ones. There are two types of markedness—typological markedness (Zobl, 1984) and universal markedness (Chomsky, 1986). Typological markedness assumes that L1 must meet three criteria to be unmarked and thus transferrable—productive in L1, frequently used, and not be historically endangered of disappearing. On the other hand, universal markedness differentiates core rules and peripheral ones. The former

consists of marked (i.e., idiosyncratic rules) and the latter includes both marked and unmarked rules. Both the two types of markedness claim that unmarked forms are more likely to be transferred.

In sum, L1 influence is not solely attributable to the similarities and differences between L1 and L2. Both positive and negative effects of L1 influences can be better understood when developmental stage and markedness are also considered.

2.2.2 The Existence of UG

Universal grammar (UG), according to Chomsky (1986), is the language acquisition device available in L1 acquisition. This device consists of a set of principles regulating the choices of parameters, and is triggered by children's exposure to the relevant L1 input. It ensures the uniform success of L1 acquisition. However, whether UG continues to operate in L2 acquisition has been a controversial issue until recently. There were mainly two main branches and three sub-branches of hypothesis about the existence of UG in L2 acquisition (White, 1989a), as outlined in Table 1.

Table 1: the hypotheses about UG in L2 acquisition

Hypothesis	Sub-branches	Position
1.UG is dead	NA	UG is not active in L2 acquisition
2.UG is not dead	(1) Direct access to UG	Initial state: L2; parameters can be reset
	(2) Indirect access to UG	Initial state: L1; parameters can be reset
	(3) Partial access to UG	Only the part of UG which is exemplified in L1 is active; L1 parameters **cannot be reset**

If UG is dead or partially dead, L2 learners will not be able to reset the

parameters for the L2. By contrast, both the direct and indirect accesses to UG enable

learners to reset L1 parameter for L2. The access to UG is indirect if it proceeds with

the initial L1 influence, and is then followed by possible parameter resetting. On the

other hand, the access to UG is direct if L2 learners start with the L2 input, without

L1 influence.

Empirical studies have shown that the nature of input is important to trigger UG

in L2 acquisition (Lightbown and Spada, 1990; White, 1991; White et al, 1991).

Therefore, it has been proposed that the positive input should be enhanced in order to

make it more salient (White et al, 1991; Sharwood Smith, 1993).

In sum, UG is undoubtedly available to L1 acquisition, but its role in

interlanguage development is closely related to the nature of L2 input.

2.2.3 The Subset Principle

The UG hypothesis only mentions the setting of parameters, but it does not

mention how to guide the direction of parameter setting. The subset principle, on the

other hand, is a learning principle guiding the way parameters are to be set (Ayoun, 1996). According to Wexler & Manzini (1987), the subset principle functions when two grammars are in a superset-subset relationship. This principle is motivated by an attempt to solve the learnability problem found in L1 acquisition--overgeneralized grammar--and it interacts with UG in guiding the direction of parameter resetting (White, 1989a; Yip, 1995).

This learning principle is based on the assumption that acquisition can be achieved through 'positive evidence only' and denies the existence of negative evidence. The operation of it is to avoid overgeneralization and wild grammar by choosing the more restricted parameter setting first and then generalize it to the target parameter setting, as illustrated in figure 1.
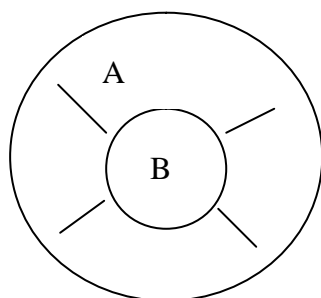
A: L1 parameter setting

B: UG default parameter setting

Subset principle: choose B first, then generalize to A based on positive input

Figure 1: the subset principle in L1 acquisition

The subset principle can also apply in L2 acquisition where L1 parameter setting forms a subset of L2 setting as a superset, but problems arises when the L1 parameter setting forms a superset of L2 setting as a subset. This causes a serious learnability problem since the L1 parameter setting cannot be restricted to the narrower setting

only by positive evidence, as shown in figure 2.
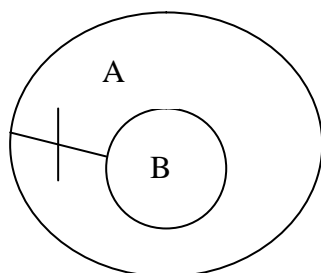
A: L1 parameter setting

B: L2 parameter setting

<u>Subset principle:</u> blocked in the attempt

to reset A for B based on positive input

Figure 2: the subset principle in L2 acquisition

In the absence of negative evidence, the original parameter setting A (L1) seems unable to be reset for B (L2). In order to solve this problem, Wexler& Manzini (1987) propose that learners will map L2 input data with the smallest value compatible with it; Yip (1995), on the other hand, argues for another learning principle: preemption, i.e., uniqueness—one-to-one mapping of form and function.

However, empirical evidence has shown that the subset principle does not successfully explain L2 acquisition (White, 1989b; Rutherford, 1989; Finer& Broselow, 1986)[1], and indeed negative evidence exists in L2 formal instruction and will trigger the process of L1 parameter resetting for the L2 (White, 1991). Thus, there is no need to stipulate either Wexler and Manzini's L2 value mapping or Yip's preemption.

In sum, the subset principle which is based on 'positive evidence only' hypothesis successfully explains L1 acquisition, but it cannot explain L2 acquisition

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[1] Both White (1989b) and Rutherford (1989) found that the predictions of the subset principle does not work since their subjects cannot reset the parameter setting of the L1 superset, and L1 transfer better explains these cases.

when L1 already forms a superset of L2, resulting in learnability problems—L1

transfer. Thus negative evidence has its role in solving such learnability problems.

2.2.4 My Theoretical Framework of the Operation of Interlanguage System

My theoretical framework of the operation of interlanguage system is developed

from the above three SLA perspectives. The perspective from L1 influence states that

L1 influence does not necessarily result in L1 transfer, and that markedness and

developmental stages should be considered in order to determine the effect of L1

influence; the perspective from UG claims that access to UG in L2 acquisition is

largely determined by the nature of input; the perspective from the subset principle

infers that when L1 generates the superset of L2, learnability problem in the form of

L1 transfer will occur.

Based on these three SLA perspectives, my theoretical framework of the

operation of interlanguage system is formulated, as illustrated in figure 3 and
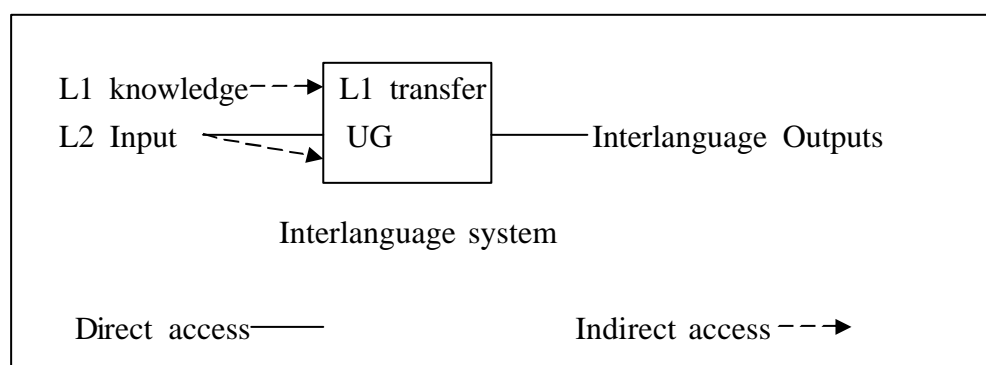
hypotheses 1-2.

Figure 3: my theoretical framework of the operation of interlanguage system

Hypothesis:

1. L1 transfer occurs if any of the following conditions is met:

    a. L1 features are unmarked

    b. L1 features overlap with the outputs of a developmental stage

    c. L1 features form a superset of L2 subset

? the more conditions the L1 features match, the more transferable these features are.

2. Direct input (explicit triggering data for parameter resetting) and indirect input (implicit triggering data) determine the relative difficulty of incorporating L2 inputs into the interlanguage system. That is, direct inputs enter the interlanguage system more easily than do indirect ones. L2 inputs can be made more direct (explicit) via input enhancement or other techniques. Only when the L2 inputs enter the interlanguage system will UG operate in L2 acquisition

This framework assumes that the interlanguage system consists of two major

processes-- L1 transfer and UG. However, some conditions must be met before the

two processes actually operate. For L1 transfer to occur, there are three possible

conditions. The more the matched conditions, the more likely L1 transfer will happen.

On the other hand, for UG to take place, the nature of input is important. The more

direct (explicit) the input is, the more probable it will enters the interlanguage system.

2.3 Empirical Studies of the Topic Structures in Interlanguage

The topic structure (i.e., topic-comment structure) in L2 learners' interlanguage

has been investigated based on the three theories discussed above—L1 influence, the

existence of UG, and the subset principle. I will review the three sets of empirical

studies in section 2.3.1, 2.3.2, and 2.3.3, respectively.

2.3.1 L1 Influence on Topic Structures

There are five studies investigating the topic structures in L2 learners'

interlanguage in terms of L1 influence—Zhang's (1987), Schachter and Rutherford's (1979), Rutherford's (1983), Green's (1996), and Xiao's (1998) studies. Among these studies, most of the L2 setting is ESL (i.e., English as a Second Language), except for Zhang's (1987) study, which is EFL (i.e., English as a Foreign Language). Their subjects range from school-age child learners (Xiao, 1998) and high school learners (Zhang, 1987) to adult learners (Schachter and Rutherford; Rutherford, 1983) or to advanced learners (Green, 1996). Except for Xiao's longitudinal oral data, all of the data they elicit is cross-sectional written data. In terms of the subjects' linguistic background, all the studies investigate Chinese learners, whose L1 is topic prominent. However, Schachter and Rutherford (1979) and Rutherford (1983) also investigate L2 learners from other linguistic backgrounds, including Japanese, Korean, Arabic, and Spanish.

Despite the methodological differences, they all conclude that the topic-comment structure in learners' interlanguage is attributable to the transfer of L1, which is a topic prominent language. The examples of topic structures are shown in (1)-(5).

(1) *To do this/ must have patience.*   (Zhang, 1987: 74)
     Topic   comment
(2) *These ways/ almost can classify two types.*   (Schachter and Rutherford, 1979,
         topic   comment   cited from Rutherford, 1983: 360)
(3) *A man choose a wife/ is a man's business.* (Rutherford, 1983: 360)
          Topic   comment
(4) *China people/ live conditions very poor.* (Green, 1996: 121)
      Topic   Comment

(5) Yun: Do you have a rabbit? Cong: *He, /name is Rita.* (Xiao, 1998: 85)
    Topic/ comment

However, as mentioned in the previous section, L1 transfer is promoted when it

is identical to the feature typical of a developmental stage, causing a delay of

developmental passage through this stage. In fact, there are empirical studies which

have found that topic structures in learners' interlanguage reveal a universal

topic-comment stage in early stage of L2 acquisition (Huebner, 1983; Fuller and

Gundel, 1987; Sasaki, 1990). Therefore, in the case of Chinese learners learning

English, whose L1 is topic prominent, the L1 transfer of topic structures is promoted

and the early stage of topic prominence may be prolonged.

In sum, transfer of L1 topic structures is found in the interlanguage of learners

whose L1 are topic prominent languages. Since the topic-comment structure is also

typical of a developmental stage, the transfer of it is enhanced and will cause a delay

of passage through this developmental stage.

2.3.2 UG on Topic Structures

The set of studies which claim an early developmental stage of topic-comment

structure (Huebner, 1983; Fuller and Gundel, 1987; Sasaki, 1990) show evidence of

the operation of UG. Aside from these studies, there is also one study which discusses

the effect of UG on the topic structure of the interlanguage—Yuan's (1997) study, but

focuses on parameter resetting.

These studies include both EFL (Sasaki, 1990; Yuan, 1997) and ESL settings (Huebner, 1983; Fuller and Gundel, 1987). They investigate high school (Sasaki, 1990) or adult learners (Huebner, 1983; Fuller and Gundel, 1987) or a combination of levels including middle school, university student, and university teachers (Yuan, 1997). The nature of their investigation is longitudinal (Huebner, 1983) or cross-sectional (Fuller and Gundel, 1987; Sasaki, 1990; Yuan, 1997). The data they collect is naturalistic oral data (Huebner, 1983; Fuller and Gundel, 1987) or elicited written data (Sasaki, 1990) or metalinguistic judgment data (Yuan, 1997). The subjects they select come from either single linguistic background--Hmong (Huebner, 1983), Japanese (Sasaki, 1990), and Chinese (Yuan, 1997)--or multiple linguistic backgrounds-- topic prominent languages: Chinese, Japanese, and Korean and non-topic prominent languages: Arabic, Farsi, and Spanish (Fuller and Gundel, 1987).

Despite the methodological differences, they conclude that the early stage of L2 acquisition reveal the topic-comment structure, as shown in (6)-(9).

(6) *yu / nais.* (Huebner, 1983:70, transcription of oral data)
    Topic/comment
     'It's really nice for you.'

(7) *The boy/ he didn't see the cat.* (Fuller and Gundel, 1987: 6)
      Topic / comment

(8) *Shoes / is tiger give.* (Sasaki, 1990:340)
     Topic/ comment

(9) a. I once met John's girl friend$_i$. $\emptyset_i$ */was very beautiful* (Yuan, 1997:480)
                     Topic/ comment

b. When you finish using *the computer$_i$,/ please let me use Ø$_i$ for a while*.
                    Topic   /   comment

Yuan's (1997) is different from the other studies in that he also examines how

UG operates in the unlearning of the topic-comment structure. He proposes a [+topic

drop] parameter of Chinese setting, and claims that Chinese learners of English have

to reset the parameter as [-topic drop] for English. He also finds that Chinese subjects

have asymmetric responses to null subjects and null objects, the former responses

being better than the latter ones. He attributes the better responses in null subjects to

the positive evidence provided by tense and agreement in English, and the worse

responses in null objects to the lack of informative evidence. However, he does not

mention one point that, since his subjects are speakers of Chinese, a topic prominent

language, L1 transfer is promoted and the topic-comment stage is predicted to be

prolonged.

In sum, the early topic-comment stage in the interlanguage of L2 learners is

universally found. This stage will be prolonged when learners' L1 is a topic prominent

language. In order to learn L2 as a non-topic-prominent language such as English, the

L1 parameter needs to be reset on the basis of positive evidence.

2.3.3 The Subset Principle on Topic Structures

I will review two studies based on the learnability account of topic structures in

interlanguage—Yip (1995) and Ou (1997), the former being experimental and the

latter being observational. Their L2 setting is ESL (Yip, 1995) or EFL (Ou, 1997).

Their subjects are college students (Ou, 1997) or graduate students (Yip, 1995).

The nature of their investigation is longitudinal (Ou, 1997) or cross-sectional (Yip,

1995). The data they collect is written production data (Ou, 1997) or an additional

metalinguistic judgment data (Yip, 1995). The only thing in common is their

subjects' linguistic background –Chinese as L1.

Despite the methodological differences, they both find similar topic structures in

their learners' interlanguage, as shown in (10). Yip also found another type in (11).

(10) *New cars/ must keep inside.* (Yip, 1995b:17; Ou, 1997)
    Topic /   comment

(11) *There's a lot of people/ find their husband or wife in parties.* (Yip, 1995a: 192)
    Topic   / comment

The example in (10) is called pseudo-passive, and that in (11) is called existential

pseudo-relatives (Schachter and Ruterford, 1979; cited from Yip, 1995a: 30), referring

to learners' failure in their attempt to produce correct English passives and relative

clauses. They all represent the overgeneralization of L1 topic structures. According to

Yip (1995a), the superset-subset relation of the two structures in Chinese

interlanguage and English is shown in figure 4.
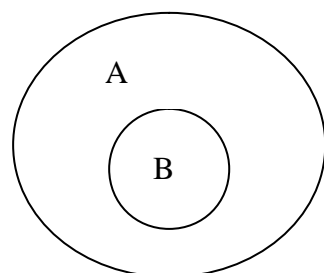
A: Chinese interlanguage topic structures

B: English topic structures

Figure 4: topic structures in Chinese interlanguage and English   (Yip, 1995a: 121)

Yip (1995a) claims that English topic structures are restricted to the colloquial left-dislocation and the more formal or archaic topicalization which is contrastive in nature, while Chinese topic structures include the more prevalent use of the two structures in addition to the double-subject construction. Thus English topic structures form a subset of the Chinese as a superset, creating the learnability problems for Chinese learners to recover from the superset grammar only on the basis of positive evidence. As mentioned in the previous section, L1 transfer will override the subset principle in this case—L1 as a superset of L2.

In sum, the subset principle account of topic structures in interlanguage emphasizes the superset-subset relation between L1 and L2, which in turn decides the learnability of the topic-comment structures. Chinese learners' problems in unlearning topic-comment structures arises from their L1 being a superset of the English L2.

The above research on topic structures in interlanguage is outlined in Table 2:

Table 2: outline of the research on topic structures in interlanguage

Theory	Researcher	Setting	Level	L1	Data
L1 influence	Zhang (1987)	EFL	High school	Chinese	Written
	Schachter&Rutherford (1979)	ESL	College	TP and non-TP	Written
	Rutherford (1983)	ESL	College	TP and non-TP	Written
	Green (1996)	ESL	Advanced	Chinese	Written
	Xiao (1998)	ESL	7-8 year old	Chinese	Oral
UG	Huebner (1983)	ESL	Adult	Hmong	Oral
	Fuller and Gundel (1987)	ESL	Adult	TP and non-TP	Oral
	Sasaki (1990)	EFL	High school	Japanese	Written
	Yuan (1997)	EFL	Teenagers/adult	Chinese	Intuitional

Theory	Researcher	Setting	Level	L1	Data
Subset principle	Yip (1995a, b)	ESL	Graduate student	Chinese	Written & Intuitional
	Ou (1997)	EFL	College	Chinese	Written

As can be observed easily, most studies focus on ESL setting, those which

investigate EFL setting are relatively few. Moreover, most studies choose adult

learners as their subjects, while few studies choose junior high school students. In

addition, most studies collect only one type of data, being oral or written. Since

different type of tasks may produce different results (Larsen-Freeman & Long, 1991),

more than one elicitation technique should be employed. Therefore, the present study

will focus on junior high school students in EFL setting and will use three different

kinds of tasks to elicit interlanguage.

On the other hand, although all of the related studies find the topic structures in

learners' interlanguage, most studies have not provided a comprehensive framework

to describe the exact nature of topic structures, as shown in table 3.

Table 3: the topic structures found in the related research

Theory	Researcher	Topic structures
L1 influence	Zhang (1987)	subject-less sentences
	Schachter&Rutherford (1979)	putative-passives[2] and serial verbs with existentials
	Rutherford (1983)	putative-passives and serial verbs with existentials
	Green (1996)	coding of topic in sentence-initial position/ null subject/ double subject/ left-dislocation/ serial verb with no subjects& existential/ pseudo-passive

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[2] Putative passive is another term for pseudo-passive—the failure of learners' attempt to produce passives and this failure lead to non-target forms.

Theory	Researcher	Topic structures
	Xiao (1998)	no dummy subject/null subject/no agreement /no copula & main verb/ object-topic-deletion/double subject/ left & right dislocation / topicalization
UG	Huebner (1983)	coding of topic/ pseudo-passives/no dummy subject/coreferential deletion/V-final
	Fuller and Gundel (1987)	coding of topic in sentence-initial position/ double subject/ zero anaphora/no dummy subject/no passive/no agreement
	Sasaki (1990)	pseudo-existential[3]
	Yuan (1997)	null subject/null object
Subset principle	Yip (1995a, b)	pseudo-passive/pseudo-existential
	Ou (1997)	pseudo-passive

Only Green's (1996), Xiao's (1998) and Fuller and Gundel's (1987) studies offer a relatively more comprehensive framework to describe the topic structures in interlanguage. However, they don't adopt exact terminologies to classify them. Therefore, the thesis will provide a comprehensive framework to describe the topic structures in Chinese learners' interlanguage based on a comparative study of Chinese and English topic structures, and use definite terminologies to name these topic structures.

2.4 Summary of Chapter 2

I have discussed the concept of interlanguage in section 2.1 and mentioned the differences of it from CA and EA, in that it gives learners a more active role as a rule-creator and it considers errors together with non-errors, and production as well as underproduction. Besides, in section 2.2 I have described three related linguistic

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[3] Pseudo-existential is the non-target form made by learners in an attempt to produce existentials.

theories on interlanguage studies—L1 influence, the existence of UG, and the subset

principle—and developed out of them the present theoretical framework of

interlanguage system. Finally in section 2.3 I have reviewed the empirical studies on

the topic-comment structures in interlanguage based on the three theories and found

that most studies investigate adult learners in ESL setting and adopt only one way of

data collection without classifying topic structures under a comprehensive framework.

Thus, further studies are needed to incorporate more ways of data collection in the

EFL setting with respect to different types of topic structures under a comprehensive

framework and exact terminologies, and to choose younger learners.