硕士学位论文

汉英语码转换词汇句法特征的优选论分析

学科专业：英语语言文学　　　　研究方向：语言学及现代英语

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内　容　摘　要

在语码转换研究领域，学者们普遍认为在一句话的什么地方进行语码转换不能简单理解为说话者一时兴起之作，也不能仅仅看作是某个语言社区的习惯使然。换句话说，语码转换存在语法限制，尽管学者们就究竟有哪些语法限制尚无定论。

本文有两个目标：（1）对汉英语码转换的词汇句法特征提供充分的描述；（2）在优选论框架内对这些词汇句法特征进行解释。由于句子层面以上的语码转换没有语言系统之间的相互作用，因此本文主要研究汉英句内语码转换。此外，语码转换现象很复杂，除了受到语法限制外，还受到诸如社会因素、心理因素等的制约，所以为了尽量不受其他因素的干扰，本文主要集中研究那些不可能或极少可能发生的汉英句内语码转换，以找出其词汇句法制约条件。

在讨论这些中心问题以前，本文在第二章对一些和语码转换相关的术语做了区分，主要讨论了语码转换与语码混合，语码转换与借词等概念的区别。就语码转换与语码混合而言，本文采用前者，将其用于包括句内和句间语码转换。而就语码转换与借词而言，本文一方面同意 Poplack 的观点，认为它们有区别，借词属于语言（或语言能力），语码转换则属于言语（或语言行为）；并接受其同化标准。另一方面，我们也接受 Myers-Scotton 的观点将借词区分为文化借词和中心借词，并同意其频率标准。文化借词和中心借词将以不同的标准区别于语码转换。

在区别这两组相关概念的基础上，本文将语码转换定义为说话者在同一句话里使用了来自于两个或多个不同语码系统的语码单位的一种语言行为现象。在这个定义中，（1）语码单位可以是从一个词素到以一篇文章的任何单位；（2）语码的惯用定义仍然被保留，即它可以指语言、方言、风格、各种语言变体，甚至个人语言。

在语料收集方面，本文采用问卷调查的形式，依靠双语者的直觉，即双语者的

语法判断。这种直觉来自于一种普遍观察：双语或多语者对什么是和什么不是可能的语码转换一般具有明确清晰的直觉（Singh, 1985）。第四章对汉英语码转换词汇句法特征的描述和第五章在优选论框架内对这些特征的解释在很大程度上是建立在用这种方法收集的语料基础之上的，但本研究的结论并不完全依赖问卷调查的结果。

第三章以批判的眼光回顾了前人在语码转换的语法限制方面所做的研究，得出结论认为先前提出的这些限制条件往往面临着若干反例。它们都有一个根本性的缺陷，即未能满足合格的语法理论所应该满足的描写充分性条件。

第四章描述了汉英语码转换的词汇语法特征。第五章在第三章文献综述和第四章汉英语码转换特征描述的基础上提出了语码转换的五条词汇句法限制条件：

(A) 避免派生词素发生转换 (*Deri)：派生词素不允许被转换。

(B) 词汇嵌入规则 (LIR)：一个词汇 X 应该被嵌入在这样一个最终节点 Y 下，Y 和 X 的语类属性一致，且 YP 和 X 的次语类特征也一致。

(C) 忠实条件 (FAITHFULNESS)：被转换的成分的语法属性和语序特征仍然保持其原语言的属性和语序特征。

(D) 深层结构条件 (DS)：表层结构不会阻止语码转换发生，但如果发生了语码转换，则参与语码转换的两种语言在深层结构上必须存在一种可映射关系。

(E) 线性句序限制条件 (LPC)：语码转换句子中的成分按照提供句法词素的语言的语序排列。

本文分析的理论框架是优选论，上述这些限制条件也置于该框架内，因此是带普遍性的、可以违反的，可以根据参与语码转换的语言不同而拥有不同的排列。在汉英语码转换中这些限制条件的排列方式为：

2）*Deri; LIR; DS >> FAITHFULNESS >> LPC; COMP >>*SPEC

最后不得不承认本文还存在不少不足之处，尤其在语料收集方面，主要依靠的是母语为汉语的汉-英双语者的语法判断，而缺少母语为英语的英-汉双语者的语法判断。对今后这方面的研究，我们认为：(1)在充分解释语码转换现象之前，有必要找到一种能对这种现象进行充分描述的方法；(2) 有必要建立一种对限制条件或理论模式准确评估的机制，这种评估机制应该建立在某些公认的概念和拥有独立理据的语言学理论原则之上；(3)语码转换现象非常复杂，不仅受到语言系统内部因素的制约，也受到语言使用的社会文化语境、言语交际的情景语境等外在因素以及语言使用的心理过程和认知机制等内在因素的制约，因此有必要对其进行跨学科研究。

关键词：汉英语码转换　　词汇句法特征　　优选论分析

An OT Approach to the Morphosyntactic Features of Chinese/English Codeswitching

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Specialty:	Linguistics and Modern English
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Abstract

It is believed in the research field of codeswitching (CS) that where in an utterance a speaker might switch might not be simply a whim of individual speakers or even a matter of habit for a specific speech community. In other words, there are grammatical constraints on codeswitching, though the question of what they are is still disputable.

The present thesis attempts to (i) present an adequate description of the morphosyntactic features of Chinese/English codeswitching; (ii) provide an adequate explanation for those features within the framework of Optimality Theory (OT).

The subject of this thesis is intrasentential Chinese/English codeswitching because there is no interaction between language systems in switches above the sentence level. Specially, this thesis focuses on the intrasentential Chinese/English switched forms that are unlikely or impossible to occur for the phenomenon of codeswitching is influenced by many other factors like grammatical constraints, social factors, psychological factors, and etc. The description and explanation of Chinese/English codeswitching morphosyntactic features is presented in Chapter Four and Five respectively.

Before addressing these central problems, this thesis makes a distinction between codeswitching and other relevant terminologies, especially code mixing and borrowing in Chapter Two. For codeswitching and code-mixing, this thesis prefers the former to the latter. Here codeswitching is used as an umbrella term to cover both intrasentential codeswitching and inter-sentential codeswitching. For codeswitching and borrowings, the present thesis agrees with Poplack recognizing the differences between borrowing and CS and adopts her criteria of integration on the one hand. We hold that they are different in that borrowing is a part of langue (or language competence) and CS belongs to bilingual parole (or language performance). On the other hand, we support Myers-Scotton's classification of borrowings into cultural borrowings and core borrowings and her proposal of the frequency criterion. The two kinds of borrowings should be distinguished from codeswitching forms separately.

Based on the above two terminological distinctions, we propose that codeswitching simply refers to the kind of language performance phenomena that there are units of two or more linguistic codes in the same conversation or utterance. In this definition, i) the linguistic units can be everything from a single morpheme to a passage; ii) the conventional meaning of code is reserved, namely, it may refer to a language, a dialect, a register, a style, or even an idiolect.

For data collection, we adopt the method of questionnaire and turn to rely on the intuition of bilingual speakers, i.e. grammatical judgments of bilingual speakers because it is observed that bilingual or multilingual speakers have clear, unambiguous intuition about what is, and also what is not, a possible code-switched utterance (Singh, 1985; qtd, Bhatt 1997:223). Although our description in Chapter Four and explanation in Chapter Five are mostly based on the data collected this way, we by no means depend solely on the questionnaire.

Chapter Three surveys the previous research done on grammatical constraints on codeswitching with a critical view. We conclude that all of the previously proposed constraints are facing a great deal of counter-examples. They all fail actually on the same grounds, i.e., to meet the need of descriptive adequacy for a linguistic theory.

Chapter Four provide a description of Chinese/English CS features. Chapter Five,

morphosyntactic constraints, as summarized below.

(A) Avoid involving derivational morphemes in a switch (*Deri): No switch involving derivational morphemes is permitted in CS.

(B) Lexical Insertion Rule (LIR): Insert lexical item X under terminal node Y, where Y corresponds to the categorical properties of X, and YP corresponds to the subcategorization properties of X.

(C) Faithfulness constraint (FAITHFULNESS): Switched items follow the grammatical properties and the word order of the language to which they belong.

(D) Deep Structure constraint (DS): Surface representation does not inhibit a switch. But the deep structure of two participating languages must map onto each other.

(E) Linear Precedence Constraint (LPC): Items of code-mixed clauses follow the word order of the language of the Infl (TNS).

These constraints are proposed in the framework of OT, which is the theoretic framework of this thesis. Therefore, these constraints are universal, violable and can be ranked differently depending on the languages involved in codeswitching. This thesis argues that in Chinese/English codeswitching these constraints are ranked like this:

2) *Deri; LIR; DS >> FAITHFULNESS >> LPC; COMP >>*SPEC

Admittedly, there are many limitations in this thesis, especially for data collection. The data is limited for the bilingual consultants are exclusively native Chinese speakers.

For future research, we propose that (i) it is necessary and indispensable to find a way to meet the descriptive adequacy requirement before providing an adequate explanation for codeswitching; (ii) it is also important and useful to propose a precise evaluating mechanism in terms of well-known categories and independently motivated principles of linguistic theory to evaluate the proposed constraints or models; and (iii) the conjoining of syntax, discourse, sociolinguistics, and psycholinguistic is necessary and important to account for the multi-faceted nature of CS because it is influenced not only by grammatical factors, but also by many other factors like socio-cultural, contextual, psycholinguistic and cognitive factors.

Key words: Chinese/English codeswitching   morphosyntactic features   OT approach

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Acknowledgments

Chapter One

Introduction

At some time or another, many people would shake their heads in amazement at overhearing speakers who were carrying out a conversation in two languages, apparently freely drawing from both linguistic systems at will. Some readers of this thesis themselves also produced such conversations. Such a naturally occurring conversational phenomenon on everyday topics is the subject of this study. It is academically called codeswitching (abbreviated as CS) in the field of linguistics.

Those mixed conversations are frequently produced all over the world, "from Puerto Rican secretaries rapidly alternating Spanish and English while strolling on lunch-break on the sidewalks of New York City, to Kikuyu market vendors in Nairobi, Kenya, judiciously adding phrases in Luo to their Swahili while wooing a Luo-speaking customer, to university professors in Tamil Nadu, India, interchanging English and Tamil when relating what happened at a recent academic conference" (Myers-Scotton 1993:1).

1.1 Objectives of the Study

The research question which this thesis addresses is the following: when speakers alternate between two linguistic varieties, how free is this alternation from the structural point of view? That is, are there any structural or grammatical constraints on codeswitching, and if so, what are those constraints? In particular, this thesis intends to achieve the following objectives.

First, it attempts to distinguish CS from other relevant terminologies, especially code-mixing and borrowing. In fact, it is often required to set a borderline between CS and these concepts in almost all the studies on CS grammatical constraints, because they are proved to be trouble-makers to the central issues of CS.

Second, based on a description of the Chinese/English (also English/Chinese) CS data,

this thesis intends to propose some morphosyntactic constraints on CS. These constraints are proposed within the Optimality-Theory (hereinafter OT) framework. They are universal, but violable.

Third, within the OT framework, this thesis further attempts to provide a language particular ranking of these constraints. In other words, how these constraints are ranked in Chinese/English CS will be examined.

Because there is no interaction between two or more language systems in a mixed conversation above the sentence level, we focus exclusively on intra-sentential Chinese/English CS, especially on the impossible intra-sentential switches.

1.2   Significance of the Study

The rationale behind the present study is mainly twofold, that is, the study of CS is of both theoretical and practical significance.

First, theoretically speaking, the attempt to find the morphosyntactic constraints of CS (at least Chinese/English CS) is helpful and contributive in exploring the grammatical constraints on CS and adds new findings to the previous research, especially to the research on grammatical properties of CS. More importantly, these findings are enlightening for researches on other subjects like Universal Grammar (UG), and psychology. In addition, this thesis expands the explanatory power of OT.

Second, for the practical value, the findings in this thesis are suggestive to language policy, language planning and language teaching. To be seriously, it is meaningful in the purification of our mother tongue. It is helpful in keeping our native Chinese as national as possible.

1.3   Layout of the Thesis

This thesis consists of the following six chapters:

Chapter One is an introduction, which gives a brief introduction of the objectives, significance and the layout of this thesis.

Chapter Two deals with some methodological issues, particularly the terminological problems and the methodology of data collection of the present thesis.

Chapter Three presents a critical review of the previous studies on CS grammatical constraints.

Chapter Four gives a descriptive generalization for the Chinese/English CS data collected.

Chapter Five proposes some grammatical constraints on CS, based on the generalizations of Chinese/English CS data in Chapter Four and previous studies.

Chapter Six is the conclusive chapter. It summarizes the major findings of this study and sheds light on the limitations of this thesis. Finally, some suggestions are presented for future research.

Chapter Two

Methodology of the Study

In this chapter, some methodological issues will be addressed, particularly some terminological problems and issues on data and data collection. These methodological issues are of extremely basic and important nature to this thesis and for anyone who investigates or attempts to investigate CS. Among these issues, the terminological problems will be discussed first. And then the issues concerning data and data collection will be presented.

2.1 Terminology

There has been a conventional and widely-held idea in linguistic field that the term code is a relatively neutral conceptualization of a linguistic variety—be it a language or a dialect. However, like studies on any aspect of language contact phenomena, research on CS is plagued by the thorny issue of terminological confusion. It is not easy to give an accredited definition to CS. On the one hand, the concept of CS is blurred by some similar terms such as code mixing, code-alternation and code-shifting. These terms are used differently by different researchers, which creates unnecessary confusion, and in turn results in difficulties in doing research. Just as Clyne (1987) appealed, "vagueness in terminology can influence the results of research" (qtd Li 1996:16). On the other hand, the term "borrowing" masks the concept of CS further. The research on CS, especially the research on the grammatical properties of CS, is always harassed by the interference of borrowing. So it is desirable and indispensable to tell them from each other. Thus, to define CS, or to clarify the nature of CS is to distinguish these two pairs of concepts.

2.1.1 Codeswitching vs. Code Mixing

Among these similar terms, code mixing (CM) is the most disturbing one. So this thesis will mainly focus on the distinction between this item and CS. As for this pair of

concepts, not all researchers use the same terms in the same way, nor do they agree on the territory covered by them. Accordingly, researchers can be divided into three groups: i) Those regard CS and CM as different; ii) those regard CS and CM as the same, the solutions of which fall into two kinds: CS as a cover term for both CS and CM or CM as a cover term for both CS and CM; iii) those say nothing about the difference or congruity between CS and CM (He Ziran, Yu Guodong 2001).

The first group of researchers (Kachru 1983; Singh 1985; Sridhar & Sridhar 1980; Auer 1998; Bokamba 1989; Hamers & Blanc 1989; Haust & Dittmar 1998; Li 1996; etc.) reserve the term code-switching for inter-sentential switches only, and instead prefer to use CM for intra-sentential switches. The reason is that only CM (i.e., intra-sentential CS) requires the integration of the rules of the two languages involved in the discourse.

But as far as the structural constraints are concerned, the intra- vs. inter-sentential distinction can equally well distinguish the two types of switches. So it largely remains as a matter of individual preference, but at the same time it creates unnecessary confusion. Thus, other researchers (Appeal & Muysken 1987; Bhatia 1989; Clyne 1991; Gumperz 1982; Myers-Scotton 1993b, 1998; etc.) abnegate the diversity between CS & CM, and put the terms "inter-sentential code switching" and "intra-sentential code mixing" under the umbrella of codeswitching.[1]

Still others (e.g., Muysken 2000) avoid using the term code switching as a cover term because they believe that switching suggests alternation only, as in the case of switching between turns or utterances, but not necessarily insertion. Instead, they prefer to use code mixing as a hyponym to cover both code switching (intra-sentential only) and borrowing (e.g., Pfaff 1979).

Obviously, there are various terminologies for the same phenomena. But most of them are unnecessary terminological obstacles. Thus this thesis abandons the distinction between them; instead we adopt the conventional term "codeswitching" as an umbrella

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[1]   Some researchers (e.g., Auer 1995) use the term code-alternation as a hyponym to replace CS, but it is marginally used in the same sense. The term alternation is, in fact, used in the literature to refer to instances of one language being replaced by the other halfway through the sentence, and it is mostly, but not always, associated with longer stretches of CS. The term insertion, in contrast, mostly correlates with occurrences of single lexical items from one language into a structure from the other language. In this sense, the terms represent two distinct but generally accepted processes at work in CS utterances (Muysken 1995, 2000).

term to cover both "inter-sentential code switching" and "intra-sentential code mixing". However, by taking this term, we are by no means implying that there is a process of switching between codes.

2.1.2 Codeswitching vs. Borrowing

Before the structural approach to CS could address its central question of how free the switching is between two or more languages from a structural point of view, it faces another issue to resolve: Of the foreign words in code-switched utterances, what constitutes CS and what constitutes lexical borrowings? If lexical borrowings are to be excluded from the analysis of CS utterances, where should the boundaries between CS and lexical borrowings be located? There are two contradictory approaches as to whether and how to distinguish between the two terms.

One group of researchers associated with Poplack (1980, 1981), have argued that lone other-language items are fundamentally different from longer stretches of switches. In other words, they think that lexical borrowings and CS are in fact based on different mechanisms. Thus, they proposed morphosyntactic and phonological integration of foreign words into the recipient language as criteria for establishing the status of such single words. Using participant observation performance data of CS from the bilingual Puerto Rican community in New York City, Poplack proposed three types of criteria to determine the status of non-native material in bilingual utterances. These include whether or not single lexical items from a donor language in code-switched utterances were (1) phonologically, (2) morphologically, and (3) syntactically integrated into what she called the base language. She identified four possible combinations of integration as shown in Table 1. According to this approach, in cases where a lexical item shows (a) only syntactic integration (Type 2), or (b) only phonological integration (Type 3), or (c) no integration at all (Type 4), it is considered to be an instance of CS. In contrast, cases where a lexical item shows all three types of integration (Type 1) constitute borrowing.

TABLE 1   Poplack's (1980) Identification of Code-Switching Based on the Type of

Integration into the Recipient Language

Type	Levels of Integration Into Base Language			Code-switching?
	Phonological	Morphological	Syntactic	
1	√	√	√	No
2	✗	✗	√	Yes
3	√	✗	✗	Yes
4	✗	✗	✗	Yes

While this proposal did capture some generalizations and received confirmation from empirical studies in other bilingual communities, the criterion of phonological integration was later discarded due to its highly variable nature. The intermediary category has since been identified as nonce borrowings (the borrowing forms "that occur only once" in a designated corpus (Myer Scotton 1993:181)).

Nonce borrowings are single lexical items or bound morphemes which are syntactically and morphologically integrated into the base language, but which may or may not show phonological integration. They differ from established borrowings in that they do not meet the criteria of frequency of use or degree of acceptance (Poplack, Wheeler, & Westwood 1987).

On the other hand, most researchers (Bentahila & Davies 1983; Myers-Scotton 1993) have chosen to deal with the problem by claiming that the perceived distinction between the two processes is not really critical to analyses of bilingual speech. Moreover, unlike the first group of researchers, they acknowledged single-word (i.e., insertions) and multiple-word (i.e., alternations) occurrences as two forms of CS, rather than as distinct processes to be distinguished from each other.

They claim that assimilation may not always be the defining criterion to distinguish borrowings from CS. For example, Myers-Scotton (1992, 1993) rejects morphosyntactic integration as a basis for distinguishing between CS and borrowings because she sees them as universally related processes such that both concepts are part of a single continuum. She therefore argues that a categorical distinction between CS and borrowings need not to be made, yet she proposes frequency as the single best criterion to link borrowed forms more closely with the recipient language mental lexicon. She also

disagrees with those researchers (e.g., Bentahila & Davies 1983; Sridhar & Sridhar 1980) who argue that one of the major characteristics of borrowed items is to fill lexical gaps in the recipient language. Instead, she argues that not all established borrowings actually occur due to the perceived absence of an equivalent term in the recipient language culture. Inspired by Haugen's (1953) comment that "borrowing always goes beyond the actual 'needs' of language" (373), she then draws a distinction between what she calls cultural borrowings and core borrowings. Cultural borrowings are those lexical items that are new to the recipient language culture. Core borrowings, on the other hand, refer to those lexical forms that have "viable" equivalents in the recipient language, and hence, do not really meet any lexical need in the base language (Myers-Scotton 1993: 169). It is only this type of borrowing which Myers-Scotton considers to be part of a continuum involving lone other-language items in codeswitching.

The important point in Myers-Scotton's argument is that, unlike Poplack and her associates, she does not see CS and borrowing as two distinct processes, nor does she see such a distinction to be critical. Gysels (1992) takes this idea even one step further on the basis of her French data in urban Lubumbashi Swahili by claiming that whether a lone other-language item is a switch or borrowing in fact cannot be determined because the same form may be interpreted as either a borrowed item or a code-switch depending on the overall discourse structure. Similarly, on the basis of his work among Turkish/Dutch bilinguals in the Netherlands, Backus (1996) also rejects morphosyntactic integration as a criterion for distinguishing switches from borrowings, claiming that it lies, at least partially, within the individual speaker's motivations to ascribe status to single-word foreign items in the recipient language.

The present thesis stands midway between the above two approaches. On the one hand, we agree with Poplack and recognize the differences between borrowings and CS. We think that her criteria illustrated in Table 1 are useful in distinguishing the two terms, but we abandon the term nonce borrowing because we recognize it as an unnecessary terminology. On the other hand, we support Myers-Scotton's classification of borrowings into cultural borrowings and core borrowings and her proposal of the frequency criterion.

The rationale behind the mixed viewpoint is that borrowing and CS are different in that the former belongs to langue or language competence and the latter is a part of bilingual parole or language performance. In other words, borrowings are involved in the

linguistic knowledge, or specially, the lexicon of monolingual speakers, while no CS forms are involved in that lexicon of bilingual speakers. Thus borrowing is a part of the host language and is used in the same way as the native language is used. But CS is just a bilingual phenomenon. This is in accordance with Poplack's view that borrowing and CS are in fact based on different mechanisms. As a matter of fact, CS is first presented in 1972 by Jan Blom and John Gumperz as a type of skilled performance (Gumperz, 1982; Myers-Scotton, 1993). Also, this belief is proved to be true by the universal observation that monolingual speakers can use borrowings, while only bilinguals can engage in CS.

Obviously, borrowings are not born to be a part of the recipient language. Their formation must be attributed to the influence exerted by a long-time language contact on one other-language items. These items achieve the status of loanwords in time through an increase in their frequency and their adoption by monolinguals. This is why Myers-Scotton holds that both CS and borrowing are part of a single continuum. But she fails to recognize that a CS form becomes a borrowing only *if it is adopted by monolinguals*. Or put another way, she does not notice the gap between parole and langue. She fails to notice that borrowings have taken one step further to become a part of monolingual lexicon. However, we credit her to the classification of cultural borrowing and core borrowing. This division is of vital importance because the two kinds of borrowings should be distinguished from CS forms separately.

Cultural borrowings are so frequently used that they are very easy to be excluded from CS. These forms represent objects or concepts new to the recipient language and often do not have a counterpart in the recipient language or the counterpart is made afterward (e.g. SARS, H_5N_1, Hip-Hop, E-mail, windows in Chinese). This kind of borrowings refers mostly to the proper nouns, letter-words, and forms of address (e.g. Doctor, Professor, Sir in Chinese). These terms are used so frequently that monolingual speakers have accepted them to be a part of our native language. For example, "MTV", "KTV", "CT", "GRE", "OK" *in* "卡拉 OK", "T" *in* "T 恤", "B" *in* "B 超", "Sir" *in* "阿 Sir", "Doctor" *in* "Doctor 方", "A" *in* "维生素 A", "K" *in* "三 K 党", and etc.. In fact, some word have entered the Chinese dictionary, like "三 K 党".

However, as for the core borrowings, the situation is much more complex. Fortunately, Poplack's assimilation criteria turn out to be very useful in distinguishing them from CS (at least for English/Chinese CS). Borrowings are said to have undergone a

process of integration into the phonology and morphosyntax of he host language. Thus, borrowings can be distinguished from CS structurally as illustrated in Table 1. For example, "咖啡" and "可口可乐" in 1) are said to be borrowings, while "coffee" and "Coca-Cola" in 2) are said to be CS forms because the former two words have adapted into Chinese syntactically, morphologically and phonologically, but the latter two words have not taken these kinds of assimilation.

1) 给我一杯咖啡，给他一杯可口可乐。

2) 给我一杯 coffee, 给他一杯 Coca-Cola.

Though these criteria work very well, there are some counter-examples. For instance, "OK" in Chinese, it remains its all characteristics as an English word, but it is frequently used by monolingual Chinese. Therefore, the frequency criterion is needed to distinguish these borrowings from forms of CS. In other words, a frequently used word, though it does not undergo an assimilation process into the host language, can be counted as a borrowing, like "OK".

So far, we have distinguished two pairs of concepts, i.e. codeswitching vs. code-mixing, and codeswitching vs. borrowing and a clearer picture of codeswitching has been presented. We can conclude that codeswitching simply refers to the kind of language performance phenomena in which there are units of two or more linguistic codes in the same conversation or utterance. In this definition, i) the linguistic units can be everything from a single morpheme to a passage; ii) the conventional meaning of code is reserved, namely, it may refer to a language, a dialect, a register, a style, or even an idiolect. In this thesis, the term codeswitching is used to cover both "inter-sentential" and "intra-sentential" codeswitching, though we will mainly focus on the intra-sentential type because there is no interaction of morphosyntactic rules in inter-sentential codeswitching. Also the scope of linguistic code is limited in this thesis to two languages, i.e. English and Chinese. The definition also implies that Chinese/English CS and English/Chinese CS are actually the same kind of codeswitching phenomenon.

2.2   Data Collection

2.2.1 Some Necessary Idealizations

Before addressing the issues of data collection, it is necessary and important to state

some idealizations of this thesis. These idealizations are required because of the underlying belief of this thesis, i.e. CS basically is a phenomenon of language use or language performance (as stated above in 2.1.2), but the grammatical constraints of CS belongs fundamentally to the grammar (or linguistic knowledge, or language competence) of a speaker. Thus like other language use phenomenon, in addition to grammatical constraints, there are other factors like social and psychological factors that exert great influence on CS. Therefore, in order to reduce the influence of these factors to the minimalist degree, we have to make the idealization that i) the grammaticality of a CS form cannot be judged based on its status of existence. In other words, the existence of a CS form does not necessarily (though mostly) imply that this form is grammatical; and the non-existence of a CS form does not necessarily mean that this form is ungrammatical; ii) any linguistic episode can be recognized as a switched episode if its linguistic units (from a single morpheme to a whole passage, but except borrowings) come from two grammatical systems (or code systems); iii) as code can be used to refer to a language, a dialect, a register, a style, or even an idiolect, we propose that anyone is a bilingual or multilingual speaker as long as he/she can produce at least one mixed utterance. In other words, he/she can be recognized as a bilingual speaker if he/she can use the linguistic units from two different linguistic systems, no matter whether freely and frequently or not. Thus, the selection of consultants is relatively free, though most of our consultants are postgraduates majoring in English and linguistics.

2.2.2 Data Collection

The Chinese/English CS data for this thesis is composed of two parts: naturalistic data and grammaticality judgment data. The former includes i) CS forms in written materials, especially literature works like *Besieged City, Fu Lei's Home Letters* ; ii) examples in the literature concerning Chinese/English CS; iii) net words, namely utterances and words on BBS and BLOG.

The naturalistic data of spontaneous speech is excluded from this data set for three reasons. First, it "tends to be distorted by extraneous factors and will not be a reliable basis on which to draw conclusions about language, especially with respect to the subtle aspects of language" (Ouhalla 2001: 10). Or put simply, no one can include all speech (or even speech patterns) produced in normal conversations, and thus the data collected in the

way of observation or recording differs from one researcher to another, this in turn results in different conclusions. But none of these conclusions will be adequate or useful, especially for language universal properties, for they all fail to achieve the requirement of descriptive adequacy for a linguistic theory. In fact, this is also the primary shortcoming of the previous approaches to grammatical constraints on CS (see Chapter Three for detail). Second, as stated above that nonoccurrence in natural conversation does not necessarily mean that a CS form is ungrammatical. Naturalistic data can be used only to estimate what is possible, but not what is impossible in, at least Chinese/English CS. As a matter of fact, as Muysken points: "...it is as important to consider the non-occurring switches as the ones that do occur" (Muysken 1995:184). We propose that for grammatical constraints, the impossible CS forms outweigh the possible forms. Third, the spontaneous speech can be replaced with items from written material, on Internet, or in other literatures. They are sufficient to meet the needs of this thesis.

Therefore, we turn to rely on the intuition of bilingual speakers, i.e. grammatical judgments of bilingual speakers because it is observed that "bilingual or multilingual speakers have clear, unambiguous intuition about what is, and also what is not, a possible code-switched utterance" (Singh 1985). We adopt the method of questionnaire, which is composed of 66 specifically constructed sentences. Some of these 66 items are designed to cover nearly all of the syntactic constraints proposed in the literature, such as, the Free Morpheme constraint and the Equivalence constraint (Poplack 1980), the Closed Class constraint (Joshi 1985), the Matrix Language Frame Model (Myers-Scotton 1993), the Government constraint (Di Sciullo et al. 1986), the Functional Head constraint (Belazi et al. 1994), the Minimalist Approach (MacSwan 1999) and the OT approach (Bhatt 1997). Other items are specially constructed to see if a certain kind of CS is possible or impossible in, at least Chinese/English CS. Besides, the naturalistic data used for this thesis is also included in this questionnaire to judge their grammaticality. The items are completely randomized. Consultants were given five choices to express their responses (relative acceptability) for each item (see below) [2]. However, as for grammaticality, the five choices can be generally divided into two groups, namely, i) unacceptable

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[2] Because there are many reasons besides grammatical factors that can make a consultant think a certain item as unacceptable, we prefer a more detailed five-scale grading to a two-scale grading (acceptable and unacceptable).

(choice1 and 2); ii) acceptable[3] (choice 3, 4 and 5). The calculations were based on the two groups. For example, for sentence [3], 16 consultants chose 1) and 38 consultants chose 2), and then there are 54 consultants in all considering it as unacceptable.

1) incomprehensible, and unacceptable

2) comprehensible, but unacceptable

3) comprehensible, acceptable, but odd

4) comprehensible, sometimes it is used

5) comprehensible, often it is used

Like other researchers (e.g. Bhatt 1997), the calculations of each choice were based on the score of 80% agreement or more for an item. Items that scored less than 80% were assumed to be the data for which the clear, robust intuition is influenced by other factors (e.g. the native language of the consultants). Altogether 64 questionnaires were administered in this study. Six of those were discarded because either the questionnaire was not completed or it was completed with obvious carelessness.

The examples in this thesis will be presented in the following format:

√ 大家   请   *look at*   黑板。

everyone   please look at (the) blackboard

"Everyone please look at the blackboard."

"大家请看黑板。"

The first line is the CS datum; the second line is a morphological "parse" of the datum in English; the third line and the forth line are the approximate translations into English and Chinese (in double quotes). Utterances prefixed with a (√) are those regarded as well-formed by the consultants; items with a asterisk (*) are those regarded as ill-formed by the consultants; expressions prefixed with a question mark (?) are items for which the intuition is influenced by other factors. An item switched is indicated with *italic text*, but here the language italicized will not be presumed to have a special status (that is,

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[3] The subjects tend to refuse CS forms because the social attitude towards codeswitching in general is negative (Mahootian and Santorini 1996). Therefore, to balance this bias, we consider these odd items as acceptable instead of unacceptable.

it will not, for my purposes, play the role of the "embedded" language as opposed to the "matrix" language, a distinction important in some models, like Myers-Scotton's MLF). And which language is italicized is not important too. In fact, the Chinese words in the above example can also be italicized. However, this thesis chose to italicize the language which contributes fewer morphemes to the mixed utterance. Finally, the Chinese/English CS morphosyntactic features manifested in this data will be generalized in Chapter Four.

Chapter Three

Literature Review

Though codeswitching was originally born as a sociolinguistic subject, its grammatical property soon aroused a wide interest in the field of linguistics. At the beginning, some linguists have despaired of finding any structural constraints on codeswitching. Lance (1975), for example, concludes from his examination of a Spanish-English CS that there are perhaps no grammatical restrictions on where the switching can occur. But other researchers have tended to disagree with him, arguing instead that there is a variety of syntactic constraints which restrict the points at which a switch is possible (e.g. Blom & Gumperz 1972). In addition, according to Singh (1985), it is believed that bilingual or multilingual speakers have clear, unambiguous intuitions about what is, and also what is not, a possible code-switched utterance. Or as Bhatt puts that "there is a grammar that presumably determines, and perhaps delimits the range of 'grammatical' code-switched utterances in a given bilingual context" (1997:223-224). So the question is not whether there are any structural constraints but what they are and what is the best way to characterize them.

To find out and account for the constraints, several theories have been proposed since the 1970s, and there have appeared a great deal of literature (e.g. Gumperz 1976; Timm 1975; Wentz & McClure 1976; Pfaff 1979; Poplack 1980; Sankoff and Poplack 1981; Sridhar and Sridhar 1980; Woolford 1983; Joshi 1985; Klavans 1985; Singh 1985; Di Sciullo, Muysken and Singh 1986; Clyne 1987; Stenson 1990; Belazi, Rubin, and Toribio 1994; Belazi 1992; Myers-Scotton 1992, 1993; Bhatt 1997; MacSwan 1999; see Hamlari 1997:67).

In the studies, the earlier proposals just provide some description of the basic facts of codeswitching and do not attempt to provide anything approaching an explanation of the grammatical phenomena in codeswitching. For instance, Timm (1975), in a study of Spanish-English codeswitching, notices that a switch may not occur between a subject

pronoun and a verb or between a verb and its object pronoun; Pfaff (1979) notices additional constraints on codeswitching involving adjectives and nouns; and Gumperz (1976) observes that switching is impossible between a conjunction and the second part of a pair of conjoined sentences. However, more and more theories attempting to provide an explanation are put forward later.

In general, those CS proposals can be divided into three types, i.e. the linear approach (e.g. Lipski 1978; Pfaff 1979; Poplack 1980, 1981; Sankoff and Poplack 1981; Sridhar and Sridhar 1980); the insertion approach (e.g. Joshi 1985; Hasselmo 1972; Bautista 1975; Klavans 1985; Petersen 1988; Myers-Scotton 1993); and the government approach (e.g. Di Sciullo et al. 1986; Pandit 1986; Santorini and Mahootian 1995). The linear approach tries to reveal the mystery of CS focusing on the word orders or the surface structures of the languages involved in codeswitching. While the insertion approach recognizes the asymmetry between the two languages involved in CS viewing CS as the insertion of elements (e.g. Joshi 1985) or procedures (e.g. Myers-Scotton 1993) from one language (the embedded language, EL), into grammatical frames set by the other language (the matrix language, ML). And the government approach seeks for explanations in terms of subcategorisation or government relations. In addition to the three types, CS grammatical constraints are also examined in the framework of some recently proposed theories, like the minimalist program (e.g. Toribio and Rubin 1996, MacSwan 1999, and etc.) and OT (e.g. Bhatt 1997).

This chapter will present a critical review of some popular and influential approaches to the constraints of intrasentential codeswitching in the light of Chinese-English data. In particular, this thesis will focus on Poplack's Free Morpheme and Equivalence Constraints; Joshi's Closed Class Constraint; Myers-Scotton's Matrix Language Frame Model; Di Sciullo, Muysken and Singh's Government Constraint; Belazi, Rubin, and Toribio's Functional Head Constraint; MacSwan's Minimalist approach and Bhatt's OT approach.

3.1   Poplack's Free Morpheme and Equivalence Constraints

3.1.1 The Free Morpheme Constraint

Poplack (1980), based on the Spanish-English codeswitching data, proposes the Free Morpheme Constraint and the Equivalence Constraint. The Free Morpheme Constraint

takes this form:

(1)   The Free Morpheme Constraint (Poplack 1980:585; qtd Myer Scotton, 1993:30)

Codes may be switched after any constituent provided that the constituent is not a bound morpheme

Or it can be stated differently as:

A switch may not occur between a bound morpheme and a lexical form unless the latter has been phonologically integrated into the language of the bound morpheme. (Sankoff and Poplack 1981:5; qtd Bhatia and William 2004:286)

Regardless of the prerequisite of the phonological integration, this constraint simply implies that the switch between a bound morpheme and a lexical form is impossible. Poplack presents an example like this:

(2)   *eat*-iendo   (Poplack 1980: 586; qtd Myer Scotton, 1993:33)

'eating'

The constraint correctly predicts that the switch in (2) between 'eat-iendo' is disallowed, for '-iendo' is not a free morpheme, but a bound one.

Though this constraint is supported in numerous corpora (Bentahila and Davies, 1983; Berk-Seligson, 1986; Clyne, 1987; MacSwan, 1999; see MacSwan 2004), it has been tested invalid for the switching in some other language pairs (e.g. Boeschoten and Verhoeven 1987: 211; Stenson 1990: 179-180; see Hamlari 1997: 76). Bokamba (1988) notes that this constraint is inadequate in accounting for "code-mixed varieties involving African and Indo-European languages" (Bokamba 1988:34; qtd Hamlari 1997: 76). A lot of counter-examples are found in later studies (e.g. Bokamba 1988; Myers-Scotton, 1988, 1989; Kamwanganalu, 1989; Hamlari 1997; see Myer Scotton, 1993:31). And according to Walters (1989), there are counter-examples even in Spanish-English codeswitching (see Myer Scotton, 1993:34).

It does not hold true for Chinese/English CS too. For instance:

(3)   √ 我怎么跟他套近乎呀? 我就坐着*郁闷ING*.

I how with him talk? I   sit (there) writhing (with the problem)

"How should I talk with him? I only sat there writhing (with the   problem)"

"我怎么跟他套近乎呀？我就坐着郁闷。"

(4)   √ 再   看了一遍，继续笑 *ING.*

again read once,   go on laughing.

"(I) read it again and go on laughing."

"再看了一遍，继续笑。"

(5)   √ 在此祝愿全天下的 *Teacher* 们   教师节   快乐。

Here wish   all   teacher-s   Teacher's Day happy.

"Here I wish all teachers happy Teacher's Day."

"在此祝愿全天下的老师们教师节快乐."

(6)   √ *阿 Sir*   怕   监听   不敢用（新手机）。

Policemen afraid of monitor not dare to use (new cell phone).

"Policemen are afraid of being monitored, so no one dares use it."

"阿 Sir 怕监听不敢用（新手机）。"

According to the Free Morpheme Constraint, the switches (between a Chinese adjective or verb[4] and an English inflectional affix; between an English noun and a Chinese bound morpheme) in the above examples are unacceptable. But in fact, they are completely acceptable and even frequently used (e.g. 笑-ing). It is not difficult to find more counter-examples in Chinese/English CS (e.g. 汗-ING, 睡-ING, 睡-ED, 想-ING, 想-ED, teacher 们, student(s) 们, mouse 们, mice 们), especially on various kinds of BBS and BLOG on internet.

Later, responding to the large number of counter-examples, Poplack proposed a new term of "nonce-borrowing" (see 2.1.2) to rescue this constraint, but it seems that this category does not help. The above switches can by no means be included in the set of nonce-borrowing. In addition, the category itself is problematic (see Myer-Scotton 1993:181-182). Clearly, the Free Morpheme Constraint is inadequate in accounting for the Chinese/English CS.

3.1.2 The Equivalence Constraint

Along with the Free Morpheme Constraint, Poplack (1980) proposed the Equivalence

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[4] Yang Chunli and Qin Xiubai count "郁闷" as an adjective (see Yang Chunli and Qin Xiubai, 2005).

Constraint as follows:

> Code-switches will tend to occur at points in discourse where juxtaposition of L1 and L2 elements does not violate a syntactic rule of either language, i.e., at points around which the surface structures of the two languages map onto each other. According to this simple constraint, a switch is inhibited from occurring within a constituent generated by a rule from one language which is not shared by another. (Poplack, 1980:586; qtd Myer Scotton, 1993:27)

This constraint means, as Di Sciullo and his associates (1986) put that "if in L1 the order of two types of constituents or elements is A/B, and in L2 it is also A/B, we find the possible outputs A1/B2 and A2/B1 in mixed code (like the following example). If on the other hand L1 has A/B and L2 has B/A, no code-mixing will be possible". It indicates that the identical surface structure enables a switch and the different surface structure inhibits a switch.

我们是 English teachers.

We are 英语老师。

Chinese: 我们是英语老师。

English: We are English teachers.

The vertical lines indicate places where the word order in both languages is equivalent, and hence, where a switch is possible. Thus it correctly predicts the switches like "我们是 English teachers" and "We are 英语老师". However, MacSwan (2004) provides a counterexample in Spanish/English CS:

(7a)   *The students had visto la pelicula italiana.

(7b)   The student had seen the Italian movie.

The example in (7a) is ill-formed, even though, the surface word order of Spanish and English are identical. Thus the same surface structure does not necessarily lead to a switch.

In addition, there are switches when the surface structures of the two languages do not map onto each other. For example:

(8)   √我 不能   保证   到   你家   *on time,* 但 我   一定   来。

    I   not can guarantee arrive your home on time but I   surely come.

    "I can't guarantee that I'll <u>arrive at</u> your home <u>on time</u>, but I'll surely come."

    "我不能   保证   <u>准时</u>   <u>到</u>   你家，   但 我 一定   来。"

(9) √ 我有   一台 *made in America* 的电脑。

    I   have   a   made in America   computer.

    "I have a <u>computer</u> <u>made in America</u>."

    "我有一台<u>美国造的电脑</u>。"

(10) √ 你们   想   吃 *what?*

    you   want   to eat   what

    "<u>What</u> do you want to <u>eat</u>?"

    "你们想<u>吃</u> <u>什么</u>？"

Though in (8) the adverbial modifiers "on time" and "准时" locate behind the English predicate verb "arrive" and before the Chinese predicate verb "到" respectively, the switched structure "…到…on time" is not disallowed. Similarly, the different attributive modifier location in (9) and the different object location in (10) cannot stop the switches in (9) and (10). Clearly, the difference between the word orders or surface structures of the two languages fails to inhibit a switch.

Therefore, according to the Chinese/English CS data, it is justifiable to conclude that not only the fulfillment of the equivalence constraint does not necessarily lead to a switch, but also the violation of the equivalence constraint does not necessarily disallow a switch.

Besides in Chinese/English CS data, the counter-examples to the equivalence constraint can be found in many other CS data sets involving other language pairs (e.g. Adaŋme/English (Nartey 1982); French/Moroccan Arabic (Bentahila and Davies 1983); Spanish/Hebrew (Berk-Seligson 1986); Lingala/French and Swahili/English (Bokabmba 1988); Swahili/ English (Myers-Scotton 1988); see Myers-Scotton 1993:28-29). As more and more counter-examples have been found in various language pairs, the equivalence

constraint gets less and less support and is shown to be inadequate in accounting for the codeswitching phenomenon.

3.2   Joshi's Closed Class Constraint

In contrary to the linear approach like the equivalence constraint mentioned above, Joshi (1985) takes a non-linear approach. Myers-Scotton (1993) credits Joshi (1985) with suggesting two insights, i.e. the basic asymmetry regarding the participation of the languages involved and the difference between open- and closed-class items.

As for the asymmetric property of CS, he puts that:

> speakers and hearers generally agree on which language the mixed sentence is 'coming from'. We can call this language the *matrix language* and the other language the *embedded language*.
>
> (Joshi 1985, qtd Myers-Scotton 1993: 35).

He went on to say that the direction of switching is asymmetrical; namely, the switch of a category of the matrix grammar to a category of the embedded grammar is permitted, but not vice versa (Joshi 1985, see Myers-Scotton 1993: 36). This idea of asymmetry and the notion of differentiating ML and EL is of critical importance for all proposals adopting insertion approaches, including Myers-Scotton's MLF model, however, this thesis will argue later (in 3.3) that they are problematic.

Joshi's second insight is to suggest that closed-class items cannot be switches and this is different from many open-class items such as nouns, verbs and so on. He notes his Closed-Class Constraint as below:

(11)   Closed-class items (e.g. *determiners, quantifiers, prepositions, possessives, Aux, Tense, helping verbs,* etc.) cannot be switched. (Joshi 1985, qtd Myers-Scotton 1993: 36). (determiner: a, the, an; quantifier: every, each, both, all, some; preposition: to, at, on, for; Aux: Tense, Model, Neg, possessives: ours, hers, mine, yours; helping verbs: can, could, must, will, should, be about to, be able to)

This constraint lacks both theoretical support and empirical evidence. Theoretically speaking, according to Myers-Scotton (1993:37), Joshi "says nothing about the exact

membership of closed-class items", and he "does not consider all types of CS," dealing only with mixed constituents and ignoring the constraints entirely composed of ML or EL. Empirically speaking, this constraint is unable to account for Chinese/English CS. For example,

(12)   √ 是吧? *睡-ed* 我上铺的 Cathy.

    Right?   Slept my bed above Cathy

    "Right? Cathy slept in the bed above mine."

    "是吧? 睡在我上铺的 Cathy."

(13)   √ You *应该* go with her.

    you should go with her

    "You should go with her."

    "你应该跟她走。"

The mixed constituent "睡-ed" in (12) obviously violates the constraint in that the English suffix "-ed" indicating the past tense is switched and attached to a Chinese verb. A large number of counter-examples involving other language pairs are presented in the literature (e.g. Mahootian 1993; Di Sciullo, Muysken and Singh 1986).

3.3   Myers-Scotton's Matrix Language Frame Model

Though Joshi first notices the asymmetry property of ML and EL in CS and the difference between open- and closed-class items, it is Myers-Scotton (1993) who develops these ideas. The hierarchical difference between ML and EL as well as that between system and content morpheme[5] are the very foundation of the matrix language frame (MLF) model which she presents to account for the structures in intrasentential CS.

In the MLF model, the Matrix Language (ML) is defined as the languages playing a more dominant role in CS. And the other languages with a less dominant role are labeled the embedded language (EL). Myers-Scotton (1993) classifies three kinds of constituent contained in sentences showing intrasentential CS, namely, ML+EL constituents (those involving morphemes from two or more participating languages), ML islands (constituents

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[5] Note that the system and content morphemes are not exactly the same with Joshi's open- and closed-class items.

composed entirely of ML morphemes) and EL islands (constituents entirely in the EL). She proposes that the grammar of the ML sets the morphosyntactic frame for the first two constituents. And the major organizing device which the ML uses in setting the frame is the division between system and content morphemes. Further, he puts forward three features to distinguish content and system morphemes. Morphemes with the feature of [+Quantification] are system morphemes (including quantifiers, specifiers, possessive adjectives, inflectional morphology, as well as "any other category which can be inserted under the specifier position of NP," plus "other categories, such as tense and aspect, which involve quantification across events" (Myers-Scotton 1993: 100)). Morphemes with the feature of [-Quantification] and the feature of [+Thematic Role[6] - Assigner] or [+Thematic Role-Receiver] are content morphemes (including prototypically most verbs, prepositions, nouns, and descriptive adjectives) (Myers-Scotton 1993:6). And the provisions of the MLF model are contained in a set of interrelated hypotheses as stated below (Myers-Scotton 1993: 7):

(14a) The Matrix Language Hypothesis:

> The ML sets the morphosyntactic frame for ML +EL constituents.

> This hypothesis is realized as two testable principles: the Morpheme-Order Principle ('Morpheme order must not violate ML morpheme order') and the System Morpheme Principle ('all syntactically relevant system morphemes must come from the ML').

(14b) The Blocking Hypothesis:

> The ML blocks the appearance of any EL content morphemes which do not meet certain congruency conditions with ML counterparts.

(14c) The EL Island Trigger Hypothesis:

> Whenever an EL morpheme appears which is not permitted under either the ML Hypothesis or the Blocking Hypothesis, the constituent containing it must be completed as an obligatory EL island.

(14d) The EL Implicational Hierarchy Hypothesis:

> Optional EL islands occur, generally they are only those constituents which are

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[6] "Thematic roles (or theta roles) refers to the semantic relationships between verbs and their argument; for example, the role of patient is typically assigned by the verb to the object argument." (Myers-Scotton 1993: 7)

either formulaic or idiomatic or peripheral to the main grammatical arguments of the sentence.

The section above leaves a question for this part to answer, namely, why are the idea of asymmetry and the notion of differentiating ML and EL problematic? This question is left unanswered because it is related to another question in this part, i.e. how to identify the Matrix Language?

Myers-Scotton (1993:68) identifies it as "the language of more morphemes in interaction types including intrasentential CS." And he further notes that "Frequency count must be based on a discourse sample (that certainly must mean more than one sentence" (1993: 68). However, he admitted that how large the sample should be is an unresolved issue (1993: 68). In addition, he admitted that "ML assignment is dynamic", i.e. "the identity of the ML can change either synchronically (change within a same conversation, and even in a same sentence) or diachronically (change because of time and other factors such as socio-political factors)" (1993: 70). Thus, what mentioned above leaves much space for thinking if there is the distinction between ML and EL, or if the switch is really asymmetry. Even though the language of more morphemes is the ML, how can this idea exclude the possibility for ML switching to EL? Many other researchers also concern over the vagueness of the identification (e.g. Bentahila 1995; MacSwan 1999, 2000; Muysken 2000; and Muysken and de Rooij 1995, see MacSwan 2004).

In more recent work, Jake, Myers-Scotton, and Gross (2002) attempt to resolve the issue by providing a structural definition of the ML that "the ML does not change within a single bilingual CP" (2002: 73). However, it is still confusing and unclear.

The above shows that the basic theoretical foundation of the MLF model is far from being justified. And its empirical inadequacy with regard to the three hypotheses in (14a-c) will be shown below.

Firstly, as for the Morpheme-Order Principle, because it dictates that the word order of morphemes in an utterance must be that of the ML, and because the ML is by definition the language which contributes the system morphemes within the CP, there seems to be only two cases in which counter- examples would be possible (see also MacSwan, 2004):

(a) expressions in which content morphemes as well as system morphemes are contributed by one language, but in which the word order belongs to another; or

(b) expressions in which system morphemes come from one language, but content morphemes and word order are prescribed by another.

However, there are such counter-examples. Consider examples[7] in (15) and (8) repeated in (16) below:

(15) √幸灾乐祸地笑-*ING*,　　说 你　也 不能　吃辣的啦。

exultantly laugh-ing, say you too cannot eat capsicum

"Laughing exultantly, she says that you cannot eat capsicum too."

"她幸灾乐祸地笑，说你也不能吃辣的啦。"

(16) √我 不能　保证　　到　你家　*on time*, 但 我　一定　来。

I　not can guarantee arrive your home on time but I　surely come.

"I can't guarantee that I'll arrive at your home on time, but I'll surely come."

"我不能　保证　准时　到　你家，　　但 我 一定　来。"

In (16), though most of the morphemes (except the phrase "on time") come from Chinese, the word order is English[8]. In example (15), the English –ing participle indicating present progressive aspect is used, but the whole sentence is in the word order of Chinese.

Secondly, according to the System Morpheme Principle, EL system morpheme should not in principle occur within matrix language sentences. This, however, occasionally happens, as in the case of double morphology, e.g. "cats 们" in (17) involves two plural morphemes coming respectively from English and Chinese. And Halmari (1997), based on English/Finnish CS data provides another counter-example "*mountain+s+ei+lle*" (to the mountains). He observes that the plural morpheme comes both from English and from Finnish, and the allative case from Finnish (Halmari 1997: 87). Double plurals are also reported for other language pairs, e.g. Backus (1990: 4) for Turkish/Dutch; Eliasson (1991: 19-20) for Maori/English; and Kamwangamalu (1990:5) for Lingala and Chiluba/French; Hill and Hill (1986: 165) for Mexicano (Nahuatl) (see Myers-Scotton, 1993: 112). Myers-Scotton explains this type of double morphology by hypothesizing that "the EL affix may

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[7] All the examples without special notes in this part take Chinese as the ML, and English the EL. But in other places of this thesis, no distinction between ML and EL is maintained.

[8] The difference between the internal word order of "bu neng (不能)" and that of "can not" is not considered. Otherwise, it is impossible to identify what word order the sentence is in, neither Chinese nor English.

have been "analyzed as part of the stem" (Myers-Scotton 1993: 115), and thus the plural morphemes would behave differently from other system morphemes. But in fact, there are counter-examples in Chinese/English like (18), in which no English plural morpheme appears. So this is a weak point of the MLF model.

(17)　√可能　　有时　　不会像　你　和 *cats* 们 聊得那么投机。

　　　Maybe sometimes no like you and cats　talking happily.

　　　"Maybe sometimes you feel happier talking with cats."

　　　"可能有时不会像你和猫们聊得那么投机。"

(18)　√希望　　天下的　　　*little cat* 们 都能健康，快乐。

　　　Wish in the world little cat-s　　healthy　happy

　　　"(I) wish all of the little cats in the world would be healthy and happy."

　　　"希望天下的小猫们都能健康，快乐。"

Thirdly, the Blocking Hypothesis claims that any EL content morphemes which do not meet certain congruency conditions with ML counterparts would be prohibited. However, there are counter-examples. But before the discussion of counter-examples, the vagueness and unclarity of the phrase *"certain congruency conditions"* should be noted. Myers-Scotton does not spare any words on what exactly these certain congruency conditions are, so the hypothesis is problematic theoretically. So here we assume that these certain congruency conditions do not exclude the subcategorisation properties. Thus in (19), the subcategorisation properties of the English verb "look" do not meet those of the Chinese counterpart "看" as illustrated in (21). However, it is accessed. Another counter-example is presented in (20)[9].

(19)　√大家　　　请　　*look*　　　　黑板。

　　　everyone please　look (at)　　(the) blackboard

　　　"Everyone please look at the blackboard."

　　　"大家请看黑板。"

(20)　√First, please 看 this picture.

　　　first, please look at this picture

　　　"First, please look at this picture."

---

[9] This sentence takes English as the Matrix language.

"首先，请看这幅画。"

(21) 看: [V;—NP]; VS. look: [V;—PP]

Lastly, the Embedded Language Island Trigger Hypothesis dictates that an EL island has to be created whenever (1) the ML Hypothesis or (2) the Blocking Hypothesis is (or both are) violated. But no EL island like "look at" and "laughing" is created in (19), and (15) respectively. Similarly, the –ing participle in (3), (4), (15) and –ed participle in (12) appears without the creation of an EL island. In addition, there are many counter-examples in other CS data sets involving different language pairs (e.g. English/Finnish, Halmari 1997: 88).

All in all, the MLF model is challenged by many counter-examples, it is inadequate in explaining, at least, Chinese/English CS. So it fails both on the theoretical grounds and the practical grounds.

3.4   Di Sciullo, Muysken and Singh's Government Constraint

Di Sciullo, Muysken and Singh (1986) present another non-linear approach, namely, · the government constraint. They claim that the constituents holding a government must be in the same language, or in other words, must have the same Lq index. They firstly redefine government as (1986: 6):

(22) X governs Y if the first node dominating X also dominates Y, where X is a major category N,V,A,P and no maximal boundary intervenes between X and Y.

It is illustrated in the following parse tree:

(23)

```
              S
            /   \
          N      VP
          |     /  \
          |    V    NP
          |    |   /  \
          |    |  D    N
          |    |  |    |
          I   saw the  man.
```
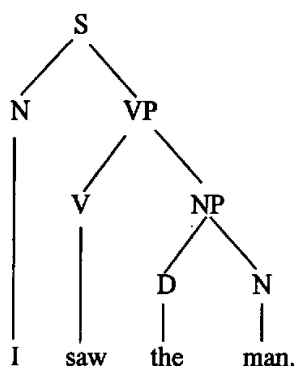
In (23), N governs VP, but not V for the maximal projection of VP. And for the same reason V governs NP, but not N or D. The N and V in (23) are recognized by them the "Lq carrier" that assign Lq index to a maximal projection. And they present the government constraint like this (1986:6):

(24) Government Constraint

(a) If Lq carrier has index q, then Yq^{max}.

(b) In a maximal projection Y^{max}, the Lq carrier is the lexical element that asymmetrically c-commands the other lexical elements or terminal phrase nodes nominated by Y^{max}.

According to the constraint in (24), switch is not allowed to occur between elements with a government relation, such as a verb and its complements, a preposition and its complements, but allowed between constituents without a government relation. Thus, the switch may occur between the subject "I" and the verb "saw", but not between the verb "saw" and the object "the man". But in fact, this kind of switch can be easily found. For example:

(25) √不要在 已经   觉得   疲惫的时候再 *force* 自己。

　　　Do not already feel   tired   when   force yourself

　　　"Do not force yourself when you have already felt tired."

　　　"不要在已经觉得疲惫的时候再强迫自己。"

(26) √下周一   就轮到我 做 *presentation* 了。

　　　Next Monday my turn to make presentation

　　　"It's my turn to make presentation next Monday."

　　　"下周一就轮到我做演示了。"

Many other counter-examples are reported in the literature (e.g. Myers-Scotton 1993; MacSwan 2004). In addition to its inadequacy on empirical ground, it is problematic on the theoretical ground. First, the class of governors in this constraint needs to be extended (at least, the complementiser should be involved). Second, the domain of government was too large, including in principle the whole maximal projection. Thus switches between determiner or quantifier and the nouns modified or between the verb and locational

adverbs are predicted to be ungrammatical as well, again contrary to the evidence (Milroy & Muysken 1995:186-7).

On both empirical ground and theoretic ground, this constraint is inadequacy, which should be attributed primarily to its short of the basic requirement of descriptive adequacy for they made a mistake that no switch occurs between a verb and its complements, and between a preposition and its complements. However, this constraint has the virtue that it refers to an independently motivated principle of grammar, i.e. government (MacSwan 2004).

3.5   Belazi, Rubin, and Toribio's Functional Head Constraint

Another principle said to be motivated independently in the theory of grammar, namely, the Functional Head Constraint (FHC) is proposed by Belazi, Rubin, and Toribio (1994). The FHC is presented heavily on "the well-established distinction between functional heads, such C^0 and D^0, and the lexical heads, such as V^0 and N^{0}" (Belazi et al 1994: 228; qtd Halmari 1997: 92)[10]. The constraint takes the following form (Belazi 1992; qtd Halmari 1997):

(27)   The Functional Head Constraint

Switching is prohibited between a functional head and its complement: the language of the complement of the functional head needs to match the language of the functional head.

According to the FHC, no switching between the determiner and its complement noun could take place, and also no switch between a complementiser and the lexical heads can occur. But, there are many counter-examples in Chinese/English CS. For instance:

(28)   √ Would you please pass me the 筷子?

would you please pass me the chopsticks

"Would you please pass me the chopsticks?"

"你能把筷子递给我吗？"

(29)   √ The professor told us that 四书五经是必读的。

---

[10] C^0: Complementiser; D^0: Determiner; V^0: Verb; N^0: Noun.

the professor told us that Four Books and Five Classics are required

"The professor told us that Four Books and Five Classics are required."

"教授告诉我们四书五经是必读的。"

The examples presented in (28) and (29) obviously speak against the constraint. And other counter-examples are also provided by other researchers, for example, Woolford (1983); Halmari (1997). Although, this constraint fails on the empirical ground, it is appreciated for searching a structural UG-based explanation for codeswitching phenomena (Halmari, 1997).

3.6 MacSwan's Minimalist Approach

As for the UG theory, Chomsky (1995) recently develops his theory from the GB theory to the Minimalist Program. Generally speaking, the minimalist approach claims that the well-formedness of structures depends on feature checking, and the recognition of the different values of features, especially a recognition of an asymmetry between interpretable and uninterpretable features (Chomsky 1995, 2001). Within this framework, many scholars have tended to find a universal account for CS phenomena (Toribio and Rubin 1996; Boeschoten and Huybregts 1999; MacSwan 1999, 2000; Ritchie and Bhatia 1999, see Jake, Myer-Scotton and Gross 2002). This section is going to discuss the minimalist approach proposed by MacSwan, whose proposal is of greater influence.

In his work, MacSwan (1999, 2004) states that:

(30) Nothing constrains code switching apart from the requirements of the mixed grammars. (MacSwan 2004: 298)

And he presents an illustration of the bilingual's language faculty as in (31):

(31) Organization of the bilingual language faculty

```
┌──────────────────────────────────────────────────────────────┐
│  ┌─────────────────────────┐      ┌─────────────────────────┐  │
│  │     Lexicon (Lₓ)        │      │     Lexicon (L_y)       │  │
│  │ (Rules of Word Formation)│      │ (Rules of Word Formation)│  │
│  └─────────────────────────┘      └─────────────────────────┘  │
│           Select (C_HL)                 Select (C_HL)          │
│                       ┌────────────────────────┐                │
│                       │      Numeration        │                │
│                       └────────────────────────┘                │
│                        Overt Component                          │
│                           (C_HL)                                │
│                                         Spell-Out               │
│                                                                 │
│   Phonology (Lₓ)  ∪  Phonology (L_y)      Covert Component (C_HL)│
│        (C_HL)                                                    │
│                                                                 │
│      PF (phonetic form)                    LF (logical form)     │
└──────────────────────────────────────────────────────────────┘
```
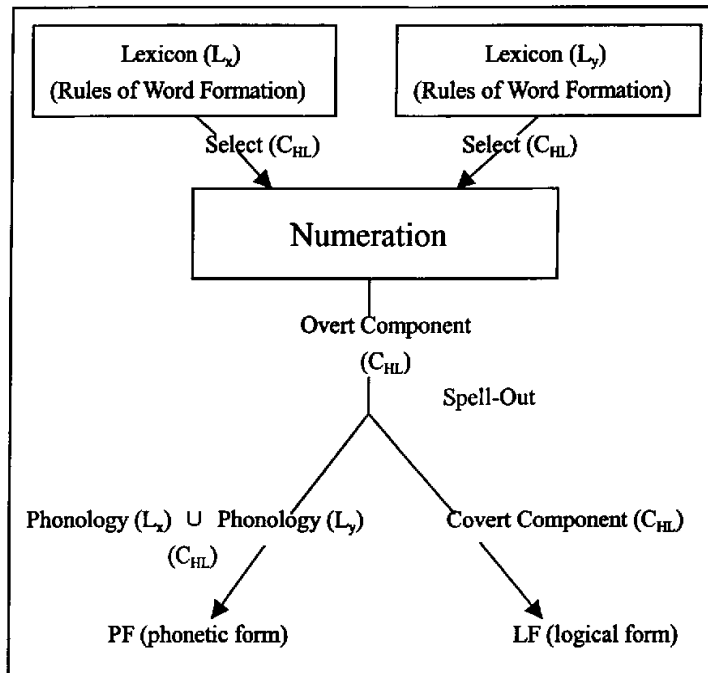
MacSwan (2004: 298-9) believes that "a minimalist approach to code switching might posit that lexical items may be drawn from the lexicon of either language to introduce features into the numeration, which must then be checked for convergence in just the same way as monolingual features must be checked, with no special mechanisms permitted". Or put another way, they assume that "the bilingual nature of codeswitching is only an issue in so far as it may increase the likelihood of feature mismatches across languages and non-converging derivations, or unacceptable stings" (Jake et. al 2002). However, we argue that his proposal in (33) is too strong to be tested.

Further, basing on the differences between the syntactic (namely, covert) and phonological components of the grammar, he rules out code switching within the PF component. He assumes that code switching is "the union of two (lexically encoded) grammars, where the numeration may draw elements from the union of two (or more) lexicons". The derivation must meet certain requirements in terms of the encoded features imposes on by each lexical item, no matter to which language the lexical item belongs. Thus, he supposes that if a PF component in PF_x contains rules ordered such that R1>R2

and R3>R4, and in PF$_y$ rules are ordered as R1<R2 and R3<R4, then the union of PF$_x$ and PF$_y$ will have no ordering relation for R$_n$. "In other words, under union (code switching), the PF components cannot meet their requirement that they have (partially) ordered rules or constraints, ruling out language mixing within the phonological component." (2004: 299) He (2004: 300) states this as the PF Disjunction Theorem with the form in (32).

(32) PF Disjunction Theorem

(i) The PF component consists of rules/constraints which must be (partially) ordered/ranked with respect to each other, and these orders vary cross-linguistically.

(ii) Code switching entails the union of at least two (lexically-encoded) grammars.

(iii) Ordering relations are not preserved under union.

(iv) Therefore, code switching within a PF component is not possible,

Particularly, (32) is views as an instantiation of the Full Interpretation (FI)[11], which requires a symbol without a sensorimotor interpretation is not allowed at PF. CS at PF is inhibited for CS at PF level generates "unpronounceable" elements that can .not be interpreted sensorimotorly. Though, the PF Disjunction Theorem is deduced in the MP framework, it is framed actually to accounts for the similar thing the Free Morpheme Constraint intends to explain, that is, the no bound morpheme is allowed to be switched. As MacSwan himself note that "the PF Disjunction Theorem captures the facts which in the Free Morpheme Constrain intended to capture" (2004: 301).Therefore, it is defeated too by the counter-examples like (3), (4), (5), (6) on the empirical grounds just like the Free Morpheme Constraint. More counter-examples across languages are presented by Jake and his associates (2002).

3.7   Bhatt's OT Approach

All of the constraints discussed above are first proposed to achieve the goal of

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[11] FI is one of the principles of economy that play an important role in MP. FI says that "no symbol lacking a sensorimotor interpretation is admitted at PF"; (MacSwan 2004:297) and "every element of the representation have a (language-independent) interpretation" at LF (Chomsky 1995:27, qtd MacSwan 2004:297). In other words, FI checks if there is any element uninterpretable at both PF and LF and deletes it if there is any. Thus, according to the interpretability, the features can be classified into interpretable features and uninterpretable features. The latter include such as case, person, number and gender.

"universal validity". But unfortunately, none of them succeed. In contrast, Bhatt's OT approach has made a big stride towards that goal.

Based on a cross-linguistic data Bhatt presents five constraints within the framework of OT as below (Bhatt, 1997):

(33a) **LINEAR PRECEDENCE CONSTRAIN (LPC)**

Items of code-mixed clauses follow the word order of the language of the Infl (TNS).

(33b) **HEAD-SYNTAX (HS)**

Grammatical properties (e.g., Case, directionality of government, etc.) of the language of the head must be respected within its 'minimal domain' (à la Chomsky, 1993).

(33c) **EQUIVALENCE (EQUI)**

Switched items follow the grammatical properties of the language to which they belong.

(33d) ***SPEC**

Avoid switching Specifier of the maximal projection in a Case-position, i.e., the Spec of an XP must be of the same language as the head which assigns Case to that XP.

(33e) **COMPLAISANCE (COMP)**

A switched specifier of the maximal projection in a Case-position must accompany a switch of its head, i.e., if Spec-XP switches, then head X switches too.

These constraints differ from the previous constraints in that they are violable, not categorical; they are universal, not language particular; and they are ranked differently in different pairs of languages involved in CS. In fact, as Bhatt himself put that "all of these constraints have appeared in the literature in different guises and under different names, either in the form of concrete proposals or in the form of background" (Bhatt, 1997:236). To be specific, the essence of LPC is the same with the Morpheme order principle in MLF; EQUI is proposed by Pfaff (1979) and Poplack (1981); and HS is approximate to Pandit's proposal. Thus, the three constraints meet the same counter-examples as those forerunners. As for *SPEC and COMP, it is easy to find counter-examples in Chinese/English CS. For instance, the specificer of the NP "他的"in (34) is switched, though it is in the case

domain of the head verb "read" and the head verb remains as English.

(34)   √ His teacher read 他的 report.

his teacher read his report

His teacher read his report.

他的老师读了他的报告。

Obviously, there are many counter-examples to these constraints. However, we cannot abandon them, because they are soft and violable, instead of categorical. The soft nature of these constraints in OT provides us another way to explain their inadequacy: they are ranked lower; and to violate them is to satisfy higher ranker constraints. Thus, we recognize their status of universality.

But, the OT approach proposed by Bhatt said nothing about the switched construction like "笑-ING", "teacher 们". This is the primary weakness of this proposal.

3.8   Summary

To sum up, all of the previously proposed constraints meet a great deal of counter-examples. They all fail actually on the same grounds, i.e., to achieve the goal of descriptive adequacy for a linguistic theory.

Chapter Four

The Morphosyntactic Features of Chinese/English CS

This chapter is going to present the morphosyntactic features of Chinese-English CS, mostly are generalized from the data collected in this thesis. Specially, the different features in Chinese/English CS data involving morphemes, arguments and adjunct constituents are presented respectively. Each of the three groups is analyzed in detail by subdividing them into some smaller groups, like inflectional morphemes, derivational morphemes, subject, object, sentential complement, and so on so forth. In addition, accompanying with the feature-presentation, a contrastive analysis of Chinese and English language facts is presented because the issues in CS, especially its grammatical properties, are closely related to language typology, which also is a hot topic discussed in CS literature. This chapter is designed to meet the condition of descriptive adequacy, thus it is highly descriptive in nature.

4.1   Morphemes in Chinese/English CS

It is widely recognized and acknowledged in the field of linguistics that morpheme can be divided into inflectional morpheme and derivational morpheme. However, all of the approaches discussed in Chapter Three seem to overlook this division in accounting for the grammatical constraints of CS. But as a matter of fact, this division is very important because the two kinds of morphemes behave so differently in CS that can change the result of research. This will become obvious later. Before we addressing the inflectional morphemes and derivational morphemes, it is necessary to notice that this part is focusing on bound morphemes. This is because i) root cannot be divided into derivational or inflectional, all of the free morphemes can be a root, so all of the free morphemes can not be divided into derivational or inflectional (Hu Zhuanglin 2001:84); ii) free morphemes may constitute words by themselves, thus they are discussed later as word-switching.

4.1.1 Inflectional Morpheme

As for inflectional morpheme, there is a difference between Chinese and English. Structurally speaking, Chinese is an analytic language, English is an inflectional language[12]. They differ from each other in that the grammatical relationship between constituents of a sentence is represented by means of word order and system morphemes in Chinese, while the expressing of such grammatical relationship is accomplished by morphological changes of morphemes in English. Thus, in English there are inflectional morphemes like the plural marker *–s/-es,* the past tense marker *–ed,* the third person singular present tense marker *–s/-es,* the possessive case marker *-'s,* the participle marker *–en* (past),*-ing* (present), the comparative degree and superlative degree marker for adjective and adverb *-er,* and *–est.* Whereas in Chinese, there is no such grammatical categories as gender, person, tense, aspect, mood, degree, voice, nor is there any marker for the grammatical categories like case, and number (we consider "们"in Chinese to be an obvious marker here, although "们" is in fact not equivalent to English plural marker *–s/- es).* Thus we are prevented from seeing a full picture of inflectional morphemes in CS. However, the data shows that the inflectional morphemes can be switched, i.e. inflectional affixes can be attached to a root of another language. For example:

(35a) √ 在此祝愿全天下的 *Teacher 们*　　教师节　　　　快乐。
　　　　Here wish　all　　teacher-s　Teacher's Day happy.
　　　　"Here I wish all teachers happy Teacher's Day."
　　　　"在此祝愿全天下的老师们教师节快乐."

(35b) √ 小王　　不想　　　　答话，继续　　*睡 ing.*
　　　　Xiao Wang not want to answer, go on sleep-ing
　　　　"Xiao Wang does not want to answer and he goes on sleeping."
　　　　"小王不想答话，继续睡 ing."

(35c)　√ 我怎么跟他套近乎呀？我就坐着*郁闷ING.*
　　　　I how with him talk? I　sit (there) writhing (with the problem)
　　　　"How should I talk with him? I only sat there writhing (with the　　problem)"
　　　　"我怎么跟他套近乎呀？我就坐着郁闷。"

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[12] Though there are fewer morphological changes in English than in other inflectional languages like Russian, it is still recognized as inflectional by many scholars (e.g. Dai Weidong et al. 1998; Zhang Bin 2003).

And specially, there is the case of double morphology, e.g. cat+s+们. More examples are:

(36a) √ Law Students 们   今天站起来啦！

    Law Students –s   today free

    "Law Students are free today!"

    "法律系的学生们今天站起来啦！"

(36b) √ 美国的 *Founding Fathers* 们 早已定下了国家运行的规则。

    America Founding Fathers -s already line out government run   rule

    "The Founding Fathers of America have already lined out the rules

    running government."

    "美国所谓的建国领袖们早已定下了国家运行的规则。"

4.1.2 Derivational Morpheme

Both in English and Chinese, there are many derivational morphemes, either bound or free. But the data (both naturalistic data and grammaticality judgment data) shows that no switch involves derivational morphemes, neither free derivational morphemes, nor bound derivational morphemes. All the fabricated items are judged to be ill-formed. For example:

(37a) √ 这有很多非常著名的作-er.

    There are many famous writer

    "There are many famous writer."

    "这有很多非常著名的作家。"

(37b) √ Let's *简单-fy* 这个问题。

    Let's simpli-fy the question.

    "Let's simplify this question."

    "我们来简单化这个问题。"

(37c) √ This software is *用-ful*.

    This software is use-ful

    "This software is useful."

    "这个软件很好用。"

(37d) √ 山上有好多 *stone-头*。

mountain on have many stone

"There are many stones on the mountain."

"山上有好多石头。"

(37e) √ 那个小伙子有 *create-性*。

　　　that　　guy　　of　creativity

　　　"That guy is creative."

　　　"那个小伙子有创造性。"

(37f) √ *we 们*[3]是学生。

　　　　we　　are　students.

　　　　"We are students."

　　　　"我们是学生。"

In addition to the example cited above, there are a bound of other instances like "brush 子", "flower 儿", "Wood 头", "you 们", "act 员", "draw 家", "吸引-tive", "记-er" and etc.. All of them are banned to occur. There perhaps is one potential counterexample, namely "阿 Sir", which is judged by subjects to be good and acceptable. But this item is considered as cultural borrowing (see Chapter Two).

4.2　Arguments of the Verb in Chinese/English CS

This part deals especially with the generalizations that refer to the grammatical arguments of the verb including subject, objects, and sentential complements. According to the data, elements in argument position are generally possible to be switched.

4.2.1 Subject

Elements taking the subject position are free to be switched, no matter the element is a pure noun, a noun with adjunction, or a pronoun (cf. Bhatt 1997). In addition, for the adjunction+noun subject, the head noun tends to be switched. This is in agreement with Bhatt's observation. The examples are presented below.

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[3] Here "们"is a bound derivational morpheme instead of a inflectional bound morpheme as in (1a). The former is meaningless, while the latter is used to mean a group of.

(A) Pure noun subject:

(38a) √ *Personality* 要能匹配才可以合作。

　　　　personality　　　　match　　can cooperate.

　　　　"Matching personalities make cooperation possible."

　　　　"性格要能匹配才可以合作。"

(38b) √ He said that *老天爷* blessed him again.

　　　　He said that God blessed him again

　　　　"He said that God blessed him again."

　　　　"他说老天爷又帮了他。"

(B) Adjunction+noun subject:

(39a) √ *Black car* 好看一点。

　　　　black car looks more beautiful

　　　　"Black car looks more beautiful."

　　　　"黑色的车子好看一点。"

(39b) √ *纯净水* is much more healthy.

　　　　pure water is much more healthy

　　　　"Pure water is much more healthy."

　　　　"纯净水更健康。"

(C) Pronoun subject

(40a) √ *I* 服了 *you*.

　　　　I agree with you

　　　　"I agree with you."

　　　　"我服了你。"

(40b) √ *他们* failed the exam.

　　　　they failed the exam

　　　　"They failed the exam."

　　　　"他们没通过这次考试。"

(D) Head noun in adjunction + noun subject

(41a) √ 她的 *pose* 很好。

         her pose is very good

      "Her pose is very good."

       "她的姿势很好。"

(41b) √ 美好的 *time* 一去不复返了。

         happy time   gone   forever

      "Gone is happy time."

       "美好的时光一去不复返了。"

(41c) √ Your 发型 is very cool.

         your hair-style is very cool

      "Your hair-style is very cool."

       "你的发型很酷。"

(41d) √ Every 球员 is very rich.

         every football player is very rich

      "Every football player is very rich."

       "每个球员都很有钱。"

Because the grammatical category of case is not active neither in Chinese nor in English, we cannot make an observation to say that there is no case limitation for subject elements when they are switched entirely (cf. Bhatt 1997).

4.2.2 Object

The data shows that objects, both direct object and indirect objects are often free to be switched. For direct object, there is no combination restriction, that is, the switched elements can be a noun, an adjective+noun combination or a possessive+quantifier+noun combination (cf. Bhatt 1997). And for indirect object, it can be switched entirely or only the head is switched. For the same reason stated above, we don't know from Chinese/English CS data that if there is morphological case feature restriction on switched items. For example:

(A) Direct object:

    (a) Pure noun:

(42a) √ 学校又在修 *playground.*

       school   build playground

       "Another playground is being built in our school."

       "学校又在修操场。"

(42b) √ His uncle bought many 书。

       His uncle bought many books

       "His uncle bought many books."

       "他叔叔买了很多书。"

    (b) Adjective + noun:

(42c) √ 中美两国正是在　　　　那一年　　　建立起了 *diplomatic relation.*

       China (and) America that year   establish diplomatic relation

       "In that year, China and America established diplomatic relation."

       "中美两国正是在那一年建立起了外交关系。"

(42d) √ He told us many *有趣的故事。*

       he told us many interesting stories

       "He told us many interesting stories."

       "他给我们讲了许多有趣的故事。"

    (c) Possessive + quantifier + noun:

(42e) √ 那只猴子　　　　吃完了　　　*all its bananas.*

       that monkey has eaten up all its bananas

       "That monkey has eaten up all its bananas."

       "那只猴子吃完了它所有的香蕉。"

(42f) √ He remembers *他所有的朋友。*

       he remembers his all   friends

       "He remembers all his friends."

       "他记得他所有的朋友。"

(B) Indirect object:

(a) Switched entirely:

(43a) √ 他经常帮助我 *with my computer course.*

he usually help me with my computer course

"He usually helps me with my computer course."

"他经常在计算机功课上帮助我。"

(43b) √ I put a book 在桌子上。

I put a book on table

"I put a book on the table."

"我放了一本书在桌子上。"

(b) Only head noun is switched:

(43c) √ 我放了一只笔在 *table* 上.

I put a   pen   table on

"I put a pen on the table."

"我放了一只笔在桌子上。"

(43d) √ 他买了一本书给他 *mother.*

he bought a book for his mother

"He bought a book for his mother."

"他买了一本书给他妈妈。"

4.2.3 Sentential Complement

In addition to NP arguments, we also find switches permitted between a complementiser and a sentence. Bhatt (1997) observed the same switch. Examples are shown below:

(44a) √ 他 跑出去   看见 *two dogs fighting.*

he ran out and saw two dogs fighting

"He ran out and saw two dogs fighting."

"他跑出去看见两只狗在打架。"

(44b) √ He indicates to me with his eyes that 他们是骗子。

    he indicates to me with his eyes that they are liars

    "He indicates to me with his eyes that they are liars."

    "他用眼神告诉我他们是骗子。"

(44d) √ The professor told us that 四书五经是必读的。

    the professor told us that Four Books and Five Classics are required

    "The professor told us that Four Books and Five Classics are required."

    "教授告诉我们四书五经是必读的。"

(44e) √ 大家都   认为 *he is a kind man.*

    everyone thinks he is a kind man

    "Everyone thinks (that) he is a kind man."

    "大家都认为他是一个心地善良的人。"

And switches are also possible between a verb and a complementiser. For instance:

(45)   √ 我们希望 *that everyone can be healthy and happy.*

    we all wish that everyone can be healthy and happy

    "We all wish that everyone can be healthy and happy."

    "我们希望每个人都健康快乐。"

There is no overt Comp in Chinese, and the Comp in English is optional, thus the observations stated here need further proof from other CS data involving other pairs of languages.

So far, we have found many significant generalizations. However, because the basic linear word orders of both languages are SVO, we get no significant observation regarding to the surface linear structures of switched item. This will be solved below when adjunct constituents are involved in switching because the places taking by adjunct constituents in both languages do not match anymore, especially the position of attributive constituents.

4.3 Adjunct Constituent

4.3.1 Adjunct Clause

Like complement clauses, the entire adjunct clause, including the subordinating

conjunction, can be switched, as shown in (46a-d) below. Some switches may exclude just the subordinator, as shown in (46e) below. And the conjunction can be switched alone, as shown in (46f) below.

(46a) √ 我 不　喜欢　　这件衣服 *because I don't like the color.*

      I don't like　　this coat because I don't like the color

      "I don't like this coat because I don't like the color."

      "我不喜欢这件衣服因为我不喜欢这种颜色。"

(46b) √ I like this film 因为男主人公很帅。

      I like this film because the hero is very handsome

      "I like this film because the hero is very handsome."

      "我喜欢这部电影因为男主人公很帅。"

(46c) √ 这本 书　　很好看 *and it is not very expensive.*

      this book is very good and it is not very expensive

      "This book is very good and it is not very expensive."

      "这本书很好看而且也不贵。"

(46d) √ I dreamed yesterday that I was very rich *但是房子很小。*

      I dreamed yesterday that I was very rich　but　　house very small

      "I dreamed yesterday that I was very rich but the house is very small."

      "我昨天梦到我很有钱，但是房子很小。"

(46e) √ 这本　　书　　很好，但是 *it is too expensive for me.*

      this book is very good, but it is too expensive for me

      "This book is very good, but it is too expensive for me."

      "这本书很好，但是对我来说太贵了。"

(46f) √ 我可以把　　这本书　　给你，*but* 你要请我吃饭。

      I　can　this book　give you, but you must buy me a dinner

      "I can give this book to you, but you must buy me a dinner."

      "我可以把这本书给你，但是你要请我吃饭。"

4.3.2 Adverbial Phrases and Parenthetical Elements

Also, the data shows that switches of adverbial phrases and parentheticals are not uncommon. Bhatt (1997) made the same observation. Some of the examples are given in (47),

(47a) √ 早上,I usually get up at 9:30.

   in the morning I usually get up at 9:30

   "In the morning, I usually get up at 9:30."

   "早上，我通常 9:30 起床。"

(47b) √巴拿马也写信来，说 *at all costs* 要我去开音乐会。

   Panama too send letter, say at all costs I must go and give a concert

   "Panama send a letter too, saying (that) at all costs I must go to there and give them

   a concert."

   "巴拿马也写信来，说无论如何要我去开音乐会。"

(47d) √ Every Sunday *他都要去教堂。*

   every Sunday he goes to church

   "Every Sunday he goes to church."

   "每个星期天他都要去教堂。"

(47e) √ By the way, I met *林伯母的   弟弟。*

   by the way, I met aunt Lin's brother

   "By the way, I met aunt Lin's brother."

   "顺便提一下，我遇到了林伯母的弟弟。"

But, the word order may change when a single adverb is involved in switching. For example,

(48a) * 我看着 *above my head* 的   星星.

   I look at above my head   stars.

   "I look at the stars above my head."

   "我看着头上的星星"

(48b) √我不能   保证   到   你家   *on time*, 但我一定来。

   I   not can guarantee arrive your home on time but I   surely come.

   "I can't guarantee that I'll arrive at your home on time, but I'll surely come."

   "我不能保证准时到你家，但我一定来。"

(48c) √They live in *上面的* room.

   they live in above room

   "They live in the room above."

   "他们住在上面的房间。"

(48d) * Do you see the big dam 那里的?

    do you see the big dam there

    "Do you see the big dam there?"

    "你看见了那里的大坝了吗"

4.3.3 Topicalized Element

Similarly, switching of topicalized constituents appears to be highly possible and acceptable, such as shown in the data below:

(49a) √ On the wall 有一幅画挂着。

    on the wall, there is a picture

    "on the wall, there is a picture."

    "在墙上，有一幅画挂着。"

(49b) √ 这个问题, *we can solve.*

    this problem, we can solve

    "This problem, we can solve."

    "这个问题，我们能解决。"

4.3.4 Attributive Constituents

For switches involving attributive constituents, like single adjectives, –ed and –ing participles, and attributive prepositional phrases, the case is much more complex. Some switches are judged to be acceptable, but others unacceptable. This is because in Chinese, the attributive constituents precede the head noun, while in English some are pre-modifiers, and some are post-modifiers. Thus, the linear difference inhibits some switches. For example

4.3.4.1 Adjectives

The data shows that the single adjectives can be switched without the trouble of linear difference, for in both languages the adjective words are pre-modifiers. For example:

(50a) √ 马尼拉的音乐水平不错，菲律宾人很 *musical.*

    Manila   music   level   is good, Filipino very musical

    "The music level of Manila is very high, Filipino are very musical."

"马尼拉的音乐水平不错，菲律宾人很有音乐感。"

(50b) √ 常常 保持 *fresh* 的精神。

　　　often keep   fresh spirit

　　　"Keep a fresh spirit often."

　　　"常常保持新鲜的精神。"

4.3.4.2 Attributive prepositional phrase

(51a) * I saw the dragon　童话里的。

　　　I saw the dragon in the story

　　　"I saw the dragon in the story."

　　　"我看见了童话里的龙。"

(51b) √ I saw 童话里的 dragon.

　　　I saw in the story the dragon

　　　"I saw the dragon in the story."

　　　"我看见了童话里的龙。"

(52a) ? *In X-Man*, 那些演员都很好看。[14]

　　　in "X-Man", those actors   are   good-looking

　　　"In "X-Man", those actors are good-looking."

　　　"X-Man（电影）里面的那些演员都很好看。"

(52b) ? 那些演员 *in X-Man* 都很好看。

　　　those actors in X-Man   are good-looking

　　　"In X-Man, those actors are good-looking."

　　　"X-Man（电影）里面的那些演员都很好看。"

4.3.4.3 –ed and –ing Participles

Generally speaking, it is possible to switch participles. But in contrast with single adjectives, –ed and –ing participles are post-modifiers in English, but pre-modifiers in Chinese. Thus this difference leads to that some switches are acceptable, while others are unacceptable. For example:

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[14] Because the influence exerted by native language on consultants, the intuition in these sentences is not as reliable as in other sentences. But these items are possibly acceptable.

(A) –ing participles

(53a) * I don't know the man *和你说话的*。

       I don't know the man with you talk

       "I don't know the man talking with you."

       "我不认识和你说话的人。"

(53b) √ I don't know *和你说话的* man.

       I don't know   with you talk   man

       "I don't know the man talking with you."

       "我不认识和你说话的人。"

(53c) √ 我不认识那个 *talking to you* 的人。

       I don't know   the talking to you   man

       "I don't know the man talking to you."

       "我不认识那个和你说话的人。"

(53d) ? 我不认识那个人 *talking to you.*

       I don't know the man talking to you

       "I don't know the man talking to you."

       "我不认识那个和你说话的人。"

(54a) * Those boys *在那玩的* are my classmates.

       those boys   there   play are my classmates

       "Those boys playing there are my classmates."

       "在那玩的那些男孩是我的同学。"

(54b) √ *在那玩的* those boys are my classmates.

       there play those boys are my classmates

       "Those boys playing there are my classmates."

       "在那玩的那些男孩是我的同学。"

(54c) √ *Playing there* 的那些男孩是我的同学。

       playing there   those boys are my classmates

       "Those boys playing there are my classmates."

       "在那玩的那些男孩是我的同学。"

(54d) ? 那些男孩 *playing there* 是我的同学。

       those boys playing there are my classmates

"Those boys playing there are my classmates."

"在那玩的那些男孩是我的同学。"

(B) –ed participles

(55a) √ 我有一辆汽车 *made in America.*

I have a car made in America

"I have a car made in America."

"我有一辆美国造的汽车。"

(55b) √ 我有一台 *made in America* 的电脑。

I have a made in America computer

"I have a computer made in America."

"我有一台美国造的电脑。"

(56a) ? I got a car *中国制造的* 。

I got a car made in China

"I got a car made in China."

"我有一辆中国制造的汽车。"

(56b) ? I got a *中国制造的* car.

I got a made in China car

"I got a car made in China."

"我有一辆中国制造的汽车。"

4.4   Other Significant Features

There are many other significant features.

First, in contrast to Bhatt's (1997) observation that "Spec of maximal projections (XPs) within the case-domain of a head does not switch; i.e. the language of the Case-governor must match the language of the Spec of the XP it governs", we find that it does not hold true for Chinese/English CS data. For example:

(57)   √ I read *他的* critique.

I read his critique

"I read his critique."

"我读了他的评论。"

In (57), though the Spec "他的"of NP "他的 critique" is in the case-domain of the head verb "read", they are in different language.

Second, the data shows that some switches in the following examples are unacceptable, while in others are acceptable.

(58a) * I 看 at the blackboard.

   I look at the blackboard

   "I look at the blackboard."

   "我看着黑板。"

(58b) * 我安静地 *look* 那个老人。

   I   quietly   look that old man

   "I looked at that old man quietly."

   "我安静地看着那个老人。"

(58c) √ First, please 看 the blackboard.

   first, please look at the blackboard

   "First, please look at the blackboard."

   "首先，请看着黑板。"

(58d) √ 大家请 *look at* 黑板。

   everyone please look at the blackboard

   "Everyone, please look at the blackboard."

   "大家请看着黑板。"

Finally, the data shows that some switches are acceptable, though the word order is different between two languages. .

(59) √ 你们想吃 *what?*

   you   want to eat what

   "What do you want to eat?"

   "你们想吃什么?"

Chapter Five

An OT Approach to the Morphosyntactic Features of CS

Based on the generalizations in Chapter Four, this chapter attempts to add four universal grammatical constraints to that of Bhatt. One is a morphological constraint, namely, *Deri; and the other three are syntactic constraints called LIR, FAITHFULNESS, and Deep Structure Constraint (DS) respectively. They will be discussed respectively. And then the ranking of these constraints together with the constraints proposed by Bhatt will be discussed. But before that, a brief introduction to the theoretic framework of this paper will be presented first.

5.1   Theoretic Framework

The theoretic framework adopted in this paper is Optimality Theory (henceforth "OT"), a theory first presented by Alan Prince and Paul Smolensky in 1991. Since then, "research in OT, especially in the area of phonology has grown tremendously and is coming to dominate the world of linguistic research" (Archangeli 1997:1). But OT is not only a theory of phonology, but a general theory of grammar. It has been widely applied to the fields of morphology, syntax, semantics, pragmatics, language acquisition, computational linguistics and even artificial intelligence (AI). Although, "the impact of OT in these areas of linguistics has not been dramatic, it has been significant, and is likely to rival its impact in phonology before long" (Archangeli 1997:1).

OT, like other models of linguistics, proposes an input and an output and a relation between the two. In Transformational Generative Grammar, the input is the starting point, there is a series of operations performed on the input, and the result of these operations is the output. Crucially, if an operation makes some change in the input, that changed form serves as the input to the next operation. While in OT, the relation between input and output is mediated by two formal mechanisms, GEN (for Generator) and EVAL (for

Evaluator). GEN creates a candidate set of possible outputs for a given input. EVAL selects the best (optimal) candidate(s) from the candidate set generated by GEN by making use of the language particular ranking of violable constraints from CON (for a universal set of constraints). The optimal output, the one that is selected by EVAL is the one that best satisfies these constraints. In other words, the optimal, harmonic, output representation is the one that has the least serious constraint violations. The working model of OT is presented below in Figure 1. And Figure 2 illustrates how EVAL selects the optimal output.

EVAL is at the heart of OT. And CON is at the heart of EVAL. CON is assumed to be part of our innate knowledge of language. The constraints in CON are universal, and violable or soft, while they can be ranked according to their relative importance, and the ranking is language particular. Thus to set the constraints and their ranking is of critical importance for applying OT to CS or to any other linguistic issues.
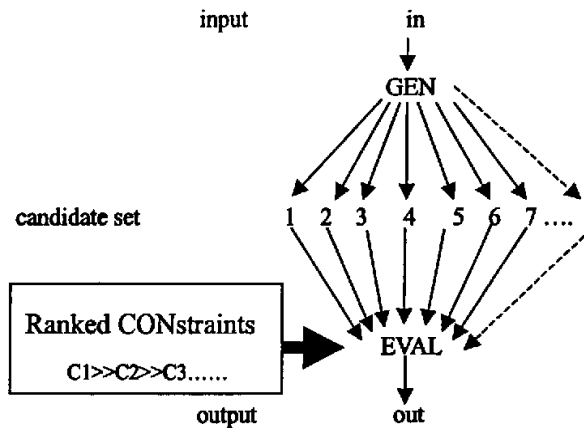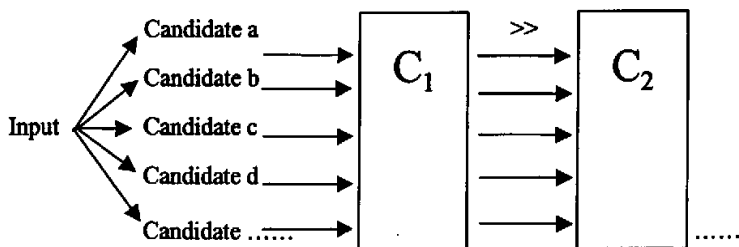

Figure 1   OT Model

Figure 2 The Working Mechanism of EVAL

(Kager 2001:24)

Simply speaking, the constraints can be understood as positive requirements or negative restrictions made by UG to language surface representations (Li Bing 1998). It results from "surface-representation derivation", i.e. the constraints are derived from surface structures, but they must be universal and are not necessarily "surface-true". In fact, the setting of constraints relates to an idea that lies at the heart of OT, namely, OT thinks that every grammar is a system of conflicting forces that are embodied by constraints (Kager 2001:4). And among these forces there are two major forces that are engaged in a fundamental conflict in every grammar: force produced by principles of economy and force produced by the function to express contrasts of meaning (Ma Qiuwu, Chen Bin 2004).[15] They are embodied by FAITHFULNESS constraints and MARKEDNESS constraints respectively. FAITHFULNESS constraints require that outputs preserve the properties of the input, i.e. require some kind of similarity between the output and the input. Whereas, MARKEDNESS constraints require that output forms undergo some changes in order to meet some criterion of structural well-formedness, i.e. to be acceptable. Then, the core ideas of OT can be summed up in the following way: constraints can be violated; constraints are ranked; and the optimal form is grammatical.

The rationale for adopting OT is twofold. i) The spirit of optimal form is in accordance with the important cross-linguistic observation: that languages involved in code-switching have 'preferences' for what constitutes 'well-formed' (Gumperz and Hernandez-Chavez 1975; Shaffer 1977; Kachru 1978; Gumperz 1982; Poplack 1981; Singh 1985). ii) These grammatical constraints that have been previously offered to accounting for CS were of categorical nature, such that a violation of a constraint was supposed to yield illicit structure. These constraints were considered inviolable and counterevidence of their inviolability was often reported in subsequent studies. In contrast, the constraints in optimality theory are 'violable' or soft. These soft constraints are not categorical and are defeasible in just those contexts in which they conflict with a higher ranked constraint.

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[15] Most of the conflicting forces lie outside of the grammatical system proper. (Kager 2001:5)

5.2 Morphological Constraints on Chinese/English CS

First, we attempts to account for some impossible switches involving morphemes, especially bound morphemes. As has been shown in Chapter Four, inflectional morphemes are relatively free to be switched, while, derivational morphemes are generally inhibited from switching. This paper argues that

(60) Avoid involving derivational morphemes in a switch (*Deri)

No switch involving derivational morphemes is permitted in (at least Chinese/English) CS.

This constraint means that no derivational morpheme is possible to be switched, or in other words, avoid to switch a derivational morpheme. *Deri turns out to be the case in accounting for the impossible switches like "brush 子", "flower 儿", "Wood 头", "you 们", "act 员", "draw 家", "吸引-tive", "记-er" and etc.. This constraint is superior to the previous proposed constraints like Poplack's Free Morpheme constraint, Myers-Scotton's System Morpheme Principle in that it tells derivational morphemes from inflectional morpheme. It can provide an adequate account for Chinese/English CS. And we propose that it is universal. However, this is by no means to say that there is no counter-example to this constraint. But at least in Chinese, it holds water.

In addition, *Deri also implies that there is no such constraint on inflectional morphemes. This means that inflectional morphemes can be switched relatively free. This is in agreement with the generalization in Chapter Four that examples in (35a, b) are acceptable and possible, though they may not be the best ones. Some examples are repeated below in (61a-c).

(61a) √ 在此祝愿全天下的 *Teacher 们*　　教师节　　　　快乐。

Here wish　all　　teacher-s　Teacher's Day happy.

"Here I wish all teachers happy Teacher's Day."

"在此祝愿全天下的老师们教师节快乐."

(61b) √ 小王　　　不想　　　　答话，继续　　*睡 ing.*

Xiao Wang not want to answer, go on sleep-ing

"Xiao Wang does not want to answer and he goes on sleeping."

"小王不想答话，继续睡 ing."

(61c) √ Law Students 们　　今天站起来啦！

　　　Law Students –s　today free

　　　"Law Students are free today!"

　　　"法律系的学生们今天站起来啦！"

However, some switches involving inflectional morphemes are reported disallowed, for example,

(63)　＊*eat*-iendo　(Poplack 1980: 586; qtd Myer Scotton, 1993:33)

　　　'eating'

Obviously, this counter-example does not speak against *Deri. It only implies that these switches may constrained by other factors, either grammatical, social or psychological.

In addition, the different behaviors of inflectional morpheme and derivational morphemes provides us with another important insight, that is, bilingual speakers or multilingual speakers are possess of two or more Mental Lexicons in their mind, and the these different lexicons are separate and mostly if not in all time do not interact with each other. This is illustrated in the figure below:
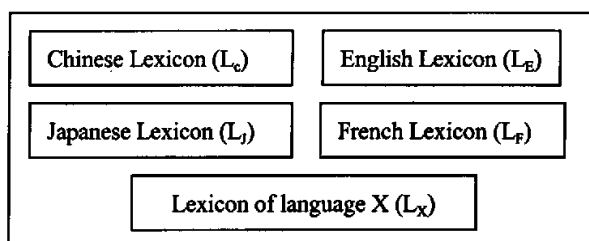
5.3　Syntactic Constraints on Chinese/English CS

5.3.1 LIR

In Chapter Three, we have argued that Myers-Scotton's Blocking Hypothesis fails when the subcategorisation property of a switched word does not match that of its counterpart in another language. As shown in Chapter Three in (19) and (20), which

repeated below in (64a, b).

(64a) √大家　　　　请　*look*　　　黑板。

　　　　everyone　please　look (at)(the) blackboard

　　　　"Everyone please look at the blackboard."

　　　　"大家请看黑板。"

(64b) √First, please 看 the blackboard.

　　　　first, please look at the blackboard

　　　　"First, please look at the blackboard."

　　　　"首先，请看黑板。"

(65a) * I 看 at the blackboard.

　　　　I look at the blackboard

　　　　"I look at the blackboard."

　　　　"我看着黑板。"

(65b) * 我安静地　　　*look*　　　那个老人。

　　　　I　quietly　look that old man

　　　　"I looked at that old man quietly."

　　　　"我安静地看着那个老人。"

In fact, Myers-Scotton is not the only one who resorts to the subcategorisation restrictions. She credited Doron with "recognizing that clashes in subcategorisation may underlie inadmissible switches" (Myers-Scotton 1993: 38). Doron writes that it is the considerations about agreement that blocks some switches (Myers-Scotton 1993: 38). At the same time, Bentahila and Davies also raised the subcategorisation issue by concluding their discussion of Moroccan Arabic/French CS with the remark that "all items must be used in such a way as to satisfy the [language-particular] subcategorisation restrictions imposed on them" (Bentahila and Davies 1983; qtd Myers-Scotton 1993: 38). Other scholars like Muysken (1990; 1991) hold the similar opinion by stating that "the subcategorisation of the main verb is always preserved" and "the main verb provides a planning frame...content word insertion must be done within the specifications of the planning frame".

Of course, they all are proved to be inadequate on the same grounds that Myers-Scotton's Blocking Hypothesis fails. We argue that it is not the subcategorisation

restrictions alone that blocks switches like (65a, b). It is the interaction between the subcategorical properties (and, of course the categorical properties) of a lexical item and the environment in which it can occur. Simply speaking, the Lexical Insertion Rule (LIR) must be respected. Namely,

(66) **Lexical Insertion Rule (LIR)**

Insert lexical item X under terminal node Y, where Y corresponds to the categorical properties of X, and YP corresponds to the subcategorization properties of X.

This constraint provides a perfect explanation for the acceptability of example 4a and 4b, and the unacceptability of example 65a and 65b. Because the subcategorization properties of the Chinese word "看" is [V;—NP], then this constraint inserts it to a terminal node where the subcategorization properties are identical. Similar, the English verb "look" is inserted in the context where the subcategorization properties of the terminal node is [V;—PP]. Also, we propose that this constraint is universal, though proof from other CS data is needed.

Strictly speaking, LIR is not a syntactic constraint, because it is an interface that connects lexicon and syntax. But it is a grammatical constraint on CS for it is a part of UG, or a mechanism of UG (Ouhalla 2001).

5.3.2 FAITHFULNESS

In Chapter Three, we have presented Bhatt's EQUIVALENCE (EQUI) constraint that "switched items follow the grammatical properties of the language to which they belong" (Bhatt 1997). However, it seems that he excludes the location issue of switched items from those grammatical properties, instead he propose LINEAR PRECEDENCE CONSTRAIN (LPC) that "items of code-mixed clauses follow the word order of the language of the Infl (TNS)" (ibid.). But according to the generalizations about the attributive constituents in Chapter Four, we find that the location of the switched attributive constituents like adjectives, -ed and -ing participles, and attributive prepositional phrases are identical to their positions in the source language rather than the word order of the Infl. Thus, we propose that

(67) **Faithfulness constraint (FAITHFULNESS)**

Switched items follow the grammatical properties as well as the word order of the language to which they belong.

FAITHFULNESS implies that the grammatical properties and the word order of the switched items should not adjust to that of another language. In specific, those attributive constituents ought to locate in the same position as they do in the language they belong to, rather than adjusting to that of another language. For example, in (68), the Chinese adjective phrase is supposed to pre-modify the head noun, and FAITHFULNESS dictates it to be placed before the noun. While (68a) violates FAITHFULNESS, so it is ungrammatical, and (68b) is grammatical because it conforms to FAITHFULNESS.

(68a) * I saw the dragon *童话里的*。

       I saw the dragon in the story

       "I saw the dragon in the story."

       "我看见了童话里的龙。"

(68b) √ I saw *童话里的* dragon.

       I saw in the story the dragon

       "I saw the dragon in the story."

       "我看见了童话里的龙。"

Similarly, switches involving -ed and -ing participles in examples (53a-d), (54a-d) in Chapter Four, repeated in (69-71) below, can be explained. (69a, 70a) are ungrammatical because they violate FAITHFULNESS in that the Chinese attributive phrases should pre-modify the noun. (69b, c; 70b, c; and 71a, b) are grammatical because the attributive elements can be located either before or after the noun in English.

(69a) * I don't know the man *和你说话的*。

       I don't know the man with you talk

       "I don't know the man talking with you."

       "我不认识和你说话的人。"

(69b) √ I don't know *和你说话的*   man.

       I don't know with you talk   man

"I don't know the man talking with you."

"我不认识和你说话的人。"

(69c) √ 我不认识那个 *talking to you* 的人。

I don't know   the talking to you   man

"I don't know the man talking to you."

"我不认识那个和你说话的人。"

(69d)? 我不认识那个人 *talking to you.*

I don't know the man talking to you

"I don't know the man talking to you."

"我不认识那个和你说话的人。"

(70a) * Those boys *在那玩的* are my classmates.

those boys   there   play are my classmates

"Those boys playing there are my classmates."

"在那玩的那些男孩是我的同学。"

(70b) √ *在那玩的* those boys are my classmates.

there play those boys are my classmates

"Those boys playing there are my classmates."

"在那玩的那些男孩是我的同学。"

(70c) √ *Playing there* 的那些男孩是我的同学。

playing there   those boys are my classmates

"Those boys playing there are my classmates."

"在那玩的那些男孩是我的同学。"

(70d)? 那些男孩 *playing there* 的是我的同学。

those boys playing there are my classmates

"Those boys playing there are my classmates."

"在那玩的那些男孩是我的同学。"

(71a) √ 我有 一辆汽车 *made in America.*

I have a car made in America

"I have a car made in America."

"我有一辆美国造的汽车。"

(71b) √ 我有一台 *made in America* 的电脑。

I have a made in America computer

"I have a computer made in America."

"我有一台美国造的电脑。"

5.3.3 Deep Structure

We have mentioned in Chapter Four that some switches are acceptable, even though the surface structure is different between two languages. The example is represented in (72) below.
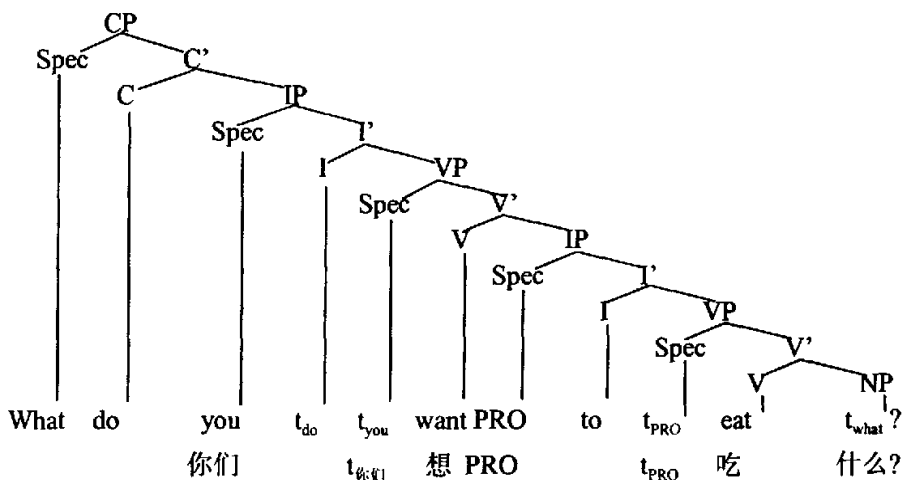
(72) √ 你们　想吃　　　*what?*

you   want to eat what

"What do you want to eat?"

"你们想吃什么？"

The X' structures of its Chinese counterpart and English counterpart are presented below:

From the tree diagram, we can see that the deep structures of both languages are similar, if not identical. They are different in surface representations because the wh-movement in the English sentence. Thus, we propose that

(73) **Deep Structure constraint (DS)**

Surface representation does not inhibit a switch. But the deep structure of two participating languages must map onto each other.

DS constraint is a requirement on a maximal projection XP instead of a whole sentence, namely that the similarity between the maximal projection XP, not necessarily between the two whole sentences, is sufficient to trigger a switch. However, because the basic sentence structure of both Chinese and English is SVO, we cannot find more proof for this constraint in the present data. But we also propose that it is universal, though more evidence from other pairs of language is necessary. And also, the identical basic structure prevents us from seeing which language dictates the word order of the switched clause. Thus, we take Bhatt's Linear Precedence Constraint (LPC).

(74) **Linear Precedence Constraint (LPC)**

Items of code-mixed clauses follow the word order of the language of the Infl (TNS).

5.4   Ranking of Constraints

So far, we have proposed four constraints. They all are supposed to be universal but violable. This section is going to focus on the conflicts between these constraints, in other words, the rankings of constraints will be discussed in this section. First, they are presented below.

(75a) **Avoid involving derivational morphemes in a switch (*Deri)**

No switch involving derivational morphemes is permitted in (at least Chinese/English) CS.

(75b) **Lexical Insertion Rule (LIR)**

Insert lexical item X under terminal node Y, where Y corresponds to the categorical properties of X, and YP corresponds to the subcategorization properties of X.

(75c) **Faithfulness constraint (FAITHFULNESS)**

Switched items follow the grammatical properties as well as the word order of the language to which they belong.

(75d) **Deep Structure constraint (DS)**

Surface representation does not inhibit a switch. But the deep structure of two participating languages must map onto each other.

(75e) **Linear Precedence Constraint (LPC)**

Items of code-mixed clauses follow the word order of the language of the Infl (TNS).

Before addressing the ranking, it is important to spare some words on the Faithfulness constraints and Markedness constraints in OT. They are two sets of constraints; or they are two kinds of constraints family. Each of them includes a variety of specific constraints. For example, FAITHFULNESS here belongs to the Faithfulness family for it requires some kinds of similarities between output and input[16], and LPC belongs to the Markedness family because it exerts pressure on a given input to undergo certain alteration. The two constraints of course conflict with each other. From the word order of attributive constituents, which conforms to that of the source language, we find in Chinese/English CS that

Candidates	FAITHFULNESS	LPC
I saw the dragon 童话里的。	*!	
☞ I saw 童话里的dragon.		*

Candidates	FAITHFULNESS	LPC
Those boys 在那玩的are my classmates.	*!	
☞ 在那玩的 those boys are my classmates.		*

So, the ranking between FAITHFULNESS and LPC is

(76) FAITHFULNESS>>LPC

The ranking is language particular, and we believe that there are languages that rank LPC higher than FAITHFULNESS.

But as for other constraints, they do not actually interact or conflict with each other because they deal with different aspects of a switched item, e.g. *Deri on morphological level, LIR on the interface between lexicon and syntax, and DS is a constraint on a

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[16] Here, the input is supposed to be bilingual.

Maximal projection XP. The human mind is said to have a modular structure and knowledge of language is one of the many autonomous modules (Ouhalla 2001:5). Language knowledge is also said to have a modular structure. Lexicon and syntax are different modules in it. Thus, *Deri is a constraint on building words in lexicon; DS is a constraint on building sentence structures in syntax; and LIR is a rule or constraint linking the two modules. In producing a sentence, one must first builds words; sentence structures and then links them with LIR. So a switch has to meet firstly these three constraints. Therefore, they are ranked higher than FAITHFULNESS and LPC.

Thus, the ranking of Chinese/English CS is like this:

(77) ***Deri; LIR; DS >> FAITHFULNESS >> LPC**

As for the other three constraints[17] (repeated below in 78) Bhatt (1997) proposed, we have argued that they turn out to be not true for Chinese/English data (see detail in Chapter Three).

(78a) **HEAD-SYNTAX (HS)**

Grammatical properties (e.g., Case, directionality of government, etc.) of the language of the head must be respected within its 'minimal domain' (à la Chomsky 1993).

(78b) ***SPEC**

Avoid switching Specifier of the maximal projection in a Case-position, i.e., the Spec of an XP must be of the same language as the head which assigns Case to that XP.

(78c) **COMPLAISANCE (COMP)**

A switched specifier of the maximal projection in a Case-position must accompany a switch of its head, i.e., if Spec-XP switches, then head X switches too. (Bhatt 1997)

This is obviously against their claimed status of universality. Thus it seems that either the constraints are inadequate in nature or their universality is problematic. In traditional way (e.g. Transformational Generative Grammar), to provide an adequate explanation for

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[17] The EQUI constraint is absorbed into the FAITHFULNESS constraint, see detail in 5.3.2.

this, we can either abnegate these constraints or acknowledge their statue as constraints on CS with the expense of losing their status of universality. However, OT presents us another choice, that is, to rank them lower. In this framework, they are universal and violable constraints. They can be violated in order to satisfy the higher constraints like FAITHFULNESS for example. So the constraints on Chinese/English CS can be ranked like this:

(79) ***Deri; LIR; DS >> FAITHFULNESS >> LPC**
      COMP >>*SPEC

Because in word order, LPC and HS stipulate the same requirement, thus, they do not conflict. And, though the violation of *SPEC or COMP does not lead to an illicit form, the degree of acceptability can also determine which one should be ranked higher. In (80a), both the Spec and the head that case-governing the Spec are switched, while in (80b), only the Spec is involved in the switch. According to the data, (80a) is judged to be more grammatical than (80b). Therefore, COMP should be ranked higher than *SPEC. .

(80a) √ His teacher 看了　他的 report.

      his teacher   read   his report

      "His teacher read his report."

      "他的老师看了他的报告。"

(80b) √ His teacher read 他的 report.

      his teacher   read   his report

      "His teacher read his report."

      "他的老师看了他的报告。"

Now, let us take a close look at how the ranking works to inhibit the impossible switched forms.

For a given input "The writer looks at the man standing there", some of the possible switched outputs are:

    (a) The 作-er looks at the man standing there.

    (b) The writer 看 at the man standing there.

    (c) The writer 看着 the man standing there.

(d) The writer looks at the man 站在那儿的。

(e) The writer looks at 站在那儿的那个 man.

These constraints can help us find out what is possible and what is impossible.

*Deri; LIR; DS >> FAITHFULNESS >> LPC

Candidates	*Deri	LIR	DS	FAITHFULNESS	LPC
a	* !				
b		* !			
☞ c					
d				* !	
e					*

  Though, there is only one optimal output, namely c, the possible outputs are ranked in their degree of possibility. In other words, a and b are highly impossible, d is impossible, e is possible, and c is highly possible.

  Finally, we are going to make clear that there are more constraints than those listed above. These constraints are ranked here to pick out the worst switches instead of the optimal or best ones. This is done to meet the special requirement of explanatory adequacy of CS phenomenon. Because OT is designed to select the best output for a given input, but to select an optimal output in CS for a given input involves not only the grammatical constraints, but also the social and psychological constraints. Thus, it is impossible to select the optimal output depending on only the conflicts between grammatical constraints. Switches that are optimal are not the only possible or acceptable switches, and switches that are not optimal are not switches impossible or unacceptable. Thus, for searching grammatical constraints on CS, it is unnecessary, meaningless as well as impossible to select the optimal one. Rather, it is the unacceptable switches that will reveal the grammatical secrets. Besides, according to the data generalizations in Chapter Four, it has been shown that there are more acceptable switches than unacceptable switches. It seems that language prefers variability to invariability. Or in other words the majority of switched items are tolerable; only a small part is completely intolerable or unacceptable. These intolerable items tend to be constrained by our knowledge of language, i.e., grammar. This is also why this thesis relies more on the unacceptable switches than on the acceptable switches.

Chapter Six

Conclusion

The present chapter is going to draw a conclusion for the whole thesis with a summary of the major findings. Besides, limitations of this thesis as well as suggestions for future study will be presented in this part.

6.1   Findings of the Study

From the previous chapters, we can see that where in an utterance a speaker might switch might not be simply a whim of individual speakers or even a matter of habit for a specific speech community. In other words, there are grammatical constraints on CS, though the question of what they are is still disputable. Basing on the Chinese/English CS data, this thesis presents five morphosyntactic constraints, as summarized below:

(81a) **Avoid involving derivational morphemes in a switch (*Deri)**

No switch involving derivational morphemes is permitted in (at least Chinese/English) CS.

(81b) **Lexical Insertion Rule (LIR)**

Insert lexical item X under terminal node Y, where Y corresponds to the categorical properties of X, and YP corresponds to the subcategorization properties of X.

(81c) **Faithfulness constraint (FAITHFULNESS)**

Switched items follow the grammatical properties as well as the word order of the language to which they belong.

(81d) **Deep Structure constraint (DS)**

Surface representation does not inhibit a switch. But the deep structure of two participating languages must map onto each other.

(81e) **Liner Precedence Constraint (LPC)**

Items of code-mixed clauses follow the word order of the language of the Infl (TNS).

These constraints are proposed to be universal and violable and can be ranked differently depending on the languages involved in CS. This thesis holds that in Chinese/English CS these constraints are ranked like this:

(82) ***Deri; LIR; D S >> FAITHFULNESS >> LPC**

      COMP >>*SPEC

6.2   Limitations of the Study

Admittedly, there are many limitations in this thesis, especially for data collection. On the one hand, Chinese and English are so similar in some aspects that we cannot get more about the grammatical properties of CS. For instance, the basic sentence structures of Chinese and English are similar, though they are typologically different languages. This kind of similarity prevents us from getting more useful generalizations about the word order of a switched utterance, which in turn exerts influence on the search for the constraints and our conclusions. But it is unavoidable in the present thesis. Thus we propose that they are true at least in Chinese/English CS. But these constrains are ready to be examined with CS involving other language pairs like Japanese/English. On the other hand, the bilingual consultants are exclusively native Chinese speakers and no native English speaker is consulted. To some degree, this creates the uncertainty of the switched utterances prefixed with "?".

6.3   Suggestions for Future Study

As noted by other scholar (e.g. MacSwan) that the linguistic study of CS is still very much in its infancy, but it is an exciting and intriguing field. For future study, we propose that the following conditions are required to meet:

First, as we have summarized in chapter three that almost all the previous constraints fails on the grounds of descriptive adequacy, which together with explanatory adequacy are desired to achieve for research on a speaker's knowledge of language, namely grammar, or for research on grammatical properties of any kind of language facts or

phenomenon including CS. Thus, before providing adequate explanation for CS, we propose that it is necessary and indispensable to find a way to meet the descriptive adequacy requirement.

Second, it is also important and useful to propose a precise evaluating mechanism in terms of well-known categories and independently motivated principles of linguistic theory to evaluate the proposed constraints or models. Other scholars like MacSwan think similarly by noting that "evaluating precisely formulated theories will play an important, perhaps leading role in the case of CS research, to significant insight into the nature of bilingual linguistic competence" (MacSwan 2004:308).

Finally, there are some words on the role of grammatical approach in the entire cause of CS research. The grammatical approach to CS, like many other approaches, is impossible to tell us everything about CS alone. It fails to do so because the social, cultural, psychological, cognitive factors are excluded from the domain. All of these factors are necessary to account for the multi-faceted nature of codeswitching. Thus, we propose that in future research, on the one hand, we should go on to focus exclusively on specific domains, namely, grammatical properties, social factors and psychological factors; on the other hand, research done on the interface between these separate domains is necessary and desirable, though it is not as easy as it sounds. Namely, the conjoining of syntax, discourse, sociolinguistics, and psycholinguistics is needed.

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Appendix

<h1 style="text-align:center">调查问卷</h1>

亲爱的同学：

您好！

感谢您抽出宝贵的时间接受我的问卷调查，此问卷不记姓名，只记录你的看法。答题之前请先认真看一下下面的答题说明：

在此问卷中，你会看到很多句子，请你对看到的每一个句子做出判断，从句子下面所给出的选项中选出你认为最合适的答案，答案无所谓对错。每个句子的备选答案一共有五个，分别用1，2，3，4，5代表，具体如下（括号中为答案说明）：

1. 不懂，不接受　　（即不理解句子的意思，且不能接受其成为合法的句子)
2. 懂，不接受　　　（即理解句子的意思，但不能接受其成为合法的句子）
3. 懂，不自然　　　（即理解句子的意思，且能接受其成为合法的句子，但感觉不自然）
4. 懂，有时说　　　（即理解句子的意思，并且有时可以这样说）
5. 懂，经常说　　　（即理解句子的意思，并且经常可以这样说)

请你最好在看完句子以后立刻作答，不要过多地停留在一个句子上。我们真诚地希望您认真回答，不要漏答任何题。最后再一次对您的参与表示衷心的感谢。

[1] 我有一台 made in America 的电脑。
1)不懂，不接受 2)懂，不接受　3)懂，不自然
4)懂，有时说　5)懂，经常说

[2] First, let's 看 the picture.
1)不懂，不接受 2)懂，不接受　3)懂，不自然
4)懂，有时说　5)懂，经常说

[3] 上山好多 stone 头。
1)不懂，不接受 2)懂，不接受　3)懂，不自然
4)懂，有时说　5)懂，经常说

[4] 她幸灾乐祸地笑 ing，"你也不能吃辣的了"。
1)不懂，不接受 2)懂，不接受　3)懂，不自然
4)懂，有时说　5)懂，经常说

[5] This software is 用-ful.
1)不懂，不接受 2)懂，不接受　3)懂，不自然
4)懂，有时说　5)懂，经常说

[6] There are many famous 作-er.
1)不懂，不接受 2)懂，不接受 3)懂，不自然
4)懂，有时说　5)懂，经常说

[7] I don't know the girl 大声说话的 there.
1)不懂，不接受 2)懂，不接受 3)懂，不自然
4)懂，有时说　5)懂，经常说

[8] 希望天下的 little cat 们都能健康，快乐。
1)不懂，不接受 2)懂，不接受 3)懂，不自然
4)懂，有时说　5)懂，经常说

[9] 那些演员 in "X-Man" 都很好看。
1)不懂，不接受 2)懂，不接受 3)懂，不自然
4)懂，有时说　5)懂，经常说

[10] 他跑出去看见 two dogs are fighting.
1)不懂，不接受 2)懂，不接受 3)懂，不自然
4)懂，有时说　5)懂，经常说

[11] 这本书很好看 and it is not very expensive.
1)不懂，不接受 2)懂，不接受 3)懂，不自然
4)懂，有时说　5)懂，经常说

[12] 我喜欢这件衣服 because I like the color.
1)不懂，不接受 2)懂，不接受　3)懂，不自然
4)懂，有时说　5)懂，经常说

[13] He remembers 他所有的朋友。

1)不懂，不接受 2)懂，不接受 3)懂，不自然
4)懂，有时说 5)懂，经常说

[14] 我有一辆汽车 made in America.
1)不懂，不接受 2)懂，不接受 3)懂，不自然
4)懂，有时说 5)懂，经常说

[15] I got a 中国制造的 car.
1)不懂，不接受 2)懂，不接受 3)懂，不自然
4)懂，有时说 5)懂，经常说

[16] 我看着 above my head 的星星。
1)不懂，不接受 2)懂，不接受 3)懂，不自然
4)懂，有时说 5)懂，经常说

[17] They live in 上面的 room.
1)不懂，不接受 2)懂，不接受 3)懂，不自然
4)懂，有时说 5)懂，经常说

[18] He told us many 有趣的故事。
1)不懂，不接受 2)懂，不接受 3)懂，不自然
4)懂，有时说 5)懂，经常说

[19] 我傻傻地 look 着那个老人。
1)不懂，不接受 2)懂，不接受 3)懂，不自然
4)懂，有时说 5)懂，经常说

[20] 你们想吃 what?
1)不懂，不接受 2)懂，不接受 3)懂，不自然
4)懂，有时说 5)懂，经常说

[21] 我可以把这本书给你，but 你要请我吃饭。
1)不懂，不接受 2)懂，不接受 3)懂，不自然
4)懂，有时说 5)懂，经常说

[22] I got a car 中国制造的。
1)不懂，不接受 2)懂，不接受 3)懂，不自然
4)懂，有时说 5)懂，经常说

[23] He said that 老大爷 helped him again.
1)不懂，不接受 2)懂，不接受 3)懂，不自然
4)懂，有时说 5)懂，经常说

[24] 可有时不会像你和 cats 们聊得那么投机。
1)不懂，不接受 2)懂，不接受 3)懂，不自然
4)懂，有时说 5)懂，经常说

[25] The professor told us that 四书五经必读。
1)不懂，不接受 2)懂，不接受 3)懂，不自然
4)懂，有时说 5)懂，经常说

[26] Your 发型 is very cool.
1)不懂，不接受 2)懂，不接受 3)懂，不自然
4)懂，有时说 5)懂，经常说

[27] His uncle bought many 书。

1)不懂，不接受 2)懂，不接受 3)懂，不自然
4)懂，有时说 5)懂，经常说

[28] 美好的 time 一去不复返了。
1)不懂，不接受 2)懂，不接受 3)懂，不自然
4)懂，有时说 5)懂，经常说

[29] 那个小伙子有 create 性。
1)不懂，不接受 2)懂，不接受 3)懂，不自然
4)懂，有时说 5)懂，经常说

[30] Every 球员 is very rich.
1)不懂，不接受 2)懂，不接受 3)懂，不自然
4)懂，有时说 5)懂，经常说

[31] 那只猴子吃完了 all its bananas.
1)不懂，不接受 2)懂，不接受 3)懂，不自然
4)懂，有时说 5)懂，经常说

[32] 台"国安局"为警官配保密手机，阿 Sir 怕监听不敢用。
1)不懂，不接受 2)懂，不接受 3)懂，不自然
4)懂，有时说 5)懂，经常说

[33] He bought a book for her 妈妈。
1)不懂，不接受 2)懂，不接受 3)懂，不自然
4)懂，有时说 5)懂，经常说

[34] 在树底下看书的 those boys are my classmates.
1)不懂，不接受 2)懂，不接受 3)懂，不自然
4)懂，有时说 5)懂，经常说

[35] Law Students 们今天站起来啦！
1)不懂，不接受 2)懂，不接受 3)懂，不自然
4)懂，有时说 5)懂，经常说

[36] I read 他的 critique.
1)不懂，不接受 2)懂，不接受 3)懂，不自然
4)懂，有时说 5)懂，经常说

[37] 是吧?去年睡 ed 我上铺的兄弟。
1)不懂，不接受 2)懂，不接受 3)懂，不自然
4)懂，有时说 5)懂，经常说

[38] 小王不想答话，继续装睡 ing.
1)不懂，不接受 2)懂，不接受 3)懂，不自然
4)懂，有时说 5)懂，经常说

[39] Every Sunday, 他都要去教堂。
1)不懂，不接受 2)懂，不接受 3)懂，不自然
4)懂，有时说 5)懂，经常说

[40] Let's 简单 fy 这个问题。
1)不懂，不接受 2)懂，不接受 3)懂，不自然
4)懂，有时说 5)懂，经常说

[41] He indicates to me with his eyes that 他们是骗子。

1)不懂，不接受 2)懂，不接受　3)懂，不自然
4)懂，有时说　5)懂，经常说

[42] I like this film 因为男主人公很帅。
1)不懂，不接受 2)懂，不接受　3)懂，不自然
4)懂，有时说　5)懂，经常说

[43] 她的 pose 很好。
1)不懂，不接受 2)懂，不接受　3)懂，不自然
4)懂，有时说　5)懂，经常说

[44] 我怎么跟他套近乎呀？我就坐着郁闷 ING.
1)不懂，不接受 2)懂，不接受　3)懂，不自然
4)懂，有时说　5)懂，经常说

[45] 这个问题 we can solve.
1)不懂，不接受 2)懂，不接受　3)懂，不自然
4)懂，有时说　5)懂，经常说

[46] 大家都认为 he is a kind man.
1)不懂，不接受 2)懂，不接受　3)懂，不自然
4)懂，有时说　5)懂，经常说

[47] I dreamed yesterday that I am very rich 但是房子很小。
1)不懂，不接受 2)懂，不接受　3)懂，不自然
4)懂，有时说　5)懂，经常说

[48] The girl 和我说话的 is my good friend.
1)不懂，不接受 2)懂，不接受　3)懂，不自然
4)懂，有时说　5)懂，经常说

[49] 早上 I usually get up at 9:30.
1)不懂，不接受 2)懂，不接受　3)懂，不自然
4)懂，有时说　5)懂，经常说

[50] 她说 We 们是大学生。
1)不懂，不接受 2)懂，不接受　3)懂，不自然
4)懂，有时说　5)懂，经常说

[51] 美国所谓的 Founding Fathers 们早已定下了如果革命成功之后，国家运行的规则。
1)不懂，不接受 2)懂，不接受 3)懂，不自然
4)懂，有时说　5)懂，经常说

[52] 我不能保证到你家 on time，但我一定来。
1)不懂，不接受 2)懂，不接受　3)懂，不自然
4)懂，有时说　5)懂，经常说

[53] 用那个 brush 子刷一下。
1)不懂，不接受 2)懂，不接受　3)懂，不自然
4)懂，有时说　5)懂，经常说

[54] On the wall 有一幅画挂着。
1)不懂，不接受 2)懂，不接受　3)懂，不自然

4)懂，有时说　5)懂，经常说

[55] I 看 at her beautiful face.
1)不懂，不接受 2)懂，不接受　3)懂，不自然
4)懂，有时说　5)懂，经常说

[56] 我放了一只笔在 table 上。
1)不懂，不接受 2)懂，不接受 3)懂，不自然
4)懂，有时说　5)懂，经常说

[57] I put a book 在桌子上。
1)不懂，不接受 2)懂，不接受　3)懂，不自然
4)懂，有时说　5)懂，经常说

[58] 中美两国正是在那一年建立起了 diplomatic relation.
1)不懂，不接受 2)懂，不接受 3)懂，不自然
4)懂，有时说　5)懂，经常说

[59] Personality 要能匹配才可以合作。
1)不懂，不接受 2)懂，不接受 3)懂，不自然
4)懂，有时说　5)懂，经常说

[60] 学校又在修 playground。
1)不懂，不接受 2)懂，不接受 3)懂，不自然
4)懂，有时说　5)懂，经常说

[61] 大家请 look 黑板。
1)不懂，不接受 2)懂，不接受 3)懂，不自然
4)懂，有时说　5)懂，经常说

[62] 这本书很好，但是 it is too expensive for me.
1)不懂，不接受 2)懂，不接受 3)懂，不自然
4)懂，有时说　5)懂，经常说

[63] I saw the dragon 童话里的。
1)不懂，不接受 2)懂，不接受 3)懂，不自然
4)懂，有时说　5)懂，经常说

[64] In "X-Man"，那些演员都很好看。
1)不懂，不接受 2)懂，不接受 3)懂，不自然
4)懂，有时说　5)懂，经常说

[65] 在此祝愿全天下的 Teacher 们教师节快乐。
1)不懂，不接受 2)懂，不接受 3)懂，不自然
4)懂，有时说　5)懂，经常说

[66] 我们希望 that everyone can be healthy and happy.
1)不懂，不接受 2)懂，不接受 3)懂，不自然
4)懂，有时说　5)懂，经常说

结束，非常感谢！