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ON SUBJECT AND SUBJECT-POSTPOSED
CONSTRUCTIONS IN CHINESE

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ON SUBJECT AND SUBJECT-POSTPOSED
CONSTRUCTIONS IN CHINESE


By


Jean Yuanpeng Wu




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ABSTRACT

ON SUBJECT AND SUBJECT-POSTPOSED
CONSTRUCTIONS IN CHINESE

By

Jean Yuanpeng Wu

This dissertation presents a study on the notion of 'subject' in linguistic theory with an emphasis on its relevance in the syntactic structure of Chinese. 'Subject' has been one of the oldest descriptive categories utilized in almost all theories of grammar, and yet it has remained a concept difficult to define. In this dissertation, issues related to the notion of 'subject' are explored within the theoretical framework of functionalism. It is proposed that 'subject' needs to be treated as a prototype concept so as to accommodate the flexibility and gradation it manifests cross-linguistically. This proto-type approach follows from the theoretical assumption that 'subject' is a universal linguistic category, though its functions may vary in different languages.

It is further proposed that subject, as a proto-type concept, can be defined in terms of a group of characteristic subject properties (based on Keenan 1976), which are abstracted from a large and diverse corpus of data collected from different languages. These properties are used as the collective criteria for identifying

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subjects. Some of them are more crucial than others in determining what subject is. For instance, the morphosyntactic coding and behavioral properties are considered more prominent indicators of subjecthood. The assignment of the subject status to an NP (or its equivalent) in a predication is based on the comparison of the different degrees of subjecthood measured according to the ranking of subject properties that NPs exhibit in that sentence. It is recognized however, that some subject properties may not apply in all languages.

This study also focuses on a particular syntactic structure in Chinese whose nature crucially involves the notion of 'subject'. With a clause level configuration of $V_{intransitive}$ + NP, it has been frequently characterized as subjectless in the literature.

In this dissertation, a detailed and systematic analysis is given of the syntactic, semantic and pragmatic properties of this construction. Arguments are presented that such a construction is not subjectless, but can be better accounted for as a subject-postposed structure. It is shown that the postposing of the subject is triggered by semantic and pragmatic factors which can be clearly identified.

To my beloved family

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# ON SUBJECT AND SUBJECT-POSTPOSED
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## Chapter 1 Introduction

### 1.1 General statement of purpose

The purpose of this dissertation is to give a detailed and systematic analysis of the syntactic, semantic and pragmatic properties of the three groups of sentences exemplified in (1.1)-(1.3):

(1.1)a.     Xia   yu    le.
             fall   rain  ASP.
             'It is raining.'

     b.     Xia   xue   le.
             fall   snow  ASP.
             'It's snowing.'

     c.     Gua   feng  le.
             blow   wind  ASP.
             'It' windy.'

     d.     Chu   taiyang     le.
             out    sun          ASP.
             'The sun came out.'

     e.    You   guo   yi   hui,   yingying  xiang  qi  leisheng.
             again pass  one  moment,    vague       sound  ASP. thunder
             'A moment later, there came the vague sound of thunder.'

     [Examples (a) through (d) from Zhang & Chen 1981, p83; (e) from Huang & Liang 1991, p.115]

(1.2)a.     You   zhe   yang yi   ge     chuanshuo.                                   ∨
             exist this   kind   one   CL.     legend
             'There is such a legend.'

     b.     You   ge     nongchun   jiao  Zhangjiazhuang.                  ∨
             exist Cl[1]  village     call   Zhangjiazhuan
             'There is a village called Zhangjiazhuang.'

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[1] Cl. = Classifier, usually used before NPs to indicate the categories they belong to.

c. You    yi    ge    ren         zai   tiaowu.
   exist  one   Cl.   person      Asp² dance
   'There is someone dancing.'

d. Houbian      you   yi    ge    xiao  huayuan.
   behind       exist one   Cl.   small garden
   'There is a garden at the back.'

(1.3)a. Lai    keren        le.
        come   guest        ASP.
        'Some guest(s) came. = Here comes some guest(s).'

   b. Houlai      you          zou  le   xuduo       ren.
      later       again        leave ASP. many        people
      'Later, many more people left.'

   c. Pao        le   yi   zhi   mao.
      run-away   ASP. one  CL.   cat.
      'A cat has run away.'

   d. Jinglai      le   ji        zhi   xiao        gou.
      enter        Asp. several   Cl.   small       dog
      'Several puppies came in.'

   e. Tai   shang       zuo  zhe  zhuxituan.
      stage top         sit  Asp. presidium
      'On the stage sat the presidium.'

The analysis of these sentences crucially involves the grammatical relations of 'subject' and 'object' in Chinese. Given the fact that 'subject' is still hardly a well-defined notion in Chinese, there is an absence of general agreement over the nature of these sentences among Chinese linguists. For instance, some view all (1.1)-(1.3) as typical 'subjectless constructions' (Gao 1957, Yang 1963, Chang & Chen 1981), some view all of them as having subjects (e.g. Li and Thompson 1981), and others analyze some of these sentences as subjectless, and some as having

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² *Zai* is an aspect marker indicating the on-going status of the verb following it.

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a subject (e.g. Chao 1968). Even when linguists agree that a particular sentence has a subject, they differ as to which constituent is the subject.

As a result of lack of agreement on the nature and structure of these sentences, the explanations of the syntactic and semantic structures offered for these sentences in Chinese grammar books are sketchy and superficial. Sentences such as (1)-(3) are simply labeled as 'subjectless constructions', or 'non-subject-predicate sentences' etc. without any unified criteria or adequate explanation. There is as yet no consensus among Chinese linguists as to how to define the notion of 'subject' in Chinese. The question of subjecthood in Chinese remains a linguistic problem which has attracted a lot of attention in the field of Chinese linguistics but is still unresolved.

Thus, two major research questions in Chinese are still in search of answers: (1) How to define 'subject' and identify subjects in Chinese and (2) How to characterize those sentences that are perceived as subjectless.

In order to solve these problems, other fundamental issues need to be resolved: Is 'subject' a universal category? If so, what definitions of this category will hold universally, and how can the category be recognized across languages? Are subjects primitive or predictable? In what way can 'subject' be best characterized? What criteria can be used to identify the subject? Can a

sentence be without a subject?  Are those 'subjectless constructions' in Chinese truly subjectless?  If yes, why?  If not, what is the subject?  What are the functions of 'subject' in the structure of Chinese?

In this study, I will explore answers to the above questions by investigating the properties of sentences such as (1)-(3) since their syntactic structures are typical of those which have remained controversial.

In brief, the goals of this dissertation are:

(A)  to redefine the notion of 'subject' in Chinese and to argue for the prominence of subjecthood in Chinese;

(B)  to re-examine the properties of the so-called 'subjectless constructions' in terms of their syntax, semantics and pragmatics, and to argue that these sentences have postverbal subjects;

(C)  to account for subject-postposing phenomena in Chinese in contrast to the unmarked SVO form,

(D)  to identify the semantic and pragmatic factors which trigger the particular syntactic structures of the subject-postposed constructions.

## 1.2 Hypothesis

I present the following hypotheses to be examined in this study:

(I) Grammatical relations such as 'subject' and 'object' are not independent of semantic and pragmatic

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factors.  Subjects are not primitive, but they are also not independent of non-syntactic factors.

(II) Subject can be best viewed as a prototype concept rather than taken as a discrete category.  Instead of being defined in terms of a single criterion, which would yield numerous counter-examples, subject can be more plausibly characterized in terms of a cluster of prototypical subject properties.

(III) The characteristics of a Chinese subject may be different for different constructions of Chinese.  Subject in Chinese can be postverbal as well as preverbal, if the conditions under which it can go postverbal are met.

(IV) Subject selection is argument selection: only arguments of the predicator can function as subjects.  The relation between a subject and a predicate is fundamentally related to the argument structure or the valence of the predicator.  Subject can be properly assigned only after the argument structure of the predicator is determined first.

(V) Subject can be functionally construed as the most prominent argument of the sentence in the sense that it is that argument which manifest more core subject properties than other constituents in the sentence.

(VI) Sentence patterns frequently construed as 'subjectless constructions' can be classified into three groups or types according to their semantic structure. Group one is what I will call 'weather sentences' since

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they normally have to do with the change of natural phenomena such as the weather; group two consists of existential sentences; group three includes what is often referred to as 'presentative sentences' which mainly involve verbs denoting appearance and disappearance. While the data to be presented in this study are by no means an exhaustive list of all the so-called 'subjectless constructions' in Chinese, they represent the prototypical types commonly given in the grammar books and those which are frequently featured in contemporary linguistic discussion.

I claim that all of the sentences in (1)-(3) do involve explicit syntactic subjects, subjects that do not occupy the unmarked preverbal position in Chinese. Rather, their subjects are postposed due to semantic and pragmatic conditioning. Thus, I will characterize them as subject-postposed constructions in Chinese. Furthermore, I argue the subject postposing is motivated by pragmatic factors and principles. I will present evidence to show that Chinese is a pragmatics-driven language in the sense that the organization of basic sentences is very much conditioned by pragmatic considerations.

(VII) I will suggest that the theory of information structure and especially the notion of focus structure play an important role in accounting for subject-postposed constructions and syntactic structures in general in Chinese. My claim is that a syntactic structure is often

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determined by its information structure and the subject-postposed constructions represent certain grammaticalized focus structures in Chinese.

1.3 Theoretical framework

The theoretical approach that I use to analyze subject and subject postposing in Chinese is that of functionalism, which emphasizes the consideration of the pragmatic purposes served by linguistic forms in the analysis of linguistic phenomena. This is well explained by M. Halliday, a dominant functionalist in the history of linguistics:

> A functional approach to language means, first of all, investigating how language is used: trying to find out what are the purposes that language serves for us, and how we are able to achieve these purposes through speaking, listening, reading and writing. But it also means more than this. It means seeking to explain the nature of language in functional terms: seeing whether language itself has been shaped by use, and if so, in what ways --how the form of language has been determined by the function it has evolved to serve...
>
> (Halliday 1973:7)

The fundamental principle underlying functionalist theories is a functional perspective on the language, which is regarded as 'an instrument which human beings use in order to achieve certain goals and purposes' (Dik 1987: 83). Therefore the structure of linguistic expressions is taken as non-arbitrary but to a large extent influenced by the communicative purposes of the language user. This view

is expressed in the non-autonomous assumption widespread among functionalists that 'language (and grammar) can be neither described nor explained adequately as an autonomous system' (Givon 1995: xv). The language system is not considered as an autonomous set of rules and principles; rather, it is assumed that the rules and principles composing the language system can only be adequately understood when they are analyzed in terms of the conditions of use.

Specifically, functionalists advocate the following theoretical premises (see Givon 1995:9):

- Language is a social-cultural activity
- Structure serves cognitive or communicative function
- Structure is non-arbitrary, motivated, iconic
- Change and variation are ever-present
- Meaning is context-dependent and non-atomic
- Categories are less-than discrete
- Structure is malleable, not rigid
- Grammars are emergent
- Rules of grammar allow some leakage

The ultimate goal of functionally-oriented linguistic theories is to determine the relation between the form of a linguistic expression and its linguistic function (Bolkestein et al. 1985, Dik 1991). In the analysis of the subject-postposed constructions in Chinese, one of my goals is to have an understanding of the correlation between the syntactic structures that these constructions display and the functions they fill in verbal interaction. A major point that I argue for is that the syntactic structures

under examination are non-arbitrary and cannot be adequately accounted for unless semantic and pragmatic factors are taken into consideration, because these structures are very much conditioned by the language user's judgment of situations in which they are used.

Major theoretical assumptions and principles based on which this study is conducted are given as follows:

(I) Following Functional Grammar outlined in Dik (1991), I will describe linguistic expressions in terms of a level of abstract underlying predications, built up from predicates and arguments, which together constitute the base of the language. Every predicate is a part of a predicate frame where the semantic and morphosyntactic properties of the predicate are stored. Predicate frames are the most basic components for the construction of predication.

In FG outlined in Dik (1991), an underlying predication is formed through the insertion of appropriate terms into the slots of a predicate frame. The constituents of that predication will then be provided with syntactic and pragmatic functions, according to general principles. Underlying predications are mapped onto linguistic expressions through a system of 'expression rules', which govern the form and order of the constituents, depending on the structural properties of the corresponding components of the underlying predication (Dik 1991:249).

(II) Linguistic expressions involve three dimensions (Danes 1966, Halliday 1967 & 1985, Dik 1991): (a) the grammatical dimension, which involves the syntactic functions (e.g. 'subject' and 'object'); (b) the semantic dimension, which specifies the roles that the referents of the NPs play within the state of affairs designated by the predication in which the NPs occur (e.g. 'agent', 'goal', 'recipient', 'beneficiary', etc.); (c) the pragmatic dimension, which specifies the informational status of the constituents of a predication within the communicative setting in which they occur (e.g. 'given' and 'new'; 'theme' and 'tail'; 'topic' and 'focus', etc.).

In this dissertation, I will explore the relations between these three dimensions of syntax, semantics and pragmatics. I hold the view that syntax is not autonomous of pragmatics and semantics: many syntactic phenomena only make sense against a background of pragmatic and semantic correlates; and many syntactic phenomena in Chinese can be regarded as syntacticization of semantic-pragmatic phenomena.

(III) The pragmatic dimension is an essential part that characterizes functionalist theories. It is generally assumed that the form of a linguistic expression may be influenced not only by the semantic and syntactic functions borne by the arguments of various predicates but also by the pragmatic functions associated with constituents. In addition, it is claimed that the structuring of sentences

has to do with what the speakers assume hearers know and are paying attention to at the time of utterance (Chafe 1976, Prince 1986, Lambrecht 1994, Vallduvi 1995).

Vallduvi (1995:123) maintains that 'when communicating a proposition *p*, a given speaker may encode *p* in different sentential structures according to his/her beliefs about the hearer's knowledge state with respect to *p*.' Lambrecht (1994) argues that the relationship between speaker assumptions and the formal structure of the sentence is 'governed by rules and conventions of sentence grammar' and views 'information structure' as a grammatical component[3].

In the analysis of subject postposed constructions in Chinese, I will make the following distinctions (largely based on Lambrecht 1994) which appear to correlate directly with structural properties of the syntactic structures I will investigate in this study.

- Pragmatic presupposition vs. pragmatic assertion

    Basically these are concerned with the speaker's assumptions about 'the hearer's state of knowledge and awareness' at the time of utterance. I claim this distinction helps to explain some of the differences

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[3] The formal definition of 'information structure' proposed by Lambrecht (1994:5) is as follows:
    'That component of sentence grammar in which propositions as conceptual representations of states of affairs are paired with lexicogrammatical structures in accordance with the mental states of interlocutors who use and interpret these structures as units of information in given discourse contexts'.

between subject-preposed structures and their postposed counterparts. I argue that the variation of subject position in Chinese to a large extent has to do with the nature of the setting in which assertions occur as well as the pragmatic presupposition on the part of the speaker.

- Topic vs. Subject

The notions of 'topic' and 'subject' function in different dimensions (i.e. pragmatic vs. syntactic) and they are not conflated since topics are not necessarily grammatical subjects, and grammatical subjects are not necessarily topics. Thus, the distinction is made between 'non-subject topics' and 'non-topic subjects'. The contrast is also made between 'topicalized sentences' and 'non-topicalized sentences'.

- Focus structure

This refers to 'the conventional association of a focus meaning with a sentence form' (Lambrecht 1994: 222). Three kinds of focus structure are distinguished: Predicate focus, argument focus, and sentence focus. Predicate-focus structure involves a presupposition and an assertion in the unmarked subject-predicate sentence type, in which the predicate is the focus and the subject is in the presupposition. Argument-focus structure is one in which 'the focus identifies the missing argument in a presupposed open proposition' (p.222). The sentence-focus structure

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characterizes the event-reporting or presentational sentence type, in which the focus extends across the whole sentence. In this dissertation, I argue that the unmarked focus structure in Chinese is the predicate-focus structure and that subject-postposing occurs only in sentence-focus structures. In other words, the focus structure of a predication determines the subject position in Chinese.

• Categorical vs. thetic sentences

These are two different types of 'judgment' which involve different structures. This distinction was first proposed by the nineteenth-century philosopher Brentano and his student Marty as a cognitive distinction between two types of human judgment (Kuroda 1992:19), and later further developed by Kuroda (1972 & 1992), Sasse (1987) and Lambrecht (1994). According to Kuroda (1992), the categorical judgment corresponds to the subject-predicate structure (i.e. associating a subject with a predicate) while the thetic form does not. Specifically, a categorical judgment involves **both** the act of recognition of a subject and the act of affirming or denying what is expressed by the predicate about the subject. In contrast, a thetic judgment does not predicate a property of some entity but simply asserts a fact or state of affairs.

In this thesis, I will argue that subject-postposed constructions in Chinese are typical thetic sentences in the sense that they manifest an 'all-new character' by

'introducing a new element into the discourse without linking it either to an already established topic or to some presupposed proposition' (Lambrecht 1994: 144). 'Categorical sentences' on the other hand, represent the 'topic-comment' structure.

To summarize, I will argue that the grammatical form of subject postposing in Chinese is motivated by the requirement of information structure. I claim that subject postposing only occurs in what Lambrecht (1994) refers to as 'pragmatically structured propositions'. Predications in which subjects are postposed can be analyzed as having grammaticalized 'sentence-focus structures' featuring 'non-topic subjects' and 'thetic' propositions.

## 1.4 Organization of the study

This thesis includes three major parts:

(I) A review of previous studies on the notion of 'subject'

The study of subject-postposing in Chinese crucially involves the notion of 'subject': how it features in the grammatical theories in general and how it works in Chinese in particular.

Thus, as we can see, while the universality of subject as a grammatical category is widely assumed, the difficulties of determining subject are also well-known. 'Subject' is hardly defined in a unified fashion, presumably due to the fact that languages differ considerably in the prominence which they give to

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subjecthood, as far as surface manifestations of it are concerned (Li and Thompson 1981). In Chapter 2, I will first present the problem of defining 'subject' by examining previous research on the notion of 'subject' and then establish the need to redefine the notion of 'subject' in Chinese.

(II) Redefining the notion of 'subject' in Chinese

In chapter 3, I will attempt to redefine the notion of 'subject' in Chinese. I will first establish the predication principle that 'all clauses have a subject' and then argue that subject can be best viewed as a prototype concept.

In Chapter 4, I will discuss the properties of the so-called 'subjectless constructions', and argue that they have subjects, subjects that are postposted. I will therefore claim that these sentences should be accounted for as subject-postposed constructions.

(III) A systematic analysis of 'subject-postposed constructions'

Having shown that the so-called 'subjectless constructions' are in fact subject-postposed constructions, I will explore in chapter 5 the semantic and pragmatic constraints on the subject-postposed constructions which determine their use. I will attempt to identify the necessary semantic and pragmatic conditions under which a

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subject can be postposed in Chinese and then propose some general statements about their use in functional terms.

In Chapter 5, I will also discuss the distinction between two types of statement, 'categorical' vs. 'thetic', and propose that in Chinese all sentences with subject postposed can be uniformly characterized as having the typical 'thetic' structure.

In Chapter 6, I will summarize major findings in the dissertation and present some suggestions for future research.

Chapter 2  The problem of defining subject

## 2.0  Introduction

The practice of dividing a sentence or clause into two parts, subject and predicate, is a long established one. The notion of 'subject' has always been considered a basic grammatical relation in the sentential structure of languages.  This grammatical relation has always played a central role in descriptive discussions of data in the world's languages.  In recent years, grammatical relations such as subject and object have come to play a prominent role in linguistic theory as well.  For instance, Relational Grammar is based on the idea that grammatical relations are primitive elements.  In this theory, the phrase structures and derivations of transformational grammar are dispensed with in favor of relational networks (or relational graphs).  Various generalizations, including many originally motivating transformations, are captured by allowing constituents to bear distinct grammatical relations in different strata.

Grammatical relations are also central to the analysis of clause structure in Lexical Functional Grammar (LFG). LFG mapping theory provides an account of the linking of thematic roles with grammatical relations, based on the idea that the former are organized into a hierarchy and the latter are composed of binary features.

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In Government and Binding Theory (GB) and Head-Driven Phrase Structure Grammar (HPSG), 'subject' is a derivative notion, and it is a key element as well. Within GB, position in phrase structure, which potentially yields different theta-role assignments, different government configurations, and the properties corresponding to the grammatical relations of other theories, is crucial to the statement of both universal principles and language-particular generalizations. Within HPSG, a predicate's dependents are differentiated by relative positions in the SUBCAT list, a formal device that yields the equivalent of grammatical relations. Thus, as we can see, the grammatical relations apparently serve as a common ground for practitioners of various syntactic theories. As an important grammatical relation, 'subject' is 'frequently used in the description of individual languages and in stating cross-linguistic generalizations' (Comrie 1989:105). Despite its wide use, 'subject' is still a notion that is hardly defined in a unified fashion, presumably due to the fact that languages differ considerably in the prominence which they give to subjecthood, as far as surface manifestations of it are concerned (Li 1981). Research indicates lack of agreement among linguists on subjecthood. Studies have shown that subjects can vary in their properties not only cross-linguistically but also within a specific language (Givon 1996; Anderson 1976; Chung 1976; Craig 1976). For a

language like Chinese, where there is not much
morphological inflection for case marking or syntactic
agreement between subject and the predicate, it is
difficult to identify subjects.  In the Chinese descriptive
tradition, one of the most controversial issues has been
which constituents to be assigned the grammatical status of
'subject'.  Many questions concerning the concept of
'subject' are still in search of answers today.  For
example: Is subject a universal category?  If so, what
definitions of this category will hold universally, and how
can the category be recognized across languages?  What role
do subjects play in the structure of language?  In what way
can 'subject' be best characterized?  What criteria can be
used to identify the subject?  Can a sentence be without a
subject?  Are those 'subjectless construction' in Chinese
truly subjectless?  If yes, why?  If not, what is the
subject?  What are the functions of 'subject' in the
structure of Chinese?

In this chapter, I will survey issues surrounding the
notion of 'subject' and review previous studies on this
concept.  I will then establish the need to redefine it in
Chinese grammar.

## 2.1 On the term of 'subject'

### 2.1.1 Three meanings of the term 'subject'

The term 'subject' has different meanings in different contexts. According to Pope (1995), three meanings of 'subject' are current:

(A) 'Subject' meaning grammatical subject: it controls the verb and is traditionally distinguished from grammatical 'object'. For example, in the two sentences below, the underlined constituents are the corresponding subjects of each sentence.

(2.1) a.    <u>She</u> started the car.
      b.    <u>The car</u> was started easily.

(B) 'Subject' meaning subject matter: What something is about. This can have a generalized sense, as in 'the subject of the film is...' or a specialized educational sense, meaning 'subject of study' or 'academic discipline.'

(C) 'Subject', as in psychological and modern philosophical usage, meaning 'subject position: a perceptual location within or orientation towards an event, usually unconsciously and habitually assumed' (Pope 1995:46).

In this dissertation, it is primarily the first two meanings that are of relevance.

## 2.1.2 Subject: its metaphysical, logical and grammatical sense

The term 'subject' comes from Latin *subjectum*, which is a translation of Aristotle's *to hupokeimenon*, meaning 'the material of which things are made', hence 'the subject of an attribute or of a predicate' (Chalker et al 1994: 378). 'Subject' has been used in at least three different senses, not only grammatically but also metaphysically and logically. As a metaphysical concept, 'subject' is 'a unit of existence--whatever is assumed to exist as an individual entity' (Kuroda 1976: 1):

> A subject is that in which various properties are contained, those properties which can be affirmed of it as an entity. The entity as a subject may be identified by the properties that belong to it, and these properties may be considered as making up the notion of the entity as a subject. 'Subject', in this sense, overlaps the concept of 'substance'.
>
> (Kuroda 1976: 1)

According to Kuroda (1976), the logical concept of 'subject' is derived from the metaphysical concept of 'subject'. If we assume that the universe consists of subjects, (i.e. entities with their respective properties), Kuroda argues, then 'the content of a single judgment, must take the form of affirming or denying the attribution of some property to some subject' (p.2). Kuroda goes on to explain: 'That to which a judgment affirms or denies the attribution of a property is called the subject of the

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judgment, and that which the judgment affirms or denies of the subject is called its predicate' (ibid.).

In this dissertation, the focus of study is 'subject' as a grammatical concept. As such, it has been discussed extensively in the linguistic literature. Major research in recent linguistic history on the notion of 'subject' includes Keenan (1976); Li and Thompson (1976); Schachter (1976); Foley and van Valin (1977 & 1984); Cole et al.(1980); Tomlin (1983 & 1986); Comrie (1989); Arnold et al. (1989); Chafe (1994); Palmer (1994); Naylor (1995). A significant consensus among many of these researchers is that there is no universal definition of 'subject', and it is almost impossible to discuss the notion of 'subject' outside a particular grammatical theory. As a result, the notion of 'subject' is defined differently within different theoretical frameworks, and different theories employ different analytical devices to account for grammatical relations such as 'subject' and 'object' etc. For example, GB theory defines 'subject' structurally in terms of dominance relations in phrase structure trees, Relational Grammar and Lexical Grammar treat it as a primitive notion, and Functional Grammar characterizes it in terms of a cluster of properties that subjects share cross-linguistically. In this dissertation, the study of the grammatical category of 'subject' is oriented towards a functionalist theoretical framework, and 'subject' is characterized as a prototype concept, definable in terms of

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its prototypical subject properties attested cross-linguistically.

## 2.2 Previous definitions of 'subject' and their limits

In the following sections, I will review previous definitions of 'subject' proposed within the framework of functional theories and discuss their advantages and limits.

### 2.2.1 'Subject' as a pure syntactic notion

'Subject' is frequently regarded as a pure syntactic notion. As such, it refers to the primary syntactic relation borne by a NP with respect to the verb. It is generally identifiable through syntactic coding features such as case marking and agreement. Viewed as strictly a syntactic category, subject has no semantic or pragmatic attributes. Notions such as 'semantic role', 'position', 'theme', 'topic', or 'old information', which are often used in the literature to characterize subject, represent neither features of subjects nor their identifying characteristics. Instead, what is emphasized is the morphological marking and syntactic behavior of subjects.

The syntactic function of 'subject' seems to be essential in the sentence structure of languages such as English. So much so, that a dummy subject must sometimes be introduced:

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(2.2)a.   <u>It</u>'s raining.
     b.   <u>It</u>'s me.

While this syntactic definition of subject seems to work well with Indo-European languages such as English, where a grammatical relation may be immediately recognized on the basis of the coding features in ordinary clauses, it runs into a major problem in Chinese which lacks morphological inflections as basis for analysis. Morphosyntactic features such as cross-referencing (frequently called 'agreement'), case-marking, etc. do not apply to Chinese and thus cannot be used as a sole criterion for identifying subject.

## 2.2.2 Subject as 'topic'

Subject is often defined as 'what is being talked about'. Subject and predicate are often used respectively to refer to 'that which is spoken of' and 'that which is said of the subject'. In this sense, subject is defined in terms of the concept of 'topic'. There are several problems with confusing 'subject' with 'topic'. First of all, the division of a sentence into grammatical subject and predicate does not always correspond to the distinction between 'topic' and 'comment', that is, what the sentence is about and what is said about it. This point is well illustrated in Jespersen (1924: 146), where given the sentence '*John promised Mary a gold ring*', one could say there are four things of which something is said, and which

might therefore be said to be subjects, namely (a) John, (b) a promise, (c) Mary and (d) a ring. If we were to claim that all of the four choices are equally valid, we would be led to say that the subject of the sentence varies according to the speaker. But then a sentence would not have a fixed subject, it would have multiple potential subjects, relative to different individuals, given that different individuals tend to have different intuitions as to what a sentence is about.

The following sentences further illustrate the problem with defining subject as what the sentence is about. They involve the same linguistic string, but are spoken in different ways, with the capital letters indicating where the audible stress peak of the sentence falls:

(2.3)a. JOHN likes Mary.
     b. John LIKES Mary.
     c. John likes MARY.

It goes without saying that the discourse contexts differ in which these sentences are uttered with these different intonation contours. For example, if the speaker assumes that the hearer knows someone likes Mary but does not know who likes Mary, (2.3a) might be used. If the speaker assumes that the hearer knows that John has something to do with Mary, but does not know in what respect, (2.3b) might be used. If the speaker assumes that the hearer knows that John likes someone, but does not know who he likes, (2.3c) might be used. Now if these different

situations mean that each of the sentences in (2.3) is about different things, then we could be forced to say that the subject of each of these sentences is different. However, syntactically speaking, these sentences are obviously identical, given that they involve the same syntactic structure with the same lexical items in the same word order. If the notion of 'subject' is supposed to have clear syntactic correlates, such as manifested in (2.3), the definition of 'subject' as 'what the sentence is about' certainly fails in this regard. Therefore, it can be concluded, just as Jespersen (1924: 146) did years ago, that 'this popular definition, according to which subject is identified with subject-matter or topic, is really unsatisfactory'.

The current literature also attests a widespread objection against conflating 'subject' and 'topic'. This objection is clearly reflected in Napoli's statement quoted below, which echoes a general consensus in the linguistic community with regard to the relation of 'subject' and 'topic'.

> Although in subject-prominent languages like English, the topic is usually the subject, we may not in principle subsume topic under subject, and the definition of subject must not simply appropriate the notion of topic without further ado. Topic is a discourse function realized at various levels of structure. Although in languages like English topic function is typically coded in clause syntax as subject, topic and subject are nonetheless separate entities.

(Napoli 1995: 161)

Conflating 'subject' and 'topic' also presents another kind of problem for language internal data where there are clear cases of subject being non-topical, as in (2.2), repeated below, and topics being non-subject, as in (2.4). Compare:

(2.2)a.    <u>It</u>'s raining.
     b.    <u>It</u>'s me.

(2.4)a.    The play, <u>John</u> saw it yesterday.
     b.    As for the play, <u>John</u> saw it yesterday.

        [Example (2.4) from Chafe 1976: 49]

In (2.2), one would agree that the subject of the sentences is 'it', given its syntactic agreement feature with the verb. However, 'it' is only what is called a 'dummy subject' with no referential or semantic content, and therefore cannot be considered topic of the sentences. In contrast, sentences may involve topics that are not subjects. 'The play' in (2.4a), marked as the topic of the sentence by a comma which separates it from rest of the sentence or a pause in speech, is generally considered topical, but not the subject of the sentence. Nor is 'the play' in (2.4b) a subject, though overtly marked as the topic of the sentence by the topic expression 'as for..'. Both sentences in (2.4) may be characterized as contrastive sentences with topicalization of the object. It is generally considered that the subject of the sentences is 'John', given its semantic role of agent, and given the

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fact that in basic active sentences, the subject is usually the agent, if there is one.

### 2.2.3 Subject as 'point of departure'

In this sense, 'subject' primarily refers to the sentence-initial NP in the sentence. The theoretical foundation for this point of view is largely cognitive and appears to parallel the term 'psychological subject' introduced by grammarians of the nineteenth century. For example, von der Gabelenz (1891: 351) defines the psychological subject as 'the idea which appears first in the consciousness of the speaker...what makes him think and what he wants the hearer to think of'. He considers that this notion is determined by word order and the psychological subject needs to be the first element in the sentence (ibid.). The psychologist G. F. Stout, who was quoted by Jespersen in *The Philosophy of Grammar* (p.246), shares the same view and considers the subject to be the 'product of previous thinking which forms the immediate basis and starting-point of further development.'

Chafe (1994:83) also argues for the conception of subject as 'point-of-departure':

> Clauses do not express a random collection of independent events or states, floating in the air like so many disconnected bubbles. Rather, each has a point of departure, a referent from which it moves on to provide its own new contribution. It is this starting point referent that appears grammatically as the clause's subject.

This view of subject is closely related to the discourse notions of 'given' vs. 'new' information.  Chafe (1994) maintains that the referents of subjects tend to be either 'given' or 'accessible', but not new information. 'It makes sense', he says, 'that one would employ as a starting point a referent that is already active in the discourse' (p.85).  Studies have shown that one of the striking properties of subjects manifested in discourse is the fact that a high proportion of them do express 'given information' (Prince 1992, Chafe 1994).

The idea of subject as the expression of starting-points undoubtedly gives us an insightful perspective on the nature and function of subject in the sentence. However, there are several problems with designating subject as the sentence-initial NP.  First, compare the following sentences:

(2.5)a.    He likes beans, not peas.
     b.    Beans he likes, not peas.

In (2.5a), we would be led to claim that *he* is the subject, but in (2.5b), *beans* would be the subject. However, these sentences appear to express the same eventuality -- the same person likes and dislikes the same kind of things.  It is true that the two sentences differ to a certain extent: (2.5b) involves a more marked word order with its object topicalized.  However, one could hardly characterize the difference between the two as one of the difference between subjects, given the identical

syntactic agreement features between the pronoun *he* and the verb *likes* in both sentences. Generally speaking, if a language clearly has overt morphosyntactic agreement features, these features are normally considered clear indications of grammatical relations such as 'subject' and 'object'.

Now consider the following pairs:

(2.6) a.  Mary left.
      b.  Yesterday Mary left.
      c.  Mary left yesterday.

Again, the definition of the 'subject' as the sentence-initial NP would lead to the conclusion that the subjects of the three sentences in (2.6) are different: The subject of (2.6a) would be *Mary* while that in (2.6b) would be *yesterday*. However, one could not help notice that *yesterday* as a temporal NP, is syntactically and semantically peripheral in (2.6b) compared to the NP *Mary*. It serves here to modify the event denoted by the rest of the sentence, that is, *Mary left*. Claiming that the subject is *yesterday* would mean that the subject of the sentence has changed as a result of this modification. But then consider (2.6c), the subject remains unchanged (i.e. still is *Mary*) with the same type of modification. The apparent contradiction between (2.6b) and (2.6c) suggests that defining the subject as the sentence initial NP is less than satisfactory.

There is yet another problem. Designating the
sentence-initial NP as the grammatical subject would also
mean that a sentence is subjectless if no NP precedes the
verb. Given the fact that 'almost all major syntactic
categories in Chinese can appear either before or after the
verb' (J. Lu 1956:589), a large number of basic sentences
in Chinese, would have to be construed as subjectless when,
on the contrary, they could be analyzed more plausibly as
containing subjects either in terms of their syntax,
semantics or pragmatics. In these cases, the definition of
subject which solely depends its position in a sentence,
irrespective of its semantic and syntactic properties would
be too mechanical and restricted to be reasonable.

Cross-linguistically, there are also problems. What
about those verb-initial languages such as Tagalog and
Arabic? They would be all denied subjects if 'subject' is
defined as the sentence-initial NP.


## 2.2.4 Subject as 'agent'

In traditional grammar, the subject is often defined
as the 'doer' or 'agent' of the verbal action (Chalker and
Weiner 1994:379). In other words, the subject of the
sentence is the NP whose referent is understood to do some
kind of an action. There seems to be some psychological
justification for this perspective. Studies indicate that
speakers tend to select as subjects participants they
empathize with most, and agents are more likely to be

selected as subjects because prototypical agents are volitional and most likely human (Dowty 1991, Croft 1991). There is also the factor of 'animacy' that is often associated with the semantic role of 'agent'. It is suggested that 'high animacy correlates high topicality' and chances are agents are more animate than any other semantic roles (Croft 1991:154).

The limitation of this definition is obvious when one considers the following sentences:

(2.7)a. Mary is lovely.
     b. John is frightened by the ghost story.

In (2.7a), one would agree that the subject of the sentence is Mary, but Mary performs no action. Being lovely is a kind of quality or state rather than an action. (2.7b) is a passive sentence, and the subject is *John*. Yet, John performs no action either. In fact, all passive sentences involve subjects with typically the semantic role of 'patient' rather than 'agent'. While it is true that subject is frequently associated with the semantic role of 'agent', subjects are not restricted to agents only. Consider the following examples from Fillmore (1968: 33).

(2.8)a.    John opened the door.
     b.    The key opened the door.
     c.    The door opened.

One would agree that in (2.8b) and (2.8c) *the key* and *the door* are subjects respectively, but they do not carry the semantic role of 'agent'. Instead, *the key* carries the

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semantic role of 'instrument', and *the door* that of 'patient'. These examples indicate that the connection between semantic role and choice of subject is not at all obvious, and that agents are not equivalent to syntactic subjects. It is misguided to equate a grammatical relation with a single semantic function. This definition would have the undesirable consequence of rendering all ergative languages subjectless, where subject is formally identical with 'patient' in the active construction (see Palmer 1994: 12).

Equating the grammatical category of 'subject' with the semantic role of 'agent' would certainly not work for Chinese, where basic sentences often do not involve NPs with the semantic role of 'agent'. For instance, one would agree that the initial NPs in (2.9) below are subjects of the sentences, however, neither is an agent.

(2.9)a.    Fan   chi   le.
           meal   eat   Asp.
           'The meal is finished.'

     b.    Xin        fa   le.
           letter     send  Asp.
           'The letter has been sent.'

Thus, the definition of 'subject' as 'agent' would again lead to the undesirable abundance of subjectless sentences in Chinese when in fact many of them manifest a perfect subject-predicate structure.

In the discussion of the different definitions of 'subject' so far, I have shown that each of these

definitions is based on emphasis on a particular function that a subject displays in a language. The major problem with these definitions, I argue, is that the notion of 'subject' is taken as a one-dimensional (or one-condition) concept, either as a pure syntactic notion, or equated with a pragmatic notion such as 'topic', or a semantic notion such as 'agent'. I have presented counter examples which indicate that none of these adequately describes linguistic reality. In order to adequately account for the diverse cross-linguistic data, the notion of 'subject' needs to be redefined.

## 2.3 Previous definitions of subject in Chinese

There was a heated linguistic debate during the mid-50's in the Chinese linguistic community on grammatical relations of 'subject' vs. 'object' in Chinese, but no conclusion was made nor consensus reached. The debate still goes on today.

Major traditions in the analysis of subject in Chinese can be roughly classified into five groups:

(A) 'Subject' as topic: Chao (1948 & 1968); Hong (1956); Householder & Chen (1967); Alleton (1973); Huang (1973); Zhu (1981);

(B) 'Subject' as the sentence-initial NP in the sentence: Zhang J. & Y. Chen (1981); Huang & Liao (1991);

(C) 'Subject' as the agent or actor: S. Lu (1942); T. Tang (1989); Gao (1994);

(D) 'Subject' as as either the topic or as the actor: S. Lu (1979); L. Li (1985);

(E) 'Subject' as the NP which has a 'doing' or 'being' relationship with the verb: Li and Thompson (1976 & 1981).

Among these five groups, the most dominating and influential views are the first two. These two views are in fact essentially the same: subject is defined as 'topic', i.e. what the sentence is about. The sentence-initial position is designated as the topic position, and subject is designated as the sentence-initial NP of the sentence.

The major proponent of this analysis of subject was Yuan-Ren Chao, one of the most renowned Chinese grammarians. He claimed that 'subject', as a grammatical term, cannot be defined syntactically within the framework of Chinese grammar. In *Mandarin Primer* (1948) and especially in his *A Grammar of Spoken Chinese* (1968), Chao said:

(a) The phonetically loose connection between subject and predicate is paralleled by a semantic looseness. In a Chinese sentence, the subject is literally the subject matter and the predicate is just something said about the subject matter.

(*Mandarin Primer*, p.35)

(b) The grammatical meaning of subject and predicate in a Chinese sentence is topic and comment, rather than actor and action.

(*A Grammar of Spoken Chinese*, p.69)

(c) Note that we are using the terms of 'topic and comment' as semantic terms and not as grammatical terms as used by many writers in discussing Chinese grammar.

(*A Grammar of Spoken Chinese*, p.69)

It is clear from these statements that Chao did not treat 'topic' as a grammatical or discourse entity distinct from the 'subject', but rather as a way to talk about the meaning that subject conveys in Chinese. In Chao's view, the functions of 'subject' and 'topic' are simply the same, and the subject of the sentence is the subject matter that is being talked about. Put differently, most Chinese sentences consist of a subject (the first noun phrase) and a predicate (the rest of the sentence), but the meaning or function of 'subject' and 'predicate' is 'topic' and 'comment' respectively.

However, this definition presents a problem for the analysis of sentences such as (2.10) below, given that one could hardly agree on what such a sentence is about, and yet one is reluctant to say that these sentences do not have a subject.

(2.10) a.  Shui chi le    dangao?
           who  eat  Asp.  cake
           'Who ate the cake?'


       b.  Shui dou  meiyou    lai.
           who  all  not       come
           'Noboby came.'

Zhu (1981: 95-96) also characterizes the subject in Chinese as the sentence-initial element. He claims that

the subject in Chinese is preverbal and functions as the
topic of the sentence.  As such, it can be optionally
marked off from the predicate by a pause and/or particles.
This subject-as-topic approach is featured in contemporary
Chinese grammar books and is the major approach currently
being adopted by the Chinese linguistic community in China:
'subject' is defined as the 'topic', and the first NP of a
sentence is designated as subject, because the sentence-
initial position is considered as the topic position.

```
(2.11)a. Women        zuotian    kai  le   yi   ge    hui.
         we           yesterday  hold ASP  one  CL.   meeting
      <-Subject->  <-----------------Predicate-------------->
      'We held a meeting yesterday.'

      b. Zuotian       women      kai  le   yi   ge   hui.
         yesterday     we         hold ASP  one  CL.  meeting
       <-Subject->  <------------Predicate------------------->
                    <-Subject->       <---------Predicate----->
      'Yesterday we held a meeting.'


(2.12) Zhe       ge    ren       xinyan'r      hao.
        this     CL.   person    heart         good
      <---Subject-----------> <-----Predicate----->
                             <-Subject-> <-Predicate->
      'This person is kind-hearted.'
```
[Examples (2.11)-(2.12) are from Fang et al., 1995:235]

In this analysis, the predicate of a clause may itself
be a subject-predicate predication: a sentence may contain
two subjects, a 'major subject' and a 'minor subject', the
former being the subject of the whole clause, the second
the subject of only the predicate segment of the clause.
If a sentence begins with a non-nominal constituent, it is
considered subjectless.

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The problems with this type of analysis, I argue, are two fold: on the one hand, it unduly complicates the structure of Chinese sentences, and on the other hand, it oversimplifies the structure of Chinese sentences. For instance, e.g. (2.11a) and (2.11b) have the same constituents, the only difference being that in (2.11a), the pronoun *women* 'we' is sentence-initial, while in (2.11b) the adverbial of time *zuotian* 'yesterday' begins the sentence. According to this analysis, the subject is different for each sentence because their initial elements are not the same, and (2.11b) would have to be considered as having a double-subject when in fact, it could be treated as a very simple sentence with a single subject, just like in (2.11a). Let me give another example.

```
(2.13)a.   Ta                mingtian        lai.
           s/he              tomorrow        come
           <-Subject->       <----Predicate------->
           'S/he will come tomorrow.'

      b.   Mingtian          ta                    lai.
           tomorrow          s/he                  come
           <-Subject->       <------Predicate----->
                             <-Subject->     <-Predicate->
           'Tomorrow s/he will come.'
```

Under this analysis, (2.13b), which is a simple sentence, would have to be considered a complex double-subject construction. This analysis would yield the result that a majority of Chinese sentences have a double-subject structure, when in fact many of them can be accounted for as simply having just one subject.

The Chao/Zhu analysis oversimplifies the syntactic structures of Chinese in the sense that all subjects are sentence-initial, then there is really no variation in terms of the order of the constituents to account for. Analysis of syntactic structures in Chinese is rendered uninteresting and unmotivated, since there is are really no variations to account for. The motivating pragmatic factors underlying the word order variations are largely ignored in the Chao/Zhu analysis. This analysis also ignores the syntactic nature of the first two NPs of the main clauses: one of them in fact shares a closer relationship with the verb. For instance, in (2.11b), *women* 'we' is selectionally more closely related to the verb *kai*, 'held', than its subject counterpart *zuotian* 'yesterday'. In (2.13b), *ta* 'he' is more closely related to the verb *lai* 'come' than its subject counterpart *mingtian*.

Dubbing 'subject' as 'topic' also has the undesirable consequence of having the syntactic properties of subject in Chinese ignored and 'subject' treated as a marginal notion in Chinese syntax. I claim that 'subject' as a syntactic notion is as important in Chinese as in English, because, it is the notion of 'subject' (not the notion of 'topic') that plays a central role in syntactic processes such as serial verb construction, reflexivization, imperativization, etc. These issues will be further discussed in the next chapter.

Li and Thompson's (1976 and 1981) distinction of the notion of 'subject' from the notion of 'topic' marks a significant departure from the traditionally dominating (despite being problematic) definition of 'subject' via the notion of 'topic' or sentence position.  For the first time, 'subject' and 'topic' are considered as distinct notions in Chinese, and each is characterized with different properties.  The following briefly summarizes how Li and Thompson account for each notion.

In essence, they distinguish 'subject' from 'topic' via a semantically based criterion which basically says a subject has to be semantically or selectionally involved with the predicate while a topic does not have to be thus restricted.

> The subject of a sentence in Mandarin[1] is the noun phrase that has a 'doing' or 'being' relationship with the verb in that sentence.  The precise nature of this relationship depends on the semantic makeup of the verb.

(Li and Thompson 1981: 87)

While their definition of 'subject' may sound a bit too broad, their definition of 'topic' is more vague and intuitive: basically they say that semantically 'topic' is what the sentence is about, and that functionally it 'sets a spatial, temporal, or individual framework within which the main predication holds' (Li and Thompson 1981: 85), a

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[1] Madarin is a major dialect of Chinese.  In this dissertation, the term Chinese is used to refer to this major variety of Chinese, as is the general practice in the literature.

functional characterization which was initially proposed in Chafe (1976:50). However, they are specific in laying out the following characteristics that they maintain that a topic has.

First, a topic has to be definite or generic in the sense that it 'always refers either to something that the hearer already knows about...or to a class of entities' (Li and Thompson 1981: 85). In comparison, a subject does not have to be definite. Secondly, a topic always occurs in the sentence initial position (unless it is preceded by a connector that links it to the preceding sentence) whereas a subject does not need to be so. Therefore, in their account, time phrases and locative phrases which occur at the beginning of a sentence are all considered topics (ibid., p. 94). Lastly, a topic can be optionally followed by a pause or pause particle[2] which separates it from the rest of the sentence.

On the basis of these distinctions between 'subject' and 'topic', Li and Thompson classify simple declarative sentences in Chinese into the four basic types given below (examples (2.14) through (2.16)are from Li and Thompson 1981:87-93).

(A) Sentences with both subject and topic

(2.14)  <u>Nei    zhi  gou</u>  <u>wo</u>   yijing     kan  guole.
        <u>that    Cl.  dog</u>  <u>I</u>    already    see  ___ Asp.
        'That dog I have already seen.'

---

[2] From the functional perspective, pause particles can be considered topic markers. They are particles *such as a, ya, ne,* or *ba.*

Li and Thompson identify *nei zhi gou* 'that dog' as the topic and *wo* 'I ' as the subject of the sentence.

(B) Sentences in which subject and topic are identical

(2.15) <u>Wo</u> xihuan    chi  pinguo.
       <u>I</u>   like      eat  apple
       'I like to eat apples.'

(C) Sentences with no subject

(2.16) Nei      ben  shu  chuban    le.
       that     Cl.  book publish   Asp.
       'That book, (someone) has published it.'

Li and Thompson claim that *nei ben shu* 'that book' in (2.16) is the topic but not the subject, because

    it is not in a doing relationship with the verb
  *chuban*.  In other words, the book does not publish
  itself; someone or some institution publishes it.

  (Li and Thompson 1981:89)

Similarly, Li and Thompson consider sentences in (2.17) are sentences involving topics only with no subjects.

(2.17)a.  Fangzi      zao        hao        le.
          house       build      finish     Asp.
          'The house, (someone) has finished building it.'

     b.  Yifu        tang wan        le.
         cloth       iron finish     Asp.
         'The clothing, (someone) has finished ironing it.'

     c.  Fan  zhu  jiao le   yi-dian.
         rice cook burnt Asp. a bit
         'The rice, (we) burnt it a little bit.'

(D) Sentences with no topic

Li and Thompson distinguish two types of sentences with no topics. The first type is one where the topic (i.e. the phrase representing the topic) is omitted because it is understood (and recoverable if necessary) from the linguistic context in which the sentence occurs. (2.18) and (2.19) are the examples provided by Li and Thompson (1981: 90) for this type.

(2.18)
A:    Ni    kan    guo    Lisi    meiyou?
      you   see    Asp.   Lisi    not
      'Have you seen Lisi?'

B:    _____    Mei    kan    guo.
                 not    see    Asp.
                 '(I) haven't.'

(2.19)
A:    Juzi        huai        le      ma?
      orange      spoil       Asp.    Q[3]
      'Are the oranges spoiled?'

B:    _____    Huai        le.
                spoiled     Asp.
                '(They) are spoiled.'


Li and Thompson maintain that topics are omitted in both of B's responses because they are understood from the context since they have been previously introduced in A's remarks.

The second type of sentences with no topics, according to Li and Thompson, is one in which 'no noun phrase is definite, or in which the definite or generic noun phrase

_____

[3] Q is a question marker. When it is attached to the end of a statement, it make that sentence into a yes-no question.

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is not what the sentence is about' (Li and Thompson 1981:
91-92).  The sentences in (2.20) are Li and Thompson's
examples of this type (ibid., p.91):

(2.20)a. Jin    lai  le   yi   ge    ren.
          enter  come Asp. one  CL.   person
          'A person came in.'

     b. You    ren zai da    dianhua    gei Zhangsan.
          exist  person Asp. hit   telephone   to  Zhangsan
          'Someone is making a phone call to Zhangsan.'

     c. Xia           yu   le.
          descend        rain Asp.
          'It is raining.'

However, Li and Thompson do not consider these
sentences subjectless.  They claim that 'in such sentences,
the subject is usually an indefinite noun phrase, which
cannot occur in sentence-initial position and cannot be a
topic' (ibid.).  The reason they give for identifying the
postverbal NPs as subjects is that they have a 'doing'
relationship with the corresponding verbs in the sentences.

Whereas Li and Thompson's analysis has the advantage
of recognizing two distinct grammatical categories of
'subject' and 'topic', their definition of 'subject' is not
without problems.  First of all, 'an NP that has a doing or
being relationship with the verb' is hardly a definition of
'subject', given that more than one NP (an object, for
instance) could share such a relationship with the verb.
It is unclear as to how such a 'doing' or 'being'
relationship should be interpreted or understood.  For
instance, one may wonder why those sentences in (2.16) and

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(2.17), repeated below, are considered subjectless by Li
and Thompson, given their own definition.  One could claim
that the sentence initial NPs in (2.16) and (2.17) are
subjects since they are selectionally related to their
predicates, and therefore may be characterized as having a
'doing' or 'being' relationship with the verb.  Yet, they
are denied subjecthood in Li and Thompson's analysis.


(2.16) Nei      ben   shu   chuban      le.
        that     Cl.   book  publish     Asp.
       'That book, (someone) has published it.'


(2.17)a.  Fangzi     zao        hao        le.
          house      build      finish     Asp.
          'The house, (someone) has finished building it.'

      b.  Yifu       tang       wan        le.
          cloth      iron       finish     Asp.
          'The clothing, (someone) has finished ironing it.'

      c.  Fan  zhu  jiao       le    yi-dian.
          rice cook burn       Asp.  a bit
          'The rice, (we) burnt it a little bit.'


From Li and Thompson's classification of the four
sentence types given above (not by their definition of
'subject' ), it appears that what they mean by a 'doing
relationship with the verb' is simply that the subject is
the NP with the semantic role of 'agent'.  That seems to be
the only reason why sentences in (2.16) and (2.17) are all
considered by Li and Thompson as subjectless, because, the
doer of the action (or the NP carrying the agent role) does
not appear in these sentences.  As a matter of fact, the
way these sentences are translated by Li and Thompson seems
to suggest so.


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According to Li and Thompson, sentences in (2.16) and

(2.17) are topic and comment constructions without

subjects. They do not consider these sentences passive

sentences in Chinese, claiming that passive sentences in

Chinese are limited to those involving the use of the *bei*

*phrase*[4], roughly the equivalent of the English *by phrase* in

passive constructions.

My objection to Li and Thompson's analysis of (2.16)

and (2.17) has to do with their restricting the passive

sentences in Chinese to those with the *bei* phrase.

Sentences (2.16) and (2.17) should be characterized as

passive sentences both syntactically and semantically. The

*bei* phrase is optional rather than obligatory. For

instance, a *bei* phrase can be inserted in these sentences

without changing their general structure or meaning, except

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[4] Here is how Li and Thompson define passive sentences in
Chinese:

'The term *passive* in Mandarin is generally applied to
sentences containing the coverb bei with the following
linear arrangement:

$NP_1$ *bei* $NP_2$ verb

For example: Ta     bei  jiejie        ma        le.
            s/he  BEI  elder-sister    scold     Asp.
            'S/He was scolded by (his/her) sister.'

This type of construction has the object noun
phrase, that is, the thing or person affected by the
action of the verb, in sentence-initial position. This
direct object noun phrase is followed by the passive
coverb *bei*, which introduces the agent of the action.
We will call this the *bei* noun phrase.

(Li and Thompson 1981:492)

to provide the specific informtion on the agent of the action, as in the sentences below:

```
(2.16)'  Nei    ben   shu   bei   xuexiao    chuban      le.
         that   Cl.   book  BEI   school     publish     Asp.
         'That book has been published by the school.'
```

```
(2.17)'a. Fangzi bei San  Shu    zao        hao         le.
          house   BEI third uncle build      finish      Asp.
          'The house was built by Third Uncle.'

       b. Yifu bei  wo    tang        wan         le.
          cloth BEI  I/me  iron        finish      Asp.
          'The clothes were ironed by me.'

       c. Fan   bei  ta          zhu  jiao le   yi-dian.
          rice  BEI  him/her     cook burn Asp. a bit
          'The rice was burnt a little bit by him/her.'
```

Since these sentences can be considered passive sentences, the sentence initial NPs with the semantic role of theme or patient may be construed as subjects of the sentence.  Though whether a sentence should be analyzed as passive or not is a separate issue to the grammatical notion of 'subject', the problems involved with the analysis of (2.16) and (2.17) suggest that Li and Thompson's definition of 'subject' as the NP sharing a doing or being relationship with the verb appears to be too vague or ambiguous to be well-defined.

To summarize, though Li and Thompson's definition helps to distinguish 'subject' and 'topic', it still lacks what is needed for the proper identification of subject in Chinese.

I have so far argued that the major definitions of 'subject' in Chinese are still problematic.  Subject

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defined as 'topic' or designated as the sentence-initial NP
has the undesirable consequence of oversimplifying and
overcomplicating the syntactic structure of Chinese at the
same time.  In order to better characterize the notion of
'subject', it is necessary to have a clear understanding of
the properties of 'subject'.  To do so, I now turn to a
'milestone' article by Keenan (1976).


2.4 Toward a universal definition of subjects: Keenan's
     'Subject Properties List' (SPL)

     In an attempt to provide a definition of the notion of
'subject' which would be universally valid in the sense
that it will enable us to identify the subjects of
arbitrary sentences from arbitrary languages, Keenan (1976)
proposes a complex if 'cumbersome' (his own word)
definition in the form of a Subject Properties List (SPL).
The universality of the subject properties on this list is
justified by the fact that they are abstracted from a large
and diverse corpus of data collected from different
languages.  Keenan points out that 'such a definition is
needed in universal grammar in order for the many universal
generalizations which use this notion to be well defined'
(1976:305).  If different criteria are used to identify
subjects in different languages, he argues, then 'subject'
is simply not a universal category and as a consequence all
those universal generalizations stated in terms of that

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notion cannot be understood as generalizations at all
(ibid.).

Keenan distinguishes between basic subjects and non-
basic subjects, the former being the subjects of the
'semantically basic sentences', which is what he calls 'a
privileged subset of sentences in any language' (ibid.,
306). The subjects of non-basic sentences are defined as
those NPs, which 'present a clear preponderance of the
properties characteristic of b-subjects' (ibid., 307). He
also maintains that subjecthood of an NP in a sentence is a
matter of degree, and that subjects in some languages will
be more subject-like than those of other languages in the
sense that they will in general, 'present a fuller
complement of the properties which universally characterize
b-subjects' (ibid.).

This subject property list that Keenan proposed is
composed of four sections: (a) autonomy properties; (b)
case-marking properties; (c) semantic role and (d)
immediate dominance. Each of these in turn incorporates
sub-lists of properties, altogether 30 of them. If one NP
in the sentence has a clear preponderance of the subject
properties, then it will be called the subject of that
sentence. In other words, a subject in any language can be
understood as the combination of a subset of Keenan's
subject properties.

The properties of subjects specified on Keenan's SPL
can be classified into three types: morphosyntactic

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properties, semantic properties, and pragmatic properties. In the following sections, I will discuss these subject properties and illustrate how they help pick out the subject in Chinese sentences.

## 2.4.1 Morphosyntactic properties

The morphosyntactic properties of subjects include properties related to overt coding, syntactic behavior and sentential configuration.

## 2.4.1.1 Coding properties

The coding features that are attributed to subject properties in Keenan's SPL are primarily of three kinds: case-marking, cross-referencing, and word order. In a great many languages, the coding features of ordinary main clauses clearly mark a subject grammatical relation. For instance, in Ancient Greek, subjects of ordinary main clauses occupy no definite position, but are for the most part clearly marked by nominative case, which always and only appears on the subjects of finite clauses. Furthermore, verbs agree with their subjects in person and number via an extensive system. (Andrews 1985: 104).

Subject can also be coded in terms of its unmarked sentence position with respect to the verb. Since all languages have a linear order of constituents, position is one possible device for all of them. In English, for example, subjects of ordinary main clauses are primarily

marked by the coding feature of preverbal position. They
are also indicated to a limited extent by case marking and
subject-verb agreement. Chinese on the other hand, is
known for its lack of inflectional marking to indicate
grammatical relations, thus case marking and agreement do
not apply to Chinese. However, it is widely recognized
that Chinese is fundamentally a SVO language where a
subject has the tendency to occur preverbally in unmarked
cases (Tsao 1977, Light 1979, Sun and Givon 1985, Wei
1989). This phenomenon conforms to what SPL specifies:
basic subjects are normally the initial occurring NP in
basic sentences (Keenan 1976: 319). Though subjects are
not always the leftmost occurring NPs, this generalization
holds in many basic sentences. For example, it would have
the effect of picking out the subjects in (2.18), which are
underlined accordingly.

(2.18)a.　<u>Mama</u>　　　bu　　xihuan　　zhe　ge　ren.
　　　　　<u>mother</u>　　　not　　like　　　this　Cl.　person
　　　　　'Mother does not like this person.'

　　　b.　<u>Wo</u>　hua　le　　qian　　　xiangshou.
　　　　　I　　　spend Asp.　money　　　enjoy
　　　　　'I spent money and had a good time.'

　　　[Example (2.12b) from Li and Thompson 1976:478]


2.4.1.2 Behavioral and control properties

　　　Behavior and control properties refer to general
behavior characteristics that subjects share with other NPs
in grammatical processes such as coreferencing (e.g.
*reflexivization, pronominalization)*, deletion (e.g. *equi-NP*

*deletion, imperative-deletion*) and movement (e.g.

*relativization, clefting, passivization, raising,* etc.).

All these processes appear to involve subject as a

controller in English. Keenan's SPL states that, cross-

linguistically, basic subjects tend to have the following

behavioral and control properties:

      a). They are always among the possible controllers of
         stipulated co-reference;
      b). They in general can control reflexive pronouns;
      c). They are among the possible controllers of
         coreferential deletions and pronominalizations;
      d). They are the easiest NPs to stipulate the
         coreference of across clause boundaries.
         (Keenan 1976:315-16)

    Now Consider the following sentences in Chinese:

(2.18)b. <u>Wo</u>    hua  le  qian      xiangshou.
      <u>I</u>      spend Asp.  money     enjoy
      'I spent money and had a good time.'

(2.19)a. <u>Zhangsan</u> ti  le  qiu. <u>Ta</u>  ye   da    le   ren.
      Zhangsan kick Asp. ball he     also  hit   Asp.  person
      'Zhangsan kicked the ball, he also hit someone.'

    b. <u>Zhangsan</u>    ti  le   qiu  ye   da    le   ren.
      <u>Zhangsan</u>    kick Asp.  ball  also  hit    Asp. person
      'Zhangsan kicked the ball and hit someone.'

(2.20) <u>Zhangsan</u> xihuan ta-ziji.
      <u>Zhangsan</u>  like      himself
      'Zhangsan likes   himself.'

(2.21)a. (<u>Ni</u>)   Qu.
      you  go
      'Go.'

    b. (<u>Ni</u>)   Bie  qu.
      you  not  go
      'Don't go.'

    Let me assume that the underlined preverbal NPs in

(2.18) - (2.21) above are the subjects of the sentences,

given that Chinese is a SVO language, and that subjects

tend to occur preverbally.   I will now illustrate that

these subjects do have the behavior and control properties

that Keenan's SPL specifies.   In other words, these

properties help predict the subjecthood of an NP in a

sentence.  (2.18b) shows that the subject controls

coreferential deletion in the serial verb construction,

which normally involves at least two verbs.   Here, in

(2.18b), the two verbs are *hua* 'spend' and *xiangshou*

'enjoy'.   The sentence literally means 'I spend money and

(I) enjoy'.   The subject, *wo* 'I', is both the controller

and the target of deletion, as indicated by a blank where

the coreferential deletion controlled by the subject

occurs.


(2.18b)<u>Wo</u> hua    le    qian ____    xiangshou.
        <u>I</u>    spend Asp.  money        enjoy
        'I spent money and had a good time.'


Now look at the sentences in (2.19).   (2.19a) shows

that the subject stipulates the coreference across clause

boundaries and controls coreferential pronominalization:

the subject pronoun *ta* 'he' of the second clause is used to

refer back to the subject of the prior sentence, *Zhangsan*,

a proper name.   (2.19) also show that subject controls

conjunction reduction.   In fact, the ungrammaticality of

(2.21) seems to suggest that identical NP deletion in a

coordinate structure is limited to the subject.   Compare

(2.19), which is repeated here, to (2.22) below:

(2.19)a. <u>Zhangsan</u>  ti   le   qiu,  <u>ta</u>  ye   da   le   ren.
        Zhangsan kick Asp. ball  he also  hit  Asp. person
        'Zhangsan kicked the ball, he also hit someone.'

   b. <u>Zhangsan</u> ti  le   qiu ____  ye   da   le    ren.
        Zhangsan kick Asp.ball      also hit   Asp. person
        'Zhangsan kicked the ball and hit someone.'

(2.22)a. Wo    mai  le  <u>li</u>,  ni   chi  le   **li**.
        I     buy  Asp. pear you  eat  Asp. pear
        'I bought the pear; you ate the pear.'

   b. *Wo   mai  le ____    ni   chi  le,   **li**.
        I     buy  Asp.       you  eat  Asp. pear
        'I bought and you ate, the pear.'


In (2.19b), the two identical subjects *ta* 'he' are
reduced to one, and the sentence is OK.  However, if
identical NPs that are non-subjects are reduced in the same
way, such as the identical objects *li* 'pear' in (2.22b),
the sentence becomes unacceptable.


Now, let us take a look at (2.20), repeated below:


(2.20) <u>Zhangsan</u>      xihuan     ta-ziji.
      <u>Zhangsan</u>      like       himself
      'Zhangsan likes himself.'

Keenan's SPL specifies that 'b-subjects in general can
control reflexive pronouns' (Keenan 1976:313).  In other
words, the subject is what can serve as the antecedent of a
reflexive.  This is apparently true in (2.20), where
*Zhangsan*, is the antecedent that controls the reflexive
pronoun *ta-ziji*, 'himself'.

In terms of word order, subjects tend to occur before
their co-referential reflexives.  According to Keenan, this
preferred word order follows from the autonomous-reference

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property that is attested in subjects of many different languages. Cross-linguistically, subjects tend to be autonomous in reference, and 'the referent of the subject must be determinable independently of that of a following NP' (Keenan 1976: 313). Thus in English, the sentence 'Mary admires herself' is OK but 'Herself admires Mary' is not where *Mary* is coreferential to *herself*.

SPL (Keenan 1976: 321) states that 'subject normally expresses the addressee phrase of the imperatives.' This is apparently true in Chinese. (2.21), repeated below, shows that subjects of imperative sentences, whether overtly expressed or omitted, are NPs denoting the addressee(s). If the subject does not refer to the addressee(s), then the sentence cannot be interpreted as imperative.

(2.21) a. (Ni)    Qu.
       you     go
      'Go.'

    b. (Ni)  Bie  qu.
       you   not   go
      'Don't go.'

So far I have illustrated that Chinese subjects share major coding and behavior properties that are attested in Keenan's universal subject list. Thus I conclude that 'subject' is a notion needed in Chinese grammatical theory in order to describe certain syntactic processes.

## 2.4.2 Semantic properties

Semantic properties of subject specified on the SPL (Keenan 1976:312) include the following: 'indispensability', 'independent existence', 'absolute reference' and 'semantic role'.

## 2.4.2.1 Indispensability:

Basic subjects cannot be eliminated from a sentence without rendering the sentence incomplete.  Thus (2.23b) is ungrammatical without a subject.

(2.23)a. John hunts lions (for a living).
     b. * hunts lions (for a living).

In Chinese, though subjects tend to be suppressed whenever understood from the context, such as in imperative sentences, basic sentence subjects cannot be omitted unless recoverable.  The equivalent of (2.23) in Chinese would have almost the same effect as in English, as illustrated in (2.24).  If the subject is omitted, this sentence is incomplete unless understood as an imperative sentence.

(2.24) a. Yuehan    bu   shizi     (wei  sheng).
       John       hunt  lion      (for  living)
      'John hunts lions (for a living).'

     b. Bu   shizi     (wei  sheng).
       hunt  lion      (for  living)
      'Hunt lions (for a living).'

## 2.4.2.2 Independent existence:

The SPL specifies that 'the entity that a b-subject refers to (if any) exists independently of the action or

property expressed by the predicate' (Keenan 1976: 312).
For non-subjects, it says, this seems less true.  For
example, in (2.25) below, the existence of the object 'a
new song' is dependent on the act of writing, whereas the
existence of the subject, 'the singer', is not.

(2.25) The singer wrote a new song.

In a sense, this property helps to explain why
semantic features such as animacy and agency are closely
associated with subjects more than any other grammatical
functions.

2.4.2.3 Absolute reference:
The SPL states that 'in the overwhelming majority of
cases, if a b-sentence is true then we understand that
there is an entity (concrete or abstract) which is referred
to, or has the property expressed by, the b-subject'
(Keenan 1976: 317).  Thus if (2.26) is true, it requires
that there exist someone named John, but not the report.

(2.26) John owes his professor a report.

2.4.2.4 Semantic role: agency
Linguists have been concerned with the nature of the
relation between an NP and the element to which it looks
for its semantic role.  A common position in the literature
regarding the semantic role of an argument in a sentence is
that 'semantic roles have no a priori or independent

existence but rather are entailed by the lexical semantics of individual predicates' (O'Brady 1987:56). A verb such as `employ', for instance, has a meaning that entails the existence of an `employer' and an `employee', while `dance' entails a `dancer' and so on. In other words, the semantic role of an argument in a sentence is determined by the semantic make-up of the predicate. Along the same line, the SPL attests that the semantic role of the referent of a basic subject is predictable from the form of the main verb.

Though a subject may potentially carry any specific semantic role according to the semantic-make up of its predicate, more often than not, subject expresses the agent of the action, if there is one (Keenan 1976: 321). Indeed, there is a cross-linguistic tendency to mark the agent as the subject of a sentence.

## 2.4.3 Pragmatic properties

Pragmatic properties have to do with the ways speakers categorize their information based on the assumptions of their shared knowledge with the listeners. They are related to pragmatic notions such as `definiteness', `topicality', `referentiality', `given vs. new information', etc. A pragmatic property can be identified on the basis of its relationship to the discourse context.

## 2.4.3.1 Autonomous reference:

SPL specifies that 'the reference of a b(asic) subject must be determinable by the addressee at the moment of utterance' (Keenan 1976: 313). This means that the reference of the subject NP must not be dependent upon the reference of an NP that follows the subject. This property is largely manifested in the reflexive binding in syntax, where the reflexive tends to be coded after its co-indexed antecedent, not before it.

## 2.4.3.2 Topicality:

Topicality is an area where the two notions of 'subject' and 'topic' often overlap. SPL states that 'b-subjects are normally the topic of the b-sentence, i.e. they identify what the speaker is talking about' (Keenan 1976: 318). I have shown in the previous chapter that subject is frequently defined via the notion of topic.

Studies on the relation between 'subject' and 'topic' are numerous. Topics being an elusive notion, researchers seem to agree more upon what properties they do not have rather than what they do have. From my research, the current consensus seems to be that subjects are obligatory arguments which are syntactically and semantically integrated into the predicate-argument structure of the clause, while topics are normally represented by NPs which do not necessarily have selectional restrictions with the

verbs in the proposition.  Often, the relation between the topics and the rest of the predication is taken to be 'a matter of pragmatic construal' (Lambrecht 1994: 118).

Chinese has been described as a topic prominent language, where the overlap between topic and subject is common.  When subject and topic conflate, the subject becomes highly topical.  What could be construed as topic becomes a constituent of the predication proper, rather than being only loosely associated with the predication.

2.4.3.3 Referentiality:

An NP is referential if the speaker intends for it to refer to a particular entity which exists within a particular universe of discourse, with continuous identity over time (Givon 1978: 293, and LaPolla 1990: 19).  SPL indicates that subjects tend to be highly referential. Since personal pronouns, proper nouns and demonstratives are highly referential by nature, they can always occur as subjects.

2.4.3.4 Given information:

The SPL also states that subjects tend to be definite and express 'given information'.  That is, the entity referred to by the subject is normally known to both the speaker and the hearer.  Clark (1973) points out that when speaker-hearers engage in talk, they abide by a 'Given/New contract': the speaker is responsible for marking

syntactically as 'given' that information that he assumes
to be known by the listener, and marks as 'new' what he
assumes not to be known by the listener.

Givenness as a subject property is apparently related
to the topicality that subject tends to exhibit.
Topicality is established on the basis of shared common
knowledge and given information.  Givenness is also related
to the unmarked preverbal position of subject in a
sentence.  Studies on discourse analysis and information
structure (e.g. Chafe 1994, Lambrecht 1994) suggest that
new information overwhelmingly follows given information in
discourse packaging.


2.4.3.5 Definiteness:

Definiteness represents another way that NPs can be
categorized in communication.  In the communicative
situation, if a speaker assumes that the listener knows and
can identify the referent she or he has in mind, she or he
would mark this item as definite.  For instance, English
speakers can use the definite article or a demonstrative
pronoun to mark an NP as given and definite when they
presume the referent to be known to and uniquely
identifiable by the addressee.

In Chinese, definiteness is marked by demonstrative
pronouns or by word order.  Definite NPs tend to occur
preverbally and indefinite NPs postverbally (see Li and
Thompson 1976).

SPL specifies that subjects of basic sentences tend to be definite (Keenan 1976: 319). In some languages, Malagasy, Tagalog and Philippine languages, subjects of basic sentences must be definite (ibid.). In Chinese, definiteness is a prominent feature of subjects. In the 50's, there were debates in the Chinese linguistic community on whether indefinite NPs can serve as subjects in Chinese. The general agreement reached nowadays is that indefinite NPs can serve as subjects, but the majority of subjects in Chinese tend to be definite.

So far I have discussed the major subject properties on Keenan's SPL, which are summarized as follows:

Syntactic properties:
- unmarked position: preverbal
- behavior: subject controls reflexive binding, imperativization, co-referential NP deletion, conjunction reduction

Semantic properties:
- indispensability
- independent existence
- absolute reference
- selectional relation with the predicate
- semantic role

Pragmatic properties:
- autonomous reference
- referentiality
- topicality
- givenness
- definiteness

In my current research, I found that, except for the morphological marking properties, almost all other properties on the SPL are attested in Chinese. I will further discuss some of these properties in the rest of the dissertation. Given that fact that crosslinguistic subject properties are largely attested in Chinese, I conclude that 'subject' is an important notion in Chinese, rather than a marginal one.

## 2.5 Critique of Keenan's approach

Keenan's approach can be characterized as a prototype clustering approach to the grammatical relation of 'subject', given the fact that it treats 'subject' as a 'cluster concept' (his own word) and a prototype, with many features to determine subjecthood, even when none of the features is by itself necessary or sufficient. It differs significantly from previous definitions of 'subject' in the following aspects.

(A) For the first time, 'subject' is no longer treated as a single-dimension or single-condition concept. Rather, it is viewed as a multi-factor notion, with attributes that are syntactic, semantic and pragmatic in nature.

Results of typological studies of subjects apparently support this perspective. For instance, Farrlund (1988) concludes from his typological investigation of subjects cross-linguistically that subjects typically code the semantic information of agent and/or the pragmatic

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information of topic.  From my own research, I have reached

the conclusion that if 'subject' is treated as a single-

condition concept, the notion of 'subject' in universal

grammar would collapse.  If we isolate the semantic and

pragmatic attributes from the concept of 'subject', what

remains would be the morphosyntactic attributes of subject.

It is precisely in terms of these properties that

Philippine languages such as Tagalog (see Schnachter 1976)

would depart significantly enough from the Romance language

model to render the notion of 'subject' as an essential

component of clause syntax unviable in such languages[5].  As

a consequence, the notion of 'subject' in universal grammar

would break down.

This is exactly where the problem lies for the

discrete single-criterion approaches that I have discussed

in their characterization of 'subject'.  Just as Givon

(1995:228) points out, these approaches would lead to

'considerable mischief' in typological comparisons.  NPs in

languages which seem to conform to the single ad hoc

criterion are designated as subjects, while NPs in

languages where this single criterion does not play a

significant role would be treated as non-subjects, despite

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[5] Schachter (1976), in his examination of Tagalog,
concludes that 'there is no single syntactic category in
Philippine languages that corresponds to the category
identified as the subject in other languages' (p. 513).
Rather, the syntactic properties of the subject in
Tagalog are divided between the topic and actor in a
clause, with a few subject-like properties reserved for
the intersection of the topic and the actor (ibid.)

their strong candidacy for subjecthood if other criteria are taken into account.

An example of this type of typological error can be seen in Li and Thompson's (1976) typological study of 'subject'. Here, Chinese is treated as a non-subject-prominent language. A close look at that study will show that the criterion based on which this classification is made is largely morphological (i.e. case-marking and verbal agreement).

I argue that this criterion of morphology by itself as an indicator of subjecthood may be questionable. Instances of mismatches between grammatical relations and morphology have been described in typological studies. For example, in the South Caucasian language Georgian, agreement markers which indicate features of indirect object will instead indicate features of subject in a construction called 'inversion'. Here, markers which otherwise indicate features of the subject instead indicate features of the direct object (see Kathman 1995).

In comparison, Keenan's proposal of the SPL as a means to define the universality of subjecthood has a clear theoretical advantage. Keenan's new approach has the benefit of avoiding potential problems associated with those single-criterion analyses. His is a unified treatment of the universal notion of 'subject', incorporating separate but parallel morphological, syntactic, semantic and pragmatic features into the subject

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prototype. This way, the notion of 'subject' as a universal concept would be applicable and cross-linguistic data would be comparable.

(B) The second aspect in terms of which Keenan's approach differs from other definitions is that 'subject' is treated as a relative rather than an absolute notion. This is in view of the fact that not all properties in the SPL will be associated with any one NP in a clause in any given language. In addition, empirical accounts of grammatical relations have shown that formal subject properties such as behavior and control properties are not equally distributed cross-linguistically. Not all properties in the SPL will be associated with any one NP in a clause in any given language, nor are all properties attested in all languages. As a result, it is virtually impossible to isolate any combination of the subject properties which is both necessary and sufficient for an NP in any sentence in any language to be the subject of that sentence. Thus Keenan concludes that 'subject' cannot be treated like a prime number, and subjecthood of an NP in a sentence is a 'matter of degree'. Subjects in some languages will be more subject-like than those of other languages in the sense that they will in general, 'present a fuller complement of the properties which universally characterize b(asic) subjects' (Keenan 1976: 307).

(C) A third aspect in terms of which Keenan's approach differs from previous definitions is his distinction of two

types of subjects: basic and non-basic subjects. Keenan
(1976: 307) states that basic subjects (coded by him as *b-subjects*) are the subjects of the 'semantically basic
sentences', which is 'a privileged subset of sentences in
any language.' The subjects of non-basic sentences are
those NPs which 'present a clear preponderance of the
properties characteristic of b(asic)-subjects'. This
distinction is based on the observation that the subjects
of basic sentences tend to display more subject properties
than the subjects of non-basic sentences. Put another way,
there is a gradation of subjecthood even within the same
language: subjects of simple sentences tend to be more
subject-like (i.e. more prototypical) than subjects of
complex sentences.

The procedure that Keenan uses for defining language-specific subjects using the SPL are as follows:

(A) Defining basic sentences[6];

(B) Defining basic subjects:

Basic subjects of a given language are defined to be
any NPs of basic sentences of that language that manifest a
majority of the properties of the universal SPL.

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[6]Keenan's definition of 'basic sentence' is given below:
For any L,
a. a syntactic structure x is semantically more basic
than a syntactic structure y if, and only if, the
meaning of y depends on that of x. That is, to
understand the meaning of y it is necessary to
understand the meaning of x.
b. a sentence in L is a basic sentence (in L) if, and
only if, no (other) complete sentence in L is more basic
than it (Keenan 1976:307).

(C) Establishing a language specific SPL:

Once the basic subjects are determined for a particular language, one can establish a SPL which is associated with the basic subjects of that language. This list may include properties that are idiosyncratic to the basic subjects in that language.

(D) Defining non-basic subjects

The non-basic subjects are defined in terms of the language specific SPL. They include those NPs which 'present a clear preponderance of the properties characteristic of b(asic)subjects' (Keenan 1976: 307).

To summarize, what the SPL seems to have achieved is to provide us with a description of different characteristics of subjects as manifested in different languages. What Keenan has given us is an explicit clustering framework based on which we could examine each language individually and come up with a language-specific definition of subject, which would, in some degree, share the universal subject properties.

In the rest of the dissertation, I will assume a cluster-prototype approach to the problem of subject, though the mechanism of operation of subject assignment is different. Keenan's article, written over 20 years ago, has had a profound impact on the study of 'subject' as a universal notion. From my research, it is by far the closest approximation to a universal definition of 'subject'. Though there are problems with Keenan's

definition in the form of a Subject Property List (SPL) to be discussed in the next section, his theory provides us with some fundamental assumptions and principles with regard to the notion of subject that are still being widely adopted today in the functionalist camp (e.g. Givon 1996).

Major objections to the validity of Keenan's SPL as the universal definition of 'subject' are raised in Johnson (1977). Johnson's major objections are the following:

(A) Objection against the definition of 'basic sentences' as a formal component of the actual definition

Johnson points out Keenan's concept of basic sentences 'does not correlate in any straightforward way with syntactic simplicity' and that this definition of basic sentence by Keenan 'has the unfortunate consequence that any paraphrase of a given sentence is more basic than S' (p. 676).

(B) Objection against 'clear preponderance' (CP) used as a general criterion in the statement of Keenan's definition. According to Johnson, there are at least two interpretations:

> On the absolute reading, this phrase would mean that for an NP to be a b-SUBJ it must have *at least a majority* of the properties on the SPL, i.e. at least 16 properties. On the 'relative' reading, the phrase would mean that for an NP to be a b-SUBJ it must have more of the SUBJ properties than any other NP in its clause.

(Johnson 1977:677)

Johnson's major objection with both readings of CP is Keenan's 'lack of necessary and sufficient criteria' for

the identification of subject.  He argues that the relative

interpretation is inconsistent with Keenan's assumption

that the same defining criteria should be used in every

language in order for subject to be well defined as a

universal category.


> If an NP merely needs more properties than any other
> NP in its clause to be, e.g., a b-SUBJ, then the
> definition would allow the case in which SUBJs in a
> language J are defined by a subset S of the SPL and
> SUBJs of some distinct language M are defined by another
> subset of the SPL, *where S and T are disjoint*.  That is,
> totally different criteria could be used in the
> definition of SUBJ in J and M.

(Johnson 1977: 768)


However, in my view, Johnson's concerns might be

unwarranted, since the disjoint cases that he specifies may

be cases where a number of the defining subject properties

simply do not apply, rather than cases where criteria for

subjecthood conflict.  For instance, in Chinese, the

morphosyntactic coding properties (e.g. agreement features)

do not apply.  As to the cases where criteria or properties

conflict with each other (i.e. one NP has some properties

and a different one has others), the problem can be

resolved by distinguishing the relative weight of subject

properties, that is, some properties may be more vital (or

play a more important role) in defining subjecthood.  This

issue will be dealt with in the next chapter, where I

propose that subject can be treated as a prototype notion

with properties that can be ranked.

My view regarding Keenan's SPL is that it is of undoubtedly tremendous importance in the theory of linguistics because of the insights for the understanding of the properties that subjects share in many different languages.  It has also provided a convenient point of departure for further research on the notion of 'subject' and other grammatical relations.  The fact that not all of the subject properties apply in every language does not nullify subject as a universal grammatical category defined in terms of prototypical subject properties.  While different languages may display different subject properties, within individual languages, subject properties can be used to distinguish the subject from other grammatical categories in the sense that the subject is more accessible to these properties than any other grammatical categories.  The possibility is ruled out that in a language, the object displays a certain subject property, but the subject does not.

## 2.6 Summary

Given the research that I have done, I have come to the conclusion that many previous researchers have expressed that there is no universal definition of subject (Bavin 1980; Platt 1971; Keenan 1976; Van Valin 1977; Foley & Van Valin 1977 & 1984; Perlmutter 1982; Comrie 1989; LaPolla 1990) in the sense that it is virtually impossible to set up necessary and sufficient criteria for defining

universal subjects. Based on previous research and given the diverse cross-linguistic data, I have come to the conclusion that there are only a limited number of options to deal with this dilemma. One could claim that 'subject' is simply not a universal category. However, I believe there is a better choice than that. One could still maintain the universality of subjecthood, as is so commonly assumed in the traditional and current linguistic theories, by treating subject as a prototype concept with a variety of properties that may be manifested in different degrees in different languages. Subjects of individual languages can be defined individually within the range of these subject properties. In the next chapter, I will further explore issues surrounding subject as a prototype concept and discuss how subjects in Chinese can be properly identified via prototypical subject properties.

Chapter 3 Subject as a proto-type concept

## 3.0 Introduction

In the previous chapter, I examined the problem of defining 'subject' by reviewing various definitions that have been proposed on this notion. My research of previous studies indicates that there is as yet no universal definition of 'subject' due to the fact that subjects vary in their properties within and across languages. Furthermore, it is impossible to give a strict universal definition of 'subject' in terms of necessary and sufficient conditions.

As a consequence, we are faced with two major research questions: Is subject a universal grammatical category (given the fact that no universal definition is applicable)? If the answer is yes, how do we go about defining it in such a way that it is applicable cross-linguistically? The focus of this chapter is to deal with the two questions above.

In section 3.1, I cover the basic notions that will be used in the rest of this dissertation, terms such as 'predication', 'predicator', 'arguments', and 'semantic roles'. A clear understanding of these fundamental concepts and how they relate to each other is essential for further discussion of the syntactic and semantic relations of the elements in a clause.

In section 3.2, I argue in favor of characterizing subject as a universal grammatical category by presenting a fundamental theoretical assumption that has been regarded as 'an exemplary principle of Universal Grammar' (Droste & Joseph 1991: 29), the predication principle that 'all clauses must have a subject'.

After establishing the status of subject as a universal grammatical category, I will then attempt to present a solution to the second question. I propose that 'subject' can be optimally characterized as a proto-type concept, even though it can be hardly defined in terms of necessary and sufficient conditions. Section 3.3 explores and identifies the proto-typical subject properties.

In section 3.4, I attempt to establish a subject selection hierarchy based on the relative weight of these prototypical subject properties . Such weighting is necessary  because the subject properties are not equally prominent in their contribution to subjecthood. Some are more significant in the sense that they help distinguish 'subject' from other grammatical categories. In other words, some properties are more critical than others. Having established the subject selection hierarchy, I will further illustrate in the rest of the dissertation how it helps to predict the appropriate subject assignment in problematic cases in Chinese.

## 3.1 Definition of basic notions

In this section, I will introduce a few fundamental notions frequently used in analysis of sentences. These are 'predication', 'predicator', 'arguments', and 'semantic roles'. As pointed out earlier, it is necessary to be clear about how they are used in order to discuss the nature of sentential constituents. The definitions given below are largely based on Functional Grammar (FG) as outlined in (Dik: 1991).

### 3.1.1 Predication, predicator, and arguments

Traditionally, a predication is divided into two parts, subject and predicate, and the subject is notionally 'what is being talked about' and the predicate 'what is said about it'. Thus in (3.1), the subject is *the boy* and the predicate is *hit the ball*.

(3.1) The boy hit the ball.

An alternative view, which is common in current linguistic theories, holds that a predication consists of a predicator and one or more arguments or terms. The predicator[1] is the center of the predication. Often

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[1]Basic predicators are given in the lexicon, and derived predicates are formed by means of 'predicate formation rules' which specify the productive processes of the predicate formation. Examples of derived predicates are: modified predicates such as *(be) very happy*; causative predicates such as *make..happy, let go*; predicates derived from terms, such as *(be) a doctor*.

realized by a verb, the predicator presupposes a number of participants--one, two or three, depending on the verb and its semantic type concerned.  The participants are called arguments or terms.  Predicators are expressions that designate properties or relations; arguments or terms are expressions which can be used to refer to entities.

In (3.1), the predicator is *hit*, and there are two arguments: *the boy* and *the ball*.  Notionally, the predicator expresses the relationship (here the act of *hitting*) between the arguments (here *the boy* and *the ball*). The two arguments *the boy* and *the ball* refer to two entities, which are related to each other through the predicator *hit*.  The structure of this sentence would be: *argument--predicator--argument.*

In this dissertation, I adopt this second view of predication in an attempt to recharacterize the notion of 'subject'.  What I want to argue for is that subject is functionally the most prominent argument of the predication.  What this means is that a subject has to be an argument of the predicator, unless the predicate verb is one which does not take arguments, verbs such as *rain* and *seem*, as in 'It is raining' and 'It seems that Mary has left'.  The subject NP has a special status in the sentence in terms of its syntactic behavior and semantic function. By semantic function, I mean the different roles played by participants (referred to by the arguments) in verbally described states of affairs such as action, processes and

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states.  Before I elaborate on this point, I will first
discuss how arguments differ from non-arguments and specify
how the distinction of 'arguments' vs. 'non arguments' is
related to the characterization of 'subject'.

### 3.1.2 Arguments vs. 'satellites'

In Functional Grammar (as described in Dik 1991),
predications are construed by combining predicators and
terms.  Predicators are expressions that designate
properties or relations, and terms are expressions which
can be used to refer to entities.  The terms in a
predication are distinguished according to whether they are
obligatory or optional for the predication.  Obligatory
terms are called 'arguments'.  These arguments can be
understood in two ways.  In the underlying logical-level
configuration, a verb's predicate frame specifies the
argument positions of the verb inherently required by its
subcategorization.  Arguments can be understood as
referring to those argument positions.  In the clause-level
structure, they are the nominals filling in those argument
positions.  From a functional point of view, what they
specify are obligatory participants in the state of affairs
characterized in the predication.  The predicator and its
arguments form what is referred as 'nuclear predication', a
minimal predication without the modification of adjuncts.
These arguments are considered essential in the predication
because they are absolutely necessary for defining the

state of affairs designated by the predication, even though they may be omitted if clearly understood given the appropriate contextual or situational clues.

In contrast, optional terms, called 'satellites', are non-arguments which are viewed as more peripheral in the predication in the sense that they do not specify the obligatory argument positions of the predicator but only provide additional details to the information given in the nuclear predication (formed by the predicator and its arguments). What satellites specify is usually information such as time, location, manner, cause, condition etc. of the states of affairs described in the predications. Example:

(3.2) The baker bought a new car yesterday because his old one had broken down.

[Example from Dik 1991:252]

In this sentence, there is a nuclear predication formed by the predicator *bought* applied to its two arguments, *the baker* and *a new car*. This nuclear predication is modified by two satellites, *yesterday* and *because his old one had broken down*, which function as adjuncts of Time and Reason to the nuclear predication of *The baker bought a new car*.

This example also shows that while arguments normally refer to entities, satellites do not. The functional differences between them parallel the distinction between 'complements' and 'adjuncts' in generative grammar.

The distinction between 'arguments' and 'satellites' appears to be significantly relevant to the characterization of subjecthood. I think there is an important generalization to be made here. Generally speaking, only arguments can function as subjects[2]. This is because arguments have a more prominent function in the predication, given that they usually specify sentence participants whereas 'satellites' only add optional details about these participants.

## 3.1.3 Semantic roles

Arguments also differ in their semantic relationships to the predicator and are clearly distinguished from one another through grammatical marking. For example, in the sentence '*the boy hit the ball*', the distinction between the two arguments is shown by the word order. Switching the positions would alter the semantic relationship of the arguments to the predicate and yield a quite different predication.

In Functional Grammar, each term in a predication is characterized by some semantic function. This semantic function specifies the role of the entity to which the term refers within the state of affairs designated by the predication.

Theoretically speaking, it is possible to identify a large number of roles played by the terms of a predication.

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[2] Two exceptions to this requirement are to be specified in Section 3.3.2.2.

Among them the common ones are Agent, Patient, Theme, Experiencer, Recipient, Beneficiary, Instrument, Source, Goal, Location and Time[3], etc. All these semantic roles relate the arguments of a verb to the meaning of that verb. In the sentence *the boy hit the ball*, for example, the verb *hit* has two arguments that carry the semantic roles of Agent and Patient respectively. The semantic role of Agent (here *the boy*) identifies a participant who does or causes something, while the Patient role (here *the ball*) identifies the participant undergoing the effect of the action.

The point to be made here about the semantic roles in relation to subjecthood is that there is no one-to-one correspondence between an underlying semantic role and the subject. Any semantic role could potentially be mapped onto subjecthood given the appropriate syntactic structure in which the NP bearing that role is involved.

## 3.1.4 Predicate frames

In Functional Grammar, a predication which consists of only the predicator and its arguments is called a 'nuclear predication'. By 'nuclear predication' is meant the application of a predicator to an appropriate number of arguments of that predicator without satellites. The fundamental structure of the nuclear predication is determined by the combinatory possibilities of the

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[3] Following the conventions in the FG, all semantic roles henceforth are capitalized.

predicator, which are specified in its 'predicate-frame'. The information that a predicate frame specifies about a predicator includes: (a) its lexical form; (b) its syntactic category; (c) its number of arguments; (d) its selectional restrictions with its arguments; and (e) the semantic roles of the arguments. For example, the predicate-frame for a predicate like English *eat* would look like (3.3):

(3.3) $eat_V(x_1: animate(x_1))_{Ag} (x_2)_{Pa}$

This predicate frame spells out that *eat* is a two-place verb, taking as arguments two terms, one of which is animate with the semantic role of Agent, and the other in the function of Patient.

If the details are left out, the predicate-frame for *eat* can be simplified as (3.4), which says that the predicate *eat* takes two arguments.

(3.4) $eat (x_1)(x_2)$

Verbs may have alternative predicate-frames given the fact that many verbs are both intransitive and transitive (often with a difference in meaning), as in (3.5) and (3.6), where *open* and *run* serve as intransitive and transitive verbs respectively.

(3.5) a. The door opened.
      b. He opened the door.

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(3.6) a. He ran the test.
       b. He ran in the 100-meter dash.

Due to their role of coding the basic semantic and morphosyntactic properties of the predicator, 'predicate frames' have been considered the most basic components for the construction of predications.

## 3.2 The predication principle

The prototype approach that I adopt here to the categorization of subject follows from the theoretical assumption that subject is a universally applicable notion. However, the universality of subjecthood is not so obvious and deserves elaboration.

Subject as a universal category can be maintained via a universal property of subject (as expounded in Keenan 1976) that subjects are indispensable in basic sentences: each basic sentence involving a predication requires a subject, expressed or unexpressed. This assumption is coded as 'the predication principle' and regarded as 'an exemplary principle of Universal Grammar' (Droste & Joseph 1991: 29).

This principle has long been reflected in the traditional view that the sentence consists of two parts, subject and predicate, the subject being notionally 'what is being talked about' and the predicate 'what is said about it'. It is also one that is implicit in much of modern theoretical linguistics. The adoption of this

subject-predicate analysis of the sentence is clearly shown in Chomsky's *Syntactic Structures* (1957:26), where the rule of S -> NP + VP states that the sentence consists of a noun phrase and a verb phrase, which corresponds closely to the traditional subject and predicate.

In his *Knowledge of Language* (1986), Chomsky maintains that 'a predicate (in particular, a VP) must have a subject' (p.93). This principle is arrived at on the basis of generative analysis of many syntactic constructions, most of which involve interclausal relations: control of nonfinite complements, deletion of coreferential arguments in conjoined clauses, the relation between a relative clause and its head noun in the main clause, reflexivization across clause boundaries, etc.

To give an example, let us look at the arguments for the predication principle in the generative analysis of infinitive clauses. The earliest treatment of null subjects in infinitival clauses was advanced on the basis of examples like (3.7).

(3.7) John wanted [_ to shave himself].

Even though infinitive clauses generally have no lexicalized subject, a syntactic subject is assumed to be invariably present. It is argued that in infinitivals, the presence of the subject can be deduced from (though it is not required by) the need for reflexives to find an antecedent.

Given, however, the ungrammaticality of sentence (3.8) on the one hand, and the grammaticality of (3.9) on the other, it is concluded that the implicit subject is syntactically present in the form of a phonologically empty pronoun.

(3.8) *Himself was shaved.
(3.9) How to shave oneself is the question.

(3.8) shows that reflexives cannot occur independently. To be well formed, they have to occur in the environment of a syntactically realized antecedent. Since (3.9) is grammatical, one has to conclude there is a syntactic antecedent for the reflexive *oneself*, the only candidate being the phonologically null subject. The relevant antecedent is the empty correlate of the lexicalized pronoun *one*. If one paraphrases the infinitival clauses of (3.8) and (3.9) in terms of finite sentences, one would invariably use lexicalized pronominal subjects.

To give another example, in (3.10), the presence of a semantic pronominal subject (*I, we, you* or *one*) is implied, though it has no phonological content.

(3.10) What __ to do?

In Government and binding theory (GB), the conclusion is that null subjects of infinitival clauses are present in

syntax and have to be based-generated.  To visualize them,
the term 'PRO'(standing for pronoun) is used.  The
distribution of PRO is accounted for in terms of government
theory and case theory, and its interpretation by control
theory.

However, it is recognized that subjects of finite
clauses are not universally lexicalized.  In Italian, for
example, it is possible to drop a pronominal subject in a
finite clause.  In GB theory, this is called the pro-drop
or null subject phenomenon.  Since the finite verb shows
agreement morphology, however, it is maintained that an
empty subject (labeled 'small pro') is present, which would
keep the Predication Principle intact.  The minimal
difference between pro-drop languages and non pro-drop
languages is considered to reside in the richness and
visibility of the agreement features on the finite verb.
On the whole, though the predication principle is universal
and bears on the finite clauses as well as infinitivals,
there is a lexicalization parameter associated with it.
Two choices are allowed: either a language obligatorily
lexicalizes the subject of a finite clause or it does so
optionally.  In English, for instance, it is obligatorily
lexicalized in finite declarative sentences and is
predictable in infinite clauses.  In Italian, however, it
does so optionally.

In Chinese, subjects tend to be suppressed when
understood from context.  Unlike Italian, Chinese does not

have a rich morphological coding system to rely on for the identification of the subject. However, it should be emphasized that the non-lexicalized subject in Chinese is always recoverable from the context. This is illustrated in (3.11), which describes a Chinese custom: each year on the fifteenth of January (i.e. the date for the traditional family reunion festival), Chinese people would serve a special kind of food called *yuanxiao* -- delicate stuffed round-shaped rice balls made with sticky rice powder, which symbolizes good fortune and family reunion. The unexpressed subject of the sentence is understood as 'people there in general'.

(3.11)    Zhengyue   shiwu      chi   yuanxiao
          January    fifteen    eat   yuanxiao
          'On January 15th, (people) eat *yuanxiao*.'

It should be pointed out that in Chinese, subjects must be lexicalized whenever they are unpredictable or unidentifiable from the context.

So far I have illustrated that subjects as understood in the predication principle are inherently arguments of the predicate, identifiable primarily in terms of their syntactic behavior or semantic relation to the predicate. In the following, I will explore other properties of 'subject' and argue that 'subject' can be most optimally characterized as a proto-type concept.

3.3 Subject as a prototype concept

3.3.1 Empirical motivation and theoretical plausibility

I argue that 'subject' needs to be treated as a prototype notion in universal grammar in order for the many universal generalizations which use this notion to be well defined. If only single-condition definitions were used, certain languages would be excluded from having subjects, then 'subject' is not applicable cross-linguistically. As a consequence, 'subject' cannot be construed as a universal category, and all those universal generalizations stated in terms of this notion cannot be understood as generalizations at all.

A proto-type approach to 'subjecthood', I argue, is both empirically motivated and theoretically plausible. This proto-type approach is based on two major conclusions drawn from findings of empirical studies on subjecthood. One is that subjecthood is indeed 'a matter of degree', and the other is that subject is a 'cluster concept'. Both conclusions are made originally in Keenan (1976), and they are still widely accepted as valid and important principles in functionally-oriented linguistic theories. For instance, Givon (1995: 247-248) points out that 'empirical account of grammatical relations has no recourse to this taxonomic luxury' of 'single-trait definitions' that produce 'unambiguous discrete classes', and argues for the necessity of recognizing the 'gradations and indeterminacy of grammatical relations'.

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The necessity of such a proto-type approach is sustained by its theoretical plausibility. According to Shore (1996:242), a category can either be seen 'in Platonic terms as something that is discrete or absolute,' or it can be seen 'in terms of a prototype with some instances considered typical representatives of the category while others are less representative.' The benefit of such a prototype approach to categorization, according to Givon (1995: 12-13), is that 'it can accommodate distinct phenomena that are nevertheless in partial overlap'. Givon maintains that 'there are profound functional reasons' why natural categories must retain a margin of flexibility as well as considerable rigidity. The main reason for the need to retain a margin of flexibility, he explains, is that

> Context-dependent processing cannot proceed without some
> flexibility and graduality in construing and adjusting
> interpretations to the relevant context.
> Givon (1995: 13)

I consider subjecthood essentially a context-dependent phenomenon, in the sense that subjects do not exist independent of the constructions in which they occur. Different constructions (i.e. syntactic structures) may yield different subjects. For instance, in an active declarative sentence, the subject is usually the agent, but in a passive sentence, the subject is usually the patient.

This notion of a prototype has been long implicit in functional grammar. Firth (1968: 46-47) points to the need

to recognize indeterminacy both in the metalanguage of linguistics and in the language being described.  Halliday (1961:254) points out that

> Likeness, at whatever degree of abstraction, is of course a cline, ranging from 'having everything in common' to 'having nothing in common.'

In recent years, a proto-type approach to categorization has been favored in functionalist-oriented linguistic theories.  Givon (1995:12) points out that

> Most functionalists are currently working, whether explicitly or implicitly, within a distinct approach to categorization, Roschean **prototypes.**
> (boldface in original)

According to the Roschean prototype approach to human categorization elaborated in Rosch (1973a, 1973b, & 1975), membership in a natural category does not need to be determined by a single feature, but rather by a set of characteristic features.  The members of a category that display the greatest number of these features are considered most typical members of a category and thus construed as the category's prototype.  The majority of members display a great number of these features and are regarded as closely resembling the prototype.  A minority of the members may display fewer of the characteristic features, and thus are less like the prototype.

Subject being essentially a syntactic notion, I would view its syntactic properties as the core of the subject prototype.  In comparison, its semantic and pragmatic

attributes can be treated as more marginal.  The advantage

of the prototype approach, I argue, is that it would allow

for not only the solidity of syntactic features at the core

of subjecthood, but also the flux of semantic and pragmatic

features at its margins.

A convenient point of departure for characterizing

subject as a proto-type concept is Keenan's (1976) Subject

Property List (SPL), which I argue, has incorporated all

the properties that a subject can potentially possess,

given the fact that it was arrived at on the basis of

empirical accounts of a large corpus of data from a variety

of languages.  Therefore, they can be construed as jointly

present in what I would call the prototypical subject.

However, in line with prototype theories, I do not claim

that all properties in the SPL will be associated with any

NP in a clause in any given languages.

In the following section, I will first review the bulk

of the proto-typical subject properties on Keenan's (1976)

SPL, and then suggest a few changes that I find necessary.

3.3.2 Prototypical properties of subject

3.3.2.1 Review of Keenan's SPL

The following are the major subject properties that I

have selected from Keenan's List.

<u>Syntactic properties</u>:
- unmarked position: preverbal
- behavior: subject controls reflexive binding,

imperativization, co-referential NP deletion, conjunction reduction

Semantic properties:
- indispensability
- independent existence
- absolute reference
- selectional restrictions
- semantic role: agency

Pragmatic properties:
- autonomous reference
- referentiality
- topicality
- givenness
- definiteness

One of the major changes on Keenan's SPL that I would like to make is to add 'argumenthood' as a subject property to take into account of cases such as (3.12).

(3.12)    _____ be admired.

Though the predicate *be admired* does not impose any selectional restrictions on its subject, since any NP can go into the underlined subject position, the NP nevertheless is an argument of the predicate. 'Selectional restriction' as stated on Keenan's SPL, appears to be too restrictive by itself to take care of cases such as (3.12).

In what follows, I will argue that argumenthood is not only a prominent subject property but also a necessary condition on subjecthood.

### 3.3.2.2 Subject selection is argument selection

The major point that I want to argue for here is that 'argumenthood' is a core property of subjecthood, and that subject selection is first of all argument selection. This claim is based on the generally indisputable assumption in modern grammatical theories that subject is primarily a syntactic notion. As such, a subject must be syntactically involved with the predicate. That the subject must be an argument of the clause means that it has to be an NP syntactically related to the verb in the sense that it is a nominal or its equivalent that fills one of the argument positions as specified in the its predicate-frame.

It should be noted, however, that there appear to be a few counter-examples to the necessity of argumenthood for subjecthood. One has to do with data in Tagalog, where it is suggested (via personal communication by Dr. David Lockwood) that certain overtly marked subject NPs are not necessarily arguments of their predicates. The other has to do with English sentences such as 'It is raining' and 'It seems that Mary has left', where *it* functions as the subject of both sentences, and yet is not an argument of either verbs. In light of these observations, I think two exceptions can be made to the requirement of argumenthood for subjecthood. One is the case where the putative subject bears overt morphosyntactic marking, and the other is the case where the predicate verbs involved are those which do not take arguments, but the syntax involved

requires a surface subject. Except for these special cases, an NP has to be an argument to be a subject.

To a certain extent, the subject of a sentence is determined by its predicate verb in the sense that its valence (to be explained below) plays an important role in the subject assignment. In the next section, I will present the relations between verbal valence and grammatical relations such as subject and object, based on researches in the theory of verbal valence and functional grammar (e.g. Allerton 1982, Dixon 1989, Speas 1990, Klaiman 1991, Palmer 1994).

3.3.2.2.1 Verbal valence and grammatical relations

Researchers have long noted that there is a correspondence between the clause level (e.g. surface level) syntactic relation between a verb or verbal element with nominals, and the underlying logical level relation of a predicate with its arguments (see Allerton 1982). In recent accounts of grammatical relations, it has been suggested that grammatical relations, such as 'subject-of', 'object-of', 'indirect-object-of', are not monostratal, but rather, are mapped onto clause-level verb nominal structure from their underlying (i.e. logical level) arguments through linking (see Dixon 1989, Speas 1990, Klaiman 1991, Palmer 1994).

The logical-level arguments are of two kinds: core arguments, which are those nominals essential to form a

predication, and non-core arguments, which are optional to form a predication. Functionally speaking, core arguments correspond to the logically required participating entities in the situation denoted by the verb, and as such, they can be identified with grammatical statuses of subject, object, and indirect object (see Matthew 1981, Speas 1990, Klaiman 1991, Palmer 1994). Noncore arguments correspond to peripheral accessories specifying the circumstances such as time, place and manner in which a process or act takes place. They can be identified with the grammatical statuses of adjuncts. This distinction of core arguments vs. peripheral arguments parallels the distinction of arguments and satellites (i.e. non-arguments) in Functional Grammar mentioned in a previous section of this chapter and I will continue to use the latter two terms in the rest of this dissertation.

The particular number of arguments with which a verb combines to form a nuclear predication is called its 'valence'. The valence of a verb is generally assumed to be an inherent property of that particular verb in the sense that verbs idiosyncratically specify the number and type of arguments they take. For example, different classes of verbs are described as having different valences, or taking different sets of valents. A one-place (i.e. univalent) predicate (e.g. *vanish*) is a predicate in an essential relation with exactly one argument and corresponds to an intransitive verb. A two-place (i.e.

bivalent )predicate (e.g. *love*) involves two arguments, corresponding to a transitive verb; and a three-place predicate (e.g. *give*) involves three arguments, corresponding to a bitransitive verb.

The relation of verbal valence and the grammatical relation is characterized as follows: univalent verbs or verbal elements take a subject element, bivalent verbs take a subject and an object, and trivalent verbs take a subject, a direct object and indirect object (see Tesniere 1959, Matthew 1981, Klaiman 1991, and Palmer 1994). To summarize, a verb takes up to three arguments to form a nuclear predication, which can be mapped onto the clause level as subject, direct object and indirect object through linking.

The following is a summary of how the linking works in basic (e.g. active) clauses.

For a univalent verb (i.e. an intransitive verb), its sole argument is mapped onto the clause-level as the subject, whatever semantic role it assumes (Dixon 1979 & 1989). Evidence in support of this analysis can be seen in the fact that in English and many other languages, the single argument of an intransitive sentence has the same grammatical marking as the Agent of an active transitive sentence, as illustrated by the following pairs in (3.13):

(3.13)    He laughs          They laugh
          He loves them      They love him

The three features of word order (i.e. preverbal), morphology (*he*, *they*, rather than *him*, *them*) and agreement with the verb (with -s for *he*, without -s for *they*), clearly establishes the identity of the single argument of the intransitive sentences with the agentive subject of an active transitive clause.

This identity is also reflected in syntax. There are certain specific syntactic possibilities which are restricted to subject, a status that the single argument of the intransitive clauses share with the agent of an active transitive clause. For instance, subjects, but not objects, can be omitted in the second clause of a coordinate construction, if they are coreferential with the subject of the clause. This is illustrated in (3.14), where the omitted subject is shown in brackets:

(3.14) The thief escaped and (the thief) chased a taxi.


In this coordinate construction, the first clause has an intransitive verb (i.e. *escape*) with a single argument (i.e. *the thief*). The second clause has a transitive verb (i.e. *chase*) taking two arguments (i.e. *the thief* and *a taxi* respectively). The subject of the second clause can be omitted because it is identical with the subject of first clause, which happens to be the single argument of an intransitive verb. However, one cannot omit the object in a similar way:

(3.15) *The thief escaped and the taxi chased (the thief).


What has been illustrated so far is that the single argument of an intransitive verb (whatever its semantic role) behaves like the Agent argument of a transitive verb in a basic structural configuration, in that they share a subject identity: the single argument of an intransitive verb always maps onto the clause-level as the subject, just like the Agent argument of a transitive verb always becomes the subject in a basic active (i.e. non-passive) sentence.

For most bivalent verbs, their two arguments, which usually can be identified as Agent and Patient semantically, will be mapped unto the clause level as subject and object respectively in basic structural configuration (i.e. the unmarked active sentence structure).  The semantically linked arguments can in principle be remapped from one grammatical relation to another by syntactic rules.  In other words, the basic grammatical relations assigned to particular NPs may be altered through what is called 'role-remapping rules' (Klaiman 1991: 14).  For instance, the object of an active sentence can be remapped as the subject of a passive sentence.

For satellites (i.e. those adverbials specifying Location, Instrument, Beneficiary, etc.), the grammatical relations to which they are mapped in basic structures are termed 'oblique relations'(see Klaiman 1991:14), and their

respective corresponding basic-level grammatical relations
are called 'oblique-locative', 'oblique-instrument',
'obligue-benefactive' (ibid.).

What I have presented so far is that researches
indicate there is a well recognized correlation between the
grammatical relation of 'subject' and the valence or the
argument structure of the verb.  A natural generalization
that can be drawn from the correlation is that subject has
to be an argument of the verb, and it is likely to be
selectionally restricted to that verb (except for cases
involving linking verbs such as 'to be').  Therefore, I
argue that subject selection is argument selection in the
sense that the subject is mapped onto the clause level from
the verb's underlying argument structure and is to some
extent predictable from the valence of the verb involved in
the sentence.


3.3.2.2.2 Argumenthood and syntactic properties

Another argument for the criterion that a subject has
to be an argument of the verb (unless otherwise exempted as
specified in 3.3.2.2) is the evidence that all those NPs
that manifest syntactic subject properties such as control,
raising, reflexivizations, etc. are all arguments of their
corresponding verbs.  This is true because all syntactic
and behavior properties of the subject entail that the
subject must be selectionally related to the predicate.
Selectional restrictions entail argumenthood.  In section

3.3.3, I will discuss the syntactic coding and behavioral properties of the subject.  The examples in that section all illustrate that argumenthood and the syntactic subject properties go together.

In this section, I have presented some of the theoretical assumptions and arguments for my claim that a subject has to be an argument of the verb in the sentence (though two exceptions may apply as specified in 3.3.2.2). One of the advantages of argumenthood as a necessary subject property is that it eliminates adjuncts from subject candidacy, therefore significantly narrowing down the range of subject assignment.  Another advantage is that it helps to distinguish 'subject' from 'topic', a closely related but distinct notion that is primarily discourse-oriented (rather than syntactic-oriented) in nature.  A major distinction between 'subject' and 'topic' is that the latter does not have to be an argument of the predicate. This is because 'topic' is primary a discourse notion, whose selection is said to be 'independent of the verb' (see Li and Thompson 1976:463).  What determines the topic selection is pragmatic factors such as discourse context and the speaker presupposition, a point that will be elaborated on in Chapter 5.

3.3.2.3 Proto-agent properties of subjecthood

In this section, I propose another change to Keenan's Subject Property List, namely, replacing 'the semantic role

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of agency' with 'proto-agent properties'. Keenan's idea is that subjects 'normally express the agent of the action, if there is one' (Keenan 1976:321). As Keenan himself notes, this property cannot be used to identify subjects of sentences in which there is no agent (ibid.). However, I argue that this property of 'agency' should be extended to accommodate cases where arguments of the predicate are not agents, but clearly display agent-like properties.

For instance, the arguments for intransitive verbs like 'break', 'die', 'grow', and 'smile', do not control or initiate the activity like typical agents do, however, they closely resemble arguments for verbs like 'walk', 'sit', 'speak', which control or initiate the activity. More examples are given in (3.16).

(3.16)    <u>John</u> is being polite to Mary.
          <u>He</u> accidentally fell..
          <u>Water</u> filled the boat.

          [Examples from Dowty 1991:572]

To accommodate cases such as (3.16), I propose to restate 'agency' as 'proto-agent properties', a term originally suggested in Dowty (1991), which incorporates the following characteristics specified in Dowty (1991:572). Each of these properties is 'hypothesized to be semantically independent' (ibid.), although more than one such property may apply to each argument of certain transitive verbs.

- volitional involvement in the event or state
  e.g. _John_ _is ignoring Mary._

- sentience (and/or perception)
  e.g. _John_ _knows/believes/is disappointed at the_
  _statement;_ _John_ _sees/fears Mary._

- causing an event or change of state in another
  participant
  e.g. _His loneliness_ _causes his unhappiness._

- movement (relative to the position of another
  participant)
  e.g. _He_ _accidentally fell;_ _Water_ _filled the boat._

- exists independently of the event named by the verb
  e.g. _John_ _needs a car._

To summarize, evidence given above indicates that it
is plausible to generalize the feature of 'agency' on
Keenan's SPL into 'proto-agent properties' since 'agency'
is not a discrete notion but rather a cluster concept
itself.

3.3.3 Ranking of the subject properties

What I have presented so far is a list of prototypical
properties of subjects largely adopted from Keenan (1976),
but not without refinements.  These properties are
construed as jointly present in the prototypical subject,
and the more of these properties an NP displays in a
sentence in comparison to other NPs, if there are any, the
more subject-like it becomes. Recall that the criterion for
subject selection proposed in Keenan (1976) is the
manifestation of a clear preponderance of his SPL.

However, there are some problems with this approach. One of them is its operational difficulty, since it is not very convenient to check NPs against a list of 30-odd properties. A more serious problem arises when two NPs display equal numbers of properties (though not identical) in the same clause.

A solution to this dilemma is to weigh the prototypical subject properties and decide what properties count more than others in determining what the subject is. This is not only theoretically plausible in the sense that it is in line with the prototype theory, but also practically necessary since these subject properties do not hold equal status, given the fact that some properties are usually subject-exclusive (e.g. syntactic agreement features) while others (e.g. definiteness) may be shared by non-subject grammatical categories as well. Evidently, some properties are more significant than others in marking subjecthood.

It seems that a detailed ranking of all 30 odd properties on Keenan's SPL is beyond the scope of this dissertation. However, a principled relative ranking can be worked out by which some subject properties can be shown to count more than others in determining what the subject is. In the rest of this chapter, I present arguments and evidence that the following general ranking (from top to bottom) of subject properties applies to English and Chinese:

(A) Argumenthood,
(B) Syntactic coding and behavioral properties,
(C) Proto-agent properties.


3.3.3.1 Argumenthood

In an earlier section, I argued that 'argumenthood' is
a core property of subjecthood, and that subject selection
is first of all argument selection. What this means is
that subjects are typically NPs, or other units that are
treated as equivalent of NPs. Moreover, they are
obligatorily involved with the predicates of the sentences
in which they occur.

While argumenthood does not directly indicate what
subjects are, it certainly indicates what they are not.
This conclusion is drawn based on the theoretical
assumption that arguments and non-arguments (i.e.
satellites) are not functionally equivalent in a
predication. Recall that arguments are terms that are
obligatory and satellites are terms that are optional.
Arguments are more essential in that they refer to entities
and indicate sentence participants. In contrast,
satellites function as adjuncts or modifiers of these
participants, usually specifying details such as Time,
Place, Manner, Degree, and Reason, etc. When both
arguments and non-arguments are involved in a sentence, it
is one of the arguments that will be selected as the
subject. This is illustrated in (3.17).

(3.17) Jintian  tamen       meiyou     lai.
       today    they        did not    come
       'Today they did not come.'


There are two NPs in (3.17), *tamen* 'they' and *jintian*
'today'.  The former is an argument, indicating the
participant of the predicator *lai*, 'come'.  The latter is a
'satellite' (i.e. non-argument), specifying the information
of Time.  Given that *tamen* 'they' is the only argument and
therefore is more essential than the non-argument *jintian*
'today', it is selected as the subject of the sentence.

This analysis, I argue, is far more plausible than the
one that is current in the Chinese linguistic community,
which would pick as subject *jintian* 'today' for (3.17).
According this analysis (e.g. Zhu 1981: 95-96), subjects
are invariantly sentence-initial.  Therefore, the
structures of (3.17) would be characterized as below.


(3.17) Jintian           tamen             meiyou     lai.
         today           they              did not    come
       <-**Subject**->     <-----**Predicate**------------>
                         <-**Subject**->     <--**Predicate**-->
       'Today they did not come.'


In this analysis, the predicate of a clause may itself
be a subject-predicate predication.  A sentence may contain
two subjects, a 'major subject' and a 'minor subject', the
former being the subject of the whole clause, as *jintian*
'today' in (3.17), the second the subject of only the
predicate segment of the clause, as *tamen* 'they' in the
same sentence.

The problem with this type of analysis, as I mentioned in Chapter 2, is that it unduly complicates the structure of Chinese sentences on the one hand, and oversimplifies it on the other. For instance, (3.17), which is a simple sentence, would have to be considered a complex double-subject construction. There is nothing wrong with a complex double-subject construction per se, the problem here is that this analysis would render a majority of Chinese sentences as having a double-subject structure, when in fact many of them can be more simply accounted for as having just a single subject.

Given the stipulation that all subjects are sentence-initial, this model also has the consequence of oversimplifying the syntactic structures of Chinese, in the sense that variation in terms of the order of the constituents motivated by pragmatic factors is ignored. Analysis of syntactic structures in Chinese is therefore rendered uninteresting and unmotivated, since there are no variations to account for. In contrast, the property of argumenthood would help the proper identification of subjects. It is simple and syntactically and functionally motivated.

What I have illustrated using the example of (3.17) is that the property of argumenthood helps to narrow down the subject choices in a sentence with the effect of excluding adjuncts from subject consideration. The next set of examples below illustrates that argumenthood can also be a

criterion to help to differentiate the subject from the topic of the sentence in certain cases.

```
(3.18) Zhe       ge    yiner,      erduo       hen  da.
       this      Cl.   infant,     ear         very big
       'This infant, (his/her) ears are very big.'
```

```
(3.19) Liu ge    xiangjiao,      wu    ge    lan         le.
       six       Cl.  banana,    five  Cl.   rotten      Asp.
       'Of the six bananas, five are rotten.'
```

```
(3.20) Qi        ge    haizi, si ge    zhu   zai   guo-wai.
       seven     Cl.   kid,   four Cl.  live  at    country-outside
       'Of the seven kids in his family, four are residing in
       a foreign country.'
```

In (3.18) through (3.20), there are two nominal phrases preceding the verb.  The status of these two phrases is different in each case, the second one is more closely involved with the verb in the sense that it is the argument of the verb while the first one is not.  How to analyze such sentences?  Instead of claiming them as constructions with double subjects following the Chao/Zhu model described a few pages back, one could more plausibly argue that the second NP functions as the syntactic subject, since it is syntactically involved with the verb in being its argument.  The status of the first NP could be considered as the topic of the sentence given its topic properties of being sentence initial referential, definite. As mentioned before, a topic does not have to be syntactically involved with the predicate.  Topics can be syntactically independent of the rest of the sentence, but subjects cannot.

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What I have argued so far is that argumenthood is an essential property of subjecthood. The first step to identify the subject of a sentence would be to approach the verb, and try to identify its arguments. The purpose of identifying arguments is to identify subject candidates. Of course, being an argument of the predicate does not necessarily guarantee subjecthood, since argumenthood is entailed in other grammatical categories such as object as well. To define subjecthood, other subject properties would have to be taken into consideration as well. In the following section, I will look into another set of properties which I think count more than others in determining what subject is, the syntactic and behavioral properties which entail argumenthood.

3.3.3.2 Syntactic coding and behavioral properties

The syntactic coding and behavioral properties of subject include case-marking and verb agreement, control of cross-reference properties such as reflexivization, anaphoric reference in chained clauses, co-referential NP deletion or control of PRO, raising, imperativization, conjunction reduction, etc. I would view these properties as weighing more than others because they have been generally regarded as indisputable subject indicators, given the assumption that subject is primarily a syntactic notion. Furthermore, they tend to apply regardless of language type.

The following are the behavioral and control
properties that subjects in Chinese manifest, some of which
I have mentioned in the previous chapter. The fact that
these properties are attested in Chinese indicates that
'subject' is an important notion in Chinese, because, as
the examples illustrate, in many cases, only the subject
has these properties while other grammatical categories do
not. Therefore, it can be argued that these properties
help to define subject in Chinese, and furthermore, subject
is a unique grammatical category with its unique
grammatical roles in Chinese.

- Subject controls coreferential deletion in serial verb
  constructions

(3.21) <u>Mama</u>    shang jie   mai dongxi   gang hui-lai   le.
       <u>Mother</u> go    street buy  stuff    just come-back Asp.
       'Mother went out, bought some stuff and just came back.'

(3.21) shows that the subject controls coreferential
deletion in the serial verb construction, which normally
involves at least two verbs. Here in (3.21), the three
verbs are *shang* 'go', *mai* 'buy' and *hui-lai* 'come back'.
The sentence literally means 'Mother went out, (mother)
bought some stuff and (mother) just came back'. The
subject, *mama* 'mother', is both the controller and the
target of deletion.

- Subject controls stipulated co-reference

(3.22)a. <u>Lisi</u>  huan  le  zazhi, <u>ta</u> hai  jie  le  shu.
      <u>Lisi</u>   return Asp. magazine <u>he</u> also  borrow Asp. book
      'Lisi returned the magazines, he also borrowed some books.'

    b. <u>Lisi</u>  huan  le  zazhi,  ___ hai jie  le   shu.
      <u>Lisi</u>   return Asp. magazine ____ also borrow Asp. book
      'Lisi returned the magazines and also borrowed some books.'

In (3.22a), the subject controls the coreference of pronouns: the subject pronoun *ta* 'he' of the second clause is used to refer back to the subject of the prior sentence, *Lisi*, a proper name. (3.22b) shows that subject controls conjunction reduction.

- Subject controls reflexive pronouns

Keenan's SPL specifies that 'b-subjects in general can control reflexive pronouns' (Keenan 1976:313). In Chinese, only the subject can serve as the antecedent of a reflexive.

In (3.23), the antecedent of the reflexive *ziji* 'self' can be either the subject of the main clause (i.e. *Zhangsan*) or the subject of the embedded clause (i.e. *Wangwu*), but not the object of the main clause, *Lisi*.

(3.23) <u>Zhangsan</u>$_i$  gaoshu Lisi$_j$ <u>Wangwu</u>$_k$ xihuan  ziji$_{i/*j/k}$.
     <u>Zhangsan</u>    tell   Lisi  <u>Wangwu</u>  like    self
     'Zhangsan told Lisi that Wangwu likes self.'

In (3.24), the antecedent of the reflexive *ziji* 'self' can only be the subject of the main clause (i.e. *Zhangsan*), not the object of the clause in which it is embedded with (i.e. *Lisi*).

(3.24) <u>Zhangsan</u>$_i$    zhidao    ziji$_{i/*j}$    xihuan    Lisi$_{/j}$.
       <u>Zhangsan</u>    know    self    like    Lisi
       'Zhangsan knows that self likes Lisi.'

What (3.23) and (3.24) illustrate is the fact that in
Chinese, it is the subject rather than the object which
controls the reflexive.  (3.25) and (3.26) below further
illustrate that it is the grammatical subject rather than
Agent or topic that controls the reflexive.

(3.25) <u>Zhangsan</u>$_i$ bei Lisi$_j$tou    le    ziji$_{i/*j}$ de    zhaopian.
       <u>Zhangsan</u>    by Lisi    steal    Asp. self    Poss[4] picture

       'Zhang got self picture stolen by Lisi.'
       = 'Zhangsan got his picture(s) stolen by Lisi.'

(3.26)a. San    ge    haizi$_i$,
         three    Cl.    kid,

         <u>liang ge</u>$_j$ bu    hui    xie zhji$_{*i/j}$    de    mingzi.
         <u>two    Cl</u>. not    able    write self    Poss. name

         'Of the three kids, two are unable to write their own
         names.'

     b. Na    chang    da    huo$_i$,
        that    Cl.    big    fire,

        <u>hao    ji    ge    xiaofang-duoyuan</u>$_j$
        quite    several    Cl.    fireman

        shao-shang    le    ziji$_{*i/j}$.
        burn-hurt    Asp.    self.

        'That fire, quite a few firemen got themselves burnt.'

In (3.25), the antecedent binding the reflexive *ziji*
'self' is the grammatical subject *Zhangsan* rather than the
*Lisi*, which is the Agent of the verb *tou* 'steal'.  In

---
[4] *De* is a Possessive particle indicating possession when
put between NPs.

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(3.26a), what controls the reflexive *ziji* is the

grammatical subject *liang ge* 'two' rather than the topic of

the sentence, *san ge haizi* 'three kids'.  (3.26b) is

another example illustrating that the reflexive *ziji* is

bound by the subject *haojige xiaofang duiyuan* 'quite a few

fireman' instead of the topic *na chang da huo* 'that big

fire'.


•     Subjects express the addressee of imperatives

     This subject property is well attested in Chinese, as

in the following examples.

```
(3.27)a. (Ni)    Qing        zuo.
            (you)   please      sit
             'Please sit down.'


      b. (Ni)    Bie   kan.
            (you)   not   look
             'Don't look.'


      c. (Ni)    Bu    yao   bei   mosheng       ren    pian le.
            (you)   not   want   by    strange       person cheat Asp.
             'Do not be cheated by strangers.'
```

     The examples in (3.28) below indicate that the

imperative sentence requires that the NP expressing the

addressee be the subject rather than any other grammatical

function.  The sentences in (3.28) cannot be understood as

imperative sentences, even though they involve NPs

expressing the addressee, because those NPs do not carry

the grammatical role of subject.  In (3.28a), the NP

expressing the addressee is the object of the verb *pei*

'accompany'; in (3.28b), each of the NPs expressing the addressee is an object of the preposition *gen* 'with'.

(3.28) a. Tamen     hui  pei       <u>ni</u>  qu  kan  jingju.
          they      will accompany <u>you</u> go  see  opera
          'They will accompany you to see the opera.'

       b. Zhexie waiguo  xuesheng  mei tian  gen  <u>ni</u>  chi,
          these  foreign   students  every day  with <u>you</u> eat

          gen  <u>ni</u>  zhu,  gen  <u>ni</u>   shuo zhongwen,
          with <u>you</u> live, with <u>you</u>  speak Chinese,

          kou  yu         you  le   hen  da   jingbu.
          oral language   have Asp. very big  progress.

          'Every day, these foreign students eat with you, live
          with you, speak Chinese with you, (they) have made great
          progress.'

So far I have illustrated that Chinese subjects share major coding and behavior properties that are attested in Keenan's universal subject property list. These properties help to define the notion of 'subject', because only subject, (i.e. not the object) appears to have these properties.

In the rest of this section, I will give examples in English where certain syntactic properties appear to be accessible to the subject only.

• Participial relativization

In the participial relative clause in (3.29), the subject is the NP that must be coreferential with the head noun and can be omitted in the embedded clause. (3.29) shows that only the subject can be relativized. (3.29b) is

ill-formed because the relativized NP *the policeman* is not the subject.

(3.29) a. The woman scolding the policeman is my mother.
      b. *The policeman the woman scolding is my father.
      c. The policeman being scolded by the woman is my father.

     [Examples from Foley and Van Valin 1984: 109]


• Raising

    Subject raising is far more common than raising of other arguments. In the raising constructions in (3.30) and (3.31), the subject NP is the one which is raised from the embedded to the main clause.

(3.30) a. It seems that Paul caught the wombat.
      b. Paul seems to have caught the wombat.
      c. *The wombat seems Paul to have caught.
      d. The wombat seems to have been caught by Paul.

(3.31) a. John expects that Paul will catch the wombat.
      b. John expects Paul to catch the wombat.
      c. *John expects the wombat Paul to catch.
      d. John expects the wombat to be caught by Paul.

     [Examples from Foley and Van Valin 1984: 109]


    In (3.30), the subject NPs of the embedded clauses are raised to the subject of the main clauses. It is shown here that only the subject of the embedded clause may occur as the subject of the matrix verb *seem*. (3.30c) is ungrammatical because *the wombat* is the direct object. In order to present *the wombat* as the subject, the passive version (3.30d) has to be used.

In (3.31), the subject NPs of the embedded clauses are raised to the object of the main clauses. It is shown here that only the subject of the complement clause may occur as the direct object of the verb *expect*. (3.31c) is ungrammatical because *wombat*, the NP that is raised, is not the subject of the complement clause; rather, it is the direct object. To have *wombat* grammatically raised to the object of the main clause, the complement clause has to be passivized as in (3.31d) so that *wombat* functions as the subject of the complement.

- Target of control and deletion in complements

Subjects also tend to be the target of control and deletion in complements. In (3.32a), *Fred* is the subject of both the matrix verb and the complement and is deleted in the complement. (3.32b) is ungrammatical because *Fred* is the direct object of the complement and may not be deleted. To make the sentence well-formed, the complement has to take the passive form as in (3.32c) so that *Fred* is the potential though non-occurring subject of the complement.

(3.32) a. Fred wants to see Marsha.
   b. *Fred wants Marsha to see [him].
   c. Fred wants to be seen by Marsha.

Similarly, subjects tend to be the target of ellipsis in coordinate structures as in (3.33).

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(3.33) a. Oscar went to the store and spoke to Bill.
       b. *Oscar went to the store and Bill spoke to [him].
       c. Oscar went to the store and was spoken to by
          Bill.

       [Examples (3.32) & (3.33) from Foley and Van
       Valin 1984: 109]

(3.33) shows that only the subject may be deleted in
non-initial coordinated constructions.  (3.33b) is ill-
formed if *Oscar* is deleted because it is the object of the
second clause rather than the subject.  To make the
deletion felicitous, either a pronoun has to be used, or a
passive form has to be used so that Oscar occurs as the
subject as in (3.33c).

The sentences in (3.29)-(3.33) illustrate that
syntactic and behavioral properties are indicators of what
subject is.

In addition, subject in English is always
syntactically involved with the verb in that it is the
argument to which the predication is attributed.

In many languages, such as English, a subject
grammatical relation may be immediately recognized on the
basis of the coding, behavior and control features in
ordinary main clauses.  In other languages, such features
do not provide a clear indication of which NPs are
subjects.  In this case, such properties simply do not
apply.  Other subject properties would have to considered
in the identification of subject.

### 3.3.3.3 Proto-agent properties

Proto-agent properties include features such as those specified and illustrated in Section 3.3.2.3, which are mostly adopted from Dowty (1991:577) and recaptured below:

- Action
- Volition
- Sentience/perception
- Causing an event or change of state in another participant
- Movement
- Independent existence

In multiple-NP sentences, that argument having the greatest number of such proto-agent features entailed by the predicate (e.g. volition, causes event, etc.) will, other things being equal, become the subject of the predicate.

Cross-linguistic typological studies indicate that subjects tend to code the argument that is agent or agent-like semantically (see Keenan 1976, Comrie 1981, Faarlund 1988, Chafe 1994, and Givon 1995), if there is one in the sentence. Therefore, I maintain the view that proto-agent properties of subject should count more as indicator of subjecthood than other semantic and pragmatic properties. Associated with this syntactic phenomenon is the psychological and cognitive justification for this tendency. Studies show that speakers tend to select as subjects participants they empathize with most, and agents are more likely to be selected as subjects because

prototypical agents are volitional and most likely animate and human (see Dowty 1991 and Croft 1991). (3.34) and (3.35) are two examples from Chinese where the proto-agent properties help to determine what the subjects of the two sentences are.

(3.34) Zhe  ge  dianying  wo  kan  le  san  bian le.
      this Cl.  movie     I  see  Asp.  three time Asp.
      'I have seen this movie three times.'

(3.35) Zuoye  ta  zuotian  jiao  gei  laoshi  le.
      homework  he  yesterday  hand-in  to  teacher  Asp.
      'Homework, he turned (it) in to the teacher yesterday.'


Both (3.34) and (3.35) involve multiple NPs. In (3.34), the subject candidates are the following: (a) *zhe ge dianying* 'this movie'; (b) *wo* 'I'; and (c) *sanbian* 'three times'. However, the choice of subject is between the two nuclear arguments, *zhe ge dianying* 'this movie', and *wo* 'I'. The latter is the one which exhibits the agent property, and thus is selected as subject of the sentence.

Similarly, in (3.35), the subject choice falls between *zuoye* 'homework' and *ta* 'he'. Since the latter carries the agent role, it is identified as subject. Note that *laoshi* 'teacher' does not participate in this subject selection process because it is marked as a non-term by the preposition preceding it, i.e. *gei*, roughly the equivalent of the English 'to'.

The following are some English examples where
arguments with proto-agent properties (i.e. those
underlined) are selected as subjects.

(3.36)  The boy is hitting the ball.
        She gave me a book.
        The tree is falling down.
        John is afraid of Mary.

So far, I have attempted to rank the subject
properties according to their 'weight' or relative
importance in defining subjecthood in the clauses.  The
notion of subject is argued to be a prototype concept.  A
prototypical subject would be one that manifests maximum
subject properties on the subject property list, including
those that are ranked high.  A subject in any language can
be understood as the combination of a subset of these
properties.

3.4 Summary
        In this chapter, I presented arguments and evidence
that subject can be plausibly characterized as a proto-type
concept.  As such, subject is defined in terms of a group
of characteristic properties.  These properties can be used
as indicators of subjecthood.  Some of them may count more
than others in determining what subject is.  The assignment
of subject status to an NP in a predication is then based
on the comparison of the different degrees of subjecthood
measured according to the ranking of subject properties

that NPs exhibit in that sentence.  If an NP displays a
property that counts more than others, it is more likely to
be selected as subject.  Properties which do not count more
than others are treated on an equal basis, in other words,
they share equal status.  In such cases, it is the number
of properties that will help decide what the subject is.
The more such properties an NP manifests, the more subject-
like it is.

In the next chapter, I will examine certain Chinese
sentences that have been regarded as 'typically
subjectless', and usually labeled as 'subjectless
constructions'.  I want to investigate whether this is true
given the new perspective of subject as a proto-type
concept.  I will also explore the properties of these
constructions in terms of their syntax, semantics and
pragmatics since 'any peculiar aspects of a construction,
such as unexpected constraints on constituent types, may in
principle be traceable to any of the three kinds of
properties' (Abbott 1993:39).

Chapter 4 'Subjectless constructions' in Chinese


4.0 Introduction

    In this chapter, I deal with the syntactic
constructions in Chinese that are often claimed to be
subjectless in nature.  The typical examples of these so-
called subjectless constructions are exemplified (4.1)-
(4.3), which are grouped based on their semantic content.


(4.1) Weather sentences:

        a.    Xia   yu    le.
              fall  rain  ASP.
              'It is raining.'

        b.    Xia   xue   le.
              fall  snow  ASP.
              'It's snowing.'

        c.    Gua   feng  le.
              blow  wind  ASP.
              'It' windy.'

        d.    Chu   taiyang   le.
              out   sun       ASP.
              'The sun came out.'

        e.    You  guo  yi  hui,  yingying xiang qi  leisheng.
              again pass one moment, vague    sound ASP. thunder
              'A moment later, there came the vague sound of thunder.'


(4.2) Existential sentences:

        a.    You   zhe   yang yi   ge    chuanshuo.
              exist this  kind one  CL.   legend
              'There is such a legend.'

        b.    You   ge    nongchun  jiao Zhangjiazhuang.
              exist Cl    village        call Zhangjiazhuan
              'There is a village called Zhangjiazhuang.'

        c.    You   yi   ge    ren       zai  tiaowu.
              exist one  Cl.   person    Asp. dance
              'There is someone dancing.'

(4.3) Presentative sentences:

    a.    Lai    keren        le.
           come   guest       ASP.
           'Some guest(s) came. = Here comes some guest(s)'

    b.    Houlai   you        zou le  xuduo     ren.
           later     again     leave ASP. many     people.
           'Later, many more people left.'

    c.    Pao         le   yi   zhi  mao.
           run-away  ASP.  one  CL.   cat.
           'A cat has run away.'

    d.    Jinglai  le   ji       zhi  xiao gou.
           enter     Asp.  several  Cl.  small dog
           'Several puppies came in.'

Group one above involves weather expressions which primarily describe meteorological phenomena. The second group are existential sentences Chinese style, those which begin with the verb *you*. This verb *you* has two meanings, one indicating possession as exemplified in (4.4), the other existence of some entity or entities as in (4.5). Thus the verb *you* can be roughly translated as 'have' or 'exist' depending on the structure of the sentence in which this word is used.

(4.4)      Wo  <u>you</u> yi  liang     Riben     che.
             I   <u>have</u> one  CL.      Japanese   car
             'I have a Japanese car.'

(4.5)a.    <u>You</u> zhe  yang yi   ge    chuanshuo.
            <u>exist</u> this kind one  CL.    legend
            'There exists such a legend.'

    b.    <u>You</u>       zhei.
           <u>exist</u>     burgalar
           'There is/are a burglar(s) (here).'

In (4.4), the verb *you* indicates possession meaning 'to have', taking *wo* 'I' as subject and *yi liang Riben che* 'a Japanese car' as object. Sentence (4.5) however, is usually regarded subjectless due to its lack of a preverbal NP. The possessive use of *you* is generally uncontroversial, and the focus of discussion in this dissertation is the existential use of *you*.

The syntactic structure involving the 'existential' *you* is schematized as (4.6), where *you* occurs at the beginning of the sentence, followed by an NP and an optional VP, depending on the communication needs of the speaker.

(4.6)     ***You* NP   (VP)**

In (4.5) above, *you* is followed by an NP alone.  In (4.7) below, *you* is followed by an NP and a VP.

(4.7) a.  You   yi   ge    nongchun   jiao  Zhangjiazhuang.
          exist one  CL    village    call  Zhangjiazhuang
          'There is a village called Zhangjiazhuang.'

      b.  You   hen  duo   ren        zai   tiaowu.
          exist very many  person     Asp[1] dance
          'There are many people dancing.'

The third group of subjectless constructions are typically presentative sentences, which primarily involve verbs of appearance and disappearance.

The structural feature that these three groups of sentences share is that they all begin with a verb,

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[1] *Zai* is an aspect marker indicating on-going status of the verb following it.

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contrary to the unmarked SVO canonical order in Chinese,

where the initial constituent is usually an NP.  As such,

they are frequently characterized as typical subjectless

constructions (see Z. Xu 1956, Gao 1957, Yang 1963, Chang

and Chen 1981, Huang and Liao 1991).  The premise of such

an analysis is based on the criterion of subjecthood by

word order in Chinese.  For instance, Z. Xu (1956:40)

claims that 'the noun phrase before the verb is the

subject, and the one after the verb is the object, no

matter whether it represents an agent or patient.'  Xing

(1956:43) states a similar view:

> Generally, the subject of a sentence is the noun or
> noun phrase at the sentence initial position....The
> subject must be a noun or noun phrase and it has to
> occupy the sentence initial position, because it
> represents the topic of a sentence.  The object is the
> noun or noun phrase in the predicate of the sentence...
> The word order is that the object follows the verb.

Even today, the view that word order governs the

choice of grammatical relations is still a dominant one in

the field of Chinese linguistics.  According to Gao (1994:

106), researches in Chinese linguistics indicate a current

tendency to view the sentence-initial NP as subject, and

the postverbal NP as object.

However, I am against characterizing sentences such as

in (4.1)-(4.3) as subjectless, because the very premise

based on which these sentences are so classified is

questionable.  In the rest of this chapter, I will focus on

issues surrounding the nature of the postverbal NPs

involved and attempt to come up with a plausible characterization of their grammatical status.

## 4.1 Arguments against the 'subjectless' analysis

First, I argue that it is not appropriate to construe sentences as subjectless simply because they begin with verbs rather than NPs.  Though the subject position tends to be preverbal cross-linguistically, word position does not single-handedly license subjecthood.  As argued in the previous chapter, subject is best viewed as a prototype concept, characterized by a cluster of properties.  Among these properties, preverbal position is not a crucial indicator of subjecthood, given that there are typologically verb initial languages in which the position of the subject may vary within the sentence.  For instance, Tagalog, a Philippine language, is a verb-initial language where the simple narrative sentences consist of a verb followed by a string of one or more noun phrases in almost any order (see Schachter 1976: 494).  Clearly, word order is not useful in determining the subject relation in Tagalog.

A conclusion that can be drawn from cross-linguistic data is that sentences with no preverbal NPs cannot be automatically assumed to be subjectless.  Theoretically speaking, the definition of 'subject' as the sentence initial NP lacks descriptive adequacy, given that Tagalog and 'VSO' languages like Arabic would be all denied

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subjects if the 'sentence-initial NP equals subject' criterion were applied universally.

4.2 Arguments against the 'object' analysis

Generally speaking, the postverbal NPs in sentences in (4.1)-(4.3) are construed as objects of the sentences by those who consider them subjectless. The arguments for this analysis again are based on the criterion of word order in determining the grammatical relations of subject and object, namely:

(4.8) a. Preverbal NP (or sentence-initial NP if more than one) = subject

     b. Postverbal NP = object

Such a structural characterization of grammatical relations in Chinese is over-simplistic and unmotivated. From the syntactic and semantic perspective, whether a verb takes an object depends on the predicate frames (i.e. subcategorization) of the verb involved. The verbs in (4.1)-(4.3) are all intransitive in nature, as specified below in (4.9).

(4.9) a. Prototypical weather verbs:

       *xia*       'fall'
       *gua*      'blow'
       *chu*      'appear'

     b. Prototypical existential verb:

       *you*      'exist'

c. Prototypical presentative verbs

*lai*        'come' or 'arrive'
*jinglai*   'enter'
*pao*       'run away'
*zou*       'leave'

Given that all these verbs are intransitive verbs and they do not take objects, I argue that the postverbal NPs cannot be plausibly analyzed as objects. Therefore their grammatical status is yet to be determined.

In the next section, I will discuss another previous analysis concerning the weather sentences, which I will call the 'subjectless verb hypothesis'.


4.3 The subjectless verb hypothesis

The subjectless verb hypothesis proposed by Givon (1984: 89) basically says that verbs most commonly denoting natural or meteorological phenomena can be accounted for as subjectless verbs in the sense that the event or state cannot be separated from the argument about which the event or state is predicated (ibid.). Therefore, weather expressions involving these verbs are subjectless constructions.

Common weather expressions in Chinese include those in (4.1), repeated below:

(4.1) a.  Xia  yu   le.
          fall  rain  ASP.
          'It is raining.'

      b.  Xia  xue  le.
          fall  snow  ASP.
          'It's snowing.'

c. Gua    feng   le.
   blow   wind   ASP.
   'It' windy.'

d. Chu    taiyang    le.
   out    sun        ASP.
   'The sun came out.'

e. You   guo  yi  hui, yingying xiang qi leisheng.
   again pass one moment, vague    sound  ASP. thunder
   'A moment later, there came the vague sound of thunder.'

Thus, according to this hypothesis, in (4.1a), *xia yu* literally meaning 'fall rain' is one verb denoting the event of 'raining'; in (4.1b) *xia xue* 'fall snow' is one verb denoting 'snowing'; and in (4.1c), *gua feng* 'blow wind' is one verb denoting 'windy'. All the weather sentences in (4.1) are construed as subjectless because the only arguments that these sentences have are assumed to be already conventionally incorporated into the corresponding weather verbs.

However, I disagree with this analysis, based on the evidence to be presented in the next section which indicates that the weather verbs and the weather NPs are distinct constituents.

4.4 Arguments against the subjectless verb hypothesis

A closer look at the internal structure of the weather expressions in (4.1) will show that their subjects are not incorporated into the corresponding verbs, but are discretely separable.

Sentences (4.10) and (4.11) below indicate that the relationship between the verbs and their following NPs in

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weather expressions is not as tight as it appears to be because lexical items can be inserted between them.

(4.10)     Zuotian   xia   le   <u>yi   chang</u>  <u>da</u>   yu/xue
           yesterday  fall  ASP.  <u>one   CL</u>.  <u>big</u>  rain/snow
           'There was a big rain/snow yesterday.'

(4.11)     Zuo  wan  gua  le   <u>yi    chang</u>     <u>da</u>   feng.
           last  night blow  ASP.  <u>one   CL</u>.    <u>big</u>  wind
           'There was a big wind last night.'

In (4.10), the verb *xia* 'fall' is separated from *yu/xue* 'rain'/'snow' by a numeral *yi* 'one', a classifier *chang*, and an adjective *da*, 'big'. (4.11) is a similar case, where intervening between the verb *gua* 'blow' and the NP *feng* 'wind' are three distinct words.

(4.12) below lists another set of examples which illustrate that the weather NPs and verbs are distinct constituents rather than one fused unit. What is different in (4.12) is that unlike in (4.10) and (4.11), the weather NPs are preverbal. However, just as the case with the postverbal NPs, they can be separated by other elements which are underlined here.

(4.12)a.   Yu   <u>kanlai</u>    <u>yao</u> xia  da   le.
           rain  <u>look</u>      <u>will</u> fall  big  ASP.
           'It looks that it is going to rain harder now.'

     b.   Feng <u>yue</u>  gua  yue  meng     le.
           wind <u>more</u> blow more strong     ASP.
           'The wind is blowing stronger and stronger.'

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c.  Xue   zheng     xia  zhe.
    snow  ASP²      fall ASP.
    'It is snowing.'

d.  Xue   yexu      mei  xia  le.
    snow  perhaps   not  fall ASP.
    'The snow may have stopped falling.'
    (= 'It might have stopped snowing.')
```

Sentences in (4.10)-(4.12) illustrate that the semantic content of these weather sentences is divided between each verb and its arguments: 'rain/snow falls', 'wind blows', 'the sun is out', 'thunder thunders'. Each linguistic item here in the weather descriptions contributes its meaning to the whole sentence on its own.

Evidence for the distinctiveness of the semantic content of these nouns and verbs can also be seen in the fact that different but related verbs can also be used with weather NPs such as *yu* 'rain', *xue* 'snow', *taiyan* 'the sun', *lei* 'thunder'.

```
(4.13) a. Luo         yu/xue    le.
          decend      rain/snow Asp.
          'It is raining/snowing.'

       b. Yu   dashi     le    wo   yi   sheng.
          rain wet       Asp.  my   one  body
          'The rain wet my whole body.'

       c. Qi   feng le.
          start wind Asp.
          'It is windy.'

       d. Taiyan     bu   jian le.
          sun        not  see  Asp.
          'The sun disappeared.'
```

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² *Zheng, zhe,* and *ne,* are aspect markers indicating an ongoing action or event. *Zheng* is used before the verb while *zhe* and *ne* are used after the verb. They can be either used individually or jointly in a sentence.

e. Taiyan    <u>jing</u> yun li   qu   le.
   sun        <u>enter</u> cloud in  go   Asp.
   'The sun has gone in the clouds.'

f. Yuan chu, lei      <u>ming</u> bu   zhi.
   far  place thunder <u>sound</u> not  stop
   'From the distance, thunder thunders without stop.'

Given the evidence that weather verbs and their NPs, whether preverbal or postverbal, can have other constituents intervening between them, and that the weather NPs can be used with other weather related verbs, I argue that the subjectless-verb analysis is not adequate for the weather expressions in (4.1). The very premise based on which that claim is made appears to be problematic: the event or state is separable from the argument about which the event or state is predicated.

I have so far presented two arguments against characterizing sentences such as (4.1)-(4.3) as subjectless. One is that it is over-simplistic to characterize sentences as subjectless constructions simply because there are no NPs in the preverbal subject position, given that subjects can hardly be defined in terms of positions only. I also argued against treating the postverbal NPs in those sentences as objects on the ground that the verbs involved are intransitive, and intransitive verbs are not subcategorized to take objects. I hypothesize that the postverbal NPs can be considered as subjects, based on arguments developed in chapter 3 that the notion of 'subject' can be best viewed as a prototype

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concept, defined in terms of proto-typical subject
properties.  In the rest of this chapter, I will discuss
the subject properties manifested by the postverbal NPs.


## 4.5 Subject properties of postverbal NPs

- Argumenthood

First of all, these NPs satisfy the necessary
condition for subjecthood by being arguments of the verbs
in the sentences.  Recall that a subject has to be an
argument of the verb and subject selection is fundamentally
argument selection.  As shown in (4.14), the verbs
typically occurring in the so-called subjectless
constructions are uniformly univalent (i.e. intransitive
verbs).  Some of their instantiated arguments in the
examples provided in this chapter are specified in the
brackets: ('A' stands for the 'argument' or 'arguments'):

(4.14)

| | | |
|---|---|---|
| *xia* | 'fall' | (A: *yu*, 'rain', *xue*, 'snow') |
| *gua* | 'blow' | (A: *feng*, 'wind') |
| *chu* | 'appear' | (A: *taiyang*, 'the sun') |
| *you*, | 'exist' | (A: *chuanshuo*, 'legend') |
| *lai*, | 'come' or 'arrive' | (A: *keren*, 'guests') |
| *pao*, | 'run away' | (A: *yi zhi mao*, 'a cat') |

Given that univalent verbs take a subject argument
only the possibility of the object status of the postverbal
NPs in the sentences involving these univalent verbs is
ruled out.

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- Selectional restrictions with the verb

     Also shown in (4.14) is another subject property that
the postverbal NPs have: they all share a selectional
relation with their corresponding verbs.


- Independent existence

     This is a semantic property which says that 'the
entity that a basic subject refers to (if any) exist
independently of the action or property expressed by the
predicate' (Keenan 1976: 313).  This property is referred
to in Keenan (1976) as the 'autonomy property'.  It
apparently applies to the weather NPs in the weather
expressions, which certainly refer to the meteorological
phenomena that universally exist, whether they are
verbalized or not.  It is also a subject property that I
consider should weight relatively more among the subject
properties.  It plays an important role in helping to
distinguish object NPs (and other adjunct NPs such as
locatives and temporals etc.) from subject NPs, because the
entities that a basic subject refers to (if any) are more
likely to exist independently of the action or property
expressed by the predicate (see Keenan 1976: 312), and this
is less true of objects or other grammatical relations such
as oblique-locatives, etc.

- Proto-agent properties

Many of the postverbal NPs under discussion manifest proto-agent properties if the feature of movement is taken into consideration. Recall that movement is a proto-agent property specified by Dowty (1991:572).

In the weather expressions discussed, most weather NPs (e.g. *yu*, 'rain', *xue* 'snow', *feng* 'wind', *taiyang* 'the sun') as they are used appear to involve movement from one point to another:

(4.15)     Weather NPs          Weather verbs

     *yu*, 'rain',          *xia* 'fall'
     *xue* 'snow',         *luo* 'descend'
     *feng* 'wind',        *gua* 'blow'
     *taiyang* 'the sun'   *chu* 'appear'

This property also applies to the NPs in the group of presentative sentences in (4.3), repeated below, since the appearance or disappearance of an entity predicated of by the presentive verbs (underlined) entails its movement from one place to another.

(4.3)a.   <u>Lai</u>  keren     le.
       <u>come</u>  guest     ASP.
       'Some guest(s) came. = Here comes some guest(s)'

    b.   Houlai   you  <u>zou</u> le  xuduo     ren.
       later     again <u>leave</u> ASP. many      people
       'Later, many more people left.'

    c.   <u>Pao</u>     le   yi   zhi  mao.
       <u>run-away</u>  ASP. one  CL.  cat
       'A cat has run away.'

    d.   <u>Jinglai</u>  le  ji      zhi  xiao gou.
       <u>enter</u>  Asp. several    Cl.  small dog
       'Several puppies came in.'

The proto-agent property does not appear to apply to all of the NPs in the existential sentences in (4.2), repeated below.

(4.2) a.     You   zhe   yang  yi    ge     chuanshuo.
              exist  this   kind   one   CL.    legend
              'There is such a legend.'

      b.     You   ge     nongchun   jiao  Zhangjiazhuang.
              exist  Cl     village     call   Zhangjiazhuan
              'There is a village called Zhangjiazhuang.'

      c.     You  yi    ge     ren        zai   tiaowu.
              exist  one   Cl.    person     Asp.   dance
              'There is someone dancing.'

However, the proto-agent property is true for the NP in (4.2c), which implies that the entity referred to by the NP (i.e. *yi ge ren*, 'someone') not only exists but also is performing some action, *tiaowu* 'dancing'.

•    Control properties

The postverbal NPs in the three groups of 'subjectless constructions' all can be shown to stipulate coreference across clause boundaries and to control coreferential deletion, as in (4.16).

(4.16) a. Xia   yu/xue     le,
         fall   rain/snow   Asp.,
         'It is raining/snowing,

                  _____       xia   de   yue  lai  yue  da.
                            fall   AM[3]   more  come  more  big
             (raining/snowing)  harder and harder.'

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[3] *De* can be used as an adverb marker (hence AM), put between a verb and an adjective, indicating the adjective following it functions as an adverb modifying the verb preceding it.

b. You    zhe   yang yi   ge    chuanshuo,
   exist this  kind one  Cl.   legend
   'There is such kind of a legend,

   ___liuchuan  hen   guang,____feichang dong  ren.
   ____ spread  very  wide, _____  very    move  person
   (it is) wide spread, and (it is) very touching.'

c. Gangcai    lai  le   yi   ge    ren,
   just now   come Asp. one  Cl.   person
   'Someone just came in,

   _____       yijing    zou   le.
   _____       already   leave Asp.
    (s/he) has already left.'

In (4.17), it is the postverbal NPs which control the
reflexive pronoun *ziji*, 'self'.

(4.17) a. keting$_i$    li
          living room in

          ziji*$_{i/j}$    pao  jinglai   yi   zhi   xiao gou$_j$.
          self            run  enter     one  Cl.   small dog
          'A small puppy ran into the living room all by itself.'

      b. Zuotian     wo    jia  lai  le   yi   ge    keren$_i$,
         yesterday   my    house come Asp. one  Cl.   guest
         'A guest came to our house,'

         mei qiao men  jiu  ziji$_{i/*j}$    jinlai    le,
         not knock door then self            enter     Asp.
         '(s/he) went in (him/her)self without knocking the door,'

         ye  bu  gen  women$_j$      shuohua,
         also not with us            speak,
         '(s/he) would not speak to us,'

         jiu ziji zai$_{i/*j}$      fangjian  dai-zhe.
         only self in              room      stay
         '(s/he) only stayed in the room by (him/her)self.'

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(4.18) indicates that the postverbal NPs in existential sentences can control coreferential deletion in serial verb construction.

(4.18)     you          zhei _____tou dongxi____pao   le.
           exist        burglar ____ steal stuff ____run   Asp.
           'There was/were a/some burglar(s) who stole some stuff
           and ran away.'

In this section, I discussed the subject properties that the postverbal NPs manifest in the so-called 'subjectless constructions'. Though the syntactic property of overt morphosyntactic features such as agreement does not apply, all NPs manifest some syntactic and semantic subject properties. Other properties that do not apply to them mainly include the pragmatic properties of topicality and definiteness, which by nature are more discourse-oriented than syntactically related, and can be considered non-core subject properties. As a matter of fact, current researches indicate that a subject can be either topic and definite, or non-topical and indefinite (see Lambrecht 1994).

Given the perspective of 'subject' as a proto-type concept, and given that the postverbal NPs are the only arguments of sentences with subject properties, I claim that they can be plausibly construed as subjects of the sentences.

## 4.6 Summary

In this chapter, I introduced sentences typically presented as 'subjectless constructions', and argued against the subjectless analysis. I also argued against the object analysis which treats the postverbal NPs as object of the intransitive verbs. I presented the subject properties based on which the postverbal NPs can be identified as subjects in the so-called 'subjectless constructions', which now I claim should be characterized as subject-postposed constructions.

Since Chinese is widely accepted as a SVO language, subject-postposed constructions undoubtedly have a marked structure. It would be interesting and meaningful to explore this structure in detail and find out answers to questions such as the following: What is the semantic and pragmatic nature of the subject-postposed structure in Chinese? How does it differ from the subject-preposed sentences? What functions does subject-postposing serve in communication? What triggers subject-postposing in Chinese? What constraints are involved to render subject-postposing felicitous? These are the major issues to be explored in the next chapter.

Chapter 5 Subject-postposed constructions in Chinese

5.0 Introduction

In this chapter, I explore subject-postposed constructions in terms of their syntax, semantics and pragmatics and try to uncover the factors contributing to the postposing of the subjects.  The theoretical approach that I use to analyze subject-postposed constructions in Chinese is that of functionalism, which emphasizes the consideration of the pragmatic purposes that linguistic forms serve in the analysis of linguistic phenomena.  The goal of my analysis of subject-postposing is to sort out the properties and behavior of subject-postposing and its functions in communication.

5.1 Syntactic structures

Syntactically speaking, the subject-postposed sentences that I have so far discussed have two constituents, a verb and a postverbal subject NP.  However, subject-postposed constructions in Chinese frequently have another constituent preceding the verb, typically a locative NP or PP.  Here are some examples:

(5.1)a.   <u>Tai   shang</u>     zuo   zhe   zhuxituan.
          <u>stage top</u>        sit   Asp.  presidium
          'On the stage sat the presidium.'


      b.  <u>Gonglu     shang</u>     pao   zhe   qiche.
          <u>highway    top</u>        run   ASP.  car
          'On the highway cars are running.'

c. <u>Jiali</u>  zuotian you    si  le  yi   zhi  ji.
   <u>home</u>      yesterday again die ASP. one  CL.  chicken
   'Yesterday another chicken died at home.'

d. <u>Ban  li</u>   zou  le    shier  ge   tongxue.
   <u>class in</u>    leave Asp.  twelve CL.   students
   'Twelve students left the class.'

e. <u>Gebi</u>       zhu  zhe  yi   wei  daifu..
   <u>next door</u>   live ASP.  one   CL.  doctor
   'Next door lives a doctor.'

The canonical structure of these sentences can be schematized as in (5.2), where XP represents an adjunct, typically locative, as exemplified in (5.1), where all locative phrases are underlined.

(5.2)     $XP_{loc}$   V    $NP_{subj}$.

There are two properties of this structure that stand out: (a) the presence of an adverbial phrase, typically a locative or directional PP, in the sentence initial position, and (b) a postverbal NP which is the sole obligatory argument of the verb and is thus understood as the subject of the sentence.

In (5.1), the preverbal adverbial phrases appear more like NPs than PPs due to the tendency in Chinese to omit prepositions of the sentence initial adverbial phrases. As a matter of fact, they are often referred to as locative NPs rather than PPs (see J. Huang 1987). In the rest of the dissertation, I will use the term locative NPs to refer to these elements. Accordingly, the syntactic constituents

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in subject-postposed constructions can be represented by the canonical order in (5.3).

(5.3)      $NP_{loc}$   V   $NP_{subj}$.

Sentences involving the structure of (5.3) (exemplified in (5.1)) have been the center of a debate on grammatical relations in the Chinese linguistic community ever since the 50's.  Researchers have not been able to come to an agreement regarding the grammatical status of the postverbal NPs and the preverbal locative NPs involved in such a structure.

There are generally three different opinions: one group views the initial the preverbal locative NP as subject, with the assumption that subject is to be defined as the sentence initial element or as the topic (i.e. topic defined as the initial element of the sentence).  Scholars in this camp include Gongwan Xing (1956), Zhonghua Xu (1956), Chao (1968), Zhang & Chen (1981), Huang & Liang (1991).

Another group of scholars view the postverbal NP as the subject, with the assumption that subject is not the same as topic, and that subject can be preverbal or postverbal in Chinese (see Shuxiang Lu 1942, Li Wang 1956, Li and Thompson 1981 and Gao 1994).  The arguments they give for the subject status of the postverbal NPs are mainly the selectional restrictions these NPs share with

the verbs in the sentence and the agentive properties some of the NPs manifest.

There is yet a third opinion which regards these sentences as subjectless (e.g. Li and Cheng 1988).

As indicated earlier in this section, I hold the view that the postverbal NP is the subject of the sentence, and the preverbal locative NP (or PP) is not. This is because the postverbal NPs satisfy the necessary subject requirement of being core arguments of the verbs involved while the preverbal locative NPs do not. (5.4) below illustrates that while the postverbal NPs can form minimal sentences with the verbs, the preverbal locative NPs cannot. Therefore, the postverbal NPs, as the only core arguments in the corresponding sentences, should be mapped onto the syntactic level as subject.

(5.4) a.  Zhuxituan          zuo   zhe.
          the presidium      sit   Asp.
          'The presidium is sitting.'


     a'. *Tai shang          zuo   zhe.
          stage top          sit   Asp.
          'The stage is sitting.'


     b.   Qiche       pao   zhe.
          cars        run   Asp.
          'Cars are running.'


     b'. *Gonglu      shang       pao   zhe.
          highway     top         run   Asp.
          'Highways are running.'


     c.   Ji   si   le.
          chicken die Asp.
          'The chicken died.'

c′.    *Jia si    le.
       home die   Asp.
       'Home died.'


d.     Shier      ge    tongxue    zou le.
       twelve     CL.   students   leave Asp.
       'Twelve students left.'


d′.    *Ban li    zou le.
       class in   leave Asp.
       ?'In class left.'


In the literature, constructions with postverbal subjects are schematized as XVS (see Payne 1992), where X stands for some kind of adverbial or adjunct, V for Verb, and S for subject. A typical instance of this construction in English is given in (5.5).


(5.5) In the distance <u>appeared</u> a small village.


In the rest of the chapter, I will use the term 'XVS constructions' to refer to sentences in which subjects are postverbal and adverbial elements are preverbal, and I will focus on data from Chinese.

I claim that the XVS constructions have a marked structure. This is based on two linguistic facts in Chinese: (a) the unmarked clausal position for adverbial phrases, especially locative phrases, is sentence-medial (i.e. between the subject and the verb) rather than sentence-initial; and (b) Chinese is a statistically SVO

language[1], given that preverbal subjects are much more common than postverbal subjects. Furthermore, it is also a cross-linguistic tendency for subjects to be preverbal rather than postverbal (see Keenan 1976, Givon 1994).

The XVS constructions have their own syntactic and semantic constraints. One of the syntactic requirements is that its preverbal constituent be a locative NP or PP. This is a natural result of the postposing of subject in Chinese, given that the unmarked sentence position of adverbial is medial, that is, between the subject and the verb.

I claim that all these sentences invariantly involve a preverbal locative argument, though they are not always overtly expressed. For those verbs that appear in the sentence-initial positions, as in the subjectless constructions examined in the previous chapter (repeated below and indicated by the same numbers when they were first introduced in the previous chapter), I would characterize them as having an understood locative argument at the beginning of the sentence.

For the weather expressions given in (4.1), an understood locative (e.g. *waimian*, 'outside'), can be added

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[1] With regard to the word order typology in Chinese, there have been different views. Tai (1973) views Chinese as a SOV language; and Li and Thompson (1974) and (1989) suggest that Mandarin has been undergoing a change from SVO to SOV. Light (1979) and Sun and Givon (1985), however, maintain that Chinese has a essentially SVO order based on their text studies.

at the beginning of the sentences without much change in
their meaning at all.

(4.1) a.   (Waimian) Xia    yu    le.
           outside      fall   rain  ASP.
           'It is raining.'


      b.   (Waimian) Xia    xue   le.
           outside      fall   snow  ASP.
           'It's snowing.'

      c.   (Waimian) Gua    feng  le.
           outside      blow   wind  ASP.
           'It's windy.'


      d.   (Waimian) Chu    taiyang    le.
           outside      out    sun        ASP.
           'The sun is out.'


For the existential verb *you* 'exist', as in (4.10)
below, the locative argument is inherently coded in the
semantic content of the word itself in the sense that this
lexical item presupposes a space or location in which an
entity exists from the view point of a componential
analysis.  In terms of argument structure, the verb *you*
'exist' takes two arguments, one core argument specifying
the entity that exists, and the other a peripheral locative
argument specifying the location of the referent of the
entity that exists.  The locative argument is often omitted
if understood from context or when predictable from the NP
referring to the entity that exists.  In such instances,
the omitted locative arguments can be recovered or
specified if necessary.  For instance, one could put either
*zher* 'here' or *nar* 'there' at the beginning of the sentence

in (4.10) without altering the grammaticality or much of meaning of the sentences.

(4.10) a. (Zher/Nar) <u>You</u> yi  ge nongchun jiao Zhangjiazhuang.
         here/there <u>exist</u> one CL  village  call  Zhangjiazhuang
         'There is a village called Zhangjiazhuang.'

    b. (Zher/Nar) <u>You</u>  zhe  yang yi  ge  chuanshuo.
         here/there <u>exist</u>  this kind one  CL.  legend
         'There exists such a legend.'

    c. (Zher/Nar) <u>You</u>  zhei.
         here/there <u>exist</u>  thief
         'There is a thief (here).'

Hu (1995:118-120) says that the presentative sentences similar to (4.11) below involve a hidden 'spatial frame' (usually expressed by a locative) containing a 'presented figure' (i.e. the referent of the postverbal NP). He maintains that when 'the speaker, the addressee and the presented figure are all in the same spatial frame, the frame itself is diffused' (Hu 1995: 119). As a result, he explains, what is in focus is the presented figure, which is expressed overtly but not 'the diffused spatial frame', that is, the locatives.

(4.11) a. Lai  <u>keren</u>    le.
       come <u>guest</u>    ASP.
       'Some guest(s) came. = Here comes some guest(s).'

    b. Houlai    you  lai  le  <u>xuduo    ren</u>.
       later    again come ASP. <u>many    people</u>
       'Later, many more people came.'

    c. Pao    le  <u>yi  zhi  mao</u>.
       run-away  ASP. <u>one  CL.  cat</u>
       'A cat has run away.'

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d.   Si    le   liang      zhi  muji.
     die   ASP. two        CL.  hen
     'Two hens have died.'
```

Based on this perspective, it seems reasonable to hypothesize that the sentence-initial locatives omitted can be understood as something like *zher* 'here', the reference of which is assumed by the speaker to be accessible to the hearer.  Otherwise, the locatives would need to be specified.  Incidentally, adding a locative *zher* 'here' at the beginning of the sentences in (4.11) would keep the meaning of the sentences intact.

So far, I have argued that the preverbal element in the subject postposed constructions has to be an locative NP or PP.  However, sometimes, a temporal adjunct can also appear sentence initially, as in (5.6)- (5.8), which are examples from Li and Chen 1988:535-536).

```
(5.6) Zuotian   women nali banjin   le  ji   jia  renjia.
      yesterday our   place move Asp. several  Cl.  family
      'Yesterday, several families moved into our neighborhood.'
```

```
(5.7) Zaoshang zou  le   san  wei  luke.
      morning  leave Asp. three Cl.   traveler
      'Three travelers left this morning.'
```

```
(5.8) Wanshang ba   dian   lai      guo liang ge  ganbu.
      evening    eight o'clock come     Asp. two   Cl.  cadre
      'Two cadres were here at 8:00 pm this evening.'
```

With regard to these preverbal temporal elements, my claim is that they are optional in the XVS constructions,

whereas a preverbal locative is always inherently required semantically despite the fact that they may not be always overtly expressed. Here is the contrast between the two types of adjuncts: when the locative element is not specified, it is generally understood as accessible to the hearer, that is, pragmatically present either from the linguistic context, or from the situation setting. In (5.6), both a temporal phrase (e.g. *zuotian* 'yesterday') and a locative phrase (e.g. *women nali* 'our place') are specified; in (5.7) and (5.8), though the locative NPs are not overtly expressed, they can be reasonably understood as *zher* 'here', whose referent the speaker assumes that the hearer can identify. This hypothesis can be verified by the fact that if a locative such as *zher* 'here' is inserted in both sentences, the meaning of the sentences still remains much the same. I think the very reason that the locatives are unspecified is to avoid redundancy, given that they are assumed to be understood by the hearer.

Compared to the locative elements in the XVS constructions, the temporal elements do not work in the same way. When it is not expressed, the temporal information of the verb in the XVS construction cannot be recovered from the context. It is simply inaccessible to the hearer unless otherwise specified. Therefore, it is not inherently present the way the locative elements are in the XVS constructions.

What I have argued above is that the subject postposed constructions syntactically and semantically require a preverbal locative adjunct, though an optional temporal adjunct may also be used.  Another syntactic restriction, which is more conspicuous, on the XVS constructions is that the verbs involved be **intransitive**.

In my research, all the XVS sentences featured in the literature involve only intransitive verbs.  This is certainly true in Chinese.  The requirement is made necessary by the lack of morphological marking of the grammatical relations in Chinese, and thus word order in many cases marks the grammatical relations.  (5.9) illustrates that Chinese syntax is sensitive to semantics in that for transitive verbs, proto-agent NP has to precede the verb, though the proto-patient NP can either precede or follow the verb.

(5.9)a.    Wo    chi   <u>fan</u>.
           I     eat   <u>rice</u>        (S - V - O)
           'I eat rice.'


     b.    <u>Fan</u>   wo    chi   le.
           <u>rice</u>  I     eat   ASP.   (O - S - V)
           'Rice I ate.'


     c.    Wo    <u>fan</u>   chi   le.
           I     <u>rice</u>  eat   ASP.   (S - O - V)
           'I ate rice.'


     d.    Fan   chi   <u>wo</u>.
           rice  eat   <u>me</u>         (S - V - O)
           'Rice eats me.'

In (5.9), all objects are underlined.  As (5.9d) shows, the position after a transitive verb is a fixed object-role spot, though an object could be fronted preverbally as in (5.9b &c).  Whenever an NP follows a transitive verb, it has to be interpreted as the object of the verb.  That is why the only reading (5.9d) gets is 'rice eats me', given that *wo* 'I' is preceded by the transitive verb *chi* 'eat', even though the sentence makes no sense in real-life communication.  What is illustrated here is that in Chinese, if the subject NP of a transitive verb is inverted postverbally, it immediately loses its subject status and acquire the object status.  Therefore, transitive verbs can in no circumstances participate in subject-postposing structures.

However, (5.10) shows that not all intransitive verbs can license subject-postposing.  This is hardly surprising since it is well known that intransitive verbs are not necessarily homogeneous in their behavior (see Allerton 1982 and Levin 1993).

(5.10)　　*Xiao　　　le　　yi　　ge　　ren
　　　　　 laugh　　　ASP.　one　CL.　person
　　　　　 'Someone laughed.'

In the following sections, I will explore the semantic properties of the constituents of the XVS constructions.  I will first focus on constraints on the verb selection by sorting out the kind of verbs which can participate in the XVS structure, and then attempt to

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account for how these verbs differ from verbs like 'laugh' which cannot appear in such a structure.

## 5.2 Semantic properties

## 5.2.1 Constraints on the verb selection

My research indicates that verbs that are compatible with the XVS structure are of the following semantic types:

(a) verbs of existence, as in (5.11);

(b) verbs of appearance or disappearance, as in (5.12);

(c) verbs of inherently directed motion, as in (5.13);

(d) verbs of manner of motion, as in (5.14);

(e) verbs of posture, as in (5.15).

(5.11)a    Fangzi  houbian <u>you</u> yi   ge xiao  huayuan.
house      behind  <u>exist</u> one  Cl. small  garden
'There is a small garden behind the house.'

    b.  Guitai li <u>you</u>  henduo      youpiao.
counter in <u>exist</u>  many        stamp
'There are many stamps in the counter.'

(5.12)a.  Waimian   <u>chu</u> taiyang   le.
outside     <u>appear</u>     sun   Asp.
'It is sunny outside.'

    b.  Jiali      <u>pao</u>       le   yi   zhi  mao.
home        <u>run-away</u>  Asp.  one  Cl.   cat
'A cat has run away from home.'

(5.13)a.  Keting    <u>lai</u> le  yi  ge   ren.
living-room <u>come</u> Asp.  one  Cl.   person
'There is someone in the living room.'

    b.  Men  wai  <u>jinlai</u>  le   jiwen     lao  han.
door  outside <u>enter</u>  Asp.  several    old  man
'Several old men entered from outside the door.'

    c.  Banli <u>zou</u> le  shiji    ge   tongxue.
class  <u>leave</u> Asp. ten-plus  Cl.   student
'More than ten students left the class.'

```
(5.14)a.  Wuding  shang  piao  zhe  yi   mian  hong qi.
          roof    on     fly   Asp. one  Cl.   red  flag
          'There is a red flag flying on the roof.'

     b.   Gonglu        shang       pao  zhe  qiche.
          highway       on          run  ASP. car
          'There are cars running on the highway.'


(5.15)a.  Tai  shang      zuo  zhe  zhuxituan.
          stage on        sit  Asp. presidium
          'On the stage sat the presidium.'

     b.   Chuang shang  tang  zhe  yi  ge  ren.
          bed    on     lie   Asp. one CL. person
          'There is someone lying on the bed.'
```

I argue that these verbs can in fact be classified into three groups semantically: (a) verbs of existence, (b) verbs of appearance and (c) verbs of disappearance.


## 5.2.1.1 Verbs of existence

The proto-typical verb of existence is the existential verb *you* 'exist', as in (5.11). Subsumed in verbs of existence are verbs of posture which indicate the way a particular entity exists, as in (5.15). In (5.15a), the posture verb *zuo-zhe*, 'sitting', describes the specific manner of existence of *zhuxi tuan*, 'the presidium', which happens to be 'on the stage'; and in (5.15b), the posture verb *tang-zhe* 'lying' specifies the manner of existence of *yi ge ren* 'a person' who is 'on the couch', is not 'sitting'.

Compare:

```
(5.15)b.  Chuang      shang       tang zhe  yi   ge   ren.
          bed         on          lie  Asp. one  CL.  person
          'There is someone lying on the bed.'
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(5.15)b'. Chuang      shang zuo/zhan  zhe   yi    ge ren.
         bed         on    sit/stand Asp.  one   CL. person
         'There is someone sitting/standing on the bed.'


Both of the sentences above are similar in that they
denote the existence of someone on the bed, but they differ
in that their respective posture verb describes the detail
of the 'existence' by specifying the exact manner or
posture with which someone is positioned on the bed.  In
(5.15b), that person is <u>lying</u> on the bed, but in (5.15b'),
that person is either <u>sitting</u> or <u>standing</u> there.  Other
posture verbs that work in the sentence would include the
following:

(5.16)    *pa*, 'lie on one's stomach'
          *dun*, 'squat'
          *kao*, 'lean against'

These posture verbs are static verbs that do not
involve any actions or movement on the part of the
arguments they describe.  They are in essence 'existential
verbs' because they are all paraphrasable or replaceable by
the proto-typical existential verb *you*, 'exist', and they
all denote a state or a particular posture in which an
entity is involved.  It is important to note that these
verbs are inherently associated with a location.  In
addition, it is important to note that their meaning is
often predictable or inferable from the conventionalized
semantic nature of the preverbal locatives and the
postverbal subject NPs that they co-occur with.  It is

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perhaps in this sense that they are called 'low-content verbs' (term used in Chafe 1994), when compared with other verbs, such as agentive verbs (e.g. 'fight', 'chase', 'sing', 'dance', 'talk', 'cry', 'laugh'), or mental verbs (e.g. 'think', 'like') etc.

Another type of verbs which can also be subsumed under verbs of existence are verbs of manner of motion, which denote the specific manner of the existence of an on-going event or state, as in (5.14), repeated below.

(5.14)a.    Wuding shang   <u>piao</u> zhe yi   mian hong qi.
           roof        on     <u>fly</u> Asp. one  Cl.  red    flag
           'There is a red flag flying on the roof.'

      b.    Gonglu      shang     <u>pao</u> zhe qiche.
           highway    on        <u>run</u> ASP. car
           'There are cars running on the highway.'

(5.14a) predicates the existence of 'a red flag on the roof', and the verb *piao-zhe* 'flying' specifies that it is 'flying' as opposed to 'being still' for instance.  In (5.14b), the verb *pao-zhe* 'running' or 'moving', specifies that the manner of the existence of 'the cars on the highway' is 'running', as opposed to *ting-zhe* 'being parked there', as in (5.14b), repeated below.

(5.14)b.    Gonglu      shang     <u>ting</u> zhe qiche.
           highway    on        <u>park</u> ASP. car
           'There are cars parked on the highway.'

These verbs of manner of motion are very similar to posture verbs in that they describe the posture of an entity that is consistently engaged in the same mode of

ongoing movement or motion.  The difference between posture

verbs and verbs of manner of motion is that the former are

stative while the latter are non-stative (i.e. involving

constant motion).  Like posture verbs, they are existential

verbs in essence, because they are paraphrasable with the

proto-type existential verb *you* 'exist' and invariantly

involve a locative NP.  For example, (5.14a) can be

paraphrased as (5.14a') and (5.14b) as (5.14b').

(5.14)a.    Wuding        shang <u>piao</u> zhe  yi    mian hong qi.
            roof          on    <u>fly</u>  Asp. one   Cl.  red  flag
            'There is a red flag flying on the roof.'

     a'.    Wuding        shang <u>you</u>  yi   mian hong qi.
            roof          on    <u>exist</u> one  Cl.   red  flag
            'There is a red flag on the roof.'

     b.     Gonglu        shang      <u>pao</u> zhe  qiche.
            highway       on         <u>run</u> ASP. car
            'There are cars running on the highway.'

     b'.    Gonglu        shang      <u>you</u> qiche.
            highway       on         <u>exist</u> car
            'There are cars on the highway.'

The meaning of posture verbs and verbs of manner of

motion is often predictable from and must be compatible

with the semantic content of the co-occurring preverbal

locative NPs and the postverbal arguments being described.

This is illustrated in (5.17) below.

(5.17)a.    Qian shang        <u>gua</u> zhe  yi    ge    zhong.
            wall on           <u>hang</u> Asp. one   Cl.   clock
            'There is a clock hanging on the wall.'

     a'.    *Qian  shang      <u>fang</u> zhe  yi    ge    zhong.
            wall   on         <u>sit</u> Asp. one   Cl.   clock
            'There is a clock sitting on the wall.'

b.    Zhuo shang    <u>fang</u> zhe yi  ge   zhong.
      desk  on       <u>sit</u> Asp. one Cl.  clock
      'There is a clock on the desk.'

b'.   *Zhuo shang   <u>gua</u> zhe yi  ge   zhong.
      desk   on      <u>hang</u> Asp. one Cl.  clock
      'There is a clock hanging on the desk.'

c.    Wuding shang   <u>piao</u> zhe yi  mian hong qi.
      roof    on      <u>fly</u> Asp. one  Cl.   red  flag
      'There is a red flag flying on the roof.'

c'.   *Wuding shang  <u>pao</u> zhe yi  mian hong qi.
      roof    on      <u>run</u> Asp. one  Cl.   red  flag
      'There is a red flag running on the roof.'

The paired sentences in (5.17a, a', b and b') contrast in the kinds of posture verbs used to describe zhong 'a clock'. When the location of the clock is *qiangshang* 'on the wall', the posture verb *gua-zhe* 'hanging' is appropriate but *fang-zhe* 'sitting' is not, because the former is compatible with the semantic nature of the preverbal locative NP, and the latter is not. When the location of the clock's existence is 'on the desk' rather than 'on the wall', the posture verb *fang-zhe* 'sitting' is appropriate and *gua-zhe* 'hanging' is not. These examples illustrate that the semantic nature of the locative NP plays a role in the selection of the kind of verbs that can be used in the sentence.

The contrast of (5.17c) and (5.17c') illustrates that the semantic nature of the postverbal argument also plays a role in the selection of the verb to be used in the sentence. The two sentences involve verbs of manner of motion: *piao-zhe* 'flying' and *pao-zhe* 'running'. For the sentences to be pragmatically well-formed, their meaning

must be compatible with the meaning of the postverbal arguments they describe. (5.17c) is OK because the verb *piao-zhe* 'flying' is associated with the conventional motion of the flag. In contrast, (5.17c') is odd in the conventional sense, if not completely ungrammatical.

So far, I have argued that verbs of posture and verbs of manner of motion are in essence existential verbs when used in the XVS configuration. I need to point out that when used in such an existential sense, they must be suffixed with *zhe*, a verbal aspectual marker attached to verb to indicate the ongoing state of a situation or event.

Existential verbs can be characterized as a subgroup of 'verbs of state' defined as 'verbs which refer not to an activity but to a state or condition' (see Palmer 1988: 85). Notable verbs of state in English are *live*, *stand*, and *lie*, as exemplified in (5.18).

(5.18)a. We <u>live</u> in London.
     b. The statue <u>stands</u> in the middle of the square.

     c. Los Angeles <u>lies</u> on the west coast of the
       United States.

     [Examples from Palmer 1988: 85]

5.2.1.2 Verbs of appearance

The proto-typical verbs of appearance in Chinese are *chuxian* 'appear', *chu* 'appear', and *qi* 'appear'. All three verbs indicate the appearance of some entity or entities, though they differ in their selectional restrictions with

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the type of the entity or entities that they respectively

refer to.  Examples:


(5.19)a. Zuijin baozhi shang <u>chuxian</u> le  yixie guai lun.
      recently newspapers on  <u>appear</u>  Asp. some  weird comments
      'Recently some weird comments appeared on the newspapers.'

    b. Cheng li  <u>chu</u>       le    yi   jian xinwen.
      city    in   <u>appear</u>    Asp.  one  Cl.  news
      'Some news appeared in the city.'
      or 'Some news-worthy thing happened in the city.'

    c. Lian    shang qi   le  yi    ge    xiao  bao.
      face      on    appear Asp. one   Cl.   small swelling
      'There appeared a small swelling on the face.'

    [Examples 5.16b and 5.16c are from Li & Cheng 1988:539]


Subsumed under this category are verbs of inherently

directed motion such as *lai*, 'come', as in (5.13a); and

*jinlai*, 'enter', as in (5.13b), both repeated below.

(5.13)a.  Keting    <u>lai</u> le  yi   ge   ren.
      living-room <u>come</u> Asp. one  Cl.  person
      'There is someone in the living room.'

    b.  Men  wai <u>jinlai</u> le  jiwen lao  han.
      door outside <u>enter</u> Asp.  several old  man
      'Several old men entered from outside the door.'


While these verbs appear to be limited in number, they

can be combined with other action or motion verbs to form a

potentially large number of compound verbs of appearance

via a morphological rule specified in (5.20).


(5.20)    Verbs of motion + prototypical verbs of
      appearance => Compound verbs of appearance


Prototypical verbs of appearance in Chinese are given

in (5.21), which may be compound verbs in their own right

and tend to share an important morpheme in them, which is
*lai*, meaning 'come' or 'appear'.


(5.21)    *lai*                'come',
          *guo-lai*            'come over',
          *chu-lai*            'come out',
          *chu*                'appear', or 'exit'
          *shang-lai*          'come up'
          *xia-lai*            'go down'
          *qi-lai*             'get up'
          *jin-lai*            'enter'


When these verbs are suffixed on verbs of manner of
motion, verbs such as *fei* 'fly', *pao* 'run', *tiao* 'jump',
*kai* 'drive', *zou* 'walk', etc., the derived compounds become
verbs of appearance.  (5.22) presents some of these
compound verbs, underlined.


(5.22) a.   Linzi  li    <u>fei-chu</u> xie   meilide    niao.
            woods  inside <u>fly-out</u> some  beautiful  bird
            'Some beautiful birds flew out of the woods.'

       b.   Men   li      <u>zou-chu</u>  yi    wei  lao   han.
            door  inside  <u>walk-out</u> one   CL.  old   man
            'An old man walked out of the door.'

       c.   Banlu   <u>sha-chu</u> yi    ge    Cheng  Yaojin.
            halfway <u>fight-out</u> one  CL.   Cheng  Yaojin
            'En route, there came out fighting a Chen Yaojin.'

       d.   Yuan       li     <u>zuan-chu</u> yi    tiao da   gou.
            courtyard  inside <u>squeeze-out</u> one CL.  big  dog
            'A big dog headed out of the courtyard.'

       e.   Qianmian  <u>gua-lai</u>   yi    zhen liang  feng.
            front     <u>blow-come</u> one   CL.  cool   wind
            'There blew a gust of wind from the front.'

       f.   Chuang wai    <u>zhuan-lai</u>  yi    zhen xiaosheng.
            window  outside <u>spread-come</u> one CL.   laughter
            'There came laughter from outside the window.'

       g.   Men  wai      <u>zou-lai</u>  yi    nan  yi   nu.
            door outside  <u>walk-come</u> one  man  one  woman
            'A man and a woman came walking from outside the door.'


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h.  Xi    bian <u>kai-guolai</u>   yi  lie  huoche.
    west  side <u>drive come-over</u>  one  Cl.  train
    'There is a train coming over from the west side.'

i.  Shan     shang <u>pao  xialai</u>  yi  qun yang.
    mountain  on    <u>run  down-come</u>  one Cl.  sheep
    'A group of sheep is coming down from the mountain.'

[Examples a-g are from Hu 1995:125-126; h-i are
from Li & Cheng 1988:538 ]

These verbs normally consist of two morphemes, the
first one being a specific verb of manner of motion (e.g.
*fei*, 'to fly'; *sha*, 'to fight', *zou*, 'to walk' in (5.22)
above) and the second one more stereotypical and uniform,
typically morphemes such as *chu* 'to appear', *lai* 'to come'
and *guolai* 'come over'.  The head of the compound is the
first morpheme, which specifies the particular manner in
which the entity appears on the scene while the second
morpheme uniformly expresses the appearance of some entity.
The semantic nature of these compounds is presentative,
expressing the appearance of some entity or entities onto
the scene.  It thus seems reasonable to characterize this
compounding process as one that turns verbs of manner of
motion into verbs of appearance.

5.2.1.3 Verbs of disappearance

These verbs are very similar to verbs of appearance in
their behavior, though opposite in meaning.  So they will
be collapsed in the same category as verbs of appearance.
They are presented here separately simply for the sake of
clarity of the Chinese data.  They denote the disappearance

of some entity or entities from the scene and typically

include those in (5.23).


(5.23)    *guoqu*     'go away',
          *chuqu*     'go out', 'exit', 'leave'
          *tao*       'escape'
          *xiaoshi*   'disappear'
          *si*        'die'
          *zou*       'leave'
          *liu*       'steal away'
          *diu*       'lost'


Examples:

(5.24)a.   Jiali zuotian   you  <u>si</u>  le    yi    zhi   ji.
           home  yesterday  again <u>die</u>  ASP.  one   CL.   chicken
           'Yesterday another chicken died at home.'

      b.   Dui  li  <u>zou</u>  le    yi    ge    caipan.
           team in  <u>leave</u> Asp.  one   CL.   referee
           'A referee has left the team.'


Subsumed under this category are also verbs of

inherently directed motion such as *zou* 'leave', *guoqu* 'go

away'. They can also form compound verbs of disappearance

with verbs of manner of motion, in the same way that

compound verbs of appearance are formed via a similar

morphological rule:


(5.25) Verbs of manner of motion + prototypical verbs
       of disappearance => Compound verbs of disappearance


Prototypical verbs of disappearance that can be

suffixed on verbs of manner of motion tend to be limited to

*zou* 'leave' and *guoqu* 'go away'.

(5.26)     *kai-guoqu*
          drive-go away     'drive away'

          *pao-zou*
          run-leave,      'run away'

          *liu-zou*
          steal-leave     'steal away'

(5.27)a.   Houmian  <u>kai-guoqu</u> yi   liang     huoche.
           behind    <u>drive-away</u> one  Cl.       train
           'A train passed by from behind.'

     b.   Ta   jia  <u>pao-zou</u>  le   yi   zhi  mao.
          his   home  <u>run-leave</u> Asp.  one  CL.  cat
          'A cat has run away from his home.'

It is important to point out that verbs of appearance and disappearance must be suffixed with the aspectual particle *le* which usually indicates the completion of an action.

I have so far explored some aspects of verb selection constraints related to the felicity of subject-postposing in Chinese. To summarize, (a) the verbs involved must be intransitive; and (b) the classes of intransitive verbs that license subject-postposing in Chinese are restricted to those commonly referred to verbs that denote the commencement of an event, state or process, or the occurrence of an event, or the coming into being or into (dis)appearance of an entity, or the existence of an entity/state/event at a specific place or time.

I have given a preliminary componential analysis to these verbs, which appear to have features specified as follows:

(5.28)
Existential
& presentative verbs

| | V-E | V-P | V-M | V-A | V-D |
|---|---|---|---|---|---|
| existence | + | + | + | + | + |
| spatial configuration | + | + | + | + | + |
| starting point of existence | − | − | − | + | − |
| end point of existence | − | − | − | − | + |
| stative | + | + | − | − | − |
| change of state | − | − | − | + | + |
| posture or manner | − | + | + | − | − |
| motion | − | − | + | + | + |
| maintaining motion | − | − | + | − | − |
| agentive | − | − | + | + | + |
| causative | − | − | − | − | − |
| transitive | − | − | − | − | − |

Note:

V-E = verb of existence
V-P = verb of posture
V-M = verb of manner of motion
V-A = verb of appearance
V-D = verb of disappearance


These verbs all seem to share the features of

expressing the meaning of existence, which could be

characterized as a continuum of existence, with verbs of

appearance on one end, denoting the beginning of the

existence, and verbs of disappearance on the other,

denoting the end of existence, and verbs of existence

(which subsumes verbs of posture, and verbs of manner of

motion) in the middle.  To put it another way, the property

of 'existence' is entailed in all these verbs.  While verbs

of appearance and disappearance involve change of state,

verbs of existence do not.

These verbs also appear to share the features of being

intransitive and non-causative, which explains why normally

transitive verbs are not found in the XVS constructions.

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Another prominent feature is what is called 'spatial configuration' (term from Levin 1993:89)[2]. I have used it to mean that all these verbs are inherently associated with a locative prepositional phrase or NP. This is based on the fact that verbs found in the XVS constructions in Chinese tend to co-occur with a sentence initial locative phrase, and in cases where no overt locative phrase is expressed, an understood locative phrase could be recovered.

Having characterized what verbs can participate in the XVS constructions, I will now address the issue that is central to the analysis of the XVS structure: why does the XVS construction select certain verbs (e.g. verbs that are mainly existential and presentative in nature when used in the XVS structure) and not others, words like 'cry' in (5.8) for instance.

My response to this question is that the answer lies in the semantic nature and the discourse function of the XVS construction. Following the idea of Levin and Rappaport (1995) that constructions select verbs that are compatible with the meaning of the constructions, I argue that the XVS structure in Chinese selects only the types of verbs identified above because their meaning[3] is inherently

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[2] Levin (1993:89) gives the following examples of verbs of spatial configuration in English: *crouch, dangle, hang, kneel, lean, lie, perch, rest, sit, slouch, sprawl, squat, stand, straddle, stretch, swing.*
[3] Speaking of meaning, I want to point out that a verb can have alternative meanings in different constructions. Here the meaning of the verb refers to the one that is specifically compatible with the XVS structure.

compatible with the semantic properties and pragmatic functions of this structure.

Semantically speaking, the XVS structure has long been characterized as existential and presentative in nature (see Li and Thompson 1981, Green 1989, LaPolla 1990, Payne 1992, and Hu 1995). I therefore argue that the semantic restriction of the verb selections in the XVS construction can be linked to the discourse function of the construction, namely, to introduce the referent of the postverbal NP on the scene (e.g. Bolinger 1977, Li and Thompson 1981, Penhallurick 1984, Rochemont 1986, Green 1989, LaPolla 1990, Rochemont and Culicover 1990, Payne 1992, and Hu 1995) or to describe the occurrence of an event, such as the disappearance of an entity or entities.

As I mentioned earlier, verbs that participate in the subject-postposed constructions include three types: verbs of existence; verbs of appearance; and verbs of disappearance. If the latter two are subsumed into one group, they match the semantic types of situation which XVS constructions denote.

Specifically speaking, XVS constructions in Chinese can be classified into two semantic types, each denoting a distinct situation. One describes a state, that is, the existence of an entity or state of affairs, as in (5.11), (5.14) and (5.15), repeated below; and the other presents a change of state, that is, the appearance or disappearance

of some entity, as in (5.12) and (5.13), also repeated

below.


(5.11) a. Fangzi houbian <u>you</u> yi   ge xiao   huayuan.
          house   behind  <u>exist</u> one  Cl. small  garden
          'There is a small garden behind the house.'

       b. Guitai  li <u>you</u>  henduo youpiao.
          counter in <u>exist</u> many   stamp
          'There are many stamps in the counter.'


(5.12) a. Waimian    <u>chu</u>      taiyang   le.
          outside    <u>appear</u>   sun       Asp.
          'The sun has appeared outside.'

       b. Jiali <u>pao</u> le   yi   zhi   mao.
          home  <u>run-away</u> Asp. one   Cl.   cat
          'A cat has run away from home.'


(5.13) a. Keting     <u>lai</u> le   yi   ge    ren.
          living-room <u>come</u> Asp. one  Cl.   person
          Someone has come to the living room.'

       b. Men  wai <u>jinlai</u> le   jiwen   lao   han.
          door outside <u>enter</u> Asp. several old   man
          'Several old men entered from outside the door.'

       c. Banli <u>zou</u>  le   shiji   ge   tongxue.
          class <u>leave</u> Asp. ten-plus Cl.  student
          'More than ten students left the class.'


(5.14) a. Wuding shang <u>piao</u>    zhe yi   mian hong qi.
          roof   on    <u>fly</u>     Asp. one  Cl.   red   flag
          'There is a red flag flying on the roof.'

       b. Gonglu  shang <u>pao</u>  zhe   qiche.
          highway on    <u>run</u>  ASP.  car
          'There are cars running on the highway.'


(5.15) a. Tai  shang      <u>zuo</u> zhe   zhuxituan.
          stage on         <u>sit</u> Asp.  presidium
          'On the stage sat the presidium.'

       b. Chuang  shang  tang zhe  yi   ge   ren.
          bed     on     <u>lie</u> Asp.  one  CL. person
          'There is someone lying on the bed.'

Due to its limited semantic functions, I argue, the XVS structure excludes classes of verbs that do not contribute to such an existential and presentative function, which inherently involves a locative argument. This requirement of a locative argument (whether overtly expressed or not), coupled with the existential and presentative function is what I think sets them apart from verbs that are not acceptable in the XVS constructions. This may help explain why verbs do not appear in the XVS constructions unless inherently associated with a locative argument.

Thus excluded from the XVS constructions are typically transitive verbs and intransitive verbs that fall into the semantic classes of verbs whose members belong to the category of internally caused agentive activity verbs, such as 'eat', 'drink', 'wash', 'clean', 'talk', 'see', 'think', 'understand', 'like', 'hate', 'cry', 'smile', 'know' 'send', 'return', etc. These verbs can be hardly characterized homogeneously, so I chose the other way around to characterize the verbs compatible for the XVS structure, which I believe is more effective, in specifying what subclasses of verbs this structure does select.

According to Dixon (1989), universally speaking, verbs can be grouped in about twenty semantic types such as GIVING, TELLING, LIKING, SHOWING, AFFECT, MOTION, etc., and such semantic classification can help explain many otherwise puzzling or arbitrary syntactic phenomena. What

I have hopefully shown is that the XVS structure selects
only two groups of verbs: verbs denoting the appearance or
disappearance of some entity; and verbs denoting the
existence of some entity or the existence of some on-going
state.  As I mentioned earlier, specific verb classes that
the XVS structure exclusively allows seem to include only
the following:

- verbs of existence
- verbs of appearance or disappearance
- verbs of inherently directed motion
- verbs of manner of motion
- verbs of posture

What I have attempted to illustrate above is that
verbs that do participate in the XVS constructions are not
only restricted in their semantic functions, but also
required to be inherently involved with a locative
argument.  Therefore excluded are verbs such as 'smile' or
'cry', 'think', 'worry' etc., which typically are not
subcategorized for a locative argument.  However, even for
the right type of verbs which appear in the XVS
constructions, there are aspectual constraints for them to
be felicitous.

5.2.1.4 Restrictions on verbal aspects

In Chinese, when denoting the appearance or
disappearance of some entity or entities, a verb usually
goes with the verbal aspect particle *le,* which is usually
used after verbs to indicate the completion of an action,

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as in (5.10)-(5.11). However, the use of *le* is optional in compound verbs, as in (5.13). When denoting the existence of an ongoing state, the verbal aspect particle *zhe* is normally used, as in (5.8) and (5.9), the only exception seems to be that *zhe* is not required for the verb *you*, 'exist', whose meaning inherently denotes an ongoing state.

So far I have explored the semantic constraints on the verbs in the XVS constructions. In the next section, I deal with issues concerning the other constituents involved in subject-postposed constructions. There appear to be constraints as well.

5.2.2 Constraints on the NP selection

5.2.2.1 Restrictions on the postverbal subject NP

My research indicates that definite subject NPs cannot undergo postposing in Chinese. Because the definiteness of NPs is often not overtly indicated, I will use only overtly marked definite NPs in my examples.

(5.29) shows that overtly marked definite subject NPs cannot be postverbalized.

(5.29)a.    Tamen      chulai     le.
          they  come-out    ASP.
          'They came out.'

     b.    *Chulai    le     tamen.
          come-out    Asp.   they
          'They came out.'

     c.    Lai le   yi   ge    ren.
          come ASP. one  CL.    Person.
          'A person came out.'

```
d.    *Lai  le     zhe   ge     ren.
      come  ASP.   this  ASP.   person
      'This person came out.'
```

(5.29a & b) have the same constituents, a pronoun,
which is by nature definite, and an intransitive verb.
When the pronoun is preverbal, the sentence is OK, as in
(5.29a), but it is unacceptable if the pronoun gets
postverbalized.  (5.29 c & d) presents a similar case.  In
(5.29c), what is postverbalized is an indefinite subject
NP, explicitly marked as such by a numeral *yi*, one.
However, if the postverbalized NP is definite, such as in
(5.29d), where the subject NP is marked definite by a
demonstrative pronoun, *zhe*, 'this', the sentence becomes
ill-formed.

(5.30) below involves weather verbs.  Again, it shows
that while indefinite NPs can be postverbalized, definite
NPs cannot.

```
(5.30)a.    Zuotian     wanshang   xia   le    yi    chang yu.
            yesterday   evening    fall  ASP.  one   CL.   rain
            'It rained last night.'

      b.    Zhe  yu    yue  xia  yue  da    le.
            this rain  more fall more big   Asp.
            'The rain is getting heavier and heavier.'

      c.    *Zuotian    wanshang   xia   le    zhe   chang yu.
            yesterday   evening    fall  ASP.  that  CL.   rain
            'It rained last night.'
```

In (5.30a), the postverbalized subject NP is
indefinite, and the sentence is OK.  The contrast of (5.30b
and c) indicates that while a definite subject NP is

grammatical when it is preverbal, as in (5.30b), it is

unacceptable if postverbalized, as in (5.30c). The latter

is ungrammatical because the postverbalized subject NP is

definite, as marked by the demonstrative pronoun *zhe*

meaning 'this'.

To summarize, the subject NPs appearing postverbally

tend to be semantically restricted to indefinite in nature.


## 5.2.2.2 Restrictions on the preverbal locative NP

In contrast to the postverbal subject NPs, the

preverbal locative NPs tend to be restricted to definite.

(5.31) shows that the locative NPs cannot used together

with morphological markers that are associated with

indefiniteness.


(5.31)a.  Na    ge    keting      lai  le   yi   ge    ren.
          that  Cl.   living-room come Asp. one  Cl.   ren
          'Someone showed up in that living-room.'

     b.   *Yi   ge    keting      lai  le   yi   ge    ren.
          One   Cl.   living-room come Asp. one  Cl.   ren
          'Someone showed up in a living-room.'


(5.31a) is OK, when the locative NP is preceded by *na-*
*ge*, 'that', which marks the NP as definite. However,

(5.31b) shows that the sentence is not acceptable if the

locative NP is preceded by *yi-ge*, 'one', an indefinite

number which often marks the NP following it as indefinite.


So far I have discussed certain constraints associated

with XVS constructions:


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(A) The verbs have to be intransitive and have to belong to the following subgroups: verbs of existence, verbs of appearance or disappearance, verbs of inherently directed motion, verbs of manner of motion, verbs of posture;

(B) The postverbal subject NP has to be indefinite or relatively unfamiliar in the discourse;

(C) The preverbal locative elements have to be definite or relatively familiar in the discourse.

In the rest of the chapter, I will illustrate that as a marked structure, subject postposing in Chinese is not arbitrary, but essentially a discourse phenomenon, which can be plausibly explained by the interaction between sentence grammar and various discourse and pragmatic strategies.

## 5.3 Pragmatic Properties

In the following sections, I will focus on the pragmatic properties of the XVS constructions. The order of subject and verb, I argue, is determined, by a variety of factors, including not only the semantic properties of the verb, but also the discourse properties of the subject. Also playing a role, I argue in addition, is the information status of other elements in the clause. I propose that subject postposing is one of the ways the speakers employ to detopicalize the subject, and to mark the focus structure that is unique to this construction.

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This proposal is largely based on the theory of information structure, which I will introduce below.

5.3.1 Information structure: an introduction

The issue of the distribution of information in clauses and sentences is one of the most important questions for linguists studying the interplay of form and function in language.  Research on this topic goes back at least to the work of Prague School linguists such as Mathesius in the 1920's.  The theory of 'information structure', also known as 'information packaging', is an outgrowth of the 'functional sentence perspective' and 'communicative dynamism' of the Prague School, and has figured prominently in current functionalism-oriented linguistic theories.

The basic assumption of this theory is that language is 'primarily a pragmatic phenomenon', and its structure 'cannot be adequately understood if these pragmatic purposes are left out of consideration' (Dik 1980: 46). Proponents of the theory of information structure characterize the purposes of linguistic communication in terms of the speaker's attempt to bring to the addressee's consciousness certain communicative units which he assumes not to be there at the moment of communication.  The way linguistic items are formed is observed to reflect efforts to achieve such a goal (see Gundel et al. 1993 and Lambrecht 1994).

Like other functionalism-oriented syntactic theories
which focus on the relation between linguistic forms and
their communicative function, the theory of information
structure primarily deals with the relations between the
pragmatic status of individual items in a proposition and
the information conveyed by the proposition as a whole.

In the rest of this chapter, I will discuss major
concepts in the theory of information structure and discuss
how they can be used in accounting for the subject-
postposing phenomenon in Chinese.


## 5.3.2 Pragmatic presupposition vs. pragmatic assertion

Pragmatic presupposition and pragmatic assertion are
two fundamental concepts in the theory of information
structure.  They are concerned with the speaker's
assumptions about 'the hearer's state of knowledge and
awareness' at the time of utterance.  Researchers have
observed that in real communications, there is a
correlation between speaker's assumptions about what the
hearer is paying attention to at the time of utterance and
the structuring of sentences according to that assumption
(see Halliday 1967, Chafe 1976, Foley & Van Valin 1985,
Prince 1986, Lambrecht 1994 and Vallduvi 1995).  For
example, Prince (1981: 224) says,

> 'information packaging in natural language reflects the
> sender's hypotheses about the receiver's assumptions and
> beliefs and strategies.'

Vallduvi (1995:123) also observes that

'when communicating a proposition *p*, a given speaker may encode *p* in different sentential structures according to his/her beliefs about the hearer's knowledge state with respect to *p*.'

What unites different accounts of information packaging is the assumption that certain formal properties of sentences cannot be fully accounted for without taking into consideration the extra-linguistic as well as the linguistic contexts in which the sentences having these properties are used. Those extra-linguistic contexts which have a bearing on the form of the utterances or texts being produced typically include the kinds of assumptions made by the speaker about the hearer.

For instance, the syntactic structuring of the weather sentences presented in (4.1) in the previous chapter, which are repeated here for quick reference, has everything to do with the speaker's assessment of the hearer's current state of mind with regard to the meteorological event that is going on.

Subject-postposed sentences in (4.1) are likely to be uttered when the speaker notices the meteorological event/state for the first time, with the assumption that the hearer has not noticed it yet.

(4.1)a.    Xia  <u>yu</u>   le.
          fall  <u>rain</u>  ASP.
          'It is raining.'

    b.    Xia  <u>xue</u>  le.
          fall  <u>snow</u>  ASP.
          'It's snowing.'

c.  Gua  <u>feng</u> le.
    blow <u>wind</u> ASP.
    'It's windy.'

d.  Chu  <u>taiyang</u>    le.
    Out  <u>sun</u>        ASP.
    'The sun came out.'


However, the subject is placed preverbally as in the sentences below when the speaker assumes the hearer has already noticed the meteorological event/state and is bringing up further information about it.


(4.1')a.  <u>Yu/xue</u>    xia  da   le.
          <u>rain/snow</u> fall big  Asp.
          'It is raining harder now.'


b.  <u>Feng</u> yue  gua  yue  da   le.
    <u>wind</u> more blow more big  Asp.
    'The wind is blowing stronger and stronger.'

c.  <u>Taiyang</u>    you       chulai    le.
    <u>sun</u>        again     appear    Asp.
    'The sun is out again.'


According to Lambrecht (1994:52), the propositional information of a sentence consists of a two-component information structure: a pragmatic presupposition and a pragmatic assertion, which he defines as follows:

<u>Pragmatic presupposition</u>: The set of propositions lexicogrammatically evoked in a sentence which the speaker assumes the hearer already knows or is ready to take for granted at the time the sentence is uttered.

<u>Pragmatic assertion</u>: The proposition expressed by a sentence which the hearer is expected to know or take for granted as a result of hearing the sentence uttered.


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The distinction between 'pragmatic presupposition' vs.
'pragmatic assertion' is parallel to the well-known
dichotomy of 'given information '(or simply 'given') vs.
'new information' (or simply 'new'), which has been
extensively expounded in the literature.

According to Clark and Haviland (1977), when speaker-
hearers engage in talk, they supposedly abide by a
'given/new contract', a contract that can be seen as one
aspect of the 'cooperative principle' popularized by Paul
Grice (1975).  Clark and Haviland (1977:4) suggest that
'the given/new contract' works in two ways.  For the
speaker, he would try 'to the best of his ability, to make
the structure of his utterance congruent with his knowledge
of the listener's mental world'.  For the listener, 'this
given-new strategy is a three-step procedure' for relating
the current sentence to his knowledge base:

> At Step 1, the listener isolates the given and the new
> information in the current sentence.  At Step 2, he
> searches memory for a direct antecedent, a structure
> containing propositions that match the given information
> precisely.  Finally, at Step 3 the listener integrates
> the new information into the memory structure by
> attaching it to the antecedent found in Step 2.
>
> Sometimes, however, the listener would not be able to
> find a direct match for the given information within
> knowledge processed, but would be forced to construct a
> bridge between what was known and what was treated as
> given.  (Clark and Haviland 1977:5)

In the literature of discourse analysis, 'given' and
'new' are considered fundamental categories of information

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status of clause constituents because they are entailed in most of the other information status such as 'identifiable' vs., 'unidentifiable', 'definite' vs. 'indefinite', 'topic' and 'comment' and 'locus' and 'focus' etc. As a matter of fact, 'given' is also known as 'familiar' or 'topical' or 'old' or 'presupposed' or 'predictable' or 'thematic', and 'new' is also known as 'asserted' or 'rhematic', etc.

Specifically, an NP is given if it refers to an entity or entities whose reference has been established in the discourse, or that which that which the speaker assumes that the hearer knows or is ready to take for granted at the time of utterance. An NP is new if it is being introduced for the first time into the discourse. An NP is also new when the speaker assumes that the hearer is not aware of the referent of that NP at the time of speaking.

Prince (1981) refines the two-way division of given vs. new by a scale of assumed familiarity which ranks entities from most to least familiar:


Evoked > Unused > Inferable > Containing Inferable > Brand-New Anchored > Brand-New

'Unused' information is that which is presumed to be known to the hearer but which has not been evoked in the current context. A 'containing inferable' is a special case of inferable in which 'what is inferenced off of is properly contained within the Inferable NP itself' (Prince 1981:236). 'Brand-new anchored' information is linked to

the discourse by means of an 'anchor' within the NP, as in (5.32). Here *a person who doesn't get a check from us every month* is anchored by means of the salient *us*.

(5.32) Somewhere in this town is a person who doesn't get a check from us every month.

[Example from Prince 1981:236]

In Prince (1992), the taxonomy of assumed familiarity is further refined into a matrix of crosscutting dichotomies. This matrix classifies the information represented by an utterance in terms of two distinct categories: discourse-old/discourse-new and hearer-old/hearer-new. The advantage of this new classification of given vs. new is that it captures the fact that what is new to the discourse may not be (or be assumed by the speaker to be) new to the hearer, although presumably what is 'given', 'old' or 'familiar' in discourse will be familiar to the hearer as well.

Researchers have observed that the differences in the information status of given vs. new 'often constitute the variable determining which clause type or packaging variant will be used' (Foley and Van Valin 1985:283). That is, there are correlations between the order of syntactic constituents in a sentence and the pragmatic status they represent (see Mathesius 1928, Chafe 1994, Firbas 1992, Foley & Van Valin 1985, Halliday 1967, Kuno 1972, Lambrecht 1994, Prince 1986 & 1992, and Vallduvi 1995). For instance, results of cross-linguistic studies suggest that

NPs that express 'given information' tend to be coded before those that express new information. This tendency is so strong that it has been hypothesized as a principle influencing clause organization (see Firbas 1964 &1992), Gundel 1988 & 1993, Herring 1990, and Chafe 1994).


5.3.3 The principle of 'the new' following 'the given'

This principle is reflected in Chinese in that if other things are equal, utterances in discourse are structured in such a way, that they build on what is given, and add new information which moves the communication forward.

At the sentential level, the preverbal position is generally associated with the pragmatic role of marking given information (unless otherwise specified) and the postverbal position is generally associated with the pragmatic role of marking new information (see Li and Thompson 1981, Hu 1995). A speaker or writer, by the 'given/new contract', has to make sure that the information status of the linguistic items he or she fills in a specific position matches the pragmatic role of that position.

In what follows, I will focus on sentences which contrast in their subject positions, and argue that subject-postposing is motivated by this principle, just as the preverbal subjects are conditioned by this principle as well.

(5.33a) shows that when the subject NP represents given information, it is placed preverbally. In contrast, the subject NP is placed postverbally when it represents new information.

(5.33)a.    Xia    <u>yu</u>    le.            (VS)
         fall    <u>rain</u>   Asp.
         'It's raining.'

     b.    <u>Yu</u>     ting      le.          (SV)
         <u>rain</u>   stop      Asp.
         'It has stopped raining.'

(5.33a) is usually uttered in the context in which the speaker assumes that the hearer is not aware that it is raining. By uttering this sentence, he brings the hearer's attention to this meteorological phenomenon. The subject NP *yu* 'rain' is coded postverbally because its referent is assumed to be unknown (i.e. assumed to be unsalient in the hearer's consciousness ) to the hearer before this utterance.

Interestingly, if the speaker assumes that the hearer knows that it was raining, but is not aware that it has stopped raining, the way he or she expresses 'it has stopped raining' in Chinese would be like (5.33b), in which the subject NP *yu* 'rain' precedes the verb, because it represents hearer-old information.

The pragmatic principle for the new to follow given is to a large extent grammaticalized in Chinese. The evidence is given in (5.34) and (5.35).

(5.34) is an example where the definiteness of NPs is coded by the position of the verb. According to Li and Thompson (1981), preverbal bare NPs are usually considered definite while postverbal NPs are indefinite.

(5.34)a.  <u>Ren</u>      lai   le.              (SV)
          <u>person</u>   come  Asp.
          'The person(s) has/have come'.

     b.  Lai   <u>ren</u>      le.              (VS)
         come  <u>person</u>   Asp.
         'Some person(s) has/have come'.

The only plausible reading that (5.34a) gets would be something like 'The person(s) you and I are expecting is/are here', given that the subject NP is placed preverbally. The subject <u>ren</u> is interpreted as hearer-old (if not discourse old) and definite, that is, known to both the speaker and the hearer. In contrast, the postverbal subject NP <u>ren</u> in (5.34b), though morphologically identical to that in (5.34a), has to be interpreted as brand-new (i.e. discourse-new and hearer-new), by virtue of being postverbal.

(5.35) below, where all objects are underlined, concerns the relative position the object may take in a sentence. It again illustrates the same point that I am trying to argue for: the pragmatic principle of the new following the given is grammaticalized in Chinese. (5.35) shows that the unmarked postverbal object may be taken as new and indefinite, while any of the three possible

preverbal positions renders it given and definite, unless explicitly specified otherwise.

In (5.35a), the object NP is in the unmarked object position -- postverbal; in (5.35b, c and d) however, they are all preverbalized. Given their different sentential positions, their information status is accordingly marked different, which can be seen in the different kinds of questions that they can (and cannot) be used to respond to.

(5.35)a.   Wo    zai   mai   <u>shu</u>.          (S - V - O)
           I     Asp.  buy   <u>book</u>
           'I'm buying <u>a book/some books</u>.'

      b.   wo    ba    <u>shu</u>   mai   le.    (S - ba - O -V)
         I    BA[4]  <u>book</u>  buy   Asp.
         'I bought <u>the book</u>.'

      c.   <u>Shu</u>   wo    mai   le.     (O - S - V)
         <u>book</u>  I     buy   Asp.
         '<u>The book</u>, I bought (it).'

      d.   Wo    <u>shu</u>   mai   le.     (S - O - V )
         I    <u>book</u>  buy   Asp.
         'I bought the book.'

(5.35a) would be a proper response to the question in (5.36), due to the new information status of the object NP (i.e. *shu*, 'book') coded as such by being placed postverbally.

(5.36)      Ni    zai   mai   shenme?
          you   Asp.  buy   what
          'What are you buying?'

---

[4] *Ba* is an object-marker. It marks the NP following it as object that is fronted before the verb.

In contrast, (5.35b, c, and d) would not be proper answers to the above question, due to the fact that in all three sentences, the object NP (i.e. *shu*, 'book') is coded as given by being placed preverbally. However, they are proper responses to the question in (5.37), where the referent of the object NP is presupposed.

(5.37)     Shu   ni   mai  le   ma?
             book  you  buy  Asp.  Q[5]
             'Did you buy the book?'

In the XVS constructions, for the sentences to be felicitous, the postverbal subject NPs all invariably have to represent relatively new information, information that is either discourse-new, or hearer-new, or both. In contrast, the preverbal locative NPs have to represent some type of given or familiar information, in the sense that it is either discourse-old or hearer-old or both. The referent of the prevebal locative NP should be at least inferable from the context by the hearer. Compare the three sentences in (5.38).

(5.38)a.   Keting      lai  le   yi    ge    ren.
          living-room come Asp.  one  Cl.   person
          'Someone is in the living room.'

      b.   *Yi  ge   keting     lai  le   yi   ge   ren.
          one  Cl.  living-room come Asp.  one  Cl.  person
          'Someone is in a living room.'

      c.   Keren-men lai       dao yi  ge   keting.
          guests     come     Asp. one  Cl.  person
          'The guests came to a living room.'

---

[5] Q= question marker, when attached at the end of a statement, it makes that statement into a question.

(5.38a) is OK because the bare locative NP is interpreted as definite given its preverbal position.  If it is specified otherwise as new and indefinite, as in (5.38b), the sentence becomes unacceptable.  However, if the locative NP marked as indefinite is positioned postverbally, as in (5.38c), the sentence becomes OK.

The point that I have been trying to argue for so far is that subject-postposing in Chinese is motivated by the pragmatic principle that new information follows given information.  I claim that this principle has to a great been extent grammaticized in Chinese, in the sense that there is a well-observed correlation between discourse familiarity and sentence position.  Other things being equal, the preverbal position, especially the sentence-initial position is generally associated with some kind of given information, and postverbal position associated with some kind of new information.  This is manifested in the sentence grammar of Chinese in that preverbal bare NPs (i.e. NPs without any modifiers) tend to be interpreted as definite while postverbal bare NPs tend to be interpreted as indefinite.

I argue that subject-postposing can be characterized as a typical instantiation of the grammaticization of this principle.  Other things being equal, a subject NP cannot be postverbalized if it represents given information.  For instance, if the subject refers to a previously mentioned entity in the discourse, it can never be postposed.  That

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explains why pronouns or other types of overtly marked definite subject NPs do not get postverbalized.

For a subject to be felitiously postposed, besides the restrictions on the selection of the verb classes, it has to represent information which is new in some sense (either relatively or absolutely, and either new within the discourse, or new to the hearer) in order to match up with the pragmatic role uniquely endowed to postverbal position by sentence grammar.

However, it should be emphasized here that it is not a particular sentence position which marks an NP as given or new -- it the relationship between a particular NP and the entire proposition in which it appears that manipulates which sentence position it goes to.

In the XVS constructions, the preverbal constituents are usually locative NPs. For the subject-postposing to be felicitous, these locatives have to represent given information in some sense. In other words, if the locative NP are marked morphologically in some way as new in the XVS order, the sentence would become unacceptable. From this perspective, subject-postposing can be characterized as an information packaging strategy by which given information is presented before new information.

In the view that the notion of 'topic' is more often than not associated with the preverbal position (see Keenan 1976, Klaiman 1991, Lambrecht 1994), subject-postposing can be considered as a strategy to disassociate the subject NP

from the pragmatic role of topic by having it moved out of the topic position. That way, the subject NP gets detopicalized, which is a desirable result, given the requirement that its information status must be new to be well-formed in the XVS constructions, since topics by definition usually represent given information rather than new information.

In the next section, I will discuss different types of focus structure and argue that subject-postposing constructions have a unique focus structure.

## 5.4 XVS constructions and their focus structure

Information distribution in sentences is relevant to syntactic analysis only to the extent that it has morphosyntactic expressions and ramifications. The grammatical system which serves to indicate the scope of the assertion in an utterance in contrast to the pragmatic presupposition is called 'the focus structure' by Lambrecht (1994).

The term 'focus' has been used in a variety of ways and has been given many different definitions. For instance, inversion has frequently been said to mark focus, but what is meant by this varies from one account to the next. For example, Bresnan (1990), Rochemont (1986), and Rochemont and Culicover (1990) view certain inversions as identifying the post-verbal constituent as a focus, while Penhallurick (1984) argues that inversion in fact defocuses

the postverbal NP, and Levine (1989) claims that inversion identifies the preverbal element as the focus.

In this dissertation, the use of 'focus' and 'focus structure' is largely based on the theory of information structure expounded in Lambrecht (1994). 'Focus', as defined below, is taken to be a relational pragmatic category, expressing a pragmatic relation rather than a pragmatic property.

> Focus: the semantic component of a pragmatically
> structured proposition whereby the assertion differs
> from the presupposition.
>
> (Lambrecht 1994: 213)

A natural consequence of this definition is that if a sentence evokes no presupposition, then focus and assertion would coincide, and the entire sentence would be a focused unit as a whole.

Closely related to the concept of 'focus' is the notion of 'focus structure', the conventional association of a focus meaning with a sentence form. A major component of Lambrecht's theory of focus structure is a taxonomy of focus types. Lambrecht (1994) distinguishes three kinds of focus structure: 'predicate focus', 'argument focus', and 'sentence focus'.

Predicate-focus structure, the most common of the three, involves a presupposition and an assertion in the unmarked subject-predicate sentence type, in which the

predicate is the focus and in which the subject is in the presupposition.

Argument-focus structure is one in which 'the focus identifies the missing argument in a presupposed open proposition' (1994:222). If this focus structure can be characterized as a narrow-focus structure since its focus domain extends over only a single constituent (i.e. usually an NP), the sentence-focus structure can be characterized as a broad focus structure, because it is one whose focus domain extends over an entire sentence.

(5.39)-(5.41) are the examples Lambrecht (1994:223) provides to illustrate each of the three types, where the focus of each sentence is underlined.

(5.39)      Predicate-focus structure

            What happened to your car?
            My car/It <u>broke down</u>.

(5.40)      Argument-focus structure

            I heard your motorcycle broke down?
            <u>My car</u> broke down.

(5.41)      Sentence-focus structure

            What happened?
            <u>My car broke down</u>.

In both the predicate focus and argument focus, there is a pragmatic presupposition involved in addition to an assertion. Associated with (5.39), is the presupposition is that the hearer has a car and something happened to it. The assertion is that it broke down. In (5.40), the

presupposition is that something broke down and that it may be the speaker's motorcycle. The assertion is that it is the speaker's car rather than motorcycle.

In contrast to predicate focus and argument focus, sentence focus does not lexicogrammatically evoke any pragmatic presupposition and the focus domain extends over the entire sentence as in (5.41). More examples of sentence focus constructions are given in (5.42).

(5.42) a. Once upon a time there was an old lady and a cat.
    b. Then out from under the bed ran a mouse.
    c. There arose a violent storm.

What these sentences have in common is that they lack an established topic, and they serve to introduce new participants into the discourse. The subject NP appears in the postverbal position normally reserved for objects, the unmarked focus constituent in a predicate focus construction. In these sentences, the subject and the predicate are both in the domain of the assertion, with no pragmatic presupposition involved. Therefore, these sentences are semantically non-binary, lacking both a topic-comment and presupposition-assertion bipartition.

This situation obtains in many of the XVS constructions that I have discussed, some of which are repeated below, indicated by the same numbers as they were originally introduced with.

(4.1) Weather sentences:

    a.    Xia   yu    le.
             fall  rain  ASP.
             'It is raining.'

    b.    Xia   xue   le.
             fall  snow  ASP.
             'It's snowing.'

    c.    Gua   feng  le.
             blow  wind  ASP.
             'It's windy.'

    d.    Chu   taiyang    le.
             Out   sun         ASP.
             'The sun is out.'

    e.    You   guo  yi  hui,  yingying xiangqi leisheng.
             again  pass  one moment, vague      sound     thunder
             'A moment later, there came the vague sound of thunder.'


(4.8) Existential sentences:

    a.    You  zhe  yang yi   ge    chuanshuo.
             exist this  kind  one  CL.    legend
             'There exists such a legend.'

    b.    You        zhei.
             exist       thief
             'There is/are thief(s) (here)'.


(4.11) Presentative sentences:

    a.    Lai  keren       le.
             come  guest      ASP.
             'Some guest(s) came. = Here comes some guest(s).'

    b.    Houlai     you        lai  le   xuduo       ren.
             later      again     come ASP.  many        people
             'Later, many more people came.'

    c.    Pao       le   yi   zhi   mao.
             run-away  ASP.  one  CL.   cat
             'A cat has run away.'

    d.    Si   le   liang       zhi   muji.
             die  ASP.  two        CL.   hen
             'Two hens have died.'


    These sentences manifest the pragmatic property of
being all-new in that they do not contain any discourse-

pragmatically presupposed materials and all the information
asserted is supposedly new to the hearer.  Since the
pragmatic assertion extends over the entire proposition,
assertion and focus coincide in these sentences.
Therefore, their clausal elements cannot be differentiated
on the basis of information status, and, as such, the
entire sentences can be characterized as having pragmatic
assertion only, whose definition is given earlier in
section 5.3.2 but repeated here for the sake of clarity.

<u>Pragmatic assertion</u>: The proposition expressed by a
sentence which the hearer is expected to know or take
for granted as a result of hearing the sentence uttered.

(Definition originally given in Lambrecht 1994: 52)

So far, I have introduced three types of focus
structures and discussed how they are related to the XVS
constructions in Chinese.  However, I should mention that
the marking of focus structure is not restricted to
morphosyntactic means.  In fact, languages employ different
grammatical means for indicating the various focus
constructions.  Syntax, morphology and prosody may all be
used.  English makes use of both prosodic and syntactic
devices.  The basic mechanism is accentuation, with the
main sentence stress falling on the primary focal element.
English allows the focal stress to fall on any constituent
in a sentence, and consequently it is possible to signal
the contrast among the three focus types solely

prosodically.  However, there are syntactic options as well

to mark the focus structure.  Subject-postposing may play a

role in the presentational sentence focus construction, and

an it-cleft marks an argument focus construction, as in

(5.43).

(5.43) It was <u>my car</u> that broke down.

In Chinese, a focal NP cannot occur in preverbal

position because a preverbal referential NP must be part of

the pragmatic presuppositions associated with the

utterance.  Thus a sentence like (5.44a)[6] can only be

interpreted as having a presupposed, specific subject.

With an indefinite NP, either the subject is

postverbalized, as in (5.44b); or the existential verb *you*

'exist' is used to introduce it and consequently rendering

it postverbal, as in (5.44c).

(5.44)a.  Keren       lai  le.
          guest       come Asp.
          'The guest(s) is/are here.'


    b.  Lai  keren       le.
        come guest       Asp.
        'Here is/are some guests.'

    c.  You          keren       lai  le.
        exist        guest       come Asp.
        'Here is/are some guests.'

I argue that subject postposing has the discourse

function of marking the relation of subject NP as non-

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[6] Sentences in (5.44) are first introduced in Li and Thompson
(1981), and have been cited widely in the literature since.

presupposed to the rest of the sentence. It undergoes

postposing to be moved out of the preverbal position which

is associated with topic. In this sense, all subject NPs

in the XVS constructions are marked non-topical, by virtue

of being postverbalized. And the very reason for the

subject to be detopicalized, I argue, is the very nature of

theticity manifested in the XVS constructions.


## 5.5 XVS constructions and theticity

In this section, I will discuss the distinction of

'categorical' vs. 'thetic' statements and propose that in

Chinese all sentences with subject postposed can be

uniformly characterized as being 'thetic' rather than

'categorical'.


## 5.5.1 Categorical vs. thetic sentences

The distinction of categorical vs. thetic sentences

can be traced back to the theory of judgment proposed by

the philosophers Franz Brentano and his student Anton Marty

at the end of 19th century (see Kuroda 1976). They

proposed a fundamental dichotomy between two basic types of

judgments: categorical and thetic. A categorical statement

corresponds to the topic-comment structure which typically

consists of two speech acts: naming an entity and stating

something about it. In this sense, categorical statement

can be characterized as having a double discourse function.

An example of categorical statement is 'John is

intelligent', wherein an entity *John* is named, to which the property of *being intelligent* is ascribed.

Categorical sentences have been characterized as 'the unmarked pragmatic sentence articulation' and characterized as 'communicatively speaking the most common type' (Lambrecht 1994:132). By definition, a categorical sentence is a predication that is judgmental in nature: semantically, it manifests the topic-comment structure in that typically an entity is identified and something is said about it. Pragmatically, it manifests the information structure of given-new in that the entity identified is given information, and something said about it is the new information. Syntactically, it manifests the subject-predicate structure in which the subject precedes the predicate.

Compared to categorical expressions, thetic statements lack the bipartite logical structure of topic and comment. They merely express an event, state or situation, and are characterized by an all-newness that extends over the entire proposition. An example of a thetic sentence in English is a weather expression such as 'it is raining', in which the pronoun *it* is impersonal and with which no statement about an entity is made, but merely the fact/state/situation of *raining* is recognized. It does not contain a referential NP and thus does not tell something about an entity.

Two kinds of 'theticity' are distinguished: entity-central and event-central (see Sasse 1987 and Lambrecht 1994). Both share the characteristics of presenting something, but differ in that the former states the existence of an entity and the latter states the existence of an event.

## 5.5.2 Entity-central theticity

Existential sentences such as (5.45) below are examples of 'entity-central' thetic sentences which by nature assert the existence of an entity, without reporting a state of affairs about it.

(5.45)a.　Fangzi houbian <u>you</u> yi　ge　xiao huanyuan.
　　　　　house　　behind <u>exist</u> one　CL.　small garden
　　　　　'There is a small garden behind the house.'

　　b.　<u>You</u>　zhe　yang yi　ge　chuanshuo.
　　　　<u>exist</u> this　kind one　CL.　legend
　　　　'There exists such a legend.'

　　c.　<u>You</u>　zhei.
　　　　<u>exist</u> thief
　　　　'There is/are a thief/thieves (here)'.

In Chinese, entity-central theticity is to a large extent grammaticized in that the entity whose existence is being predicated in the clause is more often than not introduced by the proto-typical existential verb *you*, 'exist'. This is illustrated in (5.45) above. If the specific manner or posture of the existence of the entity is given, the entity can either be introduced by the existential *you* or introduced by a verb of posture, or a

verb of manner of motion. This is illustrated in (5.46) below, where paired sentences are near paraphrases. In either case, the entity is coded postverbally in a XVS construction.

(5.46)a. <u>You</u> yi ge zhuxituan zai tai shang zuo zhe.
    <u>exist</u> one Cl. presidium on stage on sit Asp.
    'There is a presidium sitting on the stage.'

    a'. Tai shang     <u>zuo</u> zhe zhuxituan.
       stage top     <u>sit</u> Asp. presidium
       'On the stage sat the presidium.'

    b. <u>You</u> qiche zai gonglu shang pao zhe.
      <u>exist</u> car on highway on run ASP.
      'There are cars running on the highway.'

    b'. Gonglu     shang     <u>pao</u> zhe qiche.
       highway top     <u>run</u> ASP. car
       'On the highway cars are running.'

    c. <u>You</u> yi zhi ji     zuotian     zai jiali si le.
      <u>exist</u> one CL. chicken yesterday at home die ASP.
      'Another chicken died at home yesterday.'

    c'. Jiali zuotian you <u>si</u> le yi zhi ji.
       home yesterday again <u>die</u> ASP. one CL. chicken
       'Yesterday another chicken died at home.'

    d. <u>You</u> yi wei daifu zai gebi     zhu zhe.
      <u>exist</u> one CL. doctor at next-door live ASP.
      'There is a doctor living next door.'

    d'. Gebi     <u>zhu</u> zhe yi wei daifu.
       next door <u>live</u> ASP. one CL. doctor
       'Next door lives a doctor.'

## 5.5.3 Event-central theticity

Examples of event-central sentences in Chinese are given below in (5.47) and (5.48) where what is being asserted is the happening of an event rather than just the

existence of an entity or entities. For instance, (5.47) describes a meteorological event, not merely the existence of an entity:

(5.47)a. Xia   yu    le.
        fall  rain  ASP.
        'It is raining.'

     b. Xia   xue   le.
        fall  snow  ASP.
        'It's snowing.'

     c. Gua   feng  le.
        blow  wind  ASP.
        'It's windy.'

     d. Chu   taiyang    le.
        out   sun        ASP.
        'The sun came out.'

These event-central thetic sentences differ from the entity-central thetic sentences in that they involve an event, part of which is an entity. More examples are given in (5.48).

(5.48)a. Lai   keren       le.
         come  guest       ASP.
         'Some guest(s) came.  = Here comes some guest(s)'

     b. Houlai       you         lai   le    xuduo      ren.
        later        again       come  ASP.  many       people
        'Later, many more people came.'

     c. Pao          le    yi   zhi   mao.
        run-away     ASP.  one  CL.   cat
        'A cat has run away.'

     d. Si    le    liang    zhi   muji.
        die   ASP.  two      CL.   hen
        'Two hens have died.'

     e. Ban   li    zou   le    shier      ge   tongxue.
        class in    leave Asp.  twelve     CL.  students
        'Twelve students left the class.'

What differentiates a categorical sentence from a thetic one is that the former always has an NP which functions as the topic of the sentence, while the latter involves none. Put in another way, the subject is topical in a categorical sentence but non-topical in a thetic sentence. The subject has a double function in categorical sentences. Grammatically it is the subject of the sentence, and pragmatically it is the topic of the sentence. In terms of information structure, the categorical has a topic-comment structure, with a predicate-focus in the sense that the subject is given information, and the predicate is new information. In thetic expressions however, the whole sentence has a sentential-focus structure in that the scope of focus extends over the entire proposition.

Kuroda (1992:27) points out that 'a thetic judgment is based on a perception. The cognitive act of making a thetic judgment is confined within the limit of this act of perception'. The XVS constructions that I have discussed are all thetic propositions in the sense that they express the perception of a state or an event without predicating a property of an argument. The thetic nature of the propositions inherently stipulates the non-topicalization of any nominal participants. The XVS structure usually involves only one major nominal participant, which is the subject NP. In order to prevent the subject NPs from becoming topicalized, they are moved out of the preverbal

topical position. Therefore, subject-postposing can be considered a grammatical device to de-topicalize the subject, which renders the subject non-topical. This grammatical choice is triggered by the semantic nature of the theticity of the proposition and pragmatic/discourse factors of topicality and referentiality of the referents of the entities involved.

## 5.6 Summary

In this chapter, I explored the subject-postposed constructions in Chinese in terms of their syntax, semantics and pragmatics in an attempt to uncover those properties responsible for the grammatical choice of subject-postposing.

The subject-postposed constructions typically involve three clause constituents, a preverbal locative NP, which may be optional if understood; a postverbal subject NP, which is the one and only core argument of the verb; and the verb itself, which has to be intransitive and whose semantics is limited to the following subclasses: (a) verbs of existence; (b) verbs of appearance or disappearance; (c) verbs of inherently directed motion; (d) verbs of manner of motion; and (e) verbs of posture. These verbs can be characterized as 'low-content' existential and presentative verbs as they are used in the XVS constructions, which do not express anything other than the existence of an entity

or event, or the coming into existence of an entity, or going out of existence of an entity.

For the postverbal subject NP to be well-formed, it has to represent some kind of new information, while the preverbal locative NP, if specified, has to represent some kind of given information.

I have argued that the syntactic phenomenon of subject postposing is a typical instantiation of the grammaticalization of the pragmatic principle for the new to follow the given. Its major communicative function is that of affirming the existence of the NP referent, and in the process the existence of the NP referent is being asserted. In other words, its communicative function is not to predicate a property of an argument whose reference is established in the context, but to introduce a new referent into a discourse, often (but not always) with the purpose of making it available for predication in subsequent discourse.

I argue that it is the information status of the sentence constituents and the semantic/discourse function of the XVS constructions which trigger rules of sentence grammar such as subject-postposing. I maintain that rules of sentence grammar in Chinese are closely related to the pragmatic functions of particular constructions in that they reflect the pragmatic constraints on the form of linguistic expressions. In this sense, I argue, the pragmatic functions of linguistic expression in Chinese

have a unique mediating role in discourse and sentence
grammar.  On the one hand their assignment depends on the
pragmatic factors such as discourse context, speaker
presuppositions, speech settings, and the interlocutors'
general knowledge of the world; on the other hand they
trigger the expression-rules of sentence grammar.

Chapter 6 Conclusion

## 6.0 Introduction

One of the purposes of this dissertation is to present a study on the notion of 'subject' in linguistic theory with an emphasis on its relevance in the syntactic structures of Chinese. The notion of 'subject' has been one of the oldest descriptive categories utilized in almost all theories of grammar and languages, and yet it has remained a concept difficult to define, surrounding which there are many questions in search of answers. For example, is 'subject' a universal category? If so, what definition will hold universally and how can subject be recognized across languages? In this dissertation, I have attempted to explore answers to these questions by focusing on the two languages that I have knowledge of: Chinese, my native language, and English, my second language.

The goal to achieve a better understanding of the notion of 'subject' leads to another goal of the dissertation, which is to give a detailed and principled account of certain constructions that have presented typical problems in the debate concerning issues related to the grammatical notions of 'subject' and 'object' in Chinese. They are considered problem cases due to the lack of consensus in the Chinese linguistic community concerning their properties. Some of these constructions have been referred to as 'subjectless constructions', others are

controversial in terms of what their subjects are, if indeed, they are considered as having subjects at all. The heart of the problem lies in the question: What are the criteria for identifying subjects?

The following summarizes central findings of this dissertation concerning these two aims.

## 6.1 Subject as a universal category and proto-type concept

'Subject' needs to be treated as a prototype concept rather than a single-dimensional notion, in order to accommodate the flexibility and gradation it manifests cross-linguistically. A proto-type approach is proposed, which follows from the general theoretical assumption that 'subject' is a universal linguistic category, though a subject may have different functions or play different roles in different languages. It is necessary for 'subject' to be construed as a prototype notion in universal grammar in order for the many universal generalizations which use this notion to be well defined. If only single-condition definitions are used, certain languages would be excluded from having subjects, then 'subject' is not applicable cross-linguistically. As a consequence, all those universal generalizations stated in terms of this notion cannot be understood as generalizations at all.

A proto-type approach to 'subjecthood', I have argued, is both empirically motivated and theoretically plausible.

Theoretically speaking, natural cognitive and linguistic categories are not always and perhaps seldom defined in terms of a single or just a few critical properties. Specifically, this proto-type approach is based on two major conclusions drawn from findings of empirical studies on subjecthood. One is that subjecthood is indeed 'a matter of degree', and the other is that 'subject' is a 'cluster concept'. Both conclusions are made originally in Keenan (1976), and they are still widely accepted as valid and important principles in functionally-oriented linguistic theories.

As a proto-type concept, 'subject' can be defined in terms of a group of characteristic subject properties, based on Keenan's (1976) universal Subject Property List, which are abstracted from a large and diverse corpus of data collected from different languages. Some of them are morphosyntactic, others are semantic or pragmatic. These properties can be used as the collective criteria for recognizing or identifying subjects. Some of these properties are considered more crucial than others in determining what subject is. For instance, the morphosyntactic coding and behavioral properties are considered critical indicators of subjecthood in languages which have these properties, because 'subject' is fundamentally a syntactic notion rather than a semantic or pragmatic one, though it has well-recognized semantic and pragmatic correlates, such as 'agency' and 'topicality'.

The assignment of the subject status to an NP (or its equivalent) in a predication is based on the comparison of the different degrees of subjecthood measured according to the ranking of subject properties that NPs exhibit in that sentence. If an NP displays a property that counts more than others, it is more likely to be selected as subject. Properties which do not count more than others are treated on an equal basis, that is, they share equal status. In such cases, it is the number of properties that will help decide what the subject is. The more such properties an NP manifests, the more subject-like it is.

It is also recognized that some subject properties may not apply in all languages. Chinese, for instance, lacks overt syntactic coding features such as agreement. However, that does not affect the fact that the same notion of 'subject' still applies in Chinese since it manifests almost all other properties identified on the universal Subject Property List.

It is also proposed that subject selection is argument selection in the sense that the subject must be an argument of the predicate. In other words, argumenthood is a necessary property for an NP to function as subject. From a functional point of view, 'subject' can be characterized as that distinguished argument which is the most prominent participant in the event or state of affairs described by the predication. The first step to recognize the subject of a sentence is to approach it from the predicate frame or

argument structure of the verb involved and distinguish

arguments from non-arguments to narrow down the candidates

for subjects.  Arguments can be understood as the

obligatory terms required by a verb to fill in its argument

positions in order to make a minimal sentence, and they

normally specify the main participants in the event or

state expressed by the verb.  Non-arguments are usually

optional terms, most likely adjuncts, which provide

additional information such as time, place, cause, result,

manner etc. about the event that involved the main

participants.  By distinguishing arguments from non-

arguments, the choices for subject identification are

significantly reduced.


6.2 Subject plays an important role in Chinese syntax

     While Chinese is a topic-prominent language as widely

established in literature, subject is shown to be playing

an important role in Chinese syntax.  In this dissertation,

I have presented evidence to illustrate that the

manifestation of subjecthood is a very prominent syntactic

phenomenon in Chinese.  Also illustrated is the fact that

Chinese is a pragmatics-driven language in the sense that

the packaging of textual discourse, whether it is in the

domain of the sentence or above, is very much conditioned

by pragmatic considerations.

## 6.3 The 'subjectless constructions' have postverbal subjects

I have dealt with the syntactic constructions in Chinese that are often claimed to be subjectless in nature. The structural feature that these sentences share is that they all begin with a verb, contrary to the unmarked SVO canonical order in Chinese, where the initial constituent is usually an NP. As such, they are frequently characterized as typical subjectless constructions. In this dissertation, I investigated their properties and argued that they can be uniformly characterized as subject postposed constructions involving a marked focus structure.

## 6.4 Properties of the subject-postposed constructions

It is shown that subject-postposing in Chinese is subject to syntactic, semantic and pragmatic constraints, and these constraints constitute the necessary conditions for subject NPs to appear postverbally. Syntactically, subject-postposed constructions in Chinese involve a preverbal locative phrase (often in the form of an NP), which may be omitted if understood from context, a postverbal NP and an intransitive verb. From the functional perspective, the number of nominal participants involved in this type of construction is confined to one, and that nominal participant is identified as the subject of the sentence mainly because it is the most prominent

argument in the sentence in terms of the subject properties it manifests in that sentence.

Semantically, the class of verbs that participate in the subject postposed constructions must be compatible in meaning with the existential and presentative discourse functions typically expressed by these constructions. The semantics of the verb classes appear to mediate a clear correlation of the subject-postposed syntactic form and its unique discourse function in a consistent and significant way.

Pragmatically, for subject postposing to be well-formed, the information status of constituents in the XVS constructions must conform to the following dichotomy: the information represented by the postposed subject NP must be either discourse-new or hearer-new, while the information represented by the preverbal locative constituent must be more familiar within the discourse context in comparison.

The result of this study on subject postposed constructions in Chinese confirms an important point made by Birner (1997), that inversion serves the information-packaging function of allowing the presentation of relatively familiar information before relatively unfamiliar information. Birner (1997) conducts a large-scale study of English preposing and postposing constructions in which it is argued that preposing constructions in English require the preposed constituent to represent information that is given in some sense,

either to the discourse or to the hearer, and either absolutely or relatively. In comparison, postposing constructions require the postposed constituent to represent information that is new in some sense, and argument-reversing constructions require the postposed constituent to represent information that is newer than represented by the preposed constituent.

This observed symmetry between the sentence position and the information status is attested in Chinese, where constructions with preverbal subjects in Chinese are subject to the same pragmatic constraint on the relative information status of the constituents involved, despite differences in linear word order. Therefore, I have drawn the conclusion that the sentence structure in Chinese is essentially sensitive to the information structure of the clause, particularly the relative information status of its constituents. I further claim that information structure has been grammatialized to a certain degree in Chinese. This proposal is made on the basis of a well-observed correlation between discourse-familiarity and sentence position in Chinese. That is, there appears to be a formal association between sentence position and the information status of the NPs.

6.5 Limitations and suggestions for future research

This dissertation presents a study on the notion of 'subject' and the subject-postposed constructions in

Chinese.  What I have discussed largely has to do with their properties and functions at the basic sentence level. It would be meaningful to carry out future research in the direction of textual studies to further explore and verify these properties and functions of 'subject' in larger discourse.

Another type of research which seems worthwhile is a thorough and systematic contrastive study of the English *there* insertion construction and the subject postposing phenomenon in Chinese.  The results of research along that line would not only contribute to comparative and typological linguistic studies of these marked syntactic structures, but would also be beneficial to the second language acquisition of Chinese speakers learning English or vice versa.

Hopefully, the findings of this dissertation have helped in some way to clarify theoretical issues involved in the notion of 'subject' and have offered a bit of insight into the underlying pragmatic principles governing the organization of sentence structures in Chinese in general.

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