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**Grammatical Relations in Chinese:  
Synchronic and Diachronic Considerations**

**By**

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**DISSERTATION**

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**Grammatical Relations in Chinese:  
Synchronic and Diachronic Considerations**

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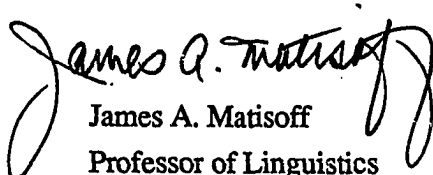
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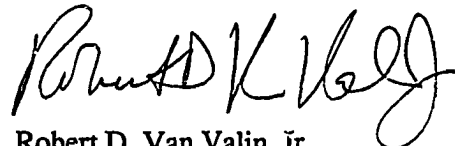
by  
Randy J. LaPolla

Abstract

The bulk of this dissertation is an analysis of grammatical relations (including syntactic, pragmatic, and semantic relations) in Modern Mandarin Chinese. In Chapter I the background, functional framework, and concepts used in the dissertation are introduced. In Chapter II it is shown that Chinese has not grammaticalized the syntactic functions 'subject' and 'object', and has no syntactic function-changing passive construction. In Chapter III the nature of word order and its relationship to information structure in Chinese is examined. It is argued that word order in Chinese does not mark 'definite' and 'indefinite' NPs, as is commonly assumed, but marks information structure. A number of marked focus structure constructions are also discussed. In Chapter IV the discussion is of the structure of Chinese discourse, developed from an analysis of the nature of discourse referent tracking. It is shown that recovery of anaphora is not based on syntactic functions, but is based on real world knowledge (semantics and pragmatics) and discourse structure. Chapter V gives the conclusions, followed by a discussion of some of the diachronic considerations that arose in the course of this investigation. It is suggested that within Sino-Tibetan, Chinese should be seen as an innovator in terms of word order, and that grammatical relations in Proto-Sino-Tibetan should be seen to be pragmatically based rather than syntactically based.

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To my mother and my wife,

the two pillars of my existence:

*Quanto vi voglio bene!*

And to my father,

who has been gone so long:

*Quanto ti rimpiango!*

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There is much I am thankful for, and there are many to whom I am grateful. The friendships I have made during my time at Berkeley are at least as important to me as any degree I have received.

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The influence of Knud Lambrecht and Sandra A. Thompson will also be evident in this dissertation, particularly Chapter III. I thank them for their careful and detail criticisms of my work, and for their encouragement.

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Last, but certainly not least, I wish to thank my doctor, Richard Tittle, and my physical therapist, Mel Terry, for helping me to keep body and soul together.

Even with all of the wise counsel I have received, I am sure I have not managed to keep this dissertation completely error free; any mistakes or errors of judgement that remain are of course my own.

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## Abbreviations Used

The abbreviations used in the interlinear glosses are

AP	adverb marking particle	GEN	genitive
ASP	aspect marker	LOC	locative verb
BA	the <i>ba</i> transitivity marker	N-A	negative aspect marker
BEI	the <i>bei</i> (and <i>gei</i> ) 'passive' marker	N-I	negative imperative
CD	complement of degree marker 度	NOM	nominalizer
CL	numeral classifier	PRT	sentential particle
COP	copula	QP	question particle
DUR	durative or 'inertia' marker	REL	relativizer

**NOTE:** The names given above for the items marked are for the convenience of the reader, and do not imply any theoretical statements. For example, we would not be wrong if we were to assign one gloss to the nominal modifying *de* (see Ross 1983), but here separate its functions into relativizer, nominalizer, and genitive (which includes 'adjectival'-type modification of nouns), to aid in the deciphering of the examples by non-Chinese speaking readers.

## Chapter I

### Introduction and Theoretical Preliminaries

#### 1.1. General

This dissertation is one part of an ongoing investigation into the nature of grammatical relations in the Sino-Tibetan language family. The ultimate goal of this investigation is to develop and present the most rational proposal possible on the typological nature of word order and grammatical relations in the mother language which gave rise to all of the many languages within the Sino-Tibetan language family. This language family is second only to Indo-European in number of speakers, though its geographic distribution is restricted to a relatively small area (China, Myanmar (Burma), Nepal, Bhutan, Northern India, and some bordering lands). Much work has been done in reconstructing the sound system and morphology of this family (see for example Benedict 1972, Bodman 1980, and the herculean Sino-Tibetan Etymological Dictionary and Thesaurus project now underway at U. C. Berkeley), but very little has been said about the nature of Sino-Tibetan syntax. This is actually for a very good reason. Unlike Indo-European, where there is abundant ancient textual evidence, to the extent that it is sometimes possible to have an exact match between text fragments in two different languages within the family (see Watkins 1989), in Sino-Tibetan the time between the break-up of the family into Chinese and Tibeto-Burman and the development of writing on either side of the family<sup>1</sup> was long enough to allow one or both sides of the family to

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<sup>1</sup>The earliest Chinese writing we have dates to at least the 13th century BC (Keightley 1978); the earliest Tibeto-Burman writing (Old Tibetan) dates to the seventh century AD (Jäschke 1954). There is no generally recognized number we can give to the time depth of

change so radically that it is almost difficult to imagine that they actually developed out of the same parent language. Also unlike Indo-European, the genres of literature (the nature of the writing and what was written about) that are the earliest attestations of the two major written languages, Chinese (oracle-bone inscriptions) and Tibetan (translations of Sanskrit Buddhist texts), are totally unrelated, so the chance of similar phrases appearing in each type is extremely slim. It is therefore impossible to actually reconstruct Proto-Sino-Tibetan syntax.

What is possible, and what I have begun in this dissertation, is to analyze the attested languages, and then work backwards from them, ‘undoing’ the grammaticalizations that have occurred, to look at what might have been the common core that is the vestige of the parent language. As the languages developed, often diverging from each other typologically, they carried this core with them, and this influenced the types of grammaticalizations that could occur in those languages. We find for example that, except for some languages in which it can be shown to be a recent development, ‘subjects’ (in the sense defined in §1.2.2, below) are not a feature of the family. Pragmatic or semantic control of grammatical relations takes precedence over syntactic control. By ‘grammatical relations’ I mean simply the relations between the elements of the discourse. In a syntactically controlled language, such as English, there are clear syntactic functions, such as subject and object; the order of constituents and the interpretation of the relations between those constituents is determined in large part by the syntactic structure. In a pragmatically controlled language, the order of elements is not as crucial to interpreting the semantics of what the speaker is trying to convey. Word order reflects more the flow of information, and syntactic constructions grammaticalize this rather than syntactic functions.

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the breakup of Sino-Tibetan. Our best working hypothesis (Matisoff, p.c.) is about 6000 years, roughly the same as Indo-European (Nichols 1989).

This and other common features of the family, which will be topics for future research, are briefly discussed in the final two chapters of this dissertation.

The rest of this introduction will deal with defining the issues involved in any discussion of grammatical relations. In Chapter II of this dissertation, I discuss the question of whether there has been a grammaticalization of the syntactic functions 'subject' and 'object', and the related question of whether there is a syntactic function-changing (switch function) passive in Chinese. In Chapter III, I discuss the nature of information structure and how it affects grammatical structure in Chinese. In Chapter IV, I outline the structure of Chinese discourse, developed from an analysis of the nature of discourse referent tracking. These four chapters are an attempt at a synchronic functional analysis of grammatical relations in Modern Mandarin. Contra Saussure (1959), I feel that as synchrony is but one slice of diachrony; therefore synchrony CAN tell us something about diachrony and vice versa. As Martinet (1977:12) has argued,

We should, in synchrony, distinguish between a static and a dynamic standpoint and generally give preference to the latter whenever the yield of observation enables us to do so. We then go beyond Saussure's illustration of the transversal cut of a tree trunk as we try to determine how the sap flows.<sup>2</sup>

---

<sup>2</sup>Cf. the following quote from Givón (1979a:233), which gives the other side of the coin:

Quite often ... the structure of synchronic syntax cannot be understood without reference to either diachronic or developmental processes. In either case the process of syntacticization, which brings syntax into being, cannot be understood without reference to its initial departure point, the pragmatic mode, as well as to the communicative parameters which govern its evolution, ontogenetically and diachronically.

A synchronic analysis can tell us what developments have and have not occurred in the language, and synchronic slices from different periods of course are what give us the diachronic picture. The possibility of projecting the analysis presented here for Modern Chinese back to Old (Archaic) Chinese is discussed in Chapter V. In that chapter as well we look at several problems related to the morphosyntax of the Tibeto-Burman languages, the dating of the development of pronominalization and its possible source, word order and serializing constructions, and the question of pivots and ergativity, in an attempt to show correspondences between Chinese and Tibeto-Burman morphosyntax and grammatical relations. I hope to be able to expand on the topics touched on here in future research.

Aside from the 'synchrony is diachrony' argument, a second reason for doing a detailed analysis of Modern Chinese is the possible use of the data in larger typological studies. I disagree with Comrie (1981:96) when he states that 'the work originated by Greenberg [1966] demonstrated that it is possible to come up with significant cross-linguistic generalizations by looking at a wide range of languages and WITHOUT NECESSARILY CARRYING OUT ABSTRACT ANALYSES OF THESE LANGUAGES' (emphasis mine). The type of broad-sweeping study pioneered by Greenberg is faulty precisely in that it assumes all languages share the same grammatical categories, such as 'subject' and 'object'. As Blansitt (1984:130) has pointed out, 'It is not adequate simply to assume that the classification of a given nominal element such as subject, direct object, or indirect object is immediately obvious, although such an assumption apparently underlies almost all earlier work on syntactic typology.' This is not meant to be a criticism of typological studies in general; I simply wish to point out that the data used in such studies should be data that has

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(See also the arguments against the Structuralist division of synchrony and diachrony in Givón 1979, Chapter 6).



been carefully analyzed (cf. Matisoff's (1990) criticisms of Greenberg's use of data in Greenberg 1987).

As I feel formal and functional linguistics are two very different endeavors, I will generally restrict my discussion to comments and criticisms of other functional analyses,<sup>3</sup> with a view toward building on the insights of these earlier works. I do not agree with the stated aim of some linguists (e.g. Kuno 1987:1, John Lu 1989) to try to unify formal and functional ways of looking at language; the two have different goals, methods, data, and applications, and should not be confused.<sup>4</sup> This is not to say that I am of the 'radical

---

<sup>3</sup>An historical footnote: I began the synchronic aspect of the present work during the summer of 1987, while studying *Lexical Functional Grammar (LFG)* at the LSA Institute. I had been working on some of the diachronic aspects of Sino-Tibetan, but felt I could not do comparative work without a clear understanding of grammatical relations in each language compared. I began with Modern Chinese because of the availability of native speakers. Attempting to analyse Chinese using LFG basically led me to the conclusions I outline in Chapter II (some of which were first presented as LaPolla 1988a, 1988b). I found that there was no way that the lexical mapping rules of LFG (for determining syntactic functions) could work on Chinese data without a lot of 'fudging'. As I was assuming all languages had subjects, I thought it was a problem with the lexical mapping rules, and they just needed to be revised (which they were, but to no avail), or that Chinese had invariant syntactic functions. It wasn't until I read a bit more that I realized that subjects, etc. were not universal, and that it wasn't that syntactic functions were invariant in Chinese, they were non-existent!

<sup>4</sup>Though it is interesting to note, in this regard, that on occasion otherwise strict formalists will resort to functional-pragmatic explanations when purely formal explanations can't be found. A good example of this for Chinese is Huang 1987, a paper which deals with one of the topics of Chapter III, existential sentences, but from a formal point of view. Huang discusses the plausibility of a 'functional-pragmatic account' of the facts regarding existential sentences (p. 250), but rejects it on the grounds that it 'cannot stand as a real explanation'—which I assume to mean it does not make reference to theory-internal constructs.

functionalist' (or anti-structure) school (e.g. Hopper 1987). What I am arguing for might be called 'structural functionalism'; structure is real, but it is not autonomous. To cite Givón 1979a:208:

∴ there are many facts supporting the existence of some structural level called syntax, but ... in order to explain the formal properties of that structural level, one must make reference ... to a number of substantive explanatory parameters of language. Rather than winding up with an independent, formal, and autonomous level of structural organization in language, we indeed find syntax to be a dependent, functionally motivated entity, whose formal properties reflect—perhaps not completely, but nearly so—the properties of the explanatory parameters which motivate its rise.

As a final note, I would like to emphasize that I do not intend this dissertation to be a refutation of the work of any of the authors mentioned, as I have nothing but the greatest respect for their pioneering scholarship in this field.

## **1.2. Grammatical Relations**

### **1.2.1. Introduction**

As mentioned earlier, I am defining GRAMMATICAL RELATIONS as the totality of systems for relating the elements of a discourse and components of the grammar. The components referred to include (morpho)syntax, semantics, and pragmatics. Traditionally, the term 'grammatical relations' has been used to refer to what I will call 'syntactic functions' (see below §1.2.2), and the term 'syntagmatics' has been used for the systems which relate constituents, but as all three of the components I am talking about are relational, and all are part of the grammar, I will break with tradition and use 'grammatical relations' for the more encompassing concept. 'Pragmatics' is also a possible term for the entire concept, as '[p]ragmatics is concerned with the three-termed relation that unites (a) linguistic form [syntax] and (b) the communicative functions that these forms are capable of serving [semantics], with (c) the contexts or settings in which those linguistic forms can have those communicative functions' (Fillmore 1981:144), but again, I prefer 'grammatical relations', as this term is semantically more transparent.

Another point of difference is the scope of the relations under discussion. In general, grammatical relations are conceived of as being a function of the valence of the verb; that is, the discussion of grammatical relations is limited to the verb and its arguments (see for example Comrie 1981:51). We cannot limit ourselves to this level, though, if we are to discuss grammatical relations in Chinese fruitfully, as many Chinese utterances will involve topics or other constituents with no selectional restrictions (subcategorization relationship) vis-à-vis the verb.

In what follows, I will introduce each of the systems used to relate constituents in a discourse, and define the terminology used in this dissertation.

### 1.2.2. Syntactic functions

I will use the term SYNTACTIC FUNCTION to refer to concepts such as 'subject', 'object', and 'indirect object'. These terms represent particular restricted neutralizations of semantic roles in particular syntactic environments (see below). In order for us to say that a language has a 'subject', etc., we need to find that in most syntactic environments (i.e. in most constructions) in the language, there is such a restricted neutralization. In fact we need to find the same restricted neutralization in all or most of the constructions in the language for the concept of, for example, 'subject' to make any sense. It is especially important when working with non-Indo-European languages that we not assume the existence of particular grammatical categories, such as 'subject', 'object', 'definiteness', etc., in those languages without proper justification. Cumming puts it well in the following quote:

... if a number of independent properties converge on one construction or linguistic unit, then they can be said to define a category which is real for that language. Thus, the category 'subject' can be said to be a useful one for English, since the properties of preverbal position and government of verb agreement converge on the same NPs. However, if there is only one property (or a cluster of interdependent properties) which is unique to the construction or unit in question, then the use of a higher level term is not justified. Thus in a language in which preverbal NPs have no other unique properties, it is not useful to refer to these NPs as 'subject', since that term imputes properties which go beyond simple word order. (1984:365)<sup>5</sup>

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<sup>5</sup>Actually, there are two parts to the question of 'subject':

... in order to say that a given grammatical relation exists in a given language this claim must be justified both language-internally and cross-linguistically. Language-

As 'subject' is the most important syntactic function cross-linguistically, the lion's share of the discussion in Chapter II will deal with determining if Chinese has grammaticalized such a syntactic function, and has a structural passive that can change assignment to that function.

Comrie, in beginning his discussion of 'subject' (1981, Ch.5), lays down the following preliminaries, which apply equally well to the present work:

First, we are not committed a priori to the view that subject is a necessary descriptive category in the grammar of every language: there may well be languages where it is not appropriate, though equally there are languages (including English) where it is appropriate. Secondly, we are not committed to the view that, even in a language where subject is generally valid, every sentence will have a subject. Thirdly, we are not committed to the view that the translation of a sentence from language X where a certain noun phrase is subject will necessarily have the same noun phrase as subject in language Y. (p. 100)

There is no universal notion of 'subject' (Platt 1971; Van Valin 1977, 1981a; Foley & Van Valin 1977, 1984; Gary & Keenan 1977; Comrie 1981); it is impossible to discuss the notion of 'subject' outside of a particular grammatical theory. As Marantz has pointed

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internally, this means that a number of logically independent criteria must be established that serve to identify the grammatical relation in question as being syntactically significant in the language in question. Cross-linguistically, ... in assigning the same name to grammatical relations established independently in different languages, it must be the case that the relations in the two languages have a reasonable degree of overlap ...' (Comrie 1981:60)

In this dissertation we will be concerned only with the language-internal question of 'subject', etc.

out, 'There can be no right definition of "subject" ... only a correct (or better) syntactic theory' (1984:3).<sup>6</sup> (See also Marantz 1982, 1984 for arguments why syntactic functions should not be seen as primitives or tied to semantic roles.) Givón 1984a (see also Givón 1981b, 1984b) defines 'subject' as a grammatical/syntactic category that codes 'discourse-pragmatics', specifically, the clausal topic. All languages code topics, so all languages can be said to have the pragmatic role of 'subject'. For Givón, then, 'subject' is the same as 'topic'. Comrie (1981:60,101) sees the prototype of 'subject' as the intersection of agent and topic, though also uses the term 'subject' to refer to what I will call the 'pivot' of a construction (see below), that NP which is crucially involved in that particular syntactic construction.

In this dissertation, I will define 'subject' as an NP that can be shown to have special GRAMMATICALIZED referential properties, beyond the prominence that might be associated with its semantic role, because of a restricted neutralization of semantic roles.

In order to determine if a language has such a grammaticalized subject, we can follow the methodology used, for example, in Anderson 1976, Van Valin 1981a, and Faarlund 1989, that of examining various constructions in the language to determine which argument of the verb, if any, figures as the syntactic pivot<sup>7</sup> in each of the constructions.

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<sup>6</sup>See also a similar argument, from the perspective of relational grammar, in Johnson 1977. Sanders (1984:222) states it more generally: 'It is simply true in general that empirically significant concepts are inherently incompatible with rigorous definition, i.e. in terms of necessary and sufficient conditions, except within the specific context of a particular scientific theory'.

<sup>7</sup> This concept is from Dixon 1979 (also discussed in Dixon 1989), but see also Foley & Van Valin 1984:107-124, 1985:304-306 for a discussion of the nature of pivots and the distinction between Pragmatic Pivots and Semantic Pivots. A Semantic Pivot is sensitive to semantic factors, while a Pragmatic Pivot is sensitive to the topicality of a referent. For Dixon, pivots are a surface phenomenon, as there is a deep universal subject. Foley & Van

Essentially, a pivot is ‘any NP type to which a particular grammatical process is sensitive, either as controller or target’ (Foley & Van Valin 1985:305). To determine if there is a pivot for a particular construction, we will look for restricted neutralizations among the semantic roles of the arguments of the verb. For ease of discussion, we will use what Dixon (1979:59) has called ‘universal semantic-syntactic primitives’<sup>8</sup> to refer to the three major types of argument. These are S, the single argument of an intransitive verb;<sup>9</sup> A, the argument which prototypically would be the agent of a transitive verb; and P, the argument which prototypically would be the patient of a transitive verb.<sup>10</sup> In a given language, if S and P function in the same way in a particular syntactic construction, and differently from

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Valin’s Role and Reference Grammar is a monostratal theory, and what Dixon calls deep subject properties, Foley & Van Valin analyze as role-related properties different from the reference-related properties that define pragmatic pivots. (The term ‘pivot’ goes back to Chao 1968, but there refers to the shared argument of a biclausal structure.)

<sup>8</sup>See Du Bois 1985 for arguments why A, S, & P (his ‘O’) are not universal or primitives. Nonetheless, I will use them here, as Du Bois does, because they are useful heuristic notions.

<sup>9</sup>The single argument of intransitive verbs can also be agentive or non-agentive (actor or undergoer—see below §1.2.4 for the definition of these terms). This semantic distinction is significant in the determination of word order in presentative and other constructions (see Chapter 3), but it is not important for the present discussion, as the question of which of two or more NPs is pivot is only relevant with transitive verbs.

<sup>10</sup>I am using ‘P’ instead of Dixon’s (and Van Valin’s) ‘O’ to refer to this role, following Comrie 1978, 1981. These ‘primitives’ are ‘semantic-syntactic’ in the sense that in terms of transitive verbs the distinction is semantic, while in terms of intransitive verbs, the neutralization of semantic roles is syntactic. Dixon’s use of ‘O’ stems from his positing of a level of ‘deep’ subject and object (see footnote 7). Though we are essentially talking about the same thing, I prefer not to use ‘O’ because of its association with ‘object’ and the confusion that might arise from this association.

A, then we can say that there is a neutralization of the distinction between S and P, and so the syntactic pivot for that construction is [S,P]. If on the other hand S and A function in the same way in a particular syntactic construction, and differently from P, then we can say there is a neutralization of the distinction between S and A, and so the syntactic pivot for that construction is [S,A]. In a language where all or most of the constructions in a language have [S,P] pivots, [S,P] can be said to be the subject of that language, and the language can be said to be syntactically ergative.<sup>11</sup> If, on the other hand, [S,A] is the major pivot pattern for all or most of the syntactic constructions of the language, then that grouping can be said to be the subject, and the language can be said to be syntactically accusative. If no consistent pattern emerges, then it is hard say what the subject should be. If there is no neutralization in any construction of the language, or unrestricted neutralization, then that language has no syntactic pivots, and it makes no sense to talk of grammatical subjects, ergativity or accusativity.<sup>12</sup>

The question then is what constructions should we look at in determining whether or not there are pivots in the language? Paul Schachter (1977) has shown that a distinction must be made between the semantic role-related properties and the reference-related properties of what we call 'subjects' in Indo-European languages. Dixon (1979) also points out that what he terms 'universal syntactic phenomena' (imperatives, jussive complements, etc.) are of no use in determining grammatical relations. Therefore, I will

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<sup>11</sup>I want to emphasize that I am talking here about syntactic ergativity; morphological ergativity has no necessary relationship to this syntactic type (Comrie 1981:65 ff.).

<sup>12</sup>This paragraph is adapted from Van Valin 1981a:362; see also Comrie 1981:64,118. There are also two other possible configurations: an active-inactive split (where there is no S, just actor and undergoer—see below, §1.2.4), as in Acehnese (Durie 1987); and a situation such as in Takelma, where S, A, and P each pattern distinctively (see Fillmore 1968, from Sapir 1917).



not discuss imperatives, jussive complements, or other role-related grammatical structures. We will look only at reference-related constructions such as 'raising', cross-clause coreference, 'passivization', relative clauses, reflexives, and certain language specific constructions.

### **1.2.3. Information Structure**

In discussing information structure, I will generally follow the theory outlined in the work of Knud Lambrecht (1986, 1987, 1988, 1989, to appear). The concept of information structure presented there is an elaboration of the Prague School notion of Functional Sentence Perspective, and goes into more detail about pragmatic structure. We will discuss two aspects of information structure: focus structure and the cognitive properties of discourse referents.

In the following introduction, I will be grossly simplifying the notion of information structure as presented in Lambrecht's work. Please see Lambrecht, to appear, for a complete and detailed analysis of information structure.

#### **1.2.3.1. Focus Structure**

The concept of FOCUS STRUCTURE, as defined in Lambrecht 1989, will be the center of interest in our discussion of information structure:

**FOCUS STRUCTURE:** The focus structure of a sentence is a grammatical system used to mark the scope of assertion in a sentence by setting it off against the pragmatic presupposition. (p. 3)

By 'grammatical system' is meant a particular use of intonation, morphology, and/or word order (what I will be discussing as 'constructions'). We then need to define the terms PRAGMATIC PRESUPPOSITION and ASSERTION (Lambrecht 1989:1):

**PRAGMATIC PRESUPPOSITION:** the proposition or set of propositions which the speaker assumes the hearer considers true (believes, knows) and is aware of at the time of utterance and which is relevant in the context of utterance.

**ASSERTION:** the proposition which is added to or superimposed on the pragmatic presupposition by an utterance.

The pragmatic presupposition must be distinguished from the TOPIC, which is the NP (expressed or not) within the pragmatic presupposition that has the function of naming the referent that the assertion is about. It is not the case that every utterance has a topic (see below, and §3.3), or that every sentence has an assertion (as with conventionalized polite greetings, etc.).

Focus structure is not a question of identifiable vs. unidentifiable NPs; it is 'an indicator of a semantic RELATION holding on the level of the sentence or proposition as a whole, not ... an expression of information properties of individual sentence constituents' (Lambrecht 1989:3, emphasis in original). For Lambrecht, there is 'a threefold distinction ... between INFORMATION as conveyed by propositions, the PRAGMATIC STATES of the referents of individual sentence constituents in the minds of the speech participants, and the

PRAGMATIC RELATIONS established between these referents and propositions' (to appear, p. 42, emphasis in original).<sup>13</sup>

Lambrecht (1986, 1987, 1989, to appear) distinguishes three types of focus structure: 'predicate focus', 'narrow focus', and 'sentence focus'. PREDICATE FOCUS is statistically the most common of the three. It involves a presupposition and an assertion in an unmarked topic-comment structure. There is a topic that is within the domain of the presupposition; the domain (scope) of the assertion is then the comment, and within this there is an unmarked focus position, usually the object position (see also Givón 1979b:51-53 on this last point). In this structure, as the topic is part of the presupposition, it is usually not necessary for it to be explicitly stated for the assertion to be understood, so it is often pronominalized or, in the case of Chinese, completely unexpressed, as in B's answer in (1.1):

(1.1) A: Ni de chezi zenme le?  
2sg GEN car how ASP  
What's with your car?

B: Huai le.  
broken ASP  
(It) broke down.

Lambrecht's second type of focus structure is the NARROW FOCUS or 'contrastive' structure. It is in a sense the opposite of the predicate focus structure in that (a) what would be the assertion in a predicate focus structure is within the domain of the

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<sup>13</sup>Cf. Kuno's division of information into two different concepts: 'the concept applied to lexical items, on the one hand, and the concept applied to the particular semantic relations which lexical items enter into in the given sentence' (Kuno 1972:272).

presupposition in the narrow focus structure, and (b) a single constituent that would correspond to the topic in a predicate focus structure is in focus in the narrow focus structure, as in the cleft constructions in ex. (1.2).<sup>14</sup>

- (1.2) a. Shi cai womei mai.  
 COP veg. 1sg N-A buy  
 It was vegetables that I didn't buy.
- b. Wo mei mai de shi cai.  
 1sg N-A buy NOM COP veg.  
 What I didn't buy was vegetables.

Just as it is possible to pronominalize or drop the topic of a predicate focus structure, it is often possible to leave out all but the focused constituent in a narrow focus structure. That is, a single NP could be the whole complete utterance, as in the answer to the question-word question in ex. (1.3).

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<sup>14</sup>(1.2a) would be the equivalent of a 'stressed focus *it*-cleft', and (1.2b) the equivalent of a *wh*-cleft (contra Teng 1979), as defined in Prince 1978. As Prince points out, 'though the *it*-cleft presents information (old vs. new) in an aberrant order, it clearly marks which is which' (1978:897). There is a third type of clefting, discussed in Zhu 1979, which is ambiguous as to the scope of assertion.

- (i) Shi Wate faming de zhengqiji. (Zhu 1979:7)  
 COP Watt invent GEN steam-engine  
 (This/that) is the steam engine invented by Watt.

The scope of the assertion is ambiguous between a predicate focus reading and a narrow focus reading, in that this sentence could be the answer to either 'What is this?' or 'Who was this steam engine invented by?'. That is, the scope could be just the post-copula noun or the whole post-copula NP.

- (1.3) a. Weiyuanhui xuan shei lai dang zhuxi?  
 committee choose who come act-as chairman  
 Who did the committee choose to be chairman?
- b. Zhangsan.  
 (personal name)

An important point is that the NP in focus is not necessarily ‘new information’, as ‘it is not so much the focus noun itself which contributes the new information to the discourse but the relationship between (the referent of) this noun and the entire proposition’ (Lambrecht 1989:9). In fact, ‘information is never conveyed by single words or expressions or even constituents, but by establishing *relations* between words as elements of propositions’ (Lambrecht 1986:160, emphasis in original).<sup>15</sup>

In Chinese, intonation can also be used to focus any constituent in the sentence (Teng 1985:166); predicate focus has the intonation on the predicate, and this is the unmarked case; narrow focus can be achieved by using marked intonation, that is, stressing a non-sentence-final constituent. Therefore, depending on where the prosodic stress is placed, (1.4), below, could be the answer to *When did Miss Zhao ask for three days’ leave of absence?*, *Who was it that last month asked for three days’ leave of absence?*, or *What did Miss Zhao do last month?* (Teng, *ibid.*).

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<sup>15</sup>This clearly goes beyond the definition of ‘new’ information in Chafe 1974:112 as that which is ‘assumed not to be in the addressee’s consciousness’. It is closer to the concept of ‘added information’ in Chafe 1987, but it seems for Chafe (and also Comrie 1981:56) that ‘new information’ is often simply a ‘new’ constituent.

- (1.4) Zhao Xiaojie shang ge yue qing le san tian jia.  
 Zhao Miss last CL month ask-for ASP three day vacation  
 Miss Zhao last month asked for three days' leave of absence.

The third type of focus structure discussed by Lambrecht, SENTENCE FOCUS, requires little or no presupposition; the scope of the assertion is the entire sentence. This is the type of sentence referred to by Kuno (1972) as 'neutral description' or 'themeless'. This type is semantically non-binary, as there is no topic-comment or focus-presupposition structure, and is often presentational; neither the lexical NP(s) or the verb can be left unexpressed. In languages that have syntactic subjects, the subject is the unmarked topic, so for a subject to be interpreted as not topical it must be 'detopicalized', marked in some way, either by intonation, word order, or morphology. As the unmarked focus position is that of the object, most languages detopicalize the subject by giving it markings or word order similar to those of an object (Lambrecht 1989). Chinese does not have a grammaticalized subject (see §2.1. below) or object (see §2.2 below), but the relevant NP must still be shown to be non-topical in a sentence focus construction. B's answer in (1.5) is an example of one type of sentence focus structure in Chinese:

- (1.5) A: Fasheng le shenme shi?  
 happen ASP what affair  
 What happened?

B: You ren hun dao le.  
 have person faint fall ASP  
 Someone fainted.

In this construction the actor is marked as non-topical by its position as the postverbal argument of the existential verb *you*. It is introduced in this way and then the assertion made about it immediately follows. We will discuss this construction and a number of

other constructions that mark focus structure, particularly marked focus structure, in Chapter III.

### 1.2.3.2. The Cognitive Properties of Discourse Referents

In this section I will give a very brief outline of the different semantic properties and pragmatic statuses a referent may have in a discourse, essentially to define the terms to be used rather than to explicate a theory of pragmatic categories. See Lambrecht, to appear, Chapter 3 for such an explication (cf. also DuBois 1980).

A referent is REFERENTIAL(-SPECIFIC) 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 (cf. Givón 1978:293, Du Bois 1980:208). This referential referent will be either IDENTIFIABLE or UNIDENTIFIABLE to the addressee. If it is identifiable, it will be in one of three activation states, ACTIVE (currently the focus of consciousness), ACCESSIBLE (not the current focus of consciousness, but textually, situationally, or inferentially derivable), or INACTIVE (not in the focus or periphery of consciousness, but in long term memory). A referent will often be unidentifiable when first introduced into a discourse, but it can be introduced in two ways, either as a 'brand-new' UNANCHORED referent, or as an ANCHORED referent (these terms from Prince 1981), one where the unidentifiable referent is presented as related in some way to an identifiable referent (as in *a guy I work with*). Further mentions of a referent after its introduction are identifiable. The question of specificity is actually relevant to the speaker rather than the addressee. A referential referent is SPECIFIC if it is identifiable to the speaker. We can also talk about REFERENTIAL-NON-SPECIFIC (Givón's (1978) 'non-definite') referents, when the speaker is committed to the existence of an entity, but its existence as an individual is not important to the utterance, though this is really the same as saying it is NON-REFERENTIAL, as it is

unidentifiable to both the speaker and the addressee.<sup>16</sup> Generics, predicative NPs and non-specific mentions (e.g. nouns that occur in compounds or are under the scope of negation) are all non-referential.<sup>17</sup>

This gives us the following hierarchy of referential referents:

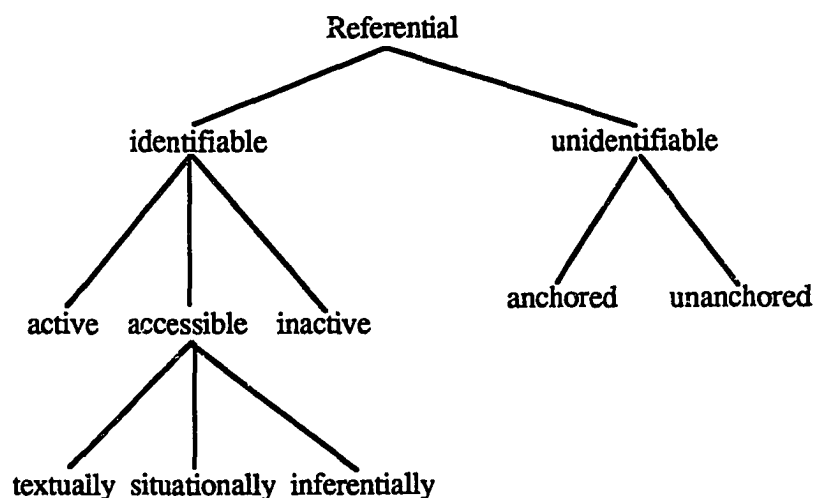


Figure 1: The Cognitive States of Referents in Discourse

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<sup>16</sup>Cf. DuBois 1980:211 ff. and Chen 1986:32, where it is considered that the specific-non-specific contrast does not apply to non-referential referents.

<sup>17</sup>It is also possible to consider that with generics the questions of referentiality and identifiability are neutralized, due to the fact that they are unindividuated, as are non-referential referents, but at the same time can be topical, as if they were referential (Givon 1984a:413). For the purposes of this dissertation, I will take the semantic property of non-referentiality of generics as more basic than their possible pragmatic uses.



It is important to point out the difference between the (possibly universal) COGNITIVE category of identifiability and the (language specific) GRAMMATICAL category of definiteness. DEFINITENESS is the grammatical coding of an NP as to whether or not the speaker assumes the referent of the NP is identifiable to the addressee (this is a rough definition, as the relationship between definite coding, to the extent that it exists, and what is identifiable varies greatly between languages).

It is also important to emphasize the distinction between the two different information structure categories introduced above. The latter (activation) involves the cognitive properties of discourse referents, while the former (topic-focus) involves the relations between discourse referents and propositions (see Lambrecht, to appear, p. 75). In Chapter III, one question we will discuss is the types of codings NPs can have in terms of identifiability, and whether or not word order is involved in marking 'definiteness' or identifiability in Chinese, as is often assumed.

#### **1.2.4. Semantics**

In discussing semantics, I will use the usual terms for semantic roles, such as 'agent', 'patient', 'experiencer', 'theme', etc., but will follow Van Valin (1990) in defining PATIENT as a referent that is either in a state or changes states, and THEME as a referent that is located in a place or moved from one place to another. The definition of LOCATIVE is expanded to include the source and goal roles and the possessor in verbs of possession (cf. the role notion 'ground' from Talmy 1978, based on the common reference-point function of these roles). The following analysis of semantic relations is a very abbreviated version of that of Role and Reference Grammar, as developed in the work of Van Valin (1990, to appear,b). See those works for more complete discussions.

Many languages do not syntactically differentiate among the various types of 'doers' of actions, such as agent, experiencer, instrument, recipient, source, and force, or among the various roles that involve the referent being affected in some way, such as patient, theme, recipient, goal, and locative. Because of this, we need to recognize, aside from these basic semantic roles, that there is another level ('tier') (of abstraction) of semantic MACROROLES (Foley & Van Valin 1984; Van Valin, to appear,b) between the basic semantic roles and the syntactic functions (if there are any in the language). The macrorole ACTOR refers to the former neutralization, subsuming all of the 'doer' roles, and the macrorole UNDERGOER refers to the latter neutralization, subsuming all of the 'receiver of action' roles. These concepts are similar to, but not identical to, the concepts 'A role' and 'P role' introduced above.<sup>18</sup> The latter simply refer to transitive arguments, while the former refer to the semantic status of an argument vis-à-vis the valence of the verb, whether the verb involved is transitive or intransitive. Even when a transitive verb is involved, there may be no undergoer, but there will always be an P role referent.

The question then is, what rules govern the interaction of the basic semantic roles and the macroroles? Consider the continuum of semantic roles in Figure 2, where agent and patient are given as polar opposites, and all other roles fall in between:

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<sup>18</sup>They are also not the same as the concepts of 'actor' and 'undergoer' in tagmemics (e.g. Pike & Pike 1977), as in that theory these concepts seem to be defined more on the basis of syntactic function and word order than on semantics (see Blansitt 1984:132-33 for discussion). The concept of undergoer is in a sense 'reinvented' by S. Anderson (1988) and given the name 'grammatical figure' (based on the concept of grammatical perspective' outlined in Fillmore 1977).

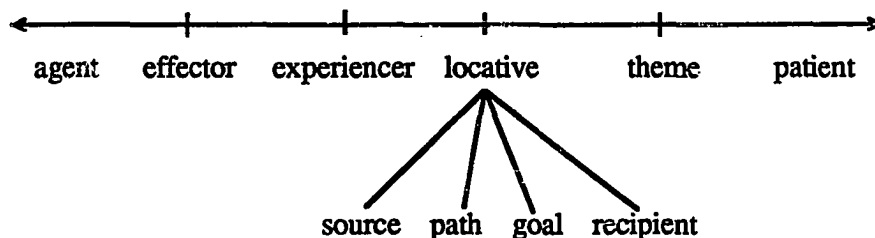


Figure 2: The Continuum of Semantic Roles

The choice of what argument role of a specific verb is an actor is never random: that role farthest to the left of the continuum, from theme on up, will always be the actor. To a certain extent the assignment to undergoer is just the opposite, that argument farthest to the right of the continuum, from experiencer on down, will be the undergoer, but there is some room for variation. In ditransitive clauses with two non-patient arguments, the speaker can choose between a theme and locative as to which to present as the most affected argument. We therefore can have alternatives like *Load the truck with hay* and *Load the hay on the truck*. In the former *the truck* (the locative) is the undergoer, while in the latter *the hay* (the theme) is the undergoer. This is true only as long as both non-actor arguments are not patients. If one of the arguments is a patient, that argument will always be the undergoer. In terms of markedness of assignment to macrorole, then, we get the hierarchy given in Figure 3 (the direction of each arrow is towards the more marked assignment to that particular macrorole):

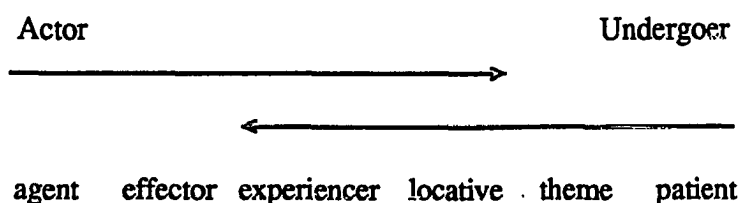


Figure 3: The Actor-Undergoer Hierarchy

The assignment of semantic roles to particular verbs is also not arbitrary. It is based on a lexical decomposition of verbs into primitive elements in a well defined semantic metalanguage. The system of lexical decomposition developed in RRG was originally proposed by Dowty (1979), based on the theory of Vendler (1967), who divided verbs into four categories based on their inherent lexical aspect, or '*Aktionsart*'. These four classes are STATES, ACHIEVEMENTS, ACCOMPLISHMENTS, and ACTIVITIES,<sup>19</sup> and can be distinguished by reference to three semantic oppositions:  $\pm$ dynamic,  $\pm$ telic, and  $\pm$ causative:

State:	-dynamic, -telic, -causative
Activity:	+dynamic, -telic, -causative
Achievement:	+dynamic, +telic, -causative
Accomplishment:	+dynamic, +telic, +causative

Table 1: Semantic Oppositions of Verb Classes

The basic verb types are states and activities, and the more complex verbs are derived from these. The LOGICAL STRUCTURE (LS) of a verb is the representation of its decomposition into one of these more basic types plus, if it is a complex verb, the operators and connectives that combine with the basic types to create its complex nature:

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<sup>19</sup>See Tai 1984 for one analysis of Chinese verbal semantics using Vendler's categories. Especially significant is Tai's finding that Chinese does not have a category of accomplishment verbs.

State:	<b>predicate' (x,(y))</b>
Achievement:	<b>BECOME predicate' (x,(y))</b>
Activity ( $\pm$ Agentive):	<b>(DO (x)) [predicate' (x,(y))]</b>
Accomplishment:	<b>X CAUSE Y, where X is normally an activity predicate, and Y is an achievement predicate.</b>

Table 2: Verb Classes

We now have a representation of the meaning of verbs that is not based on semantic roles, and which will allow us to determine in a principled manner which semantic roles a particular verb will have. As states and activities are the basic primitives of lexical decomposition, all semantic roles are defined in terms of these two basic predicate types (only these types have argument positions). The following table gives the different types of state and activity predicates, and the semantic roles associated with them:

## State Verbs

Locational	<b>be-at' (x,y)</b>	<b>x=locative, y=theme</b>
Non-locational		
State or condition	<b>broken' (x)</b>	<b>x=patient</b>
Perception	<b>hear' (x,y)</b>	<b>x=experiencer, y=theme</b>
Cognition	<b>believe' (x,y)</b>	<b>x=experiencer, y=theme</b>
Possession	<b>have' (x,y)</b>	<b>x=locative, y=theme</b>
Attrib/Identificational	<b>be' (x,y)</b>	<b>x=locative, y=theme</b>

## Activity Verbs

Uncontrolled	<b>smile' (x,(y))</b>	<b>x=effector (y=locative)</b>
Controlled	<b>DO (x,[smile' (x,(y))])</b>	<b>x=agent (y=locative)</b>

Table 3: Assignment of Semantic Roles

These predicates then are the building blocks for achievement verbs, with the addition of the operator BECOME, and accomplishment verbs, which are a combination of

an activity plus the operator CAUSE plus an achievement (BECOME + predicate). Once we know the class of verb (various tests to determine this are given in Foley & Van Valin 1984, Van Valin 1990, and Van Valin, to appear,b), we can then determine the proper semantic roles. Once we know the semantic roles, using the actor-undergoer hierarchy we can determine which role is the actor and which is the undergoer. We will see that the difference between these two roles is significant in the determination of word order in Chinese (Chapter III).

### 1.3. The Data

The data used in this dissertation, unless otherwise marked, are from asking native speakers what they would say given a particular situation. It is important to note that this does not just mean asking if a sentence is grammatical, but asking what utterance would be appropriate in a given context. I do not believe it is possible to assume sentences can be studied out of context, with 'pragmatic and discourse factors reduced to the minimum' (Huang 1984:539), as sentences of natural language do not exist in a vacuum; all utterances in natural language occur in some context. There is no such thing as a 'pragmatically neutral' utterance. The underlying assumption for those who do believe that semantic and pragmatic factors can be reduced to a minimum, and that this is the way to study language, is that syntax is more basic than pragmatics. The main focus of this dissertation is to argue that we cannot ignore semantics or pragmatics in any aspect of Chinese grammatical relations, and that pragmatics is more basic than syntax. This is what lead Herbert A. Giles, in the preface to his *Chinese-English Dictionary* (Giles 1982:x) to refer to Chinese as *supra grammaticam*:

It may indeed be said that no Chinese character can be definitely regarded as being any particular part of speech or possessing any particular function, absolutely, apart from the general tenor of its context ... It may have the force of a verb, a preposition, or anything else; but rather from the subtle influence of its surroundings than from any inherent power (or position) of its own. Voice, mood, tense, person, case, number, etc., must be determined, not by any rules which can be written down beforehand and applied as occasion requires, but by the context, by usage, by probability, by inference, and by the general drift of the subject ... This Dictionary will supply sentences without number to which grammarians will have some trouble in making their rules apply; and it is in this sense that Chinese is essentially *supra grammaticam*.

Writing when he did (almost one hundred years ago), Giles had no notion of pragmatics, or that this aspect of grammar could be discussed in a rigorous way, so his response to the lack of coding for the grammatical categories he was familiar with from Indo-European languages led him to use expressions such as 'that elusive mysterious quiddity' (p. x) when referring to the organizational principles of Chinese discourse. What I will show is that the organization of Chinese discourse is not so 'elusive' or 'mysterious', it is simply different from the Indo-European languages in that the morphosyntax exclusively codes pragmatic categories, not syntactic functions.

In this dissertation the data are to the greatest extent what are normally referred to as SENTENCES, and I will use that term when referring to them. But it should be made clear that the concept of 'sentence' as I am using it here can refer to an utterance that may be as short as a single noun or verb, or may include several joined clauses and/or an external topic. That is, it is one complete internally coherent discourse unit (generally one intonation contour<sup>20</sup>) which may or may not be larger than the clause. The term 'sentence'

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<sup>20</sup>Often similar to what Chafe (1980) referred to as 'extended sentence', and not necessarily the same as the concept of 'intonation unit' ('idea unit' in Chafe 1980) as

is used because 'utterance' is too open-ended in terms of size (though at times I will also use the latter). We must recognize a unit larger than the clause because we will see that not only is the order of lower level (clausal) constituents significant in terms of information structure, but within the sentence the order of clauses is also significant. (See also Cumming 1984 for arguments why we should recognize 'sentence' as a level of discourse structure in Chinese.) For Lambrecht (to appear), the grammatical domain of information structure is the sentence; for Prince (1981), every level of discourse involves information packaging (information structure). I will give arguments below in favor of looking at larger discourses for the proper determination of referent tracking and discourse structure, and will show how focus structure (sentence-level information structure) interacts with discourse structure, but in my discussion of focus structure I will follow Lambrecht and limit the discussion to the level of the clause or sentence.

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defined in Chafe (1987, 1988). (Actually, Chafe (1987, 1988) often marks these units in such a way that they seem to include pauses between some of the constituents, thereby making them closer to what he refers to as 'sentence' or 'extended clause'.)



## Chapter II

### Syntactic Functions and Voice

#### 2.0. General Introduction

Though many linguists have lamented the difficulties in trying to define 'subject' and 'object' in Chinese (see below), most work done on Chinese still assumes that Chinese must have the same grammatical features as Indo-European, such as having a subject, an object, and passives, though no attempt is made to justify that view. This chapter challenges that view and argues for a discourse-based analysis of grammatical relations in Chinese in which there has been no grammaticalization of syntactic functions, and there are no syntactic function-changing rules such as passivization. The correct assignment of semantic roles to the constituents of a discourse is done by the listener on the basis of the discourse structure and pragmatics (information flow and real world knowledge) (cf. Li & Thompson 1978, 1979). Though the clause may be 'the basic information processing unit in human discourse' (Givón 1983:7), the clause is not the central unit for understanding anaphora (see Chapter IV) and grammatical relations in Chinese. In §§2.1 & 2.2, I attempt to prove that there has been no grammaticalization of the syntactic functions 'subject' and 'object' respectively; in §2.3, I argue that there is no syntactic function-changing passive in Chinese.

## 2.1 The Question of ‘Subject’ in Chinese

### 2.1.1 Introduction

We saw above (§1.2.2) that many scholars believe it is impossible to define ‘subject’ cross-linguistically (universally), but many do try to define subjects for individual languages. There have been many attempts to define a subject for Chinese, though no one has succeeded in this venture (see S. Lü 1979, Li & Thompson 1978, 1981, and L. Li 1985 on the difficulties of trying to define ‘subject’ for Chinese). There was a two year debate in the 1950’s to try to decide the question of ‘subject’ and ‘object’ (J. Lü et al. 1956), but no agreement was reached. In their attempts to define ‘subject’ in Chinese, scholars can be roughly divided into three camps: those who define ‘subject’ as the agent (possibly actor) (e.g. L. Wang 1956, T. Tang 1989), those who define it as the topic or whatever comes first in the sentence (e.g. Chao 1968), and those who believe both are right (Lü 1979, L. Li 1985). Several authors have also argued that though there is a ‘subject’ in Chinese, it does not play an important role in Chinese grammar (e.g. L. Li 1985, Li & Thompson 1981).

Those authors who define subjecthood on the basis of selectional restrictions vis à vis the verb (e.g. T. Tang 1989) are confusing semantics and syntax. They claim that subjects have such a selectional restriction, while topics do not. This definition would imply that subjects are not topics, though some that hold this view do say that the subject can also be a topic. That an NP has a selectional restriction vis à vis the verb simply means that that NP is an argument of the verb. This is a necessary condition for subjecthood, but not a sufficient one. Chinese syntax is sensitive to semantics in that actors will precede the verb (except when they follow presentative verbs in presentative constructions—see §1.2.3, and Chapter III, below), while undergoers can either precede or follow the verb,

depending on the pragmatic status (referentiality, identifiability) of the referent of the NP (see Chapter III for examples), but distinguishing actor from undergoer is not the same as distinguishing subject and object (cf. the comments to this regard at S. Lü 1979:72). A simple intersection of actor and topic in a particular sentence also does not a subject make. In Chinese there is no restriction on what semantic role can be the topic, though as actors are cross-linguistically more often presupposed (and the speaker, possibly the most common actor, is always within the presupposition), they are very often topics,<sup>21</sup> and this is what seems to have led to the confusion. Word order<sup>22</sup> then is to the largest extent controlled by the nature of information flow (see Chapter III), and secondarily by semantics. Syntactic functions play no part in the determination of the order of constituents in a sentence.

Those who define 'subject' as whatever NP is sentence-initial are making almost the opposite mistake. Topichood is a pragmatic relation, not a syntactic one. Though the subject in languages that have this syntactic function is often also a topic, it need not be, as can be seen in sentence focus sentences in English with 'dummy' subjects, such as *It's raining*. On the view of those who define 'subject' as topic (e.g. S. Lü 1979, L. Li 1985),

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<sup>21</sup>Cf. Silverstein 1981:243 on the speaker (and/or addressee) as the 'maximally presupposable entities' which make the most 'natural' topics.

<sup>22</sup>I am dealing here only with the order of constituents in a sentence, not the order within constituents such as NPs. It might be said that the order of relative clause before head reflects information structure, but it is not clear how one could relate determiner-head order to pragmatic structure (though see Takashima 1985, 1987 for one attempt at this in the language of the oracle-bone inscriptions).

a patient NP becomes a subject anytime it appears before the agent.<sup>23</sup> There is then no such structure as ‘topicalization’, as the ‘topicalized’ NP becomes the subject, as in the following examples from L. Li 1985:70:

- (2.1) a. Wo yijing zhidao zhe jian shi le.  
 1sg already know this CL affair ASP  
 I already know about this affair.
- b. Zhe jian shi wo yijing zhidao le.  
 this CL affair 1sg already know ASP  
 This affair, I already know about.

On Li’s analysis, in (2.1a) *zhè jiàn shì* ‘this affair’ is an object, while in (2.1b) it is a subject. At the same time Li (following S. Lü 1979) says that ‘subject’ in Chinese has two natures: as the topic and as whatever role it is. S. Lü’s original idea (1979:72-73) was that since ‘subject’ and ‘object’ can both be filled by any semantic role, and are to a certain

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<sup>23</sup>In a later article, L. Li (1986:349) claims that not only the syntactic function, but the semantic role of a referent changes with a change in position in a sentence. Li claims that in (i) the referent of ‘3pl’ is a patient, while in (ii) it is an agent:

- (i) Zhe yi xia, jiu mang huai le women zhe xie ren.  
 this one time then busy ruin ASP 3pl this few people  
 This time we really got busy.
- (ii) Women zhe xie ren jiu mang huai le.  
 3pl this few people then busy ruin ASP  
 We really got busy.

I find this view particularly untenable.

extent interchangeable,<sup>24</sup> then we can say that subject is simply one of the objects of the verb that happens to be in topic position. S. Lü gives the analogy of a committee where each member has his own duties, but each member can also take turns being chairman of the committee. Some members will get to be chairman more than others, and some may never get to be chairman, but each has the possibility of filling both roles. This concept of the dual nature of 'subject' is S. Lü's (and L. Li's) solution to the problem of defining the concept of 'subject' in Chinese. It is clear that this definition does not give us a constant definition for 'subject'; it simply states that the subject is the topic, and can be any semantic role.

In his monumental grammar, Y. R. Chao (1968) spoke of 'subjects', but not in the rigorous sense defined here. He loosely defined them as whatever came first in the sentence, and understood them more as topics than the kind of 'subjects' found for example in most Indo-European languages.

Shibatani (1988) claims that Chinese has an [S,A] 'subject', without giving much evidence. The methodology in that paper is flawed, in that Shibatani takes Japanese *wa* and *ga* marked NP's as prototypical topics and subjects, respectively, and uses the Japanese translations of sentences in other languages to determine whether that language has topics or subjects. We can see also from the following quote that he equates actor and

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<sup>24</sup>One of the examples of what he means by 'interchangeable' is (ia-b) (S. Lü 1979:73):

- (i) a. Chuanghu yijing hu le zhi.  
 window already paste ASP paper  
 The window has already been pasted with paper.
- b. Zhi yijing hu le chuangu.  
 paper already paste ASP window  
 The paper has already been pasted on the window.

subject: 'Because of the merger between topic and subject in Western languages, the discussion of the grammatical subject in the West has been confounded by two basically distinct notions—an actor (or agent) and an entity which is being talked about' (1988:2). In Japanese, on the other hand, according to Shibatani, these two distinct notions have distinct markings, *ga* and *wa* respectively.

Li & Thompson (1974b, 1976a) argue persuasively for analyzing Chinese as a topic-prominent language. They also point out that '[t]here is simply no noun phrase in Mandarin sentences which has what E. L. Keenan [1976] has termed "subject properties"' (1976:479). Aside from this, though, they give only one explicit argument, that of 'pseudo-passives' (see §2.1.9 below), to support the idea that there is no identifiable subject. In their later *Mandarin Chinese: A Functional Grammar* (1981), they do recognize a 'subject' for Chinese, but it 'is not a structurally [i.e. syntactically—RJL] definable notion' (1981:19), and not very important structurally. For this reason they regard Chinese as a topic-prominent language rather than a subject-prominent language.

The 'subject' that Li & Thompson speak of is distinguished from 'topic' because it has a 'direct semantic relationship with the verb as the one that performs the action or exists in the state named by the verb' (p. 15), whereas the 'topic' need not necessarily have such a relationship with the verb. If this is the only criterion for determining a 'subject', though, then we are again simply substituting semantic relations for syntactic relations, and there is no subject that can be defined in syntactic terms. Therefore in this first part of this chapter, I will try to support Li & Thompson's earlier subjectless analysis of Chinese by presenting further arguments.

Following the methodology outlined in §1.2.2, we will look at various reference-related constructions in Chinese with the intention of determining the pivot, if there is one, in each construction. We will see that there is no syntactic pivot in any of these

constructions, so the concept of ‘subject’ as a syntactic function beyond semantic role simply does not exist in Chinese.

### 2.1.2 Cross-clause Coreference

In the following three examples, the referent of the zero anaphor in the second clause is an argument of both of the verbs in each sentence:

(2.2) Wo na le ta de qian, jiu Ø reng Ø le.  
 1sg pick-up ASP 3sg GEN money then throw ASP  
 I picked up his money and threw it.

(2.3) Yi zhi xiao-jir bu jian le, laoying zhua zou le Ø.  
 one CL chick not see ASP eagle grab go ASP  
 One chick disappeared, an eagle carried it away.

(2.4) Nei ge ren na-zhe gunzi Ø pao le.  
 that CL person holding stick run ASP  
 That person ran, holding a stick.

In examples (2.2)-(2.4), we have A=A (and P=P) coreference, S=P coreference, and A=S coreference respectively, so we see no restricted neutralization which would allow us to identify a pivot. Similar examples can be found in any discourse.

In introducing the examples above, I specified that the referent of the zero anaphor was an argument of both of the verbs in each example sentence. This is not always the case. As shown in Li & Thompson 1976a, 1979, and 1981, and Tao 1986, it is the topic of the sentence or discourse, not the ‘subject’, that controls coreference in cross-clause deletion; the deleted element need not even be an argument of the verb in the first clause. Li

& Thompson (1976:469-470) give the following three examples ((2.5)-(2.7a)—(2.7b) is my own).

- (2.5) Nei ke shu yezi da, suoyi wo bu xihuan Ø.  
 that CL tree leaves big so 1sg not like  
 That tree (topic), the leaves are big, so I don't like it (the tree).
- (2.6) Nei kuai tian daozi zhangde hen da, suoyi Ø hen zhiqian.  
 that CL field rice grow very big, so very valuable  
 That field(topic), rice grows very big, so it (the land) is very valuable.
- (2.7) a. Nei chang huo xiaofangdui laide zao, \*(suoyi Ø hen lei).  
 that CL fire fire brigade came early, so very tired  
 That fire (topic), the fire brigade came early, so they're very tired.
- b. Nei chang huo xiaofangdui laide zao, suoyi sunshi bu da.  
 that CL fire fire brigade came early, so loss not big  
 That fire (topic), the fire brigade came early, so there wasn't much loss.

In examples (2.5) and (2.6), the zero anaphor in the second clause corefers with the topic of the first clause, and not the 'subject'. In example (2.7a) the zero anaphor cannot corefer with *fire brigade*, as the fire brigade is not the primary topic of the clause, even though it is the 'subject' of the verb in the first clause and a logical candidate for subject of the second clause. The zero anaphor also cannot corefer with the topic because the inanimacy of the topic is not compatible with the semantics of the verb *lei* 'tired'. Only in (2.7b) can we have the topic as the controller of the zero anaphor. The evidence in these examples is consonant with Givón's statement that 'the main behavioral manifestation of important topics in discourse is continuity, as expressed by frequency of occurrence' and participation in equi-topic chains (1984:138), but as the topic that is participating in the cross-clause coreference is not an argument of the verb, no argument can be made for



subject control of cross-clause coreference, and the idea that ‘subject’ and ‘topic’ are one and the same (e.g. Givón 1984a) is then questionable.

As there is unrestricted neutralization of semantic roles in the above examples, we can say there is no syntactic pivot for cross-clause coreference.

### 2.1.3 Relativization

In Chinese an NP in any semantic role can be relativized upon (see the explanations of relevant semantic roles below; exx. (2.8i) and (2.8m) are adapted from Shi 1989:246-47; the indexed zero in each example indicates the position the referent would have in a non-relative structure):

- (2.8) a. Wo  $\emptyset_i$  zai nei ge shitang chi fan de pengyou<sub>i</sub> mai le shu.  
 1sg LOC that CL cafeteria eat rice REL friend buy ASP book  
 My friend who eats in that cafeteria bought some/a book(s).
- b. Gangcai  $\emptyset_i$  bu shufu de nei ge ren<sub>i</sub> zou le.  
 just-now not comfortable REL that CL person go ASP  
 The person who was not well just now left.
- c. Wo taoyan wo pengyou zai nei ge shitang chi  $\emptyset_i$  de fan<sub>i</sub>.  
 1sg dislike 1sg friend LOC that CL cafeteria eat REL rice  
 I dislike the rice my friend eats in that cafeteria.
- d. Wo bu xiang zai wo pengyou  $\emptyset_i$  chi fan de nei ge shitang<sub>i</sub> chi fan.  
 1sg not want LOC 1sg friend eat rice REL that CL cafeteria eat rice  
 I don't want to eat at the cafeteria where my friend eats.

- e. Wo mai pinguo gei ta<sub>i</sub> de nei ge pengyou<sub>i</sub> lai le.  
1sg buy apples give 3sg REL that CL friend come ASP  
The friend I bought the apples for came.
- f. Ta gei Ø<sub>i</sub> A+ de xuesheng<sub>i</sub> bu duo.  
3sg give A+ REL student(s) not many  
He does not give A+ to many students.
- g. Wo gei Ø<sub>i</sub> bang mang de nei ge ren<sub>i</sub> yijing zou le.  
1sg give help busy REL that CL person already leave ASP  
The person I helped already left.
- h. Wo yong Ø<sub>i</sub> lai xie zi de maobi<sub>i</sub> bu jian le.  
1sg use come write characters REL brush not see ASP  
The brush(es) I use to write characters disappeared
- i. Wo renshi Ø<sub>i</sub> baba xie guo hen duo shu de nei ge ren<sub>i</sub>.  
1sg know father write ASP very many book(s) REL that CL person  
I know that man whose father wrote many books.
- j. Ø<sub>i</sub> Bi wo gao de nei ge ren<sub>i</sub> zou le.  
compared-to 1sg tall REL that CL person leave ASP  
That person who is taller than me left.
- k. Wo bi ta<sub>i</sub> gao de nei ge ren<sub>i</sub> zou le.  
1sg compared-to 3sg tall REL that CL person leave ASP  
That person that I am taller than just left.
- l. Xiaofangdui lai de zao de nei chang huo<sub>i</sub> sunshi bu da.  
fire-brigade come CD early REL that CL fire loss not big  
The loss from the fire that the fire brigade came early to was not big.

m. Lisi cai gu lai  $\emptyset_i$   $\emptyset_j$  zhi gan le ji tian jiu bei ta baba  
 Lisi just hire come only work ASP several day then BEI 3sg father

kaichu de nei ge ren<sub>i</sub> you lai le.  
 dismiss REL that CL person again come ASP

The man whom Lisi had just hired and who worked for only a few days, and was fired by his (Lisi's) father has come again.

From these examples we can see that it is possible not only to relativize on A (2.8a), S (2.8b), and P (2.8c), it is also possible to relativize on a locative NP (2.8d), a goal (2.8e, f), a benefactive (2.8g), an instrument<sup>25</sup> (2.8h), a possessor (2.8i), either argument in a comparative structure (2.8j, k), and a topic (whether an argument of the verb or not) (2.8l). It is even possible for the referent to fill two different semantic roles (P and S) within the same relative clause, as in (2.8m).

Keenan & Comrie (1979:334), in a discussion of Chinese relativization, claim that in all but subject and object relativizations a pronoun must be retained. The cross-linguistic generalization is that 'the lower NP<sub>rel</sub> is on the Hierarchy [Subj > D.O. > I.O. > Obj. of Preposition > Possessor], the more common it is to find it expressed by a personal pronoun' (Keenan 1985:148). If we compare (2.8e), (2.8g), and (2.8f) (all locatives in the extended sense of §1.2.4), we can see that only in (2.8e) is the pronoun retained, possibly

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<sup>25</sup>James D. McCawley has pointed out (p.c.) that '[s]ince it's hard to tell which uses of *yong* are verbs and which are instrumental prepositions, it isn't completely clear that the relativized NP in (1.7h) is an instrument in the syntactic sense.' I do not make this distinction, as I feel *yong* is syntactically always a verb, but in serial verb constructions has the pragmatic function of introducing the instrument and the semantic function of adding an argument.

because of the nature of this particular serial verb construction.<sup>26</sup> In (2.8f, g) the goal/beneficiary does not require a pronoun; in fact (2.8f) would be less acceptable with the plural pronoun added. This question is secondary, though, as there is clearly no restriction on the neutralization of semantic roles such that we could determine a single pivot for this construction.

As relativization is referential by definition, a language that has no grammatical encoding of pragmatic referentiality (i.e., has no syntactic functions) should be free of restrictions on relativization (Foley & Van Valin 1977). We can see that this is in fact the situation in Chinese.

#### 2.1.4 Clefting

One of the arguments used by Tan Fu (1988a, 1988b) for seeing the initial NP of a sentence such as (2.9a) (below) as a grammatical subject is that of clefting (using the copula *shi*—see §1.2.3). Her argumentation is actually quite flawed, though, in that she is not trying to prove the clefted NP is a ‘subject’ as opposed to some other syntactic function, but as opposed to being a ‘topic’, i.e., she feels that simply showing some argument to not be a ‘topic’ will prove that it is a ‘subject’. As the clefted NP is a focused constituent, of course it could not be a ‘topic’, but that doesn’t automatically prove it is a

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<sup>26</sup>The verb *mai* ‘buy’ in Chinese is not ditransitive, so if there is a goal argument it must be coded in a serial construction with the verb *gei* ‘give’. In (2.8k) there is also a pronoun, for the same reason: to express the ‘object’ of comparison, the verb/preposition *bi* ‘compared-to’ must be added to a topic-plus-stative verb construction (see §2.1.5, below, for details). In both of these constructions, the secondary verb (*gei* or *bi*) would not be added unless it was needed to add an argument, and this is probably why they require the pronoun when the arguments they are adding are relativized.

'subject'.<sup>27</sup> She gives examples of clefting of the effector, the time phrase, and the location of the action, but claims that clefting cannot apply to objects (she cites Teng 1979<sup>28</sup> for this restriction). Tan gives the sentences in (2.9) as examples which are supposed to prove the subject nature of the preverbal NP (her (12), p. 7—all glosses, and the star on (2.9c'), are hers):

- |  |  |
|--|--|
| <p>(2.9) a. Lisi ya-shang le.<br/>Lisi hit-injured ASP<br/>Lisi was hit to injury.</p>       | <p>a'. Shi Lisi ya-shang le.<br/>SHI Lisi hit-injured ASP<br/>It was Lisi who was hit to injury.</p>             |
| <p>b. Ma qi-lei le.<br/>horse ride-tired ASP<br/>The horse was ridden to<br/>tiredness.</p>  | <p>b'. Shi ma qi-lei le.<br/>SHI horse ride-tired ASP<br/>It was the horse that was ridden to<br/>tiredness.</p> |
| <p>c. Ma wo qi-lei le.<br/>horse I ride-tired ASP<br/>As for the horse, I rode it tired.</p> | <p>c'. *Shi ma wo qi-lei le.<br/>SHI horse I ride-tired ASP</p>  |

In section 2.1.9, below, I analyze (as did Li & Thompson 1976, 1981) sentences such as (2.9a) not as passives, as Tan Fu would have them, but as topicalized constructions with the A role unexpressed. That is, for me, the verbs in (2.9b) and (2.9c) have the same valence; they are really the same sentence, except that *wo* 'I' is not expressed in (2.9b). In (2.9a'-c') the application of clefting is not to the 'subject', but to the 'object' (undergoer). The problem with the starred sentence is that it is out of context ((2.9a', b') would actually

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<sup>27</sup>This same methodological error is made in Tsao 1979.

<sup>28</sup>Teng does not give any arguments, just two examples (p. 105) that are not actually parallel to the cleft sentences he is discussing.

be equally strange out of context). Clefting is a type of contrastive narrow-focus construction (see §1.2.3). In a context where what is being contrasted is the fact that it is *the horse*, and not, for example, *the mule* that I ‘rode to tiredness’, (2.9c) is fine:

(2.10) A: Wo ting shuo lüzi gei ni qi lei le.  
 1sg hear say mule BEI 2sg ride tired ASP  
 I heard you rode the mule to tiredness.

B: Bu. Shi ma wo qi lei le.  
 not SHI horse 1sg ride tired ASP  
 No. It was a horse I rode to tiredness.

As the post-*shi* NP is a focused constituent, as both Tan (1988a, 1988b) and Teng (1979, 1985) point out, then it would be strange if an ‘object’<sup>29</sup> could not appear in the postverbal cleft position, as the ‘object’ position is the unmarked focus position cross-linguistically (Lambrecht 1986, 1988).<sup>30</sup> Aside from this, subjects are more often topics than any other syntactic function (Keenan 1976), so proving non-topicality would seem to work against an attempt to prove the existence of a subject function.

We can see from the above that clefting is of no use in establishing a subject for Chinese.

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<sup>29</sup>See section 2.2 for arguments against positing a grammatical function of ‘object’ in Chinese. I use the term here because it was used by Tan and Teng.

<sup>30</sup>See §1.2.3 for the concept of information structure, and Chapter 3 for an application of the concepts of focus structure in Chinese; clefting is a type of narrow-focus focus structure.

### 2.1.5 Comparatives

Descriptions of the structure of the *bi* comparative in Chinese (see ex. (2.11) below) often refer to the ‘subject’.<sup>31</sup> For example, Li & Thompson (1981) state that the item being compared ‘... must be the subject or the topic ... of the verb phrase that expresses the [comparative] dimension’ (p. 569). McCawley (1988b) criticizes the inclusion of topics in Li & Thompson’s analysis because sentences with comparison of a fronted object, as in (2.12a,b), are ungrammatical. Yet there are examples where the topic can be compared. Li & Thompson give sentence (2.13):

(2.11) Wo    bi            John gao.  
 1sg compared-to John be-tall  
 I am taller than John.

(2.12) a. \*Gou bi            mao wo xihuan.  
 dog compared-to cat 1sg like

b. \*Gou wo bi            mao xihuan.  
 dog 1sg compared-to cat like

(2.13) Xiang    bi    xiong bizi chang.  
 elephant comp-to bear nose be-long  
 Elephants have longer noses than bears.

There is a very real difference between the topic-comment structure of (2.13), which is a ‘double nominative’ (Teng 1974) structure, and a structure such as that in (2.12). In the former, the nominal *bizi* ‘nose’ is part of the predication (it is within the

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<sup>31</sup>In McCawley 1988a, the restriction is not stated in terms of ‘subject’, but in terms of ‘topmost’ constituent in the predicate phrase.

scope of the assertion—see §1.2.3 above), whereas in the latter, *wo* ‘1sg’ is not part of the predication. In the comparative construction there is always a topic about which a comment is being made, but there can only be one (this does not include the ‘object’ of the comparative verb/preposition *bi*). The examples in (2.12) are bad because there are two topics outside the scope of the assertion.

A. Y. Hashimoto (1971) says that compared constituents ‘need not be subject NP’s ...; they may be NP’s dominated by Time or Place expressions or prepositional phrases; however, they cannot be the object NP’s’ (p. 34).

In Chinese the problem is that the constituent that expresses the comparative dimension is an INHERENTLY comparative<sup>32</sup> single argument PREDICATION (stative verb), unlike English, where the constituent expressing the comparative dimension is a ‘gradable’ ADJECTIVE or ADVERB (Leech & Svartvik 1975). Because of this, to compare two ‘objects’ of a verb such as *xihuan* ‘like’, the whole clause must be repeated, with the comparative *bi* coming between the two clauses, as in (2.14):

(2.14) *Wo xihuan ta bi wo xihuan ni duo.*  
 1sg like 3sg compared-to 1sg like 2sg be-more  
 I like him more than I like you.

*Duo* is a single argument verb, so the structure of a sentence that compares ‘objects’ must be the same as one that compares ‘subjects’, i.e. X PP VP, where X is the constituent

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<sup>32</sup>Light (1989) argues that unmodified Mandarin Chinese stative verbs, such as *gao* ‘tall’ are INHERENTLY comparative, because a clause without the comparative PP is still comparative. For example, if there were two people standing in front of me and I said *John gao*, it would mean ‘John is taller (than the other person)’, not ‘John is tall’. To say the latter, the stative verb must be modified by *hen* ‘very’ or some other adverb.



being compared (a simple NP or a whole clause, as in (2.14)), and PP includes *bi* and the constituent X is being compared to. The X constituent is the topic about which an assertion as being made. The restriction on comparatives in Chinese then is not a function of ‘subject’ control, but is due to the nature of information structure and the class of verbs used in comparatives: a one argument verb, such as a verb used in a comparative construction, can take only one argument (the topic), so it is irrelevant to talk of ‘subject’ vs. ‘non-subject’.

### 2.1.6. Raising to Subject

Raising is seen by many (e.g. Chomsky 1981, Bresnan 1982b) as a subject controlled construction, that is, only the subject of an embedded clause can be ‘raised’ to the subject of a verb such as *seem* (2.15). In Chinese, though, the equivalent of (2.15c) (as well as of (2.15a-b)), with the ‘object’ raised, is perfectly acceptable:

- (2.15) a. It seems Paul bought the car.  
 b. Paul seems to have bought the car.  
 c. \*The car seems Paul to have bought.
- a'. Haoxiang Paul mai le chezi.  
       seem       buy ASP vehicle  
       It seems Paul bought the car.
- b'. Paul haoxiang mai le chezi.  
       seem buy ASP vehicle  
       Paul seems to have bought the car.
- c'. Chezi haoxiang Paul mai le.  
       vehicle seem       buy ASP  
       The car seems Paul to have bought.

As we can see from these examples, either of the referential constituents, or neither, can appear before *haoxiang* 'seem' in Chinese, no matter what the semantic role. As there is no restriction on the semantic roles which can be involved in raising, no evidence can be found from raising for identifying a subject in Chinese.

### 2.1.7. Indispensability

Keenan (1976) gives indispensability as one of the properties of his Subject Properties List. He says, 'A non-subject may often simply be eliminated from a sentence with the result still being a complete sentence. But this is usually not true of b[asic]-subjects' (p. 313).<sup>33</sup> In Chinese the verb phrase alone can be a complete sentence, as in (2.16):

(2.16) Chi le.  
eat ASP  
I/you/he/she ate.

There are also no 'dummy' subjects in Chinese, as are found for example in English sentences dealing with weather phenomena such as *It's raining*:

(2.17) Xia yu le.  
fall rain ASP  
(It's) raining.

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<sup>33</sup>See also Connolly 1989:1, which defines 'subject' as 'a NP which is required in (almost) every sentence and is somehow distinguished from all other NPs'.

In discussing ‘subjectless’ verbal expressions, Chao (1968:61) states that ‘[a]lthough it is possible to supply subjects to such verbal expressions ... they should be regarded as sufficient by themselves, because (a) there is not always one specific form of a subject that can be supplied, and (b) sometimes no subject can be supplied.’

We can see from this that there is no indispensable NP in the Chinese clause, and therefore indispensability also can not be evidence for a ‘subject’ in Chinese, whatever its validity as an argument for subjecthood in other languages.

### 2.1.8. Reflexives

The control of reflexives is often said to be a property of subjects (Tan 1988, Tang 1989). C. Tang (1989:99) formalizes this for Chinese with a rule that states that ‘The antecedent of a reflexive must be a subject’. As the following examples show, this is simply not true ((2.18a) is from Sun 1989):

- (2.18) a. Mama bu neng yongyuan ti ni<sub>i</sub> zhaogu (ni)ziji<sub>i</sub>.  
 Mom not able forever for you look-after yourself  
 Mom won’t be able to look after you (lit. ‘(your)self’) forever.
- b. Wo<sub>i</sub> zhen fan, buguan wo<sub>i</sub> zai nali, zong you ren lai ganshe  
 1sg very annoy not-matter 1sg LOC where always have people come interfere  
 ziji<sub>i</sub> de shi.  
 self gen affair
- I’m really annoyed, no matter where I am, someone always interferes with what I am doing (Lit.: ‘... interferes with self’s business’).

c. You ren lai jinggao Zhu Laoban<sub>i</sub> shuo ziji<sub>i</sub> de erzi zai tou dongxi.  
 have person come warn Zhu boss say self GEN son DUR steal thing(s)  
 Someone came to warn Boss Zhu that his (Zhu's) son was stealing things.

d. Wo jintian gei ni<sub>i</sub> pai le hao duo ren de zhaopian, xianzai gei ni<sub>i</sub>  
 1sg today give 2sg hit ASP very many people GEN photo now give 2sg

pai ziji<sub>i</sub> de.  
 hit self GEN

I took pictures of a lot of people for you today, now I'll take your picture (Lit.:  
 '... take self's picture').

In none of the above cases could the antecedent of *ziji* 'self' be said to be in an immediately preceding 'subject' slot. In general, reflexives in Chinese are pragmatically or semantically controlled. That is, the nature of the discourse situation, the semantics of the verb used, the topicality/referentiality of the participants, or the psychological perspective will determine the antecedent of the reflexive pronoun.<sup>34</sup> The topicality of the controller of the reflexive anaphor seems to be the key factor: the concept of psychological perspective is from Zubin, Chun, & Li 1990 and Li & Zubin 1990; it refers to the degree of access to the perceptual thought processes of the character in the text under examination. This is comparable to Kuno's (1976, 1987) 'empathy' hierarchies, which Van Valin (to appear, b) reduces to a single principle 'E(more topical NP) > E(less topical NP)', i.e., empathy is with the more topical NP.

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<sup>34</sup>The nature and use of *ziji* 'self' in Chinese is actually quite complex. See J. Sun 1989 and Zubin, Chun, & Li 1990 for more complete discussions. See §4.5, below, and Li & Zubin 1990 for more on psychological perspective framing.

The influence of context is especially clear from a comparison of (2.19a) and (2.19b), in which the clause containing *ziji* (*Lao Zhang ... gaosu Lao Wang ziji de erzi zai tou dongxi*) is the same in both examples, but the antecedent which controls *ziji* is different because of the different contexts:

- (2.19) a. Lao Zhang mingming zhidao Wang Huan (Lao Wang de erzi) ba neixie  
old Zhang clearly know Wang Huan old Wang GEN son BA those

lingjian nazoule, keshi yao zugou de zhengju cai neng gaosu Lao  
spare-parts take:leave but want sufficient REL proof then can tell old

Wang<sub>i</sub> ziji<sub>i</sub> de erzi zai tou dongxi.  
Wang self GEN son DUR steal thing(s)

Old Zhang clearly knew that Wang Huan (Old Wang's son) took those spare parts, but he needed sufficient proof before he could tell Old Wang that self's (Old Wang's) son was stealing things.

- b. Lao Zhang<sub>i</sub> mingming zhidao ta erzi ba neixie lingjian nazoule, keshi  
old Zhang clearly know 3sg son BA those spare-parts take:go but

gaosu Lao Wang ziji<sub>i</sub> de erzi zai tou dongxi, Lao Zhang ye  
tell old Wang self GEN son DUR steal thing(s) old Zhang also

daomei le.  
in-trouble ASP.

Old Zhang clearly knew his son took those spare parts, but (if he) told Old Wang that self's (Old Zhang's) son was stealing things, he would also be in trouble.

In the two examples, *ziji* refers to either Lao Wang (2.19a) or Lao Zhang (2.19b) because it is known from the respective preceding contexts whose son is doing the stealing.

The antecedent of *ziji* is determined by the semantics of the whole utterance, not the syntactic function of the antecedent or its position in the sentence. This being the case, reflexives also give us no evidence for establishing a subject in Chinese.

### 2.1.9. Pseudo-passives

A common sentence type in Mandarin is where no A role is expressed, and the P role NP is in initial position, as in (2.20):

- (2.20) Jiu he le.  
 wine drink ASP  
 I/you/he/she drank the wine.

These are often called passives<sup>35</sup> by those wishing to establish grammatical relations for Chinese (e.g. Tan 1988a, 1988b), and the initial NP is seen as the subject. This type of passive is only felicitous with inanimate patients; as there is no passive morphology, an animate noun in preverbal position would have to be interpreted as the agent of the verb unless intonation or some other clue informs the listener that it is the patient of the verb. An example of when it is logically clear that the sentence initial animate NP could not possibly be the agent is (2.21) (from L. Li 1986:347):

- (2.21) Ta qiechu le liuzi le.  
 2sg cut-out ASP tumor ASP  
 He cut out (his) tumor. (i.e., He had his tumor cut out.)

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<sup>35</sup>And given passive translations in English, e.g., (2.20) would be translated as 'The wine was drunk'.

An ambiguous case would be (2.22), the meaning of which only becomes clear when we know that Michael is only six years old.

(2.22) Michael zuijin mei qu zhao-xiang.

M. recently N-A go take-pictures

Michael hasn't taken pictures recently/ Michael hasn't had his picture taken recently.

It is clear from this that there really is no innate passive sense to the verb in this type of construction, and that in (2.20), *Jiu he le*, *jiu* cannot be a subject. It must then be a topical theme in an active sentence without an agent. A similar analysis is given in Li & Thompson 1976:479-450, and Li & Thompson 1981:498-499.

A good example to show that this type of construction is not passive is (2.23), which could be said if two old friends pass in the street and one doesn't notice the other. The person who was not noticed could call out

(2.23) Eh, Lao pengyou dou bu renshi            la!?

hey old friend all not recognize/know SFP

Hey, (you) don't recognize (your) old friend!?

To read this as a passive sentence would be inappropriate to the situation, as the emphasis is on the person addressed not recognizing the speaker rather than it being on the speaker not being recognized by someone.

Another example is the first two parts of the famous saying in (2.24), below, which would not make sense if considered to be passivized.

(2.24) Tian bu pa, di bu pa (zhi pa Guangdongren shuo Guanhua).  
 heaven not fear, earth not fear (only fear Cantonese speak Mandarin)  
 (I'm) not afraid of heaven or earth, (just afraid of a Cantonese speaking Mandarin).

Looking at (2.25), below, we can see another problem with the 'passive' analysis, pointed out by Lü Shuxiang (1986:340):

- (2.25) a. Wo bu he jiu, yi di ye bu he.  
 1sg not drink wine one drop even not drink  
 I don't drink wine, not even one drop.
- b. (Ni) bie guan wo, ni shei ye bie guan.  
 (2sg) don't pay-attention 1sg 2sg who also don't pay-attention  
 Don't pay attention to me, don't pay attention to anyone.

If we were to say that the first clause of (2.25a) is active, but the second clause is passive because the P role NP occurs in initial position, then the parallelism is thrown off. In (2.25b) the topic is animate, and so the actor (*ni*) must be expressed in the second clause or *shei* 'anyone' would be seen as the actor, and the meaning would be 'Don't anyone bother me' (or 'Nobody bother me'). Comparing the two examples, we can see that they are both meant to be parallel structures, and both clauses of both sentences are active.<sup>36</sup>

One last argument against establishing a subject in Chinese also involves this type of topic-comment structure. Givón (1984:145) states that 'one may ... view the grammar of subjectization as, in large part, the grammar of differentiating the subject from the direct

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<sup>36</sup>As Derek Herforth has pointed out (p.c.), the preverbal position of the P role NP is obligatory with *ye* 'also; even', and not related to an optional 'repackaging' (Foley & Van Valin 1985) strategy such as passivization.



object case-role.<sup>37</sup> If we look at the example below, we can see that as there are two topic positions in Chinese, first and second (after the A-role NP) position in the sentence.<sup>38</sup> The A and P roles are differentiated solely on the basis of semantics; there is no marking for which NP is the ‘subject’ and which is the ‘object’.

- (2.26) a. Zhangsan fan dou chi le.  
 Zhangsan rice all eat ASP  
 Zhangsan ate all the rice.
- b. Fan Zhangsan dou chi le.  
 rice Zhangsan all eat ASP  
 Zhangsan ate all the rice.

Chao (1968:325) gives the following ambiguous example:

- (2.27) Zhe ge ren shei dou bu rende.  
 this CL man who all not know
- a. Nobody knows this man.  
 b. This man doesn’t know anybody.

If we accept Givón’s statement, then since ‘subject’ and ‘object’ are not differentiated by the grammar, no subjectization has taken place.

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<sup>37</sup>Though see Hopper & Thompson 1980 for arguments on why P case marking should be seen as ‘functionally motivated by the Transitivity of the clause as a whole, rather than by the need to distinguish subject from P’ (p. 292).

<sup>38</sup>The case I am speaking of here is when there is both an A role NP and an P role NP in preverbal position—ignoring here the question of the *ba*-construction (see §2.2), time and location phrases, etc.

To summarize this section briefly, we have looked at cross-clause coreference, relativization, clefting, *bi* comparatives, raising to subject, indispensability, reflexives, and pseudo-passives, and have found no discernable pattern in any of these constructions that would support the recognition of a subject in Chinese.

## 2.2. The Question of 'Direct Object'

### 2.2.1. Introduction

This section deals with the question of whether there is a syntactic function 'direct object' in Chinese. As with the question of 'subject', there has been much discussion, but little resolution, often for the same reasons: confusion of syntax for semantics, or syntax for pragmatics. Again as with 'subject', 'object' is not a universal phenomenon (see for example Gil 1984, Collinge 1984), so we need to find a restricted neutralization of semantic roles in terms of behavioral and coding properties in order to say there is a grammaticalized direct object in Chinese.<sup>39</sup>

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<sup>39</sup>J. Anderson (1984:47) argues that the concept of 'object' is 'necessarily associated with subject-forming languages ... unless the notion can be generalized over all second-ranking derived relations, if any other such there be'. If this is the case, then showing that there has been no grammaticalization of 'subject' (§2.1) should obviate the need for a lengthy discussion of 'object', but as there are other opinions on the connection between 'subject' and 'object' (see for example S. Lü 1979:71, Gil 1984); and as the *ba* construction (the bulk of the following discussion) figures crucially in many analyses of Chinese grammar, I will assume it is necessary to delineate the arguments against the syntactic function of 'object' in Chinese.

### 2.2.2. Behavioral Properties

In terms of behavioral properties, many of the same tests we used for ‘subject’ above, such as relativization and indispensibility, apply equally well to the question of ‘object’. As we found no restricted neutralizations in any of the constructions considered, such as relativization, we have no behavioral evidence from those tests for a direct object in Chinese. One type of behavioral property unique to grammaticalized objects is ‘dative shifting’ (‘promotion to direct object’), a process where a non-direct object of a three argument verb is ‘promoted’ to direct object status (Givón 1984b). An example is English *John gave a dog to the boy* → *John gave the boy a dog*. These two possibilities are referred to as ‘alternate syntactic frames’ in Dixon 1989. Chinese does not allow such alternate syntactic frames, as is pointed out by Dixon (1989:99). With a small number of ditransitive verbs (those expressing ‘giving’ or ‘sending’), it is possible to have the goal argument in other than immediate post-verbal position by putting it in a second clause with *gei* ‘give’, but this breaks the sending and giving into two clauses/actions:

- (2.28) a. *Wo song haizi shu.*  
 1sg send child book(s)  
 I sent the child(ren) (a) book(s).
- b. *Wo song shu gei haizi le*  
 1sg send book(s) give children ASP  
 I sent (a) book(s) to the child(ren).

This alternate form is not possible with ditransitives where there is no actual giving, and is not possible with *gei* ‘to give’ itself:

(2.29) a. \*Wo gaosu yi jian shi gei ni.  
 1sg tell one CL affair give you  
 (I'll tell you about something.)

b. \*Wo gei yi zhi gou gei haizi.  
 1sg give one CL dog give child(ren)  
 (I gave a dog to the child(ren)).

There is also an alternant where the *gei* clause is placed before the verb, and this can be done with a wider range of verbs, but in this case the reading is a benefactive one:

(2.30) Wo gei haizi song shu.  
 1sg give child(ren) send book(s)  
 I sent (a) book(s) for the children.

In each of these cases the goal or beneficiary remains in immediate post-verbal (including *gei* as a verb) position, and does not take on the position (or markings) of a semantic object. If anything, what these constructions do is allow the P role argument to move to immediate post-verbal position, what could be considered the 'primary object' (Dryer 1986) position (a pragmatic status unrelated to syntactic functions).<sup>40</sup> I will say more about the concept of primary object in Chapter V; for now it will suffice to say that we have found no behavioral evidence for a direct object in Chinese.

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<sup>40</sup>Though Dryer (1986:824) gives Chinese as one of the languages that does not allow change of primary object status.

### 2.2.3. Coding Properties

In terms of marking properties, as undergoers can occur either preverbally or postverbally (see §3.4, below), and there is no agreement of any argument with the verb, to prove the grammaticalization of a direct object, we would need to find some type of unique marking that distinguishes the argument said to be the direct object .

It is often considered that the *ba* construction in Mandarin provides just this type of unique marking (see for example Sun & Givón 1985, who call *ba* the OM ('object marker')). In the *ba* construction, the particle *ba* occurs between two NPs and (usually) before a resultative verb complex:

(2.31) NP<sub>1</sub> *ba* NP<sub>2</sub> V<sub>1</sub> (V<sub>2</sub>) *le*

In this construction, V<sub>1</sub> is most often transitive, and V<sub>2</sub> is always intransitive or a movement/locative verb. NP<sub>2</sub> is then said to be the direct object of V<sub>1</sub> or the complex verb made up of V<sub>1</sub> and V<sub>2</sub> if there is a resultative complement, as in (2.32):

(2.32) Zhangsan *ba* yifu xi huai le.  
 Zhangsan BA clothes wash broken ASP  
 Zhangsan ruined the clothes washing them.

In this case, *yifu* 'clothes' is the P of the verb *xi* 'wash', and is the S of the stative verb *huai* 'broken'. This configuration is said to have developed out of a serial verb construction where the first verb (*ba*—which means 'hold' when it acts as a full verb) grammaticalized into a direct object-marking preposition or particle (Y.C. Li 1974; Lord 1982; Li & Thompson 1974a, 1974c, 1976b, 1981; Peyraube 1987, 1989). We need to

look more carefully, though, at the grammatical and semantic relations that hold between the constituents of a *ba* construction.

As has been pointed out elsewhere (Zhan 1983, Z. Ma 1985b), the post-*ba* position can be filled not only by a patient, but also by an agent, a locative, an instrument, or an NP that has no selectional relation to the verb, but is involved in the action. Consider the examples below (from X. Ma 1987:428-29):

- (2.33) a. Luobo ba dao qie dun le.  
 radish BA knife cut dull ASP  
 The radish made the knife dull (when I/you/he cut it).
- b. Ta ba bi xie tu le.  
 3sg BA pen(cil) write blunt ASP  
 He made the pen(cil) blunt from writing with it.
- c. Zhe bao yishang ba wo xi lei ie.  
 this package clothes BA 1sg wash tired ASP  
 Washing this pack of clothes has made me tired.
- d. Zhe xie shi ba toufa chou bai le.  
 this few affair BA hair worry white ASP  
 Worrying about these affairs has made (my/yours/his /her) hair turn white.
- e. Xiao Wang ba haizi dong bing le.  
 Little Wang BA child freeze sick ASP  
 Little Wang (did something such that his) child got sick from being too cold.

The examples above show several different possible relationships between the constituents of the *ba* construction: (2.33a) has the P of V<sub>1</sub> in initial position, the S of V<sub>2</sub> in the post-*ba* position, and no A argument specified; (2.33b) has the A of V<sub>1</sub> in initial position, the

instrument of  $V_1$ , which is also the S of  $V_2$ , in post-*ba* position, and no P argument specified; (2.33c) has the P of  $V_1$  in initial position, and the A of  $V_1$ , which is also the S of  $V_2$ , in post-*ba* position; (2.33d) has a non-argument topic in initial position, the S of  $V_2$  in post-*ba* position, and no core argument of  $V_1$  anywhere in the sentence; (2.33e) has the possessor of the S of both  $V_1$  and  $V_2$  in initial position and the S of both verbs in post-*ba* position.

As can be seen from these examples, there is no consistent relationship between the post-*ba* NP and the P of  $V_1$ . The only consistent relationship holding in these *ba* constructions is that between the post-*ba* argument and the S of  $V_2$ .

It might be argued that these verb complexes should be treated as single verbs, so the post-*ba* argument would then be the object of that single complex verb. That this would be incorrect can be seen from the fact that here cannot be, for example, a complex verb *xi-lei* 'to wash-tired', with clothes as the subject and a person as the object, as would be the case in (2.33c).

The relationship between the post-*ba* NP and the S of  $V_2$  only holds when there IS a  $V_2$ . In the following examples there is no  $V_2$ :

- (2.34) a. Wo ba ni de qian mai le shu le.  
 1sg BA 2sg GEN money buy ASP book ASP  
 I bought books with your money.
- b. Ta ba diren dang pengyou.  
 3sg BA enemy act-as friend  
 He takes enemies to be friends.

In each of these examples there is only one verb, and there is no regularity to the semantics of the post-*ba* NP: in (2.34a), the post-*ba* NP is an instrument; in (2.34b), the post-*ba* NP

is a locative (in the extended sense discussed in §1.2.4). The use of *ba* in (2.34b) changes a non-causative verb into a causative one by adding an extra argument to an otherwise equational construction. (See also exx. (2.38a,b) for similar semantics).

This lack of relationship with a specific semantic role is in concord with Tsao's (1987) analysis of the post-*ba* NP as a 'secondary topic', and with one of the functions of *ba* itself as clarifying the transitivity relation between the primary topic (the clause-initial NP) and this secondary topic. I believe Thompson (1973) is correct in being more explicit about the transitivity function of the *ba* construction.<sup>41</sup> This function is clear in examples such as the following ((2.35a) is from a love song; (2.35b) is from Li & Thompson 1981:469, their (27)):

- (2.35) a. Wo shou zai      Xishan      ba lang deng.  
           1sg stay LOC West-Mountain BA man wait  
           I stay at West Mountain and wait for (my) man.
- b. Ta ba xiao mao ai    de yao si.  
           3sg BA small cat love CD want die  
           S/He loves the kitten very much (i.e. 'so much s/he could die').

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<sup>41</sup>Thompson (1973) does call the post-*ba* NP the 'direct object', but of the whole sentence, not the verb, a somewhat broader notion of direct object (see also L. Li 1986:352 for a similar argument). Her 'semantic condition' on the use of *ba* is that '[a] NP<sub>i</sub> may be fronted with *ba* if the rest of the sentence answers the question, "What did the agent do to NP<sub>i</sub>?", that is, if it is semantically the "direct object" of the sentence' (p. 220). We can see from the examples above that the pre-*ba* NP is not always an agent, so this condition does not always hold in *ba* constructions. In other words, it would be more correct to say that something affects something else, with no reference to semantic role or grammatical function. For an analysis of the *ba* construction from the point of view of focus structure, see section 3.3.3.



Generally ‘wait’ and ‘love’ are not verbs of high transitivity, but to emphasize how much energy the woman/child is putting into waiting/loving, the *ba* construction is used. Li & Thompson (1981:469) offer the explanation that sentence (2.35b) ‘hyperbolically creates an image that such intense love must have some effect on the “small cat”’. From this example, though, we can see that *ba* here is intensifying the transitivity, but not intensifying the affectedness of the undergoer, as can be seen from the fact that the complement of result refers to the actor of the loving, not the undergoer. That the cat is not necessarily affected by the loving can be seen in the fact that the same sentence could be used about a fan loving a movie star that s/he had never met. Likewise, in the following example, it is the one doing the loving, not the one loved who can’t sleep:

- (2.36) Ta ba ni ai de shui bu liao jiao.  
 3sg BA 2sg love CD sleep not able sleep(n.)  
 She loves you so much she can’t sleep.

As pointed out by McCawley (1988b:6), it is also possible to have ambiguity as to who is being affected in a sentence of this type, as in (2.37):

- (2.37) Ta ba wo xiang si le.  
 3sg BA 1sg think die ASP  
 He misses me so much he could die / He makes me miss him so much I could die.

Another argument against seeing the *ba* construction as marking a direct object is that of the ‘retained’ object (a post-verbal object in a *ba* or *bei* construction—see Thompson 1973). Consider the examples below, both from Li & Thompson 1981:471:

- (2.38) a. Wo ba ta erzi huan le xingming.  
 1sg BA 3sg son change ASP name  
 I changed his/her son's name.
- b. Ta ba huo jia le yi-dian you.  
 3sg BA fire add ASP a-little oil.  
 S/He added a little oil to the fire.

In no sense could we say that *ta erzi* 'his/her son' is the direct object of *huan* 'change', or that *huo* 'fire' is the direct object of *jia* 'add'; (2.38a) is a case of possessor raising (Fox 1981), and there is no grammatical non-fronted form for (2.38b) without *ba* or *gei* to allow an added argument.

As we have found no consistency in the use of *ba* for marking an P argument, it cannot be used as evidence for the grammaticalization of the syntactic function 'direct object' in Chinese. We have, then, found neither behavioral or coding properties that could justify establishing the syntactic function 'direct object' in Chinese.

## 2.3. The Question of Voice in Chinese

### 2.3.1. Introduction

Related to the question of syntactic functions is the question of rules that can change syntactic functions. As passivization is one of the most common function-changing constructions cross-linguistically, and Mandarin is often said to have one or more passive constructions, in this section I will address the question of whether or not Mandarin Chinese has true function-changing passives. That is, we will discuss whether Chinese has passives where the meaning of the sentence is determined in the argument structure of the verb, so that in the lexicon there are pairs of related verbs, one active and one passive. We will see that Mandarin Chinese does not have this type of passive (contrary to the analysis in Tan 1988a, 1988b). Only if we look at passives from the point of view of pragmatics and define passives as constructions which defocus the actor and emphasize the affectedness of the undergoer or other constituent (Shibatani 1985; see also the 'non-promotional passive' discussed at Givón 1981b:169) can Chinese be said to have passives. The major difference between the syntactic and the pragmatic definitions is the specification of syntactic function rather than semantic or pragmatic role. We will see that in the sentences commonly referred to as 'passive' in Chinese, though there is an increase in the affectedness of a non-actor argument, and often a defocusing of the agent, there is no difference between 'active' and 'passive' in terms of the subcategorization or valency of the main verb.<sup>42</sup> That is, there is only one subcategorization frame for each verb in the

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<sup>42</sup>Noonan & Wook (1978) give a similar analysis for 'passives' in Lango. They distinguish between a structural passive and a functional passive, the latter being a rule that changes word order, certain referential properties and the 'orientation' of a sentence, but does not change grammatical functions. Even so, Foley & Van Valin (1985:326) still consider the Lango foregrounding structure to be a passive construction because of the

lexicon, the 'active' frame, and this is the same for all types of sentences. The shifts in focus and affectedness which give the sentences a 'passive' feeling are accomplished either through the use of a simple topic-comment structure with an unexpressed A role (see §2.1.9),<sup>43</sup> or through the use of a topic-comment structure with an added topic affectedness/focus structure marker, *bei*.

### 2.3.2 The Nature of Passives

Keenan (1975) gives the definition of relational passives in terms of the grammatical relations (GRs) 'subject of' (Su) and 'direct object of' (DO), such that in a passive '... (i) the active Su ceases to bear any GR to its verb and (ii) DO becomes Su' (p. 340).<sup>44</sup> To satisfy (i), the demoted Su will either be totally absent from the passive sentence, or it will appear as an oblique phrase. Because of (ii), passive sentences are intransitive, as the DO of the verb has become the subject.

The Lexical Functional Grammar (LFG) formulation of passives (Bresnan & Kanerva 1989; cf. Bresnan 1982a) is that the highest role of the verb on the thematic hierarchy (ag > ben/mal > go/exp > inst > th/pt > loc) is suppressed. Generally, this means

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cross-clause referential properties of the clause-initial NP (see arguments against this analysis for Chinese below, §2.3.6). The concept of changing pragmatic role without changing grammatical function is also discussed by Comrie (1988).

<sup>43</sup>Examples of the use of this type of non-passive foregrounding to achieve the foregrounding effect of a passive are given for Lakhota in Foley & Van Valin 1985:334.

<sup>44</sup>Marantz (1984:8-9) defines passives as cases where the 'logical object of a grammatically intransitive verb corresponds to the subject of the VP that the verb heads', but this is not sufficient for passives, as it is also the Lexical Functional Grammar definition of 'unaccusatives' (see for example Baker 1983).

an agent, which is said to alternate universally between SUBJ and OBL, will be mapped onto an oblique function, causing the theme, which is said to alternate universally between OBJ, OBJ<sub>f</sub>, and SUBJ, to take on the SUBJ function.

In Government-Binding theory, ‘a d-structure object moves to become an s-structure subject’ (Sells 1985:43), the external theta-role is suppressed, and the verb becomes intransitive (loses the ability to assign Case) (Sells 1985:58).

In Role and Reference Grammar, passivization ‘is a packaging variant in which a non-actor argument occurs as the pivot of a transitive verb’ (Foley & Van Valin 1985:306).

For Givón (1981b:168), the function of passives involves three functional domains:

- (i) **CLAUSAL TOPIC ASSIGNMENT:** “The subject/agent of the active clause ceases to be the TOPIC, and a non-agent argument of the active clause then assumes, by whatever means, the clausal-topic function”.
- (ii) **IMPERSONALIZATION:** “The identity of the subject/agent of the active is suppressed, by whatever means”.
- (iii) **DE-TRANSITIVIZATION:** “The clause becomes semantically less-active, less-transitive, more-stative”.<sup>45</sup>

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<sup>45</sup>This is a somewhat narrower definition of passives than the one given in Givón 1979a:

Passivization is the process by which a nonagent is promoted into the role of main topic of the sentence. And to the extent that the language possesses coding properties which identify main topics as subjects and distinguishes them from topics, then this promotion may also involve subjectivalization. (186)

By this definition we might say that Chinese has passives, but it is not clear how these would be distinguished from other topic structures (see Van Valin 1981b:63-64 for criticism of this definition).

If we are to find passives in Chinese, then, they should have the qualities mentioned above: the direct object (or other core argument which is not the actor) of the active clause should become the subject (pivot) of the passive one, the subject of the active clause should lose its status as a core argument of the verb, and the verb should become intransitive.

### 2.3.3 'Passivization' in Chinese

In Chinese there are two sentence patterns that are usually considered passive constructions.<sup>46</sup> The first type, the 'pseudo-passive', was discussed in §2.1.9.

The second type of 'passive' in Chinese will be the main focus of this section. It has the particle *bei* after the initial ('passivized') NP and before the agent, if there is one:

(2.39) John bei Mary da le  
           BEI      hit ASP  
           John was hit by Mary.

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<sup>46</sup>There is a third type that would be considered passive in the analysis of Langacker & Munro (1975), where a clause is embedded in a 'stative-existential' predicate with the 'object' taking the 'subject' position, and that is the *shi ... de* construction exemplified in (i):

(i) Zhangsan shi Lisi da de.  
           COP   hit NOM  
           Zhangsan was hit by Lisi./It was Lisi who hit Zhangsan.

This is actually not a passive, but a type of clefting that puts the agent NP in focus position when the topic is the P role (Li & Thompson 1981:499-500).

For many verbs, especially ditransitives, this type of construction cannot be used. When we try to produce the Chinese equivalents of sentences (2.41) and (2.42), the results are ungrammatical:

(2.40) Louise gave the children a book.

(2.41) A book was given to the children by Louise.

(2.42) The children were given a book by Louise

The equivalent of sentence (2.40) would be (2.43):

(2.43) Louise gei haizi shu.  
Louise give child(ren) book(s)

The equivalents of (2.41) and (2.42) would be (2.44) and (2.45) respectively:

(2.44) \*shu bei Louise gei haizi  
book(s) BEI Louise give child(ren)

(2.45) \*haizi bei Louise gei shu  
child BEI Louise give book(s)

The first problem we need to address is whether or not the agent can be made oblique. This is particularly important to the LFG lexical mapping formulation of the passive rule, in which the main function of the passive rule is to suppress the agent. ‘Suppression’ here means the agent does not get mapped into the syntactic function of subject. It then becomes oblique or is suppressed entirely. There are two problems with this in Chinese. First, for the agent to be oblique, it should be preceded by a preposition, yet the particle *bei* cannot properly be considered a preposition (see §2.3.7). Second, we

have seen above that there is no syntactic function of ‘subject’ in Chinese, so there is no reason to ‘suppress’ the agent (make it oblique) in order to make it a non-subject, and no means of doing this even if a reason were found. As we will see below, in these ‘passive’ sentences, the agent is clearly not oblique, as the verb is clearly not intransitive.

In LFG, the theme is considered to be ‘intrinsically’ classified either as ‘unrestricted’ or ‘objective’. The latter obtains when there is another unrestricted argument, the goal. Suppression of the agent leaves the goal as the highest unrestricted argument; it then becomes the SUBJ. We see that the goal cannot become the ‘subject’ in Chinese, as evidenced by (2.45). We also see that it is not possible for the theme to become the SUBJ (see (2.44)).

This is true for all ditransitive verbs. Looking at simple transitive verbs, such as *da* ‘hit’ in sentence (2.39), it seems at first glance as if the rule for passive does produce grammatical sentences, but we need to look further at the grammatical relations between the constituents of the sentence.

#### 2.3.4 Grammatical Relations in *bei* Sentences

Aside from the problem of ‘obliqueness’ mentioned above, if *bei* constructions are passives, what precedes *bei* should be the subject of the main verb (assuming for the sake of the argument that there is a subject, even though we were unable to find evidence of one in Chinese). This seems to be the case in (2.39) (reproduced below), but the situation becomes more complicated if we consider a more typical type of *bei* sentence, such as in (2.46).



(2.39) John bei Mary da le  
 John BEI Mary hit ASP  
 John was hit by Mary.

(2.46) John bei Mary da si le  
 John BEI Mary hit die ASP  
 John was beaten to death by Mary.<sup>47</sup>

In the latter case there is a resultative complement, where the S of *si* 'to die' is the P of *da* 'to hit'. If broken into two clauses, it would be the equivalent of 'John was beaten by Mary, John died.' In a single clause, the way it is here, these grammatical relationships still hold, so if we assume that *John* is the subject of *da* because *da* is made passive by *bei*, and it is also the subject of *si*, then it is difficult to explain the control relationship in a sentence with a pronoun anaphorically bound to the initial NP, as in (2.47):<sup>48</sup>

(2.47) John bei Mary ba ta da si le  
 John BEI Mary BA him hit die ASP  
 John was beaten to death by Mary.

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<sup>47</sup>I am using English passives to translate the *bei* sentences, because that is the custom, but the actual meaning is closer to 'John suffered Mary's beating him to death'. The *bei* construction developed historically from just this type of construction (NP + *bei* 'suffer' + nominalized V?) (cf. Peyraube 1988, 1989). This is why Hashimoto refers to this as an 'inflictive' construction (see §2.3.8 below).

<sup>48</sup>It is possible within the theory of LFG to have an object instantiated both by a pronoun and by a lexical noun, because a pronoun can lose its semantic attribute (the pronominal status marked by PRED) while keeping its grammatical attributes (NUM, PERSON, etc.), as the latter are not unique with each instantiation. (Bresnan and Mchombo 1987:53). For an explanation of the *ba* construction, see §2.2 above.

In this case, it is clear that *John* is the P of *da*. Otherwise, as *John* and *ta* ‘him’ (which is non-reflexive) are anaphorically bound within the same clause (according to the passive analysis), *John* would be both the subject and the object of *da*, violating the LFG function-argument biuniqueness condition, which states that ‘each lexical role is associated with a unique function, and conversely’ (Bresnan 1987:3). The control relation and voice of the verb in sentence (2.47) are the same as those for a topicalized form. It is possible to express the same meaning as sentence (2.47) simply using a topicalized structure:<sup>49</sup>

(2.48) John, Mary ba ta da si le  
 John Mary BA 3sg hit die ASP  
 John, Mary beat him to death.

The only difference between the structure of (2.48) and that of (2.47) is the existence of the particle *bei* in the latter. In both cases the topic, *John*, is the P of *da* and the S of *si*, though *John* is slightly more ‘affected’ in (2.47). *Bei* emphasizes that something has affected the sentence-initial NP in some way, and clarifies the transitivity relations (who has affected whom). In emphasizing the affectedness of that NP, *bei* is similar to passives in other languages, but in the case of *bei* there isn’t the change of grammatical relations that is involved in passivization in other languages. There is also no detransitivizing. According to the transitivity parameters in Hopper & Thompson 1980, passives are detransitivizing<sup>50</sup>

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<sup>49</sup>In most theories (see for example Foley & Van Valin 1985), sentence (2.48) would be an example of left-dislocation rather than topicalization, because of the presence of the pronoun which refers to the topic, but I am using ‘topicalization’ in a broader sense to simply mean any structure where there is a non-agent in preverbal position, either in sentence initial position or in second position (after a preverbal actor), whether or not there is an anaphoric pronoun in the normal argument slot.

<sup>50</sup>See also Dryer 1986:819, where they are seen as ‘valence-decreasing’.

and (at least in English) they generally take inanimate subjects (data from Svartvik 1966). According to them also (and Thompson 1973), the *ba* construction is a highly transitive construction. If *bei* sentences were to be seen as passives and so detransitivizing, why would they be used with a transitivity *ba* construction? Also, contrary to the case for English passives, animate pre-*bei* NPs are very common.<sup>51</sup> Let's look at some more facts about *bei* sentences.

In *bei* sentences, it is possible to drop the agent,<sup>52</sup> but not *bei*:

- (2.49) John bei da si le.  
 John BEI hit die ASP  
 John was beaten to death.

If *bei* were removed, *John* would have to be interpreted as the agent of *da*, and so would be the one doing the hitting rather than the one being hit. The *bei* particle informs the listener that *John* is not the agent, but is the receiver of the action. In topicalization, a pause is necessary after the topic to mark it as such. This pause is not necessary when the sentence-initial NP is clearly a topic because of its inanimacy or the presence of the particle *bei*.

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<sup>51</sup>Though I have not yet done a thorough discourse study on the use of the *bei* sentence, my guess is that contrary to the use of passives in languages such as English, the *bei* sentence would be used in foregrounded clauses (in the sense of Hopper 1979), which 'generally refer to events which are dynamic and active' (Hopper 1979:215).

<sup>52</sup>This is only true of 'passive' sentences with *bei* or *gei*; if the more colloquial verbs *jiao* or *rang* are used instead of *bei* or *gei*, then the agent can not be omitted (Chappell 1986a:1037 and sources cited therein). Chappell states that these constructions are 'unconditionally agentful and adversative'. Chappell refers to these constructions as passives, but defines them in terms of affectedness, i.e. pragmatically, with the adversative meaning being a function of the whole construction, not any particular lexical item.

Further evidence that the pre-*bei* NP is a topic rather than a subject, and that the verb is still in the active voice, is the existence of sentences where there is a direct object (the 'retained object' discussed in connection with the *ba* construction above, §2.2.3) after the verb, and the pre-*bei* NP is not an argument of the verb:<sup>53</sup>

(2.50) *muji bei lang chi le yi zhi xiao jir*  
 mother-hen BEI wolf eat ASP one CL little chick  
 The mother hen had one of her chicks eaten by a wolf.

(2.51) *John bei wo ge le ta (de) yi zhi shou*  
 John BEI 1sg cut ASP 3sg (GEN) one CL hand  
 John had a hand cut off by me.

In these examples, if the NP + *bei* part of the sentence is removed, what is left is still a full sentence, clearly with the active voice:

(2.50') *lang chi le yi zhi xiao jir*  
 wolf eat ASP one CL small chick  
 The wolf ate one chick.

(2.51') *wo ge le ta de yi zhi shou*  
 1sg cut (off) ASP 3sg GEN one CL hand  
 I cut off one of his hands.

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<sup>53</sup>These sentences are examples of possessor-ascension (Fox 1981) in Chinese. There is a genitive relationship between the topic and the post-verbal argument. Chappell (1986b) argues that this postverbal argument is not an undergoer separate from the sentence initial NP. This view I believe is due to confusing the topic (the sentence initial NP), what the assertion is about, with the arguments of the verb. In the case of (2.50), clearly the chick that was eaten was a separate entity from the mother hen, and the mother hen was not affected in the same way as the chick.

It can be seen that in (2.50), *muji* 'mother-hen' is neither the 'subject' or the 'direct object' of *chi* 'eat', but is affected by the action of the wolf eating a chick. This fact and the fact that the agent of *chi* is not oblique in these sentences violates both the conditions for passive structures given above.

L. Li (1986:348) presents example sentences where the instrument of the action is in topic position ((2.52)), and other examples with almost the same structure, but which include the particle *bei* ((2.53)):

(2.52) shengzi wo kun le xiangzi le  
 rope 1sg tie ASP box ASP  
 I tied the box with the rope.

(2.53) shengzi bei wo kun le xiangzi le  
 rope BEI 1sg tie ASP box ASP  
 I tied the box with the rope.

In this type of construction, not only is the pre-*bei* NP not a subcategorized core argument of the verb, it is not even the possessor of a core argument. This is a serious problem for any passive analysis of the *bei* construction. As Foley & Van Valin (1985:303) point out, 'passive is a syntactic device which only affects core arguments'. Topicalization, though, is not restricted to core arguments.

A type of *bei* construction where it is not possible to delete the agent is one where there is an instrumental adjunct clause (example from McCawley 1988b):

(2.54) Zhangsan bei Lisi/\* $\emptyset$  yong gunzi da le.  
 Zhangsan BEI Lisi use stick hit ASP  
 Zhangsan was hit with a stick by Lisi.

The post-*bei* part of this sentence is a serial verb construction (core coordination) where the shared argument is the agent of both verbs, *yong* ‘use’ and *da* ‘hit’. Both verbs are transitive, as each has a separate patient argument.

In sentences such as (2.55), and (2.49), above, the structure is as in (2.56):

(2.55) Zhangsan bei reng zai di shang.  
 Zhangsan BEI throw LOC ground top  
 John was thrown to the ground.

#### (2.56) TOPIC BEI V COMPLEMENT

In these examples, the topic is both the P of the main verb and the S of the verbal complement.<sup>54</sup> This same construction can also take certain intransitive verbs in the V slot, though with intransitives, the pre-*bei* topic is not an argument of the main verb. It may be either the S of the complement, or, such as in a sentence such as (2.57), below, it may have the same type of genitive/partitive relationship to the S of the complement<sup>55</sup> that it has

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<sup>54</sup>Though it may appear from (2.55) that the complement is not verbal because in English the locative phrase takes a preposition, in Chinese the locative and other verbs that appear in this position, such as *jin* ‘enter’, *chu* ‘exit’, *diao* ‘fall’ (see (2.57)) are verbs and not prepositions (they can take aspectual particles, etc.).

<sup>55</sup>Achievement verbs such as *diao* ‘fall’ in this example are the Chinese equivalents of ‘unaccusative’ verbs, as discussed in Perlmutter 1978 and Van Valin 1990 (see the latter for details on the aspectual basis for ‘unaccusativity’ or ‘split intransitivity’). The single argument of this type of verb is an undergoer of a stative predicate, and because of this can either precede or follow the verb, or, if the argument is a possessor-possessed phrase, it can be split, with the possessor preceding the verb and the possessed following the verb, as it is in example (2.57). See Chapter III for the conditions on this.

to the matrix postverbal object in sentences such as (2.50) and (2.51). It is not the P of the main verb, as the main verb has no P role, and it is clearly not the subject of the main verb:

- (2.57) *xianglian bei ta pao diao le san ke zhuzi.*  
 necklace BEI 3sg run lose/drop ASP three CL bead  
 The necklace dropped three beads because of her running.  
 (This example from Tan 1987:285)

The ‘active’ form of this sentence would then be as in (2.58):

- (2.58) *ta pao diao le xianglian de san ke zhuzi.*  
 3sg run lose/drop ASP necklace GEN three CL bead  
 He/she lost three beads of (her) necklace because of (her) running.

Another type of *bei* sentence where there can be a post verbal object is when the pre-*bei* NP is a location:<sup>56</sup>

- (2.59) *di shang bei sa le hao duo shui.*  
 ground top BEI sprinkle ASP very much water  
 On the ground was sprinkled a lot of water.

In this example, what is topicalized is an adjunct, so it is not bound to anything else in the sentence. The ‘active’ equivalent would be (2.60):

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<sup>56</sup>In sentences where the locative phrase is not topical, it must take the locative verb *zai*, as in (2.60). In (2.59) the locative phrase is topical, so does not include the locative verb *zai*. As Hanson (1987:107) has pointed out for French, ‘In topic constructions, when the argument to which a topic is bound is one which could be expressed as a prepositional phrase, a preverbal topic constituent will not include the preposition ...’ In Chinese, not only is this true for *zai*, but also for other prepositions, such as *gen* ‘with’ (see Lü 1986 for examples).

- (2.60) wo zai di shang sa le hao duo shui.  
 1sg LOC ground top sprinkle ASP very much water  
 I sprinkled a lot of water on the ground.<sup>57</sup>

### 2.3.5. Discussion of §2.3.1—2.3.4

All of the *bei* examples given above express a type of passive meaning, if we take topicalization or defocusing of the agent as the main pragmatic function of passives (Shibatani 1985:837), and do not define passives in terms promotion to subject. The topic is always affected in some way by the action of the main verb,<sup>58</sup> but it is not always anaphorically bound to, or functionally identified with, the P role (or any other argument) of the verb. It can also just functionally control the S or the P of the verbal complement, be in a genitive relationship with the P of the verbal complement, or it may not be an argument of any verb in the sentence, as in examples (2.53) and (2.59).

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<sup>57</sup> A note on *zai* constructions: in general, a pre-verbal *zai* marks the location of the action of the main verb, as in (2.60); a post-verbal *zai* is a verbal complement which marks the location of the object of the main verb after it has been acted upon, as in (2.55) (H. Wang 1957), but see Zhu 1979 and Solnit 1981 for discussions of possible ambiguity of locative scope.

<sup>58</sup> Shibatani (1985:841) says that it is this affectedness of what he calls the ‘passive subject’ that leads to the use of passive structures for indirect affectedness, as in those sentences with post-verbal objects given above. He gives examples of similar indirect ‘passives’ in Japanese and Korean. It is important to note that in those languages, which both have clear marking of topic vs. subject, what Shibatani calls the ‘passive subject’ is clearly marked as a topic, and adversative ‘passives’ (at least in Japanese) increase the semantic transitivity of the sentence (Cameron 1989).



We can see from all of these examples that the pre-*bei* NP is not the subject of the main verb; the syntactic functions in ‘passive’ sentences, if there can be said to be any, are no different from those in ‘active’ sentences. There is then no promotion of object to subject, no intransitivization of the verb, and no change of argument status for the agent. We see then that there are no passives in Chinese, only configurational highlighting of the affectedness of a non-actor referent; all verbs are active, and the ‘passive subjects’ are topics.

### 2.3.6. Cross-Clause Coreference

One further argument involves the pivot status of the initial NP in a pseudo-passive construction and the pre-*bei* NP in a *bei* ‘passive’. As mentioned in §2.1.2, a pragmatic pivot, the kind of pivot a foregrounding, or pragmatic, passive would have, should control cross-clause coreference. In fact referent-tracking is the main discourse function of foregrounding passives (Van Valin 1987). But of the four types of referent tracking used in the world’s languages (switch-function, switch-reference, gender/number/noun class marking, and inference—see §4.2, below), Chinese exclusively uses inference (Li & Thompson 1978, 1979, Chen 1986, Cheng 1988; see Cheng 1988 also for a correction of some of Li & Thompson’s (1979) data).

Well defined subjects and voice distinctions are necessary in a switch-function language such as English because ‘[c]oreferential zero anaphora is possible only on a “subject” to “subject” basis, and consequently for this system to operate, it must be possible for the NP referring to the participant being tracked to be the “subject” of its clause’ (Van Valin 1987:528). Topicalization and left-dislocation, on the other hand, have very different functions than (foregrounding) passives: topicalization and left-dislocation

mainly introduce or reintroduce referents into a discourse, while passives 'are involved in the presentation of alternative choices for the pivot of a clause' (Foley & Van Valin 1985:356). As there is no grammatical subject, and referent tracking does not make reference to syntactic function in Chinese,<sup>59</sup> voice distinctions are not necessary for referent tracking.

We now turn to cross-clause coreference and 'passives' in Chinese. In Foley & Van Valin's (1985:326) discussion of Lango (see footnote 42), the placing of a non-actor core argument before the actor argument, without any other change in the clause, is categorized as a type of foregrounding passive because the fronted argument has control of cross-clause properties,<sup>60</sup> i.e., it becomes the pragmatic pivot. Though the Lango fronting construction is similar to the Chinese pseudo-passive or *bei* constructions in structure (the only difference being that the fronted NP is not always a core argument in Chinese), the topicalized NP in the Chinese constructions does not necessarily control cross-clause coreference, as evidenced in (2.61) and (2.62):

- (2.61) Wo jintian bu neng kan dianying zuoye mei zuo wan, mei banfa chuqu.  
 1sg today not able see movie homework N-A do finish N-A method go-out  
 I can't (go) see a movie today (I) haven't finished (my) homework, (so) (there is)  
 no way (I) can go out.

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<sup>59</sup>If anything, it is the topic that is most important in the determination of zero anaphora (Tao 1986; Cheng 1988—see below, Chapter IV).

<sup>60</sup>Hopper & Thompson (1980) consider this type of structure (which is somewhat similar to that in Tagalog) as distinct from what are uncontroversially called passives (such as in English) because the former is high in transitivity while the latter is low in transitivity.

- (2.62) Gongzuo zhanshi ting le diannao dou bei tou le;  
 work temporary stop ASP computer all BEI steal ASP  
 Work has temporarily stopped; all (of our) computers were stolen,  
  
 dei deng xin de diannao lai.  
 must wait new GEN computer come  
 (so) we must wait for new ones to come.

In (2.61) the second clause is a pseudo-passive construction, and we can see that the (secondarily) topicalized NP of that clause (*zuoye* ‘homework’) does not control the zero pronoun in the last clause; there is a zero pronoun in the second clause that corresponds to the zero pronoun in the last clause, and both of these are controlled by the referent of *wo* ‘1sg’. In (2.62) there is a *bei* construction in the second clause, and again we see that the supposed ‘passive subject’ does not control the zero pronoun in the following clause. We see then that the initial NP is not a pragmatic pivot, and this should not surprise us, as we have seen above that there are no pivots in Chinese. This being the case, we would be surprised if Chinese HAD a pragmatic passive, as this type of passive is ‘found only in languages which have [pragmatic pivots]’ (Foley & Van Valin 1985:332).

### 2.3.7. The Nature of the Particle *bei*

It is difficult to determine what the actual status of *bei* is; there is evidence that it is no longer a full verb (e.g. cannot occur alone), but the evidence is not conclusive that it is a preposition, as is considered by Alain Peyraube (1988). Peyraube (p. 31) argues that *bei* should be seen as a preposition when it is followed by an agent NP because it is different from other verbs that occur in the V1 slot of NP1 + V1 + V2 (+NP2) structure, in that ‘(i) *bei* cannot be followed by any aspectual marker; (ii) *bei* cannot be reduplicated; (iii) the construction in *bei* cannot allow the V2 to be preceded by negation’. He also sees *bei* as a

verb when it does not have a following agent NP, but as a preposition when it does have one.

There are a number of problems with Peyraube's analysis of the history of the *bei* construction. He sees *bei* as simply replacing the earlier 'passive' marker *jian* (a verb), then taking a post-*bei* agent, with the resulting structure being the type of serial verb structure which allows the first verb (*bei*) to grammaticalize into a preposition. My hypothesis is that the *bei* construction was first a verb followed by a simple NP, then later was able to take an embedded nominalized VP as an argument, similar to the use of *shou* 'receive; suffer' today (see ex. (2.66), below). *Bei* then lost some of its verbal characteristics, but the characteristics above do not prove it is a preposition.<sup>61</sup> Looking at point (i) mentioned above, we see that there are uncontroversial verbs that can not be followed by an aspect marker, such as *yao* 'want':

- (2.63) a. *Wo yao ta qu.*  
 1sg want 3sg go  
 I want(ed) him/her to go.
- b. \**Wo yao le ta qu.*  
 1sg want ASP 3sg go
- c. *Wo mei yao ta qu.*  
 1sg N-A want 3sg go  
 I didn't want him/her to go.

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<sup>61</sup>If indeed there is a category of prepositions in Chinese. See Ross 1984b for arguments against the establishment of such a category. (Matisoff, to appear, has coined the word *verposition* to capture the half-verbal-half-prepositional nature of these function words derived from verbs.)

We can see from the last example that though *yao* cannot be followed by the aspect marker *le*, it can be PRECEDED by the aspect marker *mei* (*you*), which has the same function as *le*, except that it marks a negative.<sup>62</sup> The same cooccurrence restrictions are true for *bei* as well:

(2.64) a. \*Ta bei le da si.  
3sg BEI ASP hit die

b. Ta mei bei da si.  
3sg N-A BEI hit die  
He/She didn't get beaten to death.

Peyraube's point (ii) is also not unique to *bei*; it is true of any verb that takes a clausal complement, as does *bei*. Again we can use *yao* 'want':

(2.65) a. \*Wo yao-yao ta qu.  
1sg want -want 3sg go  
I want(ed) him/her to go.

Point (iii) is also of no use in trying to prove the prepositional nature of *bei*, as this is also true of the verb *shou* 'receive; suffer':

(2.66) a. Women zu shou Lao Wang zhihui. (Lü 1980:442)  
1pl group receive Old Wang direction  
Our group received direction from Old Wang.

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<sup>62</sup>A more exact definition is given in Light 1989, where *le* is seen as marking change, and *mei* is seen as marking the non-initiation of change. See also W. S-Y. Wang 1965 on *le* and the *you* in *mei*(*you*) as suppletive alternants of the same morpheme.

- b. \*Women zu shou Lao Wang bu zhihui.  
 1pl group receive Old Wang NEG direction

We see then that Peyraube's arguments for seeing *bei* as a preposition, if we were to accept them, would lead us to include *yao* 'to want' and *shou* 'to receive' in our category of prepositions. Because of this, it would seem safer to say that these arguments, while they may show the type of cooccurrence restrictions on *bei*, are not evidence that *bei* is a preposition.

Another reason for not considering *bei* a preposition was pointed out by M. J. Hashimoto (1968:66): *bei* can appear without a following agent noun phrase. If we were to agree that *bei* is a preposition, this would mean that this preposition could appear without a following NP, something no uncontroversial preposition can do.<sup>63</sup> Peyraube gets around this by stating that 'nothing obliges us to consider *bei* as a preposition when it is immediately followed by a verb. This *bei* is still a verb and has not been grammaticalized' (1988:31). It seems highly unsatisfactory to me to be able to have two *bei* sentences exactly alike except for the presence of the agent NP, and to say that *bei* is a full verb in one, but a fully grammaticalized preposition in the other.

From a careful survey of sixty languages, Nichols (1986) elucidates the distinction between head-marking and dependent-marking languages,<sup>64</sup> and the consequences of this typological distinction. Though Nichols did not explicitly discuss Chinese because of its

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<sup>63</sup>According to Tao 1986, *bei* and *gei* are the only two 'prepositions' (Tao uses the term 'coverbs') that can take a zero object.

<sup>64</sup>This typological distinction is based on whether the morphological marking of grammatical relations, if there is any, appears on the head or dependent member of the constituent (or on both). The difference provides a functional explanation for certain aspects of grammar and word order. See Nichols 1986, 1989 for details.

lack of morphology, she feels (personal communication) it should be possible to classify languages without morphology as either head-marking or dependent-marking based on the structure of phrases (rather than the structure of words). Given the match between the syntactic patterns given for dependent-marking languages in Nichols 1986 and those of Chinese, then, it should be possible to classify Chinese as dependent-marking. If this is the case, then it is highly unlikely that *bei* without an agent is an endocentric prepositional phrase where the dependent has been deleted, as generally only head-marking languages have endocentric PPs (Nichols 1986:110).

The facts argue against seeing *bei* as a preposition, but I am not arguing that it is still a full verb. It is somewhere between the two. That is, there has not been a complete syntacticization in the sense of Comrie 1988a. Comrie makes a distinction between 'grammatical encoding' and 'syntacticization'. Grammatical encoding is '... the formal encoding of a given pragmatic or semantic distinction, with no implication of departure from the strict semantic or pragmatic definition of that distinction. Syntacticization refers to a syntactic distinction that cannot be reduced to semantics, pragmatics, or a combination thereof' (p. 4). The *bei* sentence then seems to be an example of 'grammatical encoding' (as defined by Comrie) of the pragmatic topicality of the referent of the pre-*bei* NP.

### 2.3.8. Other Analyses

The idea that Chinese does not have passives is not new. Y. R. Chao (1968) said explicitly that Chinese verbs do not have a voice distinction. But his explanation of passive-like sentences is quite different from the one presented here. He analyzed Chinese verbs as having 'direction ... outward from the subject as actor or inward towards the

subject as goal' (p.702).<sup>65</sup> The *ba* and *bei* constructions then function to disambiguate direction outward or inward respectively. This analysis is only possible, though, because of Professor Chao's analysis of 'subject' as whatever comes first in the sentence (see §2.1.1). My analysis is similar only in that I agree that *ba* and *bei* have a disambiguating function in some contexts.

The previous analysis that is closest to mine is that of M. J. Hashimoto 1968 (and also A. Y. Hashimoto 1971), where the *bei* construction is seen as an 'inflictive' construction rather than a passive construction, and is formed by embedding an active sentence into a matrix sentence with the structure 'NP(SUBJECTIVE) + *bei* (VERB) + S(COMPLEMENT)' (p. 66). The condition on this embedding is 'that a nonsubject NP in the embedded sentence must be identical with the subject NP of the Matrix sentence' (p. 68). Hashimoto also refers to the pre-*bei* NP as a 'topic phrase' (p. 68), I assume vis-à-vis the main verb, but he marks *bei* as a verb.

## 2.4 Conclusion

We can see from the arguments above that there has been no grammaticalization of the syntactic functions 'subject' and 'direct object' in Chinese, and that there is no function changing rule of passivization. This leads me to the conclusion that the fact that there is no morphological marking of syntactic functions is not because of some historical accident or strange quirk of the Chinese language or people, as is often assumed, but is precisely because there are no grammaticalized syntactic functions to mark.

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<sup>65</sup>The less radical applications of this concept were further developed in Y-C. Li 1981.



## Chapter III

### On the Grammaticalization of Information Structure

#### 3.1. Introduction

In Chapter II, I argued that Chinese has no identifiable 'subject' or 'object' and no (syntactic) function-changing passive because Chinese is a (semantic) 'role-dominated' language, that is, one where there has been no grammaticalization of syntactic functions. What HAS happened in the development of Mandarin Chinese is the topic of this chapter. This is the grammaticalization of information structure. Though writing about a situation that exists for French and Italian, in the following quote Lambrecht (1986:38) could have been talking about Chinese:

It is interesting to observe that the difference in the pragmatic status of the NP referent as being either already present in the universe of discourse or not is not only expressed by the choice of lexical vs. pronominal encoding but also by the position of the NP in the sentence ... We thus notice a series of correlations between (i) presence of a referent in the universe of discourse, pronominal coding, preverbal position and topic status, and (ii) previous absence of a referent, lexical NP coding, postverbal position and focus status. We may draw from these correlations the preliminary conclusion that certain pragmatic differences having to do with the contrast between the text-external and the text-internal world are formally reflected in the morpho-syntactic structure of the sentence.

As Li & Thompson (1978:687) argue, 'word order in Chinese serves primarily to signal semantic and pragmatic factors rather than grammatical relations such as subject, direct object, indirect object' (see also Li & Thompson 1981:19 for similar arguments). The

importance of 'topic' in Chinese has been discussed at great length (e.g. Li & Thompson 1974b, 1976a, 1981; Barry 1975; Tsao 1979), but the importance of 'focus structure' (see definition above, §1.2.3) in determining syntactic structure has not previously been shown. What I explore then in this chapter is what Li & Thompson earlier (1975) referred to as the 'semantic' function of word order and its relation to the grammaticalization of certain marked focus structure constructions in Chinese. Both are involved in 'the tailoring of an utterance by a sender to meet the particular assumed needs of the intended receiver' (Prince 1981:224). In §3.2 we will examine previous approaches to the nature and function of word order in Chinese and attempt to build them; in §3.3 we will discuss constructions that involve marked focus structure and some of their uses in discourse.

### **3.2. The Function of Word Order in Chinese**

In this section we critically examine several principles or tendencies of Chinese word order proposed by various scholars. In §3.2.1, I discuss the relationship between 'definiteness' and word order, and suggest an alternative organizational principle for explaining the nature of word order in Chinese; in §3.2.2, I discuss the merits and limitations of the Principle of Temporal Sequence proposed by James H-Y. Tai; in §3.2.3, I point out the inadequacies of the view that preverbal word order is always contrastive; in §3.2.4, the Whole-before-part Principle is discussed; and in §3.2.5, the 'active'-'virtual' contrast proposed by Shou-hsin Teng is examined and found to be uninvolved in the determination of word order in Chinese.

### 3.2.1. The Question of ‘Definiteness’

#### 3.2.1.1. Introduction

Mulie (1932:160-168) was the first to outline the correlation between ‘definiteness’ (what he referred to as ‘determinateness’) and preverbal position, and between ‘indefiniteness’ (‘indeterminateness’) and post-verbal position, for the single argument of intransitive verbs.<sup>66</sup>

Y. R. Chao (1968:76-77) states that ‘there is a very strong tendency for the subject to have a definite reference, and the object to have an indefinite reference’, but it is ‘... not so much the subject or object function that goes with definite or indefinite reference as position in an earlier or later part of the sentence that makes the difference’. Zhu 1982, Liu 1983, and Teng 1975 also give similar analyses. It is significant that each of these scholars state the tendency with hedges; each recognized the weakness of the generalization. (For examples that violate this tendency (i.e., have ‘indefinite’ sentence initial NPs) see Fan 1985.)

In Li & Thompson 1975, an attempt is made to formalize this relationship between word order and the definiteness of the referents of a sentence in Chinese. They give the following ‘tendency’ (p. 170):

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<sup>66</sup>Mulie’s analysis was quite insightful, as he saw that what determined word order for intransitives was not accurately captured by the use of the terms ‘determinate’ and ‘indeterminate’ (‘definite’ and ‘indefinite’); he also understood the use of having the ‘subject’ of intransitives in post-verbal position ‘when “a state of affairs” or “an action”, thus the verb rather than the subject, is emphasised’ (1932:166) (see §3.3.2, below, on the event-central thetic sentence); and he understood the possible (though not always necessary) use of the ‘circumlocution’ of the presentative construction for ‘indeterminate’ ‘subjects’ of transitive verbs.

**TENDENCY A:** Nouns preceding the verb tend to be definite, while those following the verb tend to be indefinite.

Tendency A is an overgeneralization, so Li & Thompson propose a set of refinements (list from p. 184):<sup>67</sup>

**REFINEMENT 1:** The noun in postverbal position will be interpreted as indefinite unless it is morphologically or inherently or non-anaphorically definite.

**REFINEMENT 2:** A sentence-initial noun must be interpreted as definite, and may not be interpreted as indefinite even if it is preceded by the numeral *yi* 'one'.

**REFINEMENT 3:** The noun following *bei*, although pre-verbal, is immune to Tendency A.

**REFINEMENT 4:** Nouns in prepositional phrases are immune to Tendency A.

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<sup>67</sup>The need for at least two of these refinements is due to Li & Thompson's analysis (cf. Li & Thompson 1974a) of *bei*, *zai*, and other phrase-forming morphemes as prepositions. If instead we recognize (as Li & Thompson themselves do in some of their other papers) that these morphemes, which in Old Chinese, and in some cases also in Modern Chinese, are verbs, are still not completely grammaticalized (see for example the discussion of the nature of *bei* above, §2.3.7), we can do away with Refinements 3 and 4.

This tendency has been supported by data from quantitative discourse analyses of Chinese texts, such as Sun & Givón 1985<sup>68</sup> and Wang 1988.

Though there is this tendency, Li & Thompson point out that

[t]here is by no means a strict correlation between the definite interpretation of a noun and its position relative to the verb ... [W]ord order plays a significant and systematic role in distinguishing definite from indefinite nouns, although it is not the only means by which definite and indefinite nouns may be distinguished from each other. (1975:184-5)

As Li & Thompson recognize in their discussion of Tendency A, there are two parts to the question of 'definiteness' in Chinese: (1) the coding on the NP, and (2) what they consider to be coding by position of that NP in the sentence. We will look at each of these separately to see if they are really two parts of the same thing.

### 3.2.1.2. Representations of Discourse Referents

Each type of discourse referent in Chinese may be represented in several ways. A referent that is active<sup>69</sup> will often be represented by a zero or overt pronoun, but can also be

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<sup>68</sup>Sun & Givón (1985) actually claimed to have DISPROVED Tendency A with a quantitative discourse analysis of both written and oral texts, but Nichols (1988a) has shown that when run through the relevant statistical tests, Sun & Givón's own data SUPPORT Tendency A. A similar study (Wang 1988) done with the same methodology used by Sun & Givón came up with results that also support Li & Thompson's hypothesis.

<sup>69</sup>See §1.2.3.2 for the definitions of the terminology used in this section.

expressed as a bare lexical NP or one preceded by a genitive phrase or by a deictic pronoun.<sup>70</sup>

(3.1) A: Zhangsan<sub>i</sub> jintian lai guo ma?  
 Zhangsan today come ASP QP  
 Has Zhangsan come (in) today?

B: Ø<sub>i</sub> mei you, keshi (ta<sub>i</sub>) yi huir hui lai, [ta<sub>i</sub> de chezi]<sub>j</sub> you wenti.  
 N-A ASP but (3sg) one time will come 3sg GEN vehicle have problem  
 No, but he'll be in in a little while, his car has a problem.

A: (([Ta<sub>i</sub> de) chezi]<sub>j</sub>) you you wenti le! Ø<sub>j</sub> zhen shi lan huo.  
 ((3sg GEN) vehicle) again have problem ASP really COP rotten goods  
 His car has problems again! It's really a piece of junk.

In this example, Zhangsan is inactive in the first utterance, but after being mentioned is then active in the second utterance and so can be represented as a zero or a pronoun. His car is introduced as an inactive (or possibly anchored unidentifiable) referent in the second utterance, and is then active in the last utterance, so can be represented by the bare noun, the noun with the genitive phrase, or a zero.

A referent that is accessible or inactive will generally be encoded as a bare lexical NP or one preceded by a genitive phrase or by a deictic pronoun (see ex. (3.1)). An unanchored referential-unidentifiable referent which is to become a topic in the discourse will generally be introduced as a lexical noun preceded by a numeral (usually *yi* 'one') plus a classifier:

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<sup>70</sup> For other examples, see Givón 1978, Xu 1987, and Chen 1986. See Xu 1987 also for discussion of the correspondence of zero form in Chinese with forms marked by the definite article or definite pronoun in English.

(3.2) Wo<sub>j</sub> zuijin mai le yi shuang xiezi, keshi Ø<sub>j</sub> chuan le Ø<sub>i</sub> yi ci  
 1sg recently buy ASP one pair shoes but wear ASP one time

Ø<sub>i</sub> jiu po le.  
 then break ASP

I bought a pair of shoes recently, but only wore them once and (they) broke.

Here the shoes are introduced as an unanchored unidentifiable referent in the first clause, which is then active in the following two clauses.

An unanchored referential-unidentifiable referent which is not to become a topic (is incidental to the discourse) will often have the classifier, but not the numeral (see Lambrecht, to appear, p. 67, for cross-linguistic evidence of this strategy). An unidentifiable referent can also be introduced as an anchored referent, where it is marked as related, usually by a genitive phrase, to some other element either known to the addressee or within the schema or frame of the discourse, such as is the case with the topic of the following example:

(3.3) Xuexiao de yi ge gongren zuotian chu le che huo.  
 school GEN one CL worker yesterday produce ASP vehicle disaster  
 Yesterday one of the workers in the school got into a car accident.

Non-referential referents will be represented as bare lexical nouns or nouns preceded by a numeral plus a classifier or just a classifier:

(3.4) a. Ta shi ((yi) ge) gongren.  
 3sg COP ((one) CL) worker  
 He is a worker.

- b. Bu guan cong nali lai, ren zong shi ren.  
not matter from where come person always COP person  
No matter where (they) are from, people are still people.
- c. Yi ge ren zai wuliao de shihou hui xiang he jiu.  
one CL person ASP uninteresting GEN time will think drink liquor  
When a person is bored s/he will think of drinking liquor.

In (3.4a), the predicative phrase ‘a worker’ can be coded in Chinese as a bare noun, a classifier plus noun, or ‘one’ plus classifier plus noun. In (3.4b), the generic ‘person’ is coded as a bare NP, while in (3.4c) it takes a numeral and classifier.

The following table summarizes the types of representations each type of referent may have:

Type of Referent	Possible Codings
Active	zero, pronoun, bare NP, with deictic pronoun
Accessible	bare NP, with deictic pronoun
Inactive	bare NP, with deictic pronoun
Unanchored Unidentifiable	bare NP, (num. +) classifier
Anchored Unidentifiable	genitive phrase, relative clause
Non-referential	bare NP, (num. +) classifier

From the point of view of the type of NP which represents a particular referent, we can see that Chinese can distinguish between active and inactive identifiable referents by the use of pronominal (especially zero) anaphora for active referents, and between identifiable and unidentifiable referents by the use of a deictic pronoun as a modifier on nouns representing identifiable referents and a numeral plus classifier modifier on the nouns representing unidentifiable (and non-referential) referents.



Chen (1986:16-17) considers all overtly marked NPs except those representing unanchored unidentifiable referents to be 'definite' (so, for example, the topic in (3.3), which represents an anchored unidentifiable referent, would be considered by Chen to be 'definite'), and only unanchored unidentifiable referents with overt marking (numeral plus classifier) as 'indefinite'. The fact that almost any type of referent can be represented by a bare noun with no overt marking leads Chen to posit a third grammatical category, which he calls 'indeterminate'. The pragmatic states of the referents of these NPs, according to Chen, are interpreted by the addressee as identifiable or unidentifiable on the basis of 'syntactic or discourse contexts' (1986:19). It would seem then that, as Knud Lambrecht and Sandra Thompson have suggested (p.c.), that Chinese does not have a grammatical category of definiteness, but simply several means for expressing the pragmatic category of identifiability.<sup>71</sup> I will not attempt to decide this question here, as it would involve deciding the difficult question of what is meant by 'grammatical category'. For my purposes here, the terms for the different types of marking of NPs given by Chen will suffice.

### 3.2.1.3. Position of a Referent in the Sentence

In terms of position of an NP in a sentence, there are few restrictions based on semantic or pragmatic status. Generic (3.4b-c), uniquely referential-identifiable (3.5a-b), and any overtly marked NPs (either definite or indefinite—(3.6a-d)) can appear before or after the verb, without a change in pragmatic status (Chen 1986:37; see also the refinements

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<sup>71</sup>Both Chafe (1976:39) and Givón (1978:319) point out that since the deictic (demonstrative) pronouns do not lose their deictic force when used for definitization, they cannot be seen as simply marking definitization.

to Li & Thompson's Tendency A given above) (The relevant items are in bold; (3.6a) is from Fan 1985:322, originally from a New China News Agency bulletin.)

(3.5) a. **Taiyang chu lai le.**

sun out come ASP

The sun has come out.

b. **Wo yi zheng tian dou mei kan dao taiyang.**

1sg one whole day all N-A look arrive sun

I haven't seen the sun all day.

(3.6) a. **Liang ge Shaoxianduiyuan xiang Xu Haifeng he Wang Yifu xian le**  
two CL Young-Pioneer(s) towards Xu Haifeng and Wang Yifu give ASP

**xian hua he hong lingjin.**

fresh flowers and red scarf.

Two Young Pioneers gave fresh flowers and red scarfs to Xu Haifeng and Wang Yifu.

b. **Laoshi jintian song wo yi fu huar.**

teacher today give 1sg one CL painting

Today the teacher gave me a painting.

c. **Nei ge ren jintian mei lai.**

that CL person today N-A come

That person didn't come today.

d. A: **Che shang chule nei ge ren yi wai, hai you shenme ren?**

vehicle on aside-from that CL person aside-from still have what person

Who else is on the train aside from that person?

**B: Jiu zuo nei ge ren.**  
 only sit that CL person  
 Only that person is sitting there.

It is only the indeterminate category that, according to Chen, is affected by position in a sentence (cf. Chao 1968:76):

- (3.7) a. **Lai le keren.**  
 come ASP guest  
 There came a guest.
- b. **Keren lai le.**  
 Guest(s) come ASP  
 The guest(s) have come.

Chen essentially follows the scholars mentioned above in assuming that word order determines identifiability. I propose that it is not identifiability that is coded by word order, but focus structure.

If we look beyond the identifiability of noun phrases, we can see that Tendency A is actually only one part of a more general tendency to have the assertion (particularly the focus), i.e., the ‘dominant’ information, at the end of the sentence (cf. note by Dragunov in Wang 1982:106; Huang & Davis 1988:9), or at least postverbal. The concept of ‘dominance’ is taken from Erteschik-Shir & Lappin 1983:420:

**DOMINANCE:** ‘A constituent *c*, of a sentence *S*, is dominant in *S* if and only if the speaker intends to direct the attention of his/her hearer(s) to the intension of *c*, by uttering *S*.’

For ease of discussion, I will refer to this more general tendency as the Final Focus Position (FFP). The confusion of focus structure with the representation of referents came

about because referents newly introduced into the discourse will almost always occur in the sentence final (post-verbal) focus position (99% of referential-indefinite NPs in Sun & Givón's study (1985) were post-verbal), so post-verbal position became associated with indefiniteness. As a topic is most often identifiable, and as topic position is preverbal, preverbal position became associated with definite NPs. Yet an NP of any type of referentiality or identifiability can occur in post-verbal position, IF IT IS FOCAL, and the same NP can occur in preverbal position, IF IT IS TOPICAL. We can then make a much stronger generalization than Tendency A, with all its refinements, or those much-hedged statements by other scholars, if we say that **THE REPRESENTATIONS OF TOPICAL OR NON-FOCAL REFERENTS OCCUR PREVERBALLY AND THE REPRESENTATIONS OF FOCAL OR NON-TOPICAL REFERENTS OCCUR POST-VERBALLY.**<sup>72,73</sup>

### 3.2.2. The Principle of Temporal Sequence

Interacting with this more general tendency (the FFP) is the Principle of Temporal Sequence (PTS) proposed in Tai 1985:50 (see also Tai 1989a, 1989b):

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<sup>72</sup>This idea is hinted at by Givón (1978:319) when he questions whether the preverbal word order patterns are

indeed 'mere definitization' or topic-shifting devices. The nouns occurring in them could be definite or generic, which is a general restriction holding to definite NPs as well as topic-shifting. The distributional restrictions in these word order devices in Mandarin, including the *ba* construction, strongly hint that they are topic-shifting rather than definitization devices.

<sup>73</sup>See Lambrecht, to appear, p. 69, for a similar analysis of Czech. Lambrecht also cites Arabic, Russian, Amharic, Turkish, Japanese, Finnish, and Hungarian as languages where a claim (by Hetzron 1975) of correlation between preverbal definite marking and post-verbal indefinite marking in locative sentences is 'unwarranted'.

**PRINCIPLE OF TEMPORAL SEQUENCE:** [T]he relative word order between two syntactic units is determined by the temporal order of the states which they represent in the conceptual world.

Tai (1985:54) gives the following examples to prove that the order of clauses must follow that of the temporal order of the actions (his (19) and (20)):

- (3.8) a. Ta zuo gonggong qiche dao zher.  
 3sg sit public car arrive here  
 He came by bus.
- b. Ta dao zher zuo gonggong qiche.  
 3sg arrive here sit public car  
 He came here to ride in a bus.

The order of the clauses affects the interclausal semantic relations and the meaning of the sentence as a whole. In (3.8a) the relation is one of sequential actions; in (3.8b) it is purposive.

In his 1985 paper, Tai attempts to subsume presupposition and focus under his PTS in claiming that '[i]n terms of temporal sequence, presupposition precedes focus' (1985:56).<sup>74</sup> He uses this when a strict temporal analysis is not possible, as in the distinction between (3.9a) and (3.9b) (his (29) and (30), p. 56):

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<sup>74</sup>Sasse (1987:560) also states that an entity must be conceived of before it can be commented on, so topic-comment is the usual form of predicative sentences, though as there are languages that allow comment-topic structure (e.g. Tagalog—see Herring 1989b,

- (3.9) a. Ta hen kuai de pao le.  
 3sg very fast AP run ASP  
 He ran away very quickly.
- a'. \*Ta pao le de hen kuai.  
 3sg run ASP CD very fast
- b. Ta pao de hen kuai.  
 3sg run CD very fast  
 He runs very fast.
- b'. \*Ta hen kuai de pao.  
 3sg very fast AP run

In Tai's analysis of (3.9a), *hen kuai* must precede *pao le* because 'the state of initiating an action quickly precedes the performance of the action' (p. 56). His explanation of (3.9b) is that *pao* 'run' is the presupposition and *hen kuai* is the focus; presupposition temporally precedes focus, so the word order must be as it is in (3.9b). If we put these sentences into larger contexts (see below), we see that in (3.9a) *pao* 'run' is the focus; though Tai translates the sentence as 'He ran away very quickly', a better translation is 'He very quickly ran away', as the fact that the person ran away is the dominant information being conveyed. In (3.9b), *ta* is the topic, and *pao de hen kuai* is the assertion. Within the assertion, it is the speed of the running, not the running itself that must be in focus position if the dominant information is the speed of his running:

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1990), it is certainly not true that the conceiving of an entity before the conceiving of a comment about that entity necessarily must be reflected in the syntax of every language.

- (3.10) a. Na le dongxi yihou jiu ta hen kuai de pao le.  
 take ASP thing(s) after then 3sg very fast AP run ASP  
 After he took the thing(s) he very quickly ran away.
- b. Ta yi ge xiaoshi nei jiu cong jiali pao dao zheli lai le; ta pao  
 3sg one CL hour within then from home run arrive here come ASP; 3sg run  
 de hen kuai!  
 CD very fast.

He ran from home to here in less than one hour; he runs fast!

Temporality really isn't playing any part in these examples. There are two principles involved here, and in these cases it is the FFP that is determining the order of the constituents. In his 1989b paper, Tai recognizes this, as in a footnote (footnote 14, p. 20) he discusses a three-way distinction among 'the temporal sequence principle, the principle of background-foreground, and the principle of old-before-new'. Tai considers the first to be an iconic principle, and the latter two to be 'transmission principles' ('packaging strategies'). Topic-comment structure 'should then not be subsumed under the temporal sequence principle' (*ibid.*).

In the 1985 paper, Tai applies his principle to many constructions in Chinese, with varying degrees of success. Some of the arguments are quite weak, as when he attempts to explain the structure of comparatives by reference to the PTS. He states that '[o]bviously two persons have to be compared before we can find out which one is taller' (p. 55). This is not true in English and many other languages, including Old Chinese, so there is no reason to expect that it would be true in Modern Chinese. In Chinese comparatives it is a

question of predication,<sup>75</sup> not temporal order. That is, there is a topic within the domain of the presupposition about which an assertion is made. As unmodified Mandarin stative verbs (adjectives) are inherently comparative (Light 1989), all that is needed is the NP being compared (the topic) and the stative verb (the assertion). Temporality then does not seem to be the most plausible explanation for this structure.<sup>76</sup>

It is important to point out that the PTS holds only in foregrounded discourse (narrative), and not backgrounded discourse (explanation/evaluation),<sup>77</sup> as foregrounded discourse is characterized by chronological sequencing, while backgrounded discourse is not (Hopper 1979). In fact Labov (1972:360) defines a minimal narrative as ‘a sequence of two clauses which are TEMPORALLY ORDERED’ (emphasis his).<sup>78</sup> For example, if the speaker knew (or assumed) the addressee in (3.8a) already knew that the person spoken about had arrived, and was in doubt only about how he got here, that is, if the manner of coming was the dominant information, neither (3.8a) or (3.8b) would be used; an evaluative statement, as in (3.11) would be used:

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<sup>75</sup>See above, §2.1.5 for detailed discussion on this point.

<sup>76</sup>See Ross 1984a for other arguments showing the limited scope of the PTS.

<sup>77</sup>I am grateful to Derek Herforth for confirming my suspicions on this point.

<sup>78</sup>Grice could be said to include the PTS in his general maxims when he states that ‘there is a general supposition which would be subsidiary to the general maxim of Manner (“Be perspicuous”) that one presents one’s material in an orderly manner and, if what one is engaged upon is a narrative (if one is talking about events), then the most orderly manner for a narration of events is an order that corresponds to the order in which they took place’ (1981:186).



- (3.11) ta dao zher shi zuo gonggong qiche (de).  
 3sg arrive here COP sit public car (NOM)  
 It was by bus that he came here.

This is a cleft sentence in which everything to the right of the copula is within the scope of the assertion (here a nominalized clause). Both the topic and the comment are nominalized verbal expressions (propositions) set off from each other in a copula statement. This construction is used in order to have the assertion in sentence-final position, yet it seems to violate the PTS. This is possible because the PTS is only involved in finite narrative clauses, and does not hold in nominalized clauses; the temporal nature of the expression is neutralized by the nominalization,<sup>79</sup> so neither the FFP or the PTS is violated.

The PTS also does not hold for certain prepositional phrases such as those that involve the Old Chinese prepositions *zi*, *yu* and *yi*; alternative but synonymous orderings are possible. These prepositions are common in Old Chinese, but not often used in Modern Mandarin. Tai feels (1985:66) that because phrases with prepositions such as these are not subject to the PTS (even when used in Modern Mandarin, as in the example below), the PTS must not be valid for Old Chinese.

- (3.12) a. Ta zi Zhongguo lai.                      b. Ta lai zi Zhongguo.  
 3sg from China come                              3sg come from China  
 He came from China                                He came from China.

If Tai is correct in assuming that the PTS does not apply to Old Chinese, then he is saying that Chinese moved from being less iconic in its word order to being more iconic. Given the fact that Old Chinese is even more contextually-based (there being less redundancy)

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<sup>79</sup>James A. Matisoff (p.c.) notes that the whole purpose of non-finite structures like nominalizations is to be free of the constraints of linear temporal organization.

than Modern Chinese (cf. Herforth 1987), this position is hard to accept. If, on the other hand, we assume that the PTS only obtains for finite verb (or verb-like) narrative clauses, the ordering of prepositional phrases is not problematic.

The FFP, on the other hand, holds for all broad focus (non-narrow focus) sentences in all types of discourse.

Tai's PTS attempts to explain why the constituents are so ordered in a particular sentence. The FFP is a statement about information flow, so it interacts with the PTS. The FFP, though, not only determines sentence structure, as does the PTS, but in situations where two alternate word orders are both grammatical and the same in meaning, the FFP will determine which one is to be used in a particular context. That is, though the FFP is the strongest determinant of word order, often it is not so much determining the grammaticality of the order of constituents in a particular sentence (or the meaning that may be associated with that particular order), but is determining in what discourse situation a particular construction can be used felicitously.

### **3.2.3. Contrastiveness**

Timothy Light (1979) argues that rather than stating the pragmatic function of word order in terms of definiteness and indefiniteness, as in Li & Thompson's Tendency A, it should be stated in terms of 'contrastiveness' and 'non-contrastiveness'. He states that by the use of a preverbal 'object' NP, 'the speaker intends ... to indicate a contrast between the named object and certain other objects' (1979:150). The preverbal position is seen as marked because a preverbal noun is definite whether or not it is so marked by some deictic marker, while a postverbal noun is generally indefinite without such marking.

Contrastiveness is seen as broader than definiteness (and includes definiteness), as preverbal NPs are not always definite, as in (3.13) (Light's (8), p. 151):

- (3.13) Zhi, wo you. Bi, wo meiyou.  
 paper 1sg have pen 1sg neg-have  
 I have paper, (I) no pen.

In this example contrastiveness is important, and it is expressed by contrastive prosodic stress on the topic and by the parallel structure, but there are clear cases in which preverbal position is not contrastive. In Light's example (6), given below as (3.14), for example, the preverbal NPs are what the assertion is being made about; they are not being contrasted with anything else:

- (3.14) Shu, bi, zhi, women dou mai.  
 book(s), pen(s), paper, 1pl all sell  
 Books, pens and paper, we sell (them) all.<sup>80</sup>

Light equates definiteness with 'givenness' (p. 152), but these are not always synonymous. In this example, the books, pens, and paper are not referential (they are generic), but are part of the context of the discourse; that is, for this sentence to be used felicitously, it must be in a context where someone had asked about these things. They would then be part of the pragmatic presupposition, and therefore 'given', but as they are non-referential it is misleading to consider them definite.

Light (1979) seems to be confusing identifiability and contrastiveness. Contrastiveness is a function of intonation or specific narrow-focus constructions such as

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<sup>80</sup>Light gives the gloss of this sentence as 'We sell books, paper, and pens', but this is a pragmatically incorrect reading of this sentence, and so I have changed the gloss.

clefting constructions, not preverbal word order. Preverbal word order simply implies topicality, not contrastiveness (topics can of course also be contrasted<sup>81</sup>).

Light also posits what he calls the Rule of Positional Marking (1979:166):

**RULE OF POSITIONAL MARKING:** The meaning of nouns and adverbs depends on their location before or after the main verb.<sup>82</sup>

This rule is an extension of his rule of markedness of preverbal objects. It is meant to explain why, for example, preverbal locatives specify the location of the actor or action during the action, whereas postverbal locatives specify the location of the patient after the action has taken place (H. Wang 1957) (cf. Chapter II, note 57).

This rule is not really explanatory, though, in that it merely states that there is a difference, not why there is one, and is flawed vis-à-vis locatives in that it is based on the assumption that sentences with preverbal locatives and those with postverbal locatives have the same structure except for the difference in locative placement. As we will see below (§3.3.1), they are really two very different structures.

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<sup>81</sup>Cf. Kuno 1969, 1972 on the function of Japanese *wa* as marking either a theme (topic) or a contrasted element.

<sup>82</sup>In some respects this overlaps with and is included in the principles offered in Tai's work (1975, 1985).

### 3.2.4. The Whole-Before-Part Principle

Another factor which can determine word order discussed by both Light (1979) and Tai (1985, 1989b) is what Light refers to as the Whole-Before-Part Principle (1979:155):

**WHOLE-BEFORE-PART PRINCIPLE:** In noun phrases [and clauses] where the relationship of whole and part is at issue, whole will precede part.

Light states that this principle ‘predicts word order when the specific conditions of a relationship between whole and part exists, and it is invariant under that condition. As such, [it] must be taken into account in any description of Chinese word order’ (1979:155). This principle is used to explain the different orders in the examples below (Light 1979:154, Light’s (11) and (12)):

- (3.15) a. Shu duoshao qian yi ben?  
 book(s) how-much money one CL  
 How much for one of these/the books? (Lit. These books, how much for one?)
- b. Shu yi ben duoshao qian?  
 book(s) one CL how-much money  
 How much for one of these/the books? (Lit. These books, one is how much?)
- (3.16) a. Yi ben shu duoshao qian?  
 one CL book(s) how-much money  
 How much is one book?
- b. Duoshao qian yi ben shu?  
 how-much money one CL book(s)  
 How much is one book?

- (3.17) \*Yi ben duoshao qian shu?  
 one CL how-much money book(s)

Light feels that the sentences in (3.15) are different from those in (3.16) (where the numeral + classifier phrase is within the same constituent as the noun) in that the former ‘illustrate emphasis on the membership in class’ (p. 154), while the latter ‘illustrate no emphasis on the membership in class’ (p. 154). This is basically correct, except that it should be made clear that the examples in (3.15) involve anaphora, similar to that in ex. (3.18), below. In (3.15), the numeral + classifier combination is an anaphor controlled by the topic *shu* ‘books’.<sup>83</sup> An overt (non-zero) anaphor cannot precede its controller in Chinese (see ex. (3.19)<sup>84</sup>), so (3.17) is ungrammatical.

- (3.18) Wo zuotian mai le san ben shu, keshi yi ben diu le, yi ben yijing  
 1sg yesterday buy ASP three CL book(s) but one CL lose ASP one CL already  
 nong huai le.  
 make/do bad ASP

Yesterday I bought three books, but I lost one, and one already got ruined.

- (3.19) \*Ta<sub>i</sub> hui jia yihou, Zhangsan<sub>i</sub> cai hui chi fan.  
 3sg return home after Zhangsan then will eat rice  
 (Zhangsan will eat after he gets home.)

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<sup>83</sup>For other examples of numeral + classifier phrases acting as anaphors, see Jianming Lu 1989.

<sup>84</sup>This example would be grammatical only if the third person pronoun referred to a person other than Zhangsan.

### 3.2.5. 'Actual' vs. 'Virtual'

Teng (1975:99-125) proposes a distinction between 'actual' and 'virtual' NPs in discourse to explain the nature of certain kinds of referents and certain constructions. An 'actual' NP is one that has a specific reference in the mind of the speaker. A 'virtual' NP does not have such a reference; the speaker has no image of it in his mind. This is not the same as the definite-indefinite contrast, but essentially identical with the specific-non-specific contrast. A speaker may use indefinite marking for an 'actual' NP if he knows it is 'virtual' for the hearer (see the discussion of ex. (3.20a) below). On the other hand, a speaker may use definite marking for an NP that is 'virtual' to him, but which he knows is 'actual' for the hearer. This distinction accounts for the ambiguity in a sentence such as *I'm looking for a snake*. The ambiguity results from the fact that the snake is coded as indefinite because the speaker knows that the hearer does not have an image of it in his mind, but whether the snake is 'virtual' or 'actual' to the speaker is left open to question. The snake could be 'actual' in the mind of the speaker, that is, the speaker could be looking for a particular snake, or it could be that the snake is 'virtual' to the speaker, that is, the speaker has no particular snake in mind.

Teng attempts to use this framework to explain certain facts about word order (e.g. the placement of definite/indefinite NPs) and the *ba* construction (the nature of the post-*ba* NP). I would argue that though the 'actual'-'virtual' distinction may be useful in talking about certain types of ambiguity, it is not relevant in the determination of word order. That these concepts are not related to focus structure can be seen in the fact that a noun, whether it is 'actual' or 'virtual', must be introduced in an assertion the first time it enters the discourse (unless it is already part of the presupposition by being in the physical context), and only then can become part of the presupposition. On the other hand, even if a noun is 'virtual' it can become part of the presupposition. Then, even if the speaker has no image

of the referent in mind, he must treat it as identifiable. For example, in (3.20a), Teng's (10a), p. 105, the brother mentioned is 'actual' for the speaker, but 'virtual' for the hearer.

- (3.20) a. Wo you yi ge didi dao Taiwan qu le.  
 1sg have one CL brother to Taiwan go ASP  
 I have a brother who went to Taiwan.
- b. Ta zai neibiar neng bu neng gei wo mai yi ben shu?  
 3sg LOC there can not can give 1sg buy one CL book  
 While he's there, can he buy me a book?

This is the first mention of the brother, so the construction used is a biclausal presentative structure (see below, §3.3.1.1.2) which allows the new referent to be introduced in the unmarked focus position of the first clause, then followed by a second clause that is an assertion, in the same sentence. In (3.20b), a possible response by the hearer to (3.20a), the brother is still 'virtual' to the original hearer (who is now the speaker), but the referent is now discourse active, and so it is within the domain of the presupposition, and assertions can be made about it. The nature of the referent as 'actual' or 'virtual' then has no direct role in determining grammatical structure.<sup>85</sup>

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<sup>85</sup>One interesting case where the 'actual'-'virtual' distinction might seem to apply involves the type of presentative sentence just mentioned. In Chinese (as in English) it is possible to say the equivalent of *I'm looking for a person* (*Wo zai zhao yi ge ren*), with the 'virtual' reading of *person*, but it is not possible to say the equivalent of *\*I like a person* (*\*Wo xihuan yi ge ren*) as an independent sentence. The clause must be followed by an assertion about the person that would mark that referent as 'actual', as in the equivalent of *I like a person called John*. (A restrictive relative clause added to the indefinite noun would also suffice.) This is not mentioned by Teng. He gives the Chinese equivalent of *I like a person*, and says that it is ungrammatical because *xihuan* 'like' is a 'generic' verb (i.e., can only take 'generic' arguments). He does not consider the possibility of this clause being grammatical in a larger context. A clause with *xihuan* 'like' and a generic argument has an



### 3.3. Marked Focus Constructions

Word order in Mandarin is ‘consistently’ verb medial (Li & Thompson 1978) due to the statistical predominance of predicate-focus sentences, but there are a number of constructions that deviate from this form because of the influence of marked focus structure.<sup>86</sup> In a language such as English, a sentence-focus sentence can have the same syntactic structure as a predicate-focus sentence, but the subject NP will not be topical and there will be no prosodic stress on the verb. In Chinese, a presentative structure must be used to prevent a potentially topical NP from being seen as a topic. This section examines such structures, as well as how focus structure determines the nature of the utterance as entity-central or event-central, examines the pragmatic functions of the *ba*, *bei*, and *gei* constructions, and discusses the focus structure of resultative constructions, incorporation constructions, and constructions with the quantifier *dou*.

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unmarked focus structure. E.g., in *I like kids* (where neither *I* or *kids* has contrastive stress), *I* is the topic, and the assertion *like kids* is being made about it. The same clause with a definite NP in post-verbal position, such as *I like John* (without contrastive stress on *I*) must involve a marked narrow focus structure where *I like* is the presupposition, and a specific NP out of a list of items to be chosen among is the assertion. Therefore, ‘actual’ vs. ‘virtual’ is not the key factor here.

<sup>86</sup>By ‘marked’ I simply mean statistically less common. As mentioned in the §1.3, there is no such thing as a pragmatically ‘neutral’ sentence. All sentences have focus structure, but one type, predicate focus, is more common, and so less ‘marked’.

### 3.3.1. Presentative Sentences

Presentative sentences are sentences whose function is to introduce a new referent into a discourse by placing it in postverbal position.<sup>87</sup> Li & Thompson (1981:509-519) classify these into two types, those which simply state the referent's existence or location (the 'existential sentence'), and those which introduce the referent with a verb of motion. This difference is exemplified in (3.21) (Li & Thompson's (2) and (3), p. 509-10):<sup>88</sup>

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<sup>87</sup>It is not necessarily the case that all new referents are introduced in the following presentative constructions. Herring (1989a) argues that (at least in the languages she looked at) new referents are often introduced in verbless presentational utterances. Naicong Li (p.c.) has suggested that there may be a difference between those referents introduced in presentative constructions and those not introduced in presentative constructions in terms of their viability as topics in the following discourse. Both of these questions can only be solved by reference to a sizable discourse database, which at the present time is unavailable to me. (A further note on Herring 1989a: using the Sacapultec data presented in Du Bois 1987 and her own data on Tamil, Herring has shown that contrary to Du Bois's analysis that the S and P roles are 'specialized' for the introduction of new mentions, the S and P roles are actually the LEAST specialized for introducing new mentions. She found that oblique and verbless presentations are the most specialized for introducing new mentions. I have not yet been able to confirm whether or not this is also true for Chinese.)

<sup>88</sup>I will be altering the glosses in many of the examples I cite from Li & Thompson 1981 to fit the style used throughout this dissertation. The focal NP will be expressed in small caps when necessary in the English translation, though this does not necessarily mean that that NP is focal in the English translation; there are times when I could not come up with an English translation that focused the same element as the Chinese sentence (e.g. ex. (3.56)). There are also times when it was possible to give a similar structure in English, as in (3.21), but the English often sounds stilted or poetic. This is not the case in Chinese.

- (3.21) a. *Lai le yi ge keren.*  
 come ASP one CL guest  
 There came a GUEST.
- b. *(zai) yuanzi-li you yi zhi gou.*  
 (LOC) yard-inside exist one CL dog  
 In the yard there is a DOG.

### 3.3.1.1. Existential Presentative Sentences

**3.3.1.1.1. Existential *you*.** Sentences with the existential verb *you*, as in (3.21b) have two possible structures, the one given in (3.21b) and that in (3.22) (Li & Thompson's (7), p. 511):

- (3.22) *You yi zhi gou zai yuanzi-li.*  
 exist one CL dog LOC yard-inside  
 There is a DOG in the YARD.

Li & Thompson point out that there is a pragmatic difference between these two structures, but they see the difference in terms of the definiteness of the locus (*yuanzi*). That is, they state that for (3.21b) to be used properly, the locus must have already been established in the discourse context, as it functions as the topic of the sentence. Yet if we look at the identifiability of *yuanzi*, we see that in both (3.21b) and (3.22) the yard is in the same state of discourse activation—it is identifiable (this is the unmarked state for locatives—Van Valin 1975); the definiteness of the yard then is actually not important here. What is important in terms of focus structure is the relationship holding between the presupposition and the assertion. In (3.22) the yard is identifiable, so it is not being introduced, as the dog

is, yet it is focal.<sup>89</sup> In (3.21b) the yard is not focal, but it is also not a topic about which an assertion is being made. It merely acts as a locative reference point (it is situationally accessible); the locative serves simply to anchor the new referent in the discourse (Lambrecht 1988:15-16). It could not be the topic of a topic chain, for example, or even simple cross-clause coreference:

(3.23) a Yuanzi li you junren<sub>i</sub>, danshi Ø<sub>i</sub> bu duo.  
 yard inside have soldier(s) but not many  
 There are soldiers in the yard, but not many.

b. \*Yuanzi<sub>i</sub> li you junren, danshi Ø<sub>i</sub> you kuan, Ø<sub>i</sub> you da, suoyi ...  
 yard inside have soldier(s) but also wide also big therefore  
 (There are soldiers in the yard, but it is wide and big, so ...)

The second type (i.e. (3.22)), with the locus and presentative phrases reversed is not an existential presentative sentence like (3.21b), as assumed by Li & Thomson, but is actually an example of what Li & Thomson call the 'realis descriptive clause sentence',<sup>90</sup> one where a referent is introduced in one clause, and then an assertion is made about it in a following clause that is part of the same sentence (see §3.3.1.1.2).

A second point about Li & Thomson's analysis of this type of construction is that they equate the existential presentative sentences with possessives (p. 513). In their

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<sup>89</sup>The assertion may also contain a focal NP, and that is why there are two focal elements in (3.22).

<sup>90</sup>With prosodic stress on *yuanzi*, this could also be a contrastive narrow focus construction, but then the 'one dog' would mean one dog out of a number of dogs introduced in the preceding discourse.

analysis, the only difference between a sentence such as (3.21b) and (3.24) (Li & Thompson 1981:513, ex. (14)) is that (3.24) has an animate locus.

- (3.24) Ta you san ge haizi.  
 3sg exist three CL child(ren)  
 He has THREE CHILDREN.

In some languages it is legitimate to consider the possessor in a clause with a verb of possession as having the locative semantic role (see, for example, Foley & Van Valin 1984:47-53), and it is true that in some languages (such as Tibetan) that only have verbs of existence, and no verb of possession, possession is expressed as 'to X Y exists'. In Chinese, though, the opposite is true: though I have been glossing *you* as 'exist' because that is how Li & Thompson glossed it, the verb *you* is a verb of possession that can also be used to express certain kinds of existence.<sup>91</sup> It is not possible, for example, in Chinese to

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<sup>91</sup>Van Valin 1975:3 argues that one difference between locative *you* and possessive *you* is that locative *you* must be followed by an 'indefinite' NP, while a possessive *you* can be followed by either an 'indefinite' or 'definite' NP. He gives the following examples (his example 6):

- (i) a. Zhuozi shang you yi ben shu.  
 table on have one CL book  
 There is a book on the table.
- b. \*Zhuozi shang you nei ben shu.  
 table on have that CL book  
 That book is on the table (or, That book can be found on the table).
- c. Wo you yi ben shu.  
 1sg have one CL book  
 I have a book.

say the equivalent of *I have his book* using the verb *you* (you must say *Ta de shu zai wo nar*, with the locative *zai*, lit: 'His book is at my place').

The focus structure in (3.24) is not the same as in (3.21b). In (3.21b) the locus can take the locative verb *zai*; that is, it is a separate clause, and it can occur either before or after the *you* clause with no change in the truth value of the utterance. The sentence is a sentence-focus sentence, i.e., there is no topic. In (3.24), *ta* is not a separate clause, it is the topic about which the assertion is being made. It cannot occur after the *you* clause. This is a predicate-focus sentence, therefore not of the same class of sentences as (3.21b). (See also footnote 101 on the difference between locative and non-locative sentence-initial NPs.)

A similar difference obtains between sentences such as (3.21b) and those such as (3.25), which Li & Thompson (1981:514, ex. (17)) also discuss as a type of presentative sentence in that it identifies or characterizes the pre-copula NP, which they also consider a locus.

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- d. Wo you zhei ben shu.  
 1sg have this CL book  
 I have this book.

Van Valin is mistaken, though, on two counts: (ib) is grammatical, and the difference between the 'definite' and 'indefinite' NPs is not a difference of locational vs. possessive, but one of focus structure. In (ia) and (ic), a 'new' referent is being introduced in a predicate focus construction; in (ib) and (id), no new referent is being introduced—it is a narrow focus construction (there is prosodic stress on the sentence-initial NP). The facts then do not support Van Valin's hypothesis.

(3.25) Waimian shi yi zhi gou.  
 outside COP one CL dog  
 What's outside is a DOG.

For this sentence to be used properly, 'the speaker must believe not only that the listener already knows about the locus but that s/he has some reason to be interested in it and in what it is or what it has or what it looks like' (p. 515). The type exemplified by (3.21b), on the other hand, simply predicates 'the existence of the presented noun phrase at some locus in which the listener need not have had any interest' (p. 515).

Again we can see that these two types are very different in terms of focus structure, and that this is what determines the difference in meaning and usage. In (3.25), the pre-copula NP is clearly presupposed (cf. the quote in the preceding paragraph), and there is an assertion made about it. It also cannot occur at the end of the sentence. This latter type of sentence and the possessive structure (as in (3.24)) then are different from the first type of existential presentative sentence: the first type is comprised of two 'topicless' clauses, together making up athetic statement about the existence of some entity, similar to *there* sentences in English; the other two sentence types are both single-clause sentences with clear presupposition-assertion structures.

**3.3.1.1.2. Realis descriptive clause sentences.** A second type of 'existential presentative sentence' discussed by Li & Thompson (1981:611-618) (and mentioned briefly above), they call the 'realis descriptive clause sentence'. This type is a serial verb construction in which a referent is introduced in the postverbal position of the first clause, then an assertion about the referent is made by the second clause (Li & Thompson say that an 'incidental description' is made of the NP by the second clause). The two clauses together are one intonation unit/sentence. (Ex. (3.26b) is their (75), p. 611):

- (3.26) a. (Waimian) you yi ge ren xiang jian ni.  
 (outside) exist one CL person think see 2sg  
 There's a PERSON (outside) who wants to see you.
- b. Ta you yi ge meimei hen xihuan kan dianying.  
 3sg have one CL younger-sister very like look movie  
 S/He has a YOUNGER SISTER (who) likes to watch movies.
- c. Wo mai le yi jian yifu hen hao kan.  
 1sg buy ASP one CL clothes very good look  
 I bought a PIECE OF CLOTHING (that is) very good looking.

In all of these examples the structure is a juncture of two clauses,<sup>92</sup> but (3.26a) does not have exactly the same focus structure as (3.26b) or (3.26c): (3.26a) has a simple

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<sup>92</sup>This is a type of core-coordination where the two cores share an argument (see Van Valin 1984 for discussion of juncture and nexus types, and Hansell 1987 for a discussion of some juncture-nexus types in Chinese). The structure created, then, is tighter than simple juxtaposition. This leads Sasse (1987:542), in discussing this type of sentence in Chinese, to the conclusion that though an assertion is made about the referent introduced, the assertion is made 'quasi appositionally', not in the usual topic-comment structure, i.e., the assertion 'is not a main predication but rather a predication of the type found in a dependent clause: a predication without illocutive force' (p. 542). That is, the relation of the assertion to the topic is attributive rather than predicative. Sasse argues that rather than being an exocentric predicate focus structure, this sentence type is an endocentric noun-attribute structure. What would seem to be an argument in favor of this analysis is the fact that the assertion in this type of sentence cannot be questioned, whereas the assertion in a normal topic-comment structure can be:

- (i) a. Nei ge ren gei ni shenme dongxi?  
 that CL person give 2sg what thing  
 What did that person give you?



presentational clause, which asserts the existence of an entity, as discussed above, followed by a predication. The first clause is propositionally empty—it simply allows the referent to become active in the discourse; the second clause makes an assertion about it. In (3.26b), on the other hand, there are two assertions, one about the topic *ta*, the other about the sister that is introduced in the unmarked focus position of the first clause and becomes the presupposition of the second clause.<sup>93</sup> The same structure can be assigned to (3.26c).

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- b. \*You ren gei ni shenme dongxi?  
 exist person give 2sg what thing  
 (What did a person give you?)

If the clauses were simply juxtaposed without sharing an argument, as in (ii), there could be a question word in the second clause:

- (ii) Gangcai lai le yi ge ren; ta gei ni shenme dongxi?  
 just-now come ASP one CL person 3sg give 2sg what thing  
 Just now a person came; what did he give you?

But as Knud Lambrecht points out (p.c.), the focus structure of the type of second core in (ib) would NOT be the same as in the realis descriptive clause sentence, as all but the referent of the question word is within the scope of the presupposition (the speaker would have to know that the person mentioned had given the addressee something for this utterance to be used properly); it would be a narrow focus construction, not a predicate focus type assertion. We can see also from a comparison of (ib) and (ii) (i.e., by the fact that the second clause can be questioned in (ii)) that though I talk about the referent being introduced in the first core of a realis descriptive clause sentence and THEN having an assertion made about it, this is not a two-step process; it is not a case of equi-NP deletion in the second clause. The single argument is actually shared by both cores, and so is at the same time both new and a topic. This follows from the fact that the juncture-nexus type is core-coordination.

<sup>93</sup>It might be argued (as it was when I presented this idea at the 1989 LSA meeting), that in all three of these examples the first clause is propositionally empty, and functions only to

The nature of this type of structure in English is discussed at length in Lambrecht 1988. Lambrecht (1988:15) calls this structure a 'presentational amalgam construction'. An example of this in English is *I have a friend of mine in the history department teaches two courses per semester* (Lambrecht 1988:1).<sup>94</sup> It is a structure where the speaker wishes to express a single proposition about a new referent, but is forced by the constraints on information structure (cf. Du Bois's (1987:826 ff.) 'One New Argument Constraint' and Chafe's (1985:18; 1987:32) 'One New Concept at a Time Constraint') to code the proposition in two clauses. The most efficient way to do this with a minimum of syntactic paraphrasing is to code the new referent simultaneously as the focus of the first clause and the topic of the following clause. Sasse (1987:541 ff.) also discusses similar structures in Arabic, Boni<sup>95</sup> and other languages.

Li & Thompson (1981:614) point out the semantic similarity between these structures and relative clauses,<sup>96</sup> and explain the difference in the following quote:

[T]he message conveyed by the realis descriptive clause is that the property it names is entirely incidental, while the message conveyed by the relative

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introduce a referent. Yet the first clause IS making an assertion about a topic (e.g., in (3.26c) that the topic 'I' bought an item of clothing), even if the proposition expressed is a rather uninteresting or uninformative one. The variety of verbs that can occur in the first clause of this type of construction would also argue against seeing that clause as propositionally empty.

<sup>94</sup>This construction is usually considered ungrammatical in English, but nonetheless it is used very often.

<sup>95</sup>See also Sasse 1981 for a more complete discussion of Boni, the most pragmatically controlled language in the Eastern Cushitic group.

<sup>96</sup>Tai (1973:661-663) in fact posits this form as the 'underlying' form for all relative clauses.

clause is that there is a preestablished class of such items. By PREESTABLISHED we mean that the item with the property in question is assumed or has already come up at some point in discussions between speaker and hearer; they can be said to have tacitly agreed on the existence of a class of items with this property.

It would seem from this quote that they are again talking about identifiability. They give the examples in (3.27) (their (84), p. 614) as evidence of the semantic difference between realis descriptive sentences and sentences with relative clauses:

(3.27) a. Wo mai le yi jian yifu tai da.  
 1sg buy ASP one CL clothes too big  
 I bought an outfit that turned out to be too big.

b. Wo mai le yi jian tai da de yifu.  
 1sg buy ASP one CL too big REL clothes  
 I bought an outfit that was too big.

They discuss the difference between these two sentences as one of whether or not there is a preestablished class of clothes that are too big.

The discourse status of the class of the referent is not what is important here.<sup>97</sup>  
 What is important is that in the first sentence an assertion is being made about the clothing,

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<sup>97</sup>Jackson Sun in fact pointed out (p.c.) an example where the information in the relative clause, though not focal, is not part of the presupposition. The following sentence could be an answer to *Why are you going to the bookstore right now?*

(i) Wo mai le tamen yi ben que ye de shu yao ganjin qu tui.  
 1sg buy ASP 3pl one CL lack page REL book want hurry go return  
 I bought a book of theirs that is missing pages, (so I) want to return it right away.

that it is too big. No such assertion is being made in the second sentence. That is, in the first sentence there are two assertions, that I bought a piece of clothing, and that it is too big; in the second there is only one assertion, that I bought a piece of (a particular type of) clothing. If anything is incidental, it would seem to me to be the information in the relative clause, not the information which is being asserted. Though it is not clear from the main body of their discussion, Li & Thompson understand this point, as in the last few lines of the section they state that 'semantically, a descriptive clause simply adds another assertion to the first one. A relative clause, on the other hand, is a part of the noun phrase naming the item in question, so it is natural that it allows the expression of a preestablished class of items with the property it names' (p. 618).<sup>98</sup>

### 3.3.1.2. Presentative Sentences with Verbs of Motion

In another type of presentative sentence discussed by Li & Thompson (1981:517-19), the new referent occurs immediately after a verb of motion, such as we saw in (3.21a), repeated here:

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Du Bois states that 'new information may be presented in the presupposed format of a restrictive relative clause, as long as it is relatively unremarkable information ... But if the information is remarkable, the speaker is expected to assert it rather than presuppose it' (1980:223). See also Cumming 1984:369 for examples of subordinate clauses in English that contain entirely new information.

<sup>98</sup>Lambrecht (1988) treats the second clause in this type of construction as a type of relative clause which is a sister to the first clause, whereas Sasse (1987:541) considers relatives to be non-finite, so believes the second clause is not a relative or some other non-finite clause, but is a finite clause 'in a looser appositional connection with the first clause' (see footnote 92).

- (3.21) a. *Lai le yi ge keren.*  
 come ASP one CL guest  
 A GUEST came.

This type of structure cannot be used with all intransitive verbs of motion, though; verbs such as *gun* 'roll', *pa* 'climb', and *dou* 'shake' used alone cannot introduce a referent.<sup>99</sup> Li & Thompson do not give a reason for this difference, but a possible answer is that these verbs cannot introduce a referent because they are making a predication about the referent, whereas the general movement verbs, such as *lai* 'come', *qu* 'go', *chu* 'exit', etc. are semantically weak enough (they do not say anything about HOW the movement is done) that they can be used for presentational purposes. The latter, but not the former, also involve a directional component which naturally lends itself to the introduction of new referents. The verb used must also be temporally bounded in order to be presentative (cf. Kuno 1972:300). Lambrecht (1989:29) suggests that verbs such as 'arrive' are presentational due to their 'inherent lexical content', and verbs such as 'call' are presentational because of the context. Du Bois (1987:836) also argues that intransitive verbs have two functions: introducing referents and adding semantic material, the difference depending on the discourse.

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<sup>99</sup>They must be in a construction with another clause, as in exx. (3.21b) and (3.22), or appear in construction with presentative verbs that act as complements of result, as in (i):

- (i) *pa chu lai le yi zhi laohu.*  
 climb exit come ASP one CL tiger  
 A tiger climbed out.

There are examples of postverbal NPs that are not indefinite in structures that look like this presentational structure, but these are actually narrow-focus constructions, as in (3.28) (Li & Thompson's (30), p. 517), where the postverbal NPs are proper names:<sup>100</sup>

- (3.28) Women de wanhui zhi lai le Zhangsan gen Lisi.  
 1pl GEN party only come ASP Zhangsan and Lisi  
 Only Zhangsan and Lisi came to our party.

### 3.3.2. Event-Central Thetic Sentences

Presentational sentences such as in example (3.21), repeated below, are referred to by Sasse (1987) as 'entity-central' thetic sentences, as they assert the existence of an entity.

- (3.21) a. Lai le yi ge keren.  
 come ASP one CL guest  
 There came a GUEST.
- b. (zai) yuanzi-li you yi zhi gou.  
 (LOC) yard-inside exist one CL dog  
 In the yard there is a DOG.

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<sup>100</sup>McCawley (1988:7) does consider the postverbal NP in this example as indefinite because he feels that the NP is the 'focus' of the adverb *zhi* 'only', so 'the meaning of such a combination is that of an "indefinite" NP: *zhi ... Zhangsan* means "no one but Zhangsan"'. Here McCawley is not distinguishing between a referent's discourse status (identifiability) and information structure: it is true that the NP is focal, but being focal does not mean it is necessarily 'indefinite'. L. Li (1986:350) makes the same mistake when he claims that the NP following *zhi* 'only' must be 'indefinite' (*wu ding*).

Another class ofthetic sentences Sasse calls ‘event-central’thetic sentences.<sup>101</sup> In this type of structure, what is being asserted is the existence (happening) of an event, not the existence of an entity, so this type of structure will not include referential NPs.<sup>102</sup> The

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<sup>101</sup>This type of sentence is sometimes referred to as a type of existential sentence (e.g. Huang 1987), but the pragmatic function of these constructions is not to introduce a new referent; the NP which follows the verb is treated as non-topical, regardless of its identifiability. Guo (1990:24-25) recognizes the similarity in structure of existential and what he refers to as ‘possessive subject’ sentences, but distinguishes the two on the basis of whether there is a ‘positional’ particle (in example (ib), *li* ‘inside’) in the sentence initial NP. Without the positional article, the initial NP is a topic in a sentence that says something about what happened to that topic; with the positional, it is simply the location where the event occurred. He gives the following examples:

- (i) a. Ta si le yi ge erzi.  
       3sg die ASP one CL son  
       One of his sons died (on him).
- b. Tou li si le yi ge ren.  
       head inside die ASP one CL person  
       Someone among the leaders died.

Guo argues that even when the sentence initial NP is a location, without the positional particle, as in (ii), it is simply a topic in a possessor relation to the post-verbal NP, and is not a locative, as in the existential sentences:

- (ii) Dongwuyuan pao le yi zhi xiongmao  
       zoo run ASP one CL panda  
       The zoo lost a panda (by its running away).

<sup>102</sup>It is possible to have a referential NP in this type of structure, but it will be ‘pragmatically non-referential’ (Givón 1981a), that is, a referential NP can be treated as non-referential when it is not salient in the discourse (see ex. (3.30a)).

prototypical examples of this type of sentence are statements about the weather, such as *It's raining*. In Chinese the verbs for *rain* and *snow* do not incorporate the object as in English. The NPs 'rain' and 'snow' in the sentences in (3.29), below, are not referentially specific (do not refer to some specific rain or snow—are 'non-manipulable' in the framework of Hopper & Thompson 1984, 1985), though, and not topical, and so are placed in postverbal position:

- |  |  |
|--|--|
| (3.29) a. Xia yu le.<br>fall rain ASP<br>It's raining. | b. Xia xue le.<br>fall snow ASP<br>It's snowing. |
|--|--|

This kind of event-central expression can appear within a topic-comment structure as an assertion about the topic. In these cases, generally the topic is the possessor of, or is in some way related to, the NP in the event-central expression. In English this is not clearly coded, so certain sentences involving both an entity and an event can be ambiguous between event-central and entity-central statements, such as *My grandfather died* (Sasse 1987:527). In Chinese, the event-central and the entity-central readings require different structures, the former involving possessor ascension, as in (3.30a):

- |  |   |
|--|---|
| (3.30) a. Ta si le fuqin<br>3sg die ASP father<br>His FATHER died. | b. Ta de fuqin si le.<br>3sg GEN father die ASP<br>His father DIED. |
|--|---|

(3.30a) is an example of what is often referred to as an 'adversative' construction. The topic has no active control over the action represented by the verb (Guo 1990:27). A better translation for this sentence would be *He was affected by the death of (his) father*. What gives the sentence this adversative reading is the fact that 'father' is made non-topical, by being placed in postverbal position, so that the dying of the father can be expressed as an



event-central statement, which is then the assertion about the topic (cf. Kuno's (1987:206) concept of 'empathy', the speaker's identification with the person or thing affected by the event being articulated). (3.30b) is an entity-central statement about the topic 'his father', who died. Consider the following sentence, from Lü 1979:72:

- (3.31) Wang Mian      qisui      shang si le fuqin.  
 Wang Mian seven-years-old    on    die ASP father.  
 Wang Mian lost his father when he was about seven years old.

The structure is a comment about what happened to Wang Mian when he was seven years old. There is no equivalent sentence with the father as the topic, as there is in (3.30b), unless it is broken into two clauses, as in (3.32):

- (3.32) Wang Mian      qisui      de shihou, (ta) fuqin jiu si le.  
 Wang Mian seven-years-old REL    time    (3sg) father then die ASP  
 When Wang Mian was (only) seven years old, his father died.

Here, though the father is the topic of the second clause, in the larger context Wang Mian is still the more topical referent. This can be seen in a paraphrase of this utterance:

- (3.33) Wang Mian    de fuqin, zai    ta      qisui      de shihou, si le.  
 Wang Mian GEN father LOC 3sg seven-years-old REL time    die ASP  
 Wang Mian's father, when he (Wang Mian) was only seven years old, died.

As can be seen from the odd English translation of this example, the third person pronoun in the subordinate clause refers to Wang Mian, not his father, as Wang Mian is the more topical referent. (The antecedent of the pronoun is also clear from the semantics of the sentence: Wang Mian's father could not have died when he himself was only seven years

old!) Because of these factors, the most natural way to make this statement about Wang Mian is to use the structure (3.31).

In general, non-iterative achievement verbs such as *si* 'die', *lan* 'rot', and *chen* 'sink' cannot appear with the 'experiential' aspect marker *guo*, yet when these verbs appear in event-centered utterances, they CAN take *guo* (Guo 1990). This is because of the verb + post-verbal non-specific NP together being seen as one repeatable event, as in the following example, from Guo 1990:26:

- (3.34) a. Ta si guo yi pi ma.  
 3sg die ASP one CL horse  
 One of his horses died (on him).
- b. Ta lan guo wushi jin xiangjiao.  
 3sg rot ASP fifty catty banana  
 Fifty catties of his bananas rotted (on him).

Contrast these with the following unacceptable examples, in which the undergoer of the verb is specific:

- (3.35) a. \*Ta you pi ma si guo.  
 3sg have Cl horse die ASP  
 (He has a horse that died (lit.: has experienced dying).)
- b. \*Ta you wushi jin xiangjiao lan guo.  
 3sg have fifty catty banana rot ASP  
 (He has fifty catties of bananas that rotted (lit.: have experienced rotting).)

Because of this unity of the verb + post-verbal NP, we can see this as a pragmatic equivalent of noun incorporation, as noun incorporation converts a simple categorical

(topic-comment) judgement into athetic statement, and a double categorical (topic-comment within topic comment) judgement into a simple categorical statement (Sasse 1984:260).

This event-central construction also appears in background or scene-setting clauses (examples from Huang 1987:242):

- (3.36) a. *Suiran lai le Lisi/nei ge ren, keshi ...*  
 although come ASP Lisi/that Cl person but  
 Although Lisi/that person has come, ...
- b. *Ruguo fasheng zhe jian shiqing, jiu ...*  
 if happen this CL affair then  
 If that happens, then ...
- c. *Zicong zou le Zhangsang yihou, jiu ...*  
 from go ASP Zhangsang after then  
 Ever since Zhangsang left, ...

In these examples the post-verbal referent is not in any way being introduced, as it is identifiable, and may have just come up in the discourse, but it is not the topic of the larger discourse; it is presented as part of an event, and the event is simply background information for the assertion to come, as shown by the subordinating (relational) conjunctions.

### 3.3.3. The *ba* Construction

As discussed above (§2.2.3), in the *ba* construction an NP affected in some way by the action of the verb follows the particle *ba* in preverbal position:

- (3.37) *Zhangsan ba yifu xi huai le.*  
 Zhangsan BA clothes wash broken ASP  
 Zhangsan ruined the clothes washing them.

In this section, I will argue that the *ba* construction serves to allow an NP in the scope of the assertion to not be in the final focus position. In the *ba* construction, in fact, there MUST be at least one non-focal NP affected by the action other than the sentence-initial NP, and that is the post-*ba* NP. What this creates is somewhat like a double-topic construction (cf. Tsao 1987) where the whole *ba* phrase, including the post-*ba* NP, is an assertion about the sentence initial topic, and within the *ba* phrase there is an assertion about the post-*ba* NP. Let us first look at the nature of the post-*ba* NP.

### 3.3.3.1. The post-*ba* NP

Li & Thompson (1981:463 ff.) say that the noun following *ba* generally is definite or generic, and that it is generally the direct object of the verb. There are times, though, when the post-*ba* NP is known only to the speaker (and is specific for him) and so is presented as unidentifiable (quantified by ‘one’ plus a classifier), and other times when the true patient FOLLOWS the verb, although the post-*ba* NP (generally the possessor of the patient) is considered to be the main referent affected by the action (see below and also §2.2.3 above for examples).

For Teng (1975:109), the post-*ba* NP (1) must be ‘actual’, (2) must be a patient, and (3) ‘in volitional and completed events, an accusativized [i.e., *ba*] object must be “actual” at the time of action and not at the time of utterance’.

In regard to Teng’s first condition, all of the above authors are in accord, as saying that the post-*ba* NP is ‘actual’ is the same as saying it is generic, identifiable, or at least specific to the speaker. In other words, the post-*ba* NP is part of the pragmatic

presupposition, or is at least being treated as such by the speaker. As Li & Thompson point out, post-*ba* NPs marked as ‘indefinite’ are rare.<sup>103</sup> The example both Li & Thompson and Teng give of this type is (3.38) (Li & Thompson 1981:465; Teng 1975:109):

- (3.38) Wo ba yi jian shi wang le.  
 1sg BA one CL thing forget ASP  
 I forgot something.

My view is that the speaker purposely uses this construction to make an assertion about something that he does not want to, or feels he does not need to, first introduce; he treats the referent as if it were already part of the pragmatic presupposition (see Chafe 1987:27 on the concept of how a non-active referent can be ‘formulaically pretended to be so’<sup>104</sup>). He might also not remember what the thing was, just that there was something he forgot. Both of the forms below are also possible:

- (3.39) a. You yi jian shi wo wang le  
 exist one CL thing 1sg forget ASP  
 There’s something I forgot.
- b. Wo wang le yi jian shi.  
 1sg forget ASP one CL thing  
 I forgot something.

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<sup>103</sup>For Tsao (1987), this only occurs when a 1st person pronoun is the sentence-initial topic, but see Ma 1985b and Song 1981 for counterexamples.

<sup>104</sup>Cf. the paradoxical English expression *a certain something* (pointed out to me by James A. Matisoff).

Though the truth value of these three sentences are the same (in all three the discourse status of the referent is also the same), they differ in terms of pragmatic application: (3.39b) simply asserts that I forgot something; (3.39a) introduces the existence of something that I forgot (cf. *There's something I forgot*); (3.38) gives greater weight to the forgetting of a PARTICULAR thing. This last fact can be seen from the following facts: (a) the same structure with an indefinite number is ungrammatical (pointed out to me by Jackson Sun):

(3.40) \*Wo ba yi liang jian shi wang le.  
 1sg BA one two CL thing forget ASP  
 (I forgot one or two things.)

(b) the post-*ba* NP can be modified by, and in fact seems better with, a restrictive relative clause (pointed out to me by Naicong Li):

(3.41) Ta ba yi jian feichang zhongyao de shi wang le.  
 3sg BA one CL extremely important REL thing forget ASP  
 He forgot one extremely important thing.

The use of *ba* lets the hearer know that though the referent is marked as unidentifiable,<sup>105</sup> it is specific to the speaker. The closest English translation of (3.38) is *I forgot ONE thing!*

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<sup>105</sup>Because of the view which does not distinguish between location (preverbally or post-verbally) in the sentence and the definiteness of noun phrases, Chao 1968:334 (following Lü 1955) is forced to conclude that Chinese *yi ge* 'one + CL' is not limited to indefinite reference, as it sometimes appears in preverbal position after *ba*. If we separate the two issues of focus structure and the representation of referents, the post-*ba* NP, when it is preceded by *yi ge*, can be seen as unidentifiable to the addressee yet still appear in preverbal position.

As regards the second condition proposed by Teng, we saw from the examples in §2.2.3, above, that the post-*ba* NP is not always a patient. It can also be an effector (see also ex. (3.49) below), an instrument, a benefactive, or it can simply be a topic not grammatically related to anything else in the sentence.

Teng's third condition is to account for the difference between (3.42) and (3.43), Teng's (8) and (9), p. 110:<sup>106</sup>

- (3.42) a. *Wo mai le san ben shu.*  
 1sg sell ASP three CL book(s)  
 I sold three books.
- b. \**Wo ba san ben shu mai le.*  
 1sg BA three CL book(s) sell ASP
- (3.43) a. *Wo jintian san ben shu dou mai le.*  
 1sg today three CL book(s) all sell ASP  
 Today I sold all three books.
- b. *Wo jintian ba san ben shu dou mai le.*  
 1sg today BA three CL book(s) all sell ASP

Teng argues that in (3.42) the books were 'virtual' at the time of the selling, but those in (3.43) were 'actual', because 'at the time of the selling, the speaker in [(3.42)] did not have any specific books he had to sell ..., whereas in [(3.43)] had in mind three specific books he wanted to sell' (p. 110). A simpler way to state this is that the books in (3.42a) are

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<sup>106</sup>Derek Herforth (p.c.) points out that (3.43a, b) require the quantifier *dou* 'all' to be grammatical, and this is involved in the 'actual' reading of the preverbal NPs. See §3.3.7 below for more on *dou*.

being introduced as part of the assertion *sold three books*, while those in (3.43) have to already have been part of the pragmatic presupposition (had to have been discussed before), so could be used in the post-*ba* position without any problem.

### 3.3.3.2. The Pragmatic Function of the *ba* Construction

Tsao's (1987) topic-comment analysis of the *ba* construction, i.e., that the post-*ba* NP is a secondary topic about which a comment is made, is close to my analysis (discussed in detail above, §2.2), but I do not feel the post-*ba* NP is really a topic. Let's look at the pragmatic function of the *ba* construction. The examples given above in (3.38) and (3.39) give us a clue as to the nature and function of the *ba* construction. I gave three possibilities in Chinese for *I forgot something*. What is not possible is to have the NP *yi jian shi* in preverbal position without marking it with *ba* or *you* (i.e., *\*Wo yi jian shi wangle*; *\*Yi jian shi wo wangle*). We have already seen that *you* allows a new referent to appear postverbally so that it can be introduced into the discourse (§3.3.1.1); *ba*, on the other hand, doesn't generally introduce new referents, but can allow new referents to be treated as part of the presupposition. It can do this because the usual function of the *ba* construction is to allow part of the presupposition to be treated as being within the scope of the assertion. That is, as the scope of the assertion includes the *ba* phrase and everything after it, a new referent can be introduced as the post-*ba* NP, but it must be one that the speaker intends to not treat as the salient new information to be introduced, as it is not placed in the unmarked focus position (i.e. sentence-final).<sup>107</sup>

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<sup>107</sup>See Lambrecht, to appear, p. 67, on the difference in coding between 'specific unidentifiable referents which are meant to become topics in a discourse and those which play only an ancillary pragmatic role'.



In fact many of the post-*ba* NPs cannot be considered equivalent to topics or even secondary topics (those that would follow the main topic in a ‘double-nominative’ construction), as they do not have the same distribution characteristics as topics or secondary topics. For example, if we remove *ba* from (3.44a) or (3.45a), below, or have *xiezi* ‘shoes’ or *huo* ‘fire’ in initial position, that is, if we treat them as if they were topics, the results are ungrammatical or at least much more marked:

(3.44) a. Ta ba xiezi tuo le, cai jin lai.  
3sg BA shoes take-off ASP then enter come  
S/He took off his/her shoes, then came in.

b. \*Ta xiezi tuo le, cai jin lai.  
3sg shoes take-off ASP then enter come

c. \*Xiezi ta tuo le, cai jin lai.  
shoes 3sg take-off ASP then enter come

d. Ta tuo le xiezi, cai jin lai.  
3sg take-off ASP shoes then enter come  
S/He took off his/her shoes, then came in.

(3.45) a. Ta ba huo jia le yi-dian you.  
3sg BA fire add ASP a-little oil.  
S/He added a little oil to the fire.

b. \*Ta huo jia le yi-dian you.  
3sg fire add ASP a-little oil.

c. ?Huo ta jia le yi-dian you.  
fire 3sg add ASP a-little oil.

The only other possible configuration for expressing the action in (3.44a) is to have *xiezi* ‘shoes’ in post-verbal position, as in (3.44d). This is further evidence that *xiezi* ‘shoes’ is not topical here. In (3.45a) *huo* is not an argument of the verb *jia* ‘add’<sup>108</sup> (so can’t be a ‘direct object’), and it cannot be said to be the argument of a verb *ba*, as if *ba* were a verb it would create a focus position of its own, but *huo* IS a referent that is involved in, and affected by, the action of the assertion.

We can see that *ba* delimits the scope of the assertion when we compare ‘topicalized’ forms with *ba* sentences in terms of the distribution possibilities of a negative potential verb:

- (3.46) a. Zhe ge mimi wo bu neng gaosu ni.  
 this CL secret 1sg not can tell 2sg  
 This secret I can’t tell you.
- b. Wo zhe ge mimi bu neng gaosu ni.  
 1sg this CL secret not can tell 2sg  
 I can’t tell you this secret.
- c. \*Wo bu neng zhe ge mimi gaosu ni.  
 1sg not can this CL secret tell 2sg
- d. \*Zhe ge mimi bu neng wo gaosu ni.  
 this CL secret not can 1sg tell 2sg
- e. Wo bu neng ba zhe ge mimi gaosu ni.  
 1sg not can BA this CL secret tell 2sg  
 I can’t tell this secret to you.

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<sup>108</sup>Unlike its English equivalent, this verb doesn’t take an indirect object, though a benefactive clause can be added using the verb *gei* ‘give’.

- f. \*Wo ba zhe ge mimi bu neng gaosu ni.  
1sg BA this CL secret not can tell 2sg

What follows the negative potential verb is the assertion. In (3.46a-d) the two topics must precede *bu neng* ‘can’t’, but in (3.46e) the negative potential verb precedes *ba*, and cannot follow it, as shown in (3.46f).

Further evidence that the *ba* phrase can be part of the assertion is the distribution of certain modifiers:

- (3.47) a. Ta ba yizi zixi de kan le yi xia.  
3sg BA chair careful AP look ASP one time  
He looked carefully at the chair.
- b. Ta zixi de ba yizi kan le yi xia.  
3sg careful AP BA chair look ASP one time
- c. \*Ta zixi de yizi kan le yi xia.  
3sg careful AP chair look ASP one time

Manner adverbs immediately precede the assertion (in terms of structure, the predication or VP (Teng 1974)—see Lambrecht 1989 on VP as the grammaticalization of predicate-focus focus structure). In (3.47a) the adverb *zixi* ‘carefully’ immediately precedes the verb *kan* ‘look’, which points to *kan le yi xia* as being the assertion (VP), but in (3.47b) the adverb immediately precedes *ba*, pointing to the whole *ba* phrase (all that follows *ba*) as being the assertion. (3.47c) is ungrammatical because the adverb can’t precede a topical NP. It is because of facts like these that McCawley (1988b) analyzes the *ba* construction as having the structure  $\nu p(\text{PP} + \text{VP})$ .

Negation also must precede the *ba* phrase, because it is the assertion, some action taken in regard to the specified referent, that is being negated. That is, it is not the action designated by the verb alone that is negated, but the action AS IT APPLIES TO THE POST-*ba* NP.'

- (3.48) a. Wo mei ba chezi nong huai.  
 1sg N-A BA car do/make broken  
 I didn't wreck the car.
- b. \*Wo ba chezi mei nong huai.  
 1sg BA car N-A do/make broken
- c. Chezi (wo) mei nong huai.  
 car (1sg) N-A do/make broken  
 (I) didn't wreck the car.
- d. \*Wo mei chezi nong huai.  
 1sg N-A car do/make broken

(3.48a) is an assertion about 'me', that 'I' didn't wreck the car. (3.48c) is an assertion about the car, that ('I') didn't wreck it. The negative follows the topic and precedes the assertion (cf. Teng 1973).

The particle *ba* can be said to increase the transitivity of a sentence (Thompson 1973) because of this function of allowing a non-focal (and possibly non-argument) NP to be within the scope of the assertion, as it thereby increases the number of participants and the affectedness of one of the arguments (Hopper & Thompson 1980). It clarifies the line between what the speaker intends as the topic (the NP preceding *ba*), and the assertion about that referent. For example, (3.49) is a statement about a cup of wine:

- (3.49) Nei bei jiu ba ta he de chabuduo zui le!  
 that cup wine BA 3sg drink CD more-or-less drunk ASP  
 That cup of wine got him more or less drunk!

In this example the pre-*ba* NP is the patient of the verb 'drink', not the agent, but the effect of the topic-comment structure here with *ba* is that the cup of wine did something, and what it did is the assertion *he drank (it) with the effect that he got more or less drunk*.

### 3.3.3.3. The 'SVO > SOV' Hypothesis

One important point I would like to make about the *ba* construction involves the well-known hypothesis that Chinese is in the process of changing from a verb medial language to a verb final language.<sup>109</sup> In Li & Thompson (1974a), the position is put forward that word order change can be from verb medial to verb final, that it is done through the collapsing of complex sentences of one word order into simple sentences of a different word order, and that exactly this has been going on in Chinese for the past two thousand years. Li & Thompson use the questions of the location of the prepositional phrase, the existence of postpositions, and the development of the *ba* and *bei* constructions to argue their case. These arguments are continued and augmented in Li & Thompson 1974c, 1975, 1976b and Li 1975. They refer to this change in word order as 'Tendency B' in their 1975 paper (p. 185) on the 'semantic' function of word order cited above (§3.2.1), and state that their Tendency A is in conflict with Tendency B, but Tendency B will win out in the end, as the change in word order is 'relentless'.

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<sup>109</sup>Tai (1973) was the first to suggest the analysis of Chinese as an SOV language, but from the point of view of underlying structure. He later (1976, inter alia) argued for the SOV analysis at the surface level as well. Many other scholars also jumped on the bandwagon, but this theory, as far as I know, no longer has any supporters.

If it were true that Chinese was changing to verb final order and at the same time was developing a use of word order that reinforces verb medial order, such as using nominal position before or after the verb to mark focus structure, it would be strange indeed. I will not argue the case here, as the authors who originally proposed the idea no longer argue for its validity. The relevant point is that one of the key arguments used by those authors who argued that Chinese has verb final order was the existence of the *ba* construction. I would argue the opposite, that the *ba* construction developed BECAUSE OF the development of the postverbal focus position (which subsumes Li & Thompson's Tendency A). My position is that focus position is a prime determinant of word order type (somewhat the converse of the position taken in Herring 1990). My hypothesis is that Sino-Tibetan was originally verb final, and the verb medial order of Chinese developed because of the development of a sentence-final focus position (see Chapter V).<sup>110</sup> After sentence-final position became the focus position, the *ba* construction developed as a means of having non-focal (i.e. prverbal) NPs within the scope of the assertion. The *ba* construction then is not only not in conflict with the final focus position and the pragmatic function of verb medial order, but actually is a function of it.

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<sup>110</sup>Cf. Faarlund 1985, where arguments are presented in support of seeing the rise of verb medial order from verb final order in North Germanic as the result of the development of a sentence-final focus position. Bikerton & Givon (1976) argue that it is topic structure that can change or define word order, but such a view would not be able to explain a change from verb-final to verb-medial order, as the topic is in sentence-initial position in both orders. Focus structure, on the other hand, is different for each type of word order (see also Herring 1989b, 1990).

### 3.3.4. The *bei* and *gei* Constructions

I have already dealt with the *bei* construction at length above (§2.3), so here I will just mention that this construction too involves a grammaticalization of focus structure. I presented it above as a type of topic-comment structure that involves emphasizing the affectedness of the initial NP. Just as we saw for the *ba* construction, in the case of the *bei* construction all but the initial NP is within the scope of the assertion. Many of the facts about the distribution of modifiers (other than agent-oriented modifiers), negation, etc. that apply to the *ba* construction (*mutatis mutandis*) also apply to the *bei* construction. Here I will give just one example, that of negation:

- (3.50) a. Zhangsan mei bei ta da si.  
 Zhangsan N-A BEI 3sg hit die  
 Zhangsan was not beaten to death by him.
- b. \*Zhangsan bei ta mei da si.  
 Zhangsan BEI 3sg N-A hit die

The same is true for the *gei* construction<sup>111</sup> (derived from the verb *gei* ‘give’), which allows a non-focal benefactive (or malefactive) or goal NP to be included within the assertion set off against the topic (often increasing the transitivity of the verb by the

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<sup>111</sup>Another aspect of the similarity of the *bei* and *gei* constructions is that *gei* can also be used in place of *bei* in what otherwise would be a *bei* construction:

- (i) Wo yi bu xiao xin, yifu jiu gei nong zang le.  
 1sg one not small heart clothes then BEI do/make dirty ASP  
 As soon as I was not careful my clothes got dirty.

addition of such an argument). It does this by having the non-focal argument in preverbal position, but within the scope of the assertion as marked by *gei*.

- (3.51) a.   Wo gei John nong dao le yixie hao chi de.  
 1sg give John do/make arrive ASP some good eat NOM  
 I got some good stuff to eat for John.
- b.   Ni dao le yihou gei wo lai feng xin.  
 2sg arrive ASP after give 1sg come CL letter.  
 After you arrive, write me a letter.
- c.   Bie pa! Wo keyi gei ni dang fanyi.  
 N-I afraid 1sg can give 2sg act-as translator  
 Don't be afraid! I can act as your translator.

Similar to *ba* and *bei*, *gei* clarifies the semantic relationships between the referents, so that, for example, in (3.51a) the referent of *John* is not seen as the actor. *Gei* also adds an argument to the assertion that otherwise would not be able to appear in the sentence, as none of these verbs are ditransitive. Again, to use the same test as before, negation, we can see that what is negated is the whole assertion, including *gei*:

- (3.52) a..   Wo mei gei John nong dao yixie hao chi de.  
 1sg N-A give John do/make arrive some good eat NOM  
 I didn't get some good stuff to eat for John.
- b.   \*Wo gei John mei nong dao yixie hao chi de.  
 1sg give John N-A do/make arrive some good eat NOM



### 3.3.5. Resultatives

We have already seen examples of resultative verb complexes in the discussions of *ba* and *bei*. The basic structure is  $N_1 V_1 V_2 le$ , as in (3.53):

- (3.53) *yishang liang gan le.*  
 clothing air-(v.) dry ASP  
 The clothing was DRIED by airing.

What I would like to point out here is that in this structure, it is  $V_2$  that is in focus;  $V_1$  is secondary, and only serves to modify  $V_2$  (cf. §3.3.6, below, on nominal incorporation). This can be seen in that  $N_1 V_2 le$  always expresses the same basic meaning as  $N_1 V_1 V_2 le$ , while  $N_1 V_1 le$  does not (Ma 1987).  $V_2$  also gets the prosodic stress. The point in terms of the focal status of  $V_2$  is that if  $N_1 V_2 le$  has already been established in the discourse, that is, if we already know the clothes were dried, but want to know how, the resultative structure  $N_1 V_1 V_2 le$  cannot be used. One of the following three narrow-focus cleft constructions must be used (all with the meaning ‘the clothes were AIR dried’—prosodic stress is on the focused constituent) (Ma 1987:426):

- |                                |   |
|--------------------------------|---|
| (3.54) a. $N_1 shi V_1 V_2 de$ | <i>yishang shi liang gan de</i><br>clothes COP air dry NOM        |
| b. $N_1 V_2 le shi V_1 de$     | <i>yishang gan le shi liang de</i><br>clothes air ASP COP dry NOM |
| c. $N_1 shi V_1 de V_2 le$     | <i>yishang shi liang de gan le</i><br>clothes COP air NOM dry ASP |

The resultative structure has the form that it does because it places the verb of result in the sentence final focus position, and can only be used when the result of the action, and not the method, is the most important information being conveyed.

### 3.3.6. Incorporation

NP's that are not central participants of the assertion, that is, are not topical or focal, can appear in constructions where they act as modifiers of the verb (and so are part of the assertion), as is the case with the instruments incorporated into the verbs in (3.55):

(3.55) qiang-bi	huo-shao	kou-shi
gun-kill	fire-burn	mouth-test
kill with a gun	burn with fire	take an oral exam

In certain circumstances it is possible to incorporate an entire nominalized VP to act as a modifier for the main verb, as in (3.56):

(3.56) Ta yi tian dao wan xie-xin-mang.
3sg one day arrive late write-letter-busy
He was BUSY from morning till night writing letters.

Here, as *mang* 'busy' is the focal element, the phrase *xie-xin* 'write letters' is incorporated into the verb phrase, so then only modifies how or why the person was busy. If what the speaker is trying to convey is that it was writing letters that kept the person busy (e.g., if the question *What is keeping him busy all day?* was asked), the form in (3.57) would be used.

- (3.57) Ta yi tian dao wan mang zhe xie-xin.  
 3sg one day arrive late busy ASP write-letter  
 He was busy from morning till night WRITING LETTERS.

A different type of incorporation which involves the double nominative structure (Teng 1974) or possessor ascension (Fox 1981), is similar to the event-central structures discussed above (§3.3.2). This type can be used when body parts are affected. As body parts are ‘universally not conceived of as discourse characters or as independent entities about which information is given during a conversation’ (Sasse 1987:571),<sup>112</sup> the body part is incorporated into the assertion and the possessor of the body part becomes the topic about which the assertion is made.

- (3.58) a. Wo duzi e le.                      b. Wo tou teng le.  
 1sg belly hungry ASP                      1sg head hurt ASP  
 I’m hungry.                                      I have a headache.

This is a type of double-topic construction (Teng 1974). The main topic (‘1sg’ in both examples) is not in a grammatically marked possessor relationship with the secondary topic (‘belly’/‘head’), as the secondary topic has been incorporated into the assertion about the main topic, and there is an assertion about the secondary topic.<sup>113,114</sup>

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<sup>112</sup>See also Hopper & Thompson (1984, 1985) on the ‘low categoriality’ (as nouns) of body parts. Though they are as referential as the person to whom they belong, ‘IN THE DISCOURSE body parts are not in general autonomous, discourse-salient entities’ and so ‘are treated in grammar and discourse as dependent, non-individuated entities’ (1984:726, 1985:167, emphasis in original).

<sup>113</sup>I differ with Lambrecht on the question of whether the domain of the assertion can also include a referential or cognitively ‘accessible’ NP that is not the primary topical participant of the sentence (i.e. not the topic that the assertion is about), but is a secondary topic. For Lambrecht, the semantic-pragmatic scope of the assertion may not include topical NPs, but

Lambrecht (1989) argues that a sentence such as *My STOMACH hurts* is a sentence-focus structure because the subject noun is marked as a non-topic by its prosodic stress, which is usually associated with objects. In French this can be expressed in a marked biclausal structure similar to the one we discussed for Chinese above (ex. (3.26)). In Chinese, though, this proposition is not expressed in a sentence-focus structure, but in the type of predicate-focus structure involving incorporation of the body part.<sup>115</sup> In the English form of this proposition, the first person referent is not set off as a separate topic (it simply modifies the subject), but semantically it could also be said to be a statement about the first person referent. In Chinese this is simply made explicit.

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the syntactic domain of the verb phrase may contain secondary (non-subject) topics. That is, he distinguishes clearly between morphosyntax and semantics-pragmatics. What I am trying to show in this section is that semantics-pragmatics can directly and exclusively determine morphosyntax. There are structures where a topic-comment structure is itself an assertion about a more salient topic, that is, constructions exist that function to delineate primary from secondary topics, where the secondary topic is part of the assertion about the primary topic. The grammaticalization of this structure may create a VP, but the motivation is pragmatic.

<sup>114</sup>Nichols (1988b:22) sees possessor ascension as the promotion of the possessor to argumenthood in the clause (the ascended possessor no longer forms an NP with the possessed noun), which makes it a dependent on the verb rather than on the possessed noun. It then becomes a clausal, rather than phrasal, possessive pattern. Givón (1979b:91) sees it simply as topicalization of the possessor because it is a more topical NP. The only difference between these analyses and my analysis is whether we look at possessor ascension from the point of view of the ascended possessor or the incorporated possessed noun.

<sup>115</sup>Lambrecht (p.c.) points out that French also has a structure similar to that in Chinese: *J'ai mal à la tête* 'I hurt at the head'.

### 3.3.7. The Quantifier *dou*

The last construction I will discuss involves the quantifier *dou* 'all'. Generally, *dou* quantifies the topic(s), and follows the referents that it quantifies (Lü 1980:153):<sup>116</sup>

- (3.59) a. Women *dou* yao qu.  
 1pl all want go  
 We all want to go.
- b. Yifu wo *dou* xi hao le.  
 clothes 1sg all wash good ASP  
 I washed all the clothes.

There are times, though, when the quantified referents appear AFTER *dou* (all examples from Z. Ma 1985a):

- (3.60) a. *Dou* shei lai le?  
 all who come ASP  
 Who all came?
- b. *Dou* shenme yang de niu gei zai le?  
 all what kind REL cow BEI kill ASP  
 What kind(s) of cows were killed?
- c. (Ni) *dou* kan shei le?  
 (2sg) all see who ASP  
 Who all did you see?

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<sup>116</sup>Chao (1968:780), states that the adverb must come immediately before the verb and after the referent it is modifying.

- d. Ni kan, ta dou shuo xie shenme.  
 2sg look 3sg all say few what  
 Look at all that he has said.
- e. Ni dou ba shenme dongxi da-sui le?  
 2sg all BA what thing hit-to pieces ASP  
 What were all of the things that you broke to pieces?

If *dou* were to follow the referent in question in the examples above, the meaning would be very different. Compare (3.60b) with (3.61), below:

- (3.61) b. Shenme yang de niu dou gei zai le.  
 what kind REL cow all BEI kill ASP  
 All kinds of cows were killed.

The difference in the placement of *dou* influences the interpretation of *shenme yang* ‘what kind(s)’ so that it is no longer a question word, but is instead an ‘indefinite’ pronoun. The sentence then is not a question, but a statement. If a question word follows *dou*, it must be either interrogative or non-specific (Z. Ma 1985a:100).

This construction can also occur without question words:

- (3.62) a. Wo dou jiao guo tamen.  
 1sg all teach ASP 3pl  
 I taught all of them.
- b. Dou ba tamen reng le, wo yong shenme?  
 all BA 3pl throw ASP 1sg use what  
 (You) threw them all away, what am I to use?

In these cases, *dou* can follow the NPs in question, but the pragmatics of the sentence would then be different. For example, if (3.62a) were restated as (3.63), the resulting sentence would be contrastive statement about 'them', rather than a statement about something I did.

- (3.63) a. Tamen wo dou jiao guo.  
3pl 1sg all teach ASP  
Them I (all) taught.

We can see from these examples that when the quantified referents are topical, *dou* follows them, but when they are not, *dou* precedes them.

### 3.5. Conclusion

What I have tried to show in the discussion of word order and the small sample of constructions in Chinese above is that (a) verb medial word order has the function of distinguishing topical (preverbal) and focal (post-verbal) referents, not 'definite' and 'indefinite' NPs, and (b) constructions have developed in Chinese which serve to allow deviations from verb medial word order but still allow the topical (non-focal) and focal (non-topical) elements to be clearly distinguished. We see then that information structure plays a very important, and possibly the single most important, role in determining word order and certain types of morphological marking (use of construction forming particles) in Chinese.<sup>117</sup>

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<sup>117</sup>Cf. Comrie's (1981:72) analysis of Russian word order, which he says is pragmatically determined (with the focus at the end), and unrelated to syntactic functions, and Sasse's (1981) analysis of Boni, which also has pragmatically determined word order.



## **Chapter IV**

### **On Referent Tracking and Discourse Structure**

#### **4.1. Introduction**

Related to the discussions in Chapters II, and III, above, is the question of referent tracking and the organization of discourse. As there has been no grammaticalization of syntactic functions in Chinese, such syntactic functions cannot be important to discourse referent tracking, as they are in, for example, English, where the subject is the pivot for cross-clause coreference. If the listener is not aided by syntactic functions in the tracking of referents, the question must then be ‘what DOES a listener rely on in tracking referents in a discourse?’ I will show that it is the structure of the discourse (including information structure, as defined in §1.2.3), the semantics of the referents themselves, and real-world knowledge that are important to referent tracking.

#### **4.2. Types of Referent Tracking**

There are four systems of discourse referent-tracking used in languages of the world: (a) inference, (b) gender/number/noun class, (c) switch-reference, and (d) switch-function (Foley & Van Valin 1984, Ch. 7; Van Valin 1987; cf. Comrie 1989 for a slightly different analysis of switch function). The first type, inference, is where tracking of a referent is purely a matter of pragmatics, and no grammatical or lexical marking is involved. In languages that mainly or exclusively use this type, the ‘most distinctive

characteristic is the occurrence of extensive and grammatically unrestrained zero anaphora' (Van Valin 1987:520).

Type (b) is a type of lexical marking, either on the head or the dependent. This is the main system of referent tracking in, for example, many Bantu languages, which have complicated systems of noun classes. The honorific systems of Japanese and other Asian languages are also included in this type, though many of those languages mainly rely on inference for referent tracking. Chinese no longer has an honorific system, but has nominal classifiers. Even so, they are not used anaphorically very often, therefore are only minimally useful in referent tracking.<sup>118</sup>

Switch-reference is a type of grammatical head-marking which occurs only in verb final languages. In this system suffixes on the verb mark a referent's coreference or non-coreference with a participant in the following clause with the same syntactic status, usually the subject. This system is used in, for example, Choctaw.

As discussed briefly in §2.3.6, switch-function is where a referent is tracked though a discourse by reference to its syntactic function, often the subject. This is the system used (along with gender marking) in, for example, English and many other European languages. In this type of system, voice changes are important for signalling changes in the semantic function of the referent throughout the discourse.

As Chinese definitely does not use type (c), and only marginally uses type (b), we will concentrate on types (a) and, for contrast, (d) in the discussion below.

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<sup>118</sup>For examples of the anaphoric use of classifiers, see above, §3.2.4, and Jianming Lu 1989:157-158.

### 4.3. Referent Tracking in Chinese

All languages use inference to some extent (and possibly some other combination of the four types), but Chinese uses inference exclusively (cf. Li & Thompson 1978, 1979; Chen 1986; Cheng 1988, Shi 1989). Huang 1984 discusses certain restrictions within a single sentence on the reference of zero 'objects', though there is no problem if the referent of that zero object is the discourse topic (p. 541). Huang also argues for the distinction between 'discourse-oriented' languages like Chinese and 'sentence-oriented' languages like English,<sup>119</sup> and points out (1984:540) that in Chinese, pragmatics can 'override' grammar in the interpretation of zero anaphora. This being the case, it is better to take pragmatic interpretation as primary, not sentence-based rules constructed, as he says, 'in contexts in which pragmatic or discoursal factors are reduced to the minimum' (Huang 1984:539).

Referent tracking in Chinese cannot be a switch-function system, as it does not make reference to syntactic function. Referent tracking is not, and cannot be, for example, from 'subject' to 'subject', as there is no 'subject' (see §1.1 above).

Chinese is a case of what Foley & Van Valin (1977—see also Van Valin & Foley 1980) refer to as a 'role dominated' language, one where 'the organization of clause level grammar is controlled by semantic roles and their interactions' (Foley & Van Valin 1977:298).<sup>120</sup> For Chinese this must be taken one step further and carried to the discourse level. Because there is no morphological marking of syntactic functions (there not being any syntactic functions), the semantic role of a constituent in Chinese can only be

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<sup>119</sup>This distinction originally from Tsao 1979:89-98.

<sup>120</sup>The idea that it is semantic role that is primary in Chinese is not new. See for example L. Wang 1956 and Gao 1956.

understood in the discourse and real world context in which it is used.<sup>121</sup> Neither morphology or word order supply this information,<sup>122</sup> as there is no verbal or nominal inflection, and word order is primarily determined by pragmatic factors (see Chapter III). As Li & Thompson state (1979:320),

... zero pronouns can occur in any grammatical slot on the basis of coreferentiality with an antecedent that itself may be in any grammatical slot, at some distance, or not even present. The fundamental strategy in the interpretation of zero-pronouns in Chinese discourse, then, is inference on the basis of pragmatic information provided by the discourse and our knowledge of the world.

We can see this from the following example, from Chen 1984:8:<sup>123</sup>

- (4.1) a. Lao Qian; you zheme ge piqi,  
 Old Qian have such CL disposition  
 Old Qian has (just) such a disposition:
- b. Ø<sub>i</sub> wen pengyou; yao shenme dongxi<sub>k</sub>,  
 ask friend want what thing  
 if (he) asks for something from (his) friend(s),

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<sup>121</sup>The inherent aspect (*Aktionsart*), valence, and transitivity of verbs should also be seen as dynamic discourse phenomena (Okamoto 1988; cf. also Lys & Mommer 1986).

<sup>122</sup>Contra L. Yang 1980:1, which states, 'Semantic functions of linguistic units can be conveyed only through syntactic means ...'

<sup>123</sup>I have partially altered the glossing of this and other cited examples to conform to the style of the rest of this dissertation.

- c.  $\emptyset_j$  like jiu dei gei  $\emptyset_i$   $\emptyset_k$ ,  
 at-once then must give  
 (he/she/they) must give (it) (to him) at once;
- d.  $\emptyset_j$  bu gei  $\emptyset_i$   $\emptyset_k$ ,  
 not give  
 if (he/she/they) don't give (it) (to him),
- e.  $\emptyset_i$  jiu juede  $\emptyset_j$  shi qiao-bu-qi tai,  
 then feel COP look-down-on 3sg  
 (he) feels that (he/she/they) don't think much of him,
- f.  $\emptyset_i$  ji tian bu gaoxing.  
 several day not pleased  
 (and) (he) would be displeased for a few days.

In this example, the first sentence sets up the topic of the discourse, and introduces one of the three referents of the discourse. In (b), the zero anaphor is in the A role, and refers to the only referent introduced so far. Two new referents are then introduced, one in the source role of *wen* 'ask', and one in the P role of *yao* 'want'. The former then is referred to by a zero anaphor in the A role of (c), and the latter is referred to by a zero in the P role of the embedded clause of (c); Old Qian also is referred to by a zero in the beneficiary role of the embedded clause of (c). These roles are repeated in (d), but then the zero anaphor in the A role in (e) refers to the previous beneficiary, and so on. There is no consistency in the semantic role of the zero anaphors used in this discourse.

Comrie (1988b:191) points out that '[i]n any given language, there is necessarily interplay between the strictly grammatical factors and the extralinguistic (world knowledge) factors that help in determining anaphoric relations', but then goes on (p. 193) to give

examples where grammatical constraints on the control of anaphor can force a particular interpretation of a sentence, even though the result is nonsensical, as in (4.2):

(4.2) The man dropped the melon and burst.

Because of the grammatical constraint on conjunction reduction in English, this sentence has to be interpreted as the saying that the man burst after dropping the melon. In Chinese there are no such grammatical constraints, so the Chinese equivalent of (4.2) would be interpreted as saying that the melon burst after the man dropped it:

(4.3) Nei ge ren ba xigua diao zai dishang, sui le.  
 that CL person BA watermelon drop LOC ground broke-to-pieces ASP  
 That man dropped the watermelon on the ground, (and it) burst.

The same structure, but with different semantics, yields different results:

(4.4) Nei ge ren ba xigua diao zai dishang, huang le.  
 that CL person BA watermelon drop LOC ground get-flustered ASP  
 That man dropped the watermelon on the ground, (and he) got flustered.

It is semantics then, not grammatical structure, that takes precedence in the interpretation of zero anaphora.

I am dealing here only with zero anaphora, as it is the extreme case of possible ambiguity in referent tracking. Chen (1984:3) argues that ‘zero anaphora [as opposed to other types of anaphora] is triggered by the fulfillment to a high extent of the conditions along two dimensions, one being the PREDICTABILITY CONDITION (PC), the other the NEGLIGIBILITY CONDITION (NC)’. The parameters of the PC are (Chen 1984:6)

1. Availability vs. unavailability of competing nouns
2. Low vs. high conjoinability<sup>124</sup> with preceding clauses
3. Low vs. high in accessibility hierarchy.

The parameters of the NC are (Chen 1984:20)

1. Specific vs. non-specific and generic reference
2. Positions in main vs. subordinate clauses
3. Animate vs. inanimate reference.

Essentially, both of these conditions are related to how easy it is to identify a referent, and to how important it is to emphasize the identity of the referent. The easier the speaker thinks it will be for an addressee to identify a referent, or the less the speaker feels it necessary to emphasize the identity of the speaker, the more likely it is that the speaker will use zero anaphora as opposed to nominal or pronominal anaphora. As Bolinger has pointed out (1979:308), the choice of a pronoun (or zero) instead of a noun is simply 'a pragmatic choice between a nominal with a richer semantic content and a nominal with a leaner one'.<sup>125</sup>

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<sup>124</sup>'Conjoinability' involves the speaker's perception of two clauses as being part of one grammatical unit or two (Li & Thompson 1979:330). For Li & Thompson, 'the degree of preference for the occurrence of a pronoun in a clause inversely corresponds to the degree of its conjoinability with the preceding clause' (1979:330). Cf. the concept of 'consecutive congruence' in Matisoff's analysis of Lahu (1973, §4.312).

<sup>125</sup>The pattern of anaphora in Chinese is, as far as I can tell, the same as that given for Guugu Yimidhurr (an Australian language) by Levinson (1987). That pattern is generated

Chen 1986 looks at referent tracking in a sample of Chinese narratives with a view toward determining what factors influence the choice mentioned by Bolinger. Using the framework developed in Givon 1983, Chen (1986:139) finds the following correlations between referential distance/intervening referents, semantic role (and animacy<sup>126</sup>), and type of anaphora used:<sup>127</sup>

Referential distance:      less referential distance/fewer intervening referents > more referential distance/more intervening referents  
 Semantic role hierarchy:   agent > dative > benefactive > patient > locative  
 Anaphor coding:            zero > pronominal > nominal

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by general pragmatic principles (based on Grice's maxims of Quantity) in the following way (from Levinson 1987:410):

- (a) Where the syntax permits a direct encoding of co-referentiality ... the use of an informationally weaker expression ... will ... implicate a non-coreferential interpretation.
- (b) Otherwise semantically general, minimally informative expressions (pronouns and gaps) will favour a co-referential interpretation ... UNLESS:
- (c) the use of a marked form, a lexical NP where a pronoun might have been used, or a pronoun where a zero might have occurred, will ... implicate a non-coreferential interpretation.

<sup>126</sup>I add this because it is not simply semantic role, but the type of referent as well. Inanimates do not usually take pronominal anaphors. They are also less likely to be salient (topical) participants in a discourse, hence will be less likely to be coded by zero anaphora as well.

<sup>127</sup>Chen also gives position in the sentence as one of the parameters determining the type of anaphora, but I have not included it here, as it is not a single parameter—position in the sentence is determined by the type of referent (e.g. predicative mentions are always post-verbal) and whether the referent is focal or topical.



The less the referential distance and/or the fewer the intervening referents between the antecedent and anaphor, and the higher the referent is on the semantic role hierarchy, the more likely the anaphor will be coded as a zero. Though these correlations hold, often it is discourse structure (the hierarchical organization of discourse) that are crucial to the interpretation of anaphora (Chen 1986:127).

Now we turn to the structure of discourse to see what it can tell us about anaphora.

#### 4.4 The Structure of Discourse in Chinese

Quite a few linguists have argued for units of discourse structure larger than sentences (see, for example, Longacre 1979, Hinds 1979, Fox 1987). James H-Y. Tai (1978) was possibly the first to argue for enlarging the scope of Chinese syntactic studies to the discourse level<sup>128</sup> and to attempt to lay out a structure for Chinese discourse. He analyzed discourse into paragraphs built of coordinately or subordinately conjoined groups of sentences called 'segments' under larger 'paragraph topics', similar to the structure given in Hinds 1979. P. Chen (1986) combined the framework of cognitive and linguistic levels of discourse developed by Chafe (1979) with the framework of 'rhetorical organization' developed by Mann and Thompson (1983, 1985—see also 1988) and Fox (1984) *inter alios*. The three cognitive levels proposed by Chafe are Focus, Thought, and Episode; these correspond to the three linguistic levels of Phrase, Sentence, and Paragraph. These levels are not controversial, so I will say no more about them here. Determining the 'rhetorical organization' of discourse involves analyzing the cognitive relationships

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<sup>128</sup>Feng-fu Tsao's dissertation (USC, 1977) was actually the first work to argue for enlarging the scope of Chinese syntax to the discourse level, but did not appear in print until 1979 (Tsao 1979).

between relational predicates. These relational predicates are of two structural types, 'conjoining' and 'adjoining', which are divided into various semantic relational types, such as conditional, joint, contrastive, background, elaboration, reason, etc. I will not use this system, as it is not always an easy task to determine the type of relation, and for the purposes here we do not need such a complex system. Here I will focus on the proposal by C. C. Cheng (1988).

Cheng started with Tai's work as a base, and improved on it by showing that it is the discourse topic that is the basic element that holds the discourse together, and by giving a more hierarchical structure to representations of discourse. What Cheng calls the 'discourse continuity' (*huati yanxu*) of a discourse topic and its 'explanation' (*shuoming*) or development in later sentences can be diagrammed in a type of top to bottom, left to right tree structure or flow chart (see (4.6) below). A single such topic-explanation structure often has subordinate discourse continuity structures and may also include sub-structures that are 'interruptions' (*dacha*). The following is one representative example of narrative discourse, from Cheng 1988:2-3 (I have added indexing markers to facilitate analysis):

- (4.5) a. Ding laoshi<sub>i</sub> dai women<sub>j</sub> qu jiaoyou,  
 Ding teacher lead 1pl go picnic  
 Teacher Ding took us on a picnic,
- b. Ø<sub>i+j</sub> zou guo yi shan you yi shan,  
 go ASP one mountain also one mountain  
 (we - including Ding) passed mountain after mountain,
- c. Ø<sub>i+j</sub> kan dao xuduo yehua.  
 see ASP many wildflowers  
 (and) saw many wildflowers.

- d. Hua<sub>1</sub> wo<sub>k</sub> zui xihuan [ zise de Ø<sub>1</sub> ]<sub>m</sub>.  
 flowers I most like purple NOM  
 Flowers, I like purple ones best,
- e. dao<sub>1</sub> chu dou shi Ø<sub>m</sub>.  
 everywhere all COP  
 (they) were everywhere,
- f. Ø<sub>k</sub> kan Ø<sub>m</sub> de Ø<sub>k</sub> gaoxing jile.  
 see CD happy very  
 Seeing (them) made (me) very happy.
- g. Tian kuai hei Ø<sub>i+j</sub> cai hui jia.  
 sky soon black then return home  
 It was almost dark when (we) returned home.

In this example, the entire first clause is the discourse topic (sets the schema or scene) for the rest of the passage, and contains the antecedents that control the zero anaphor in the second, third, and last clauses. In these later clauses the A role of each action is represented by a zero anaphor, yet even if we believed that there was such a thing as a 'subject' in Chinese, we could not say that this was a case of subject control, as the antecedent that controls these zeros is not the A role referent of the first clause, but is a combination of the A and the P role referents. The first three clauses and the last clause are narrative expressions. Clause (d) is a second discourse topic, though it is not narrative; it is evaluative (non-narrative, non-sequential). The controllers of the zero anaphors in clauses (e) and (f)<sup>129</sup> are contained in this clause. The sentence topic in clause (d), *hua*

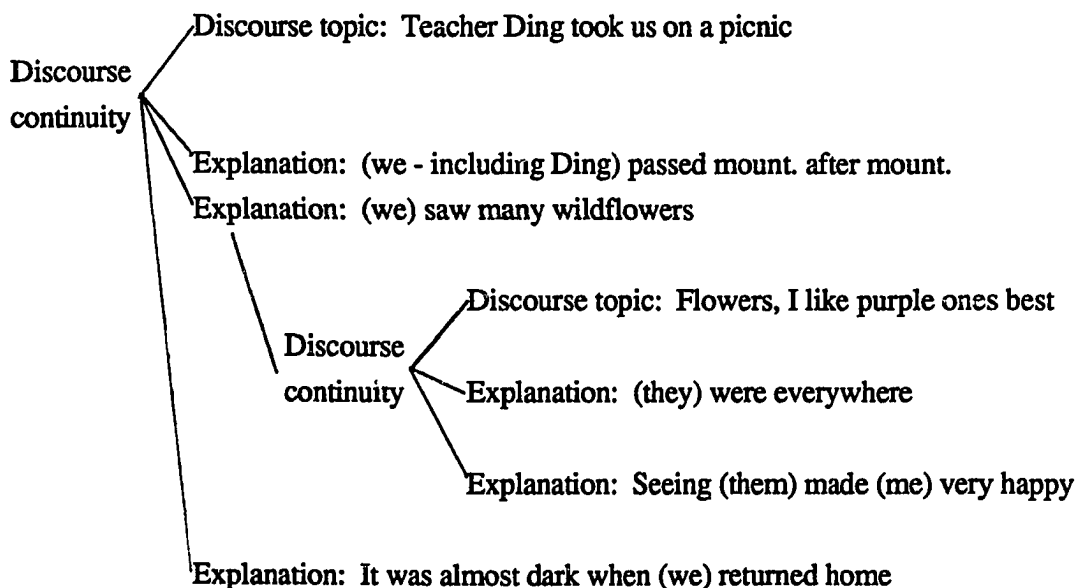
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<sup>129</sup>Clauses (e) and (f) are also both evaluative, but (f) is actually an evaluative embedding of the narrative *kan* 'see' by means of the manner adverbial. (Thanks to Derek Herforth for help on the analysis of this passage.)

'flowers', does not control the anaphor in either of the following clauses; the zero in the clause (e) refers to PURPLE flowers, not flowers in general, and the two zeros in clause (f) refer to *wo* 'I' and *zise de hua* 'purple flowers' respectively. What determines this last fact is simply the semantics of the predications, not any structural considerations. Of the three major participants in the discourse (*women*, *wo*, and *hua*), only *wo* had any predication about liking flowers, and is animate, so is able to be happy. Because of these facts, a Chinese speaker can identify *wo* as the first zero argument in clause (f). The discourse topic sentence sets up the possible antecedents, but which argument controls which zero anaphor is determined by the semantics of the predication (sometimes it is actually the entire propositional content of the clause that controls the zero anaphor in a subsequent clause).

We can see from all of this that the structure and semantics of the narrative as a whole, and not the structure of the individual sentences, are the main determining factors in referent tracking. This structure can be diagrammed as follows (adapted from Cheng 1988:5):

(4.6)



Within the larger discourse continuity structure there is an identifiable sub-structure with its own discourse topic sentence and explanations. The fact that this is identifiable as a sub-structure is what allows the zero anaphor in the last clause to be recognized as coreferring with a referent in the first clause, even though it follows the second discourse topic sentence in linear order.

We can see that Cheng's discourse diagram is very similar to the diagram given in Hopper 1979 (p. 214) distinguishing foreground from background information. There is in fact a direct correlation between discourse continuity substructures and the foreground-background distinction (cf. Li & Thompson 1979): the major structure is the foreground (narrative), and the substructures are the background (evaluation).<sup>130</sup>

It is examples such as the above that lead Cheng to the conclusion that the 'discourse topic' (*huati*) and the 'sentence topic' (*zhuti*) are two separate entities (though of course there are situations where they coincide), a distinction not generally made by other linguists working on Chinese (cf. Li & Thompson 1976, 1979). Chafe (1976:50-51) seems to have understood this difference in that he characterized sentence topics in Chinese as being different from, for example, English subjects (those which are topics); he feels Chinese topics are not 'what the sentence is about', but are 'the frame within which the sentence holds'. Though there is validity in this view vis-à-vis certain types of topic structures in Chinese, I don't quite agree that this characterization is relevant to the examples Chafe is discussing, which are 'double nominative' (Teng 1974) sentences. Below is one example (Chafe's (15), p. 50):

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<sup>130</sup>Though I am not familiar enough with the framework used by Chen (1986) to know for sure, it seems the 'conjoining'-'adjoining' structural types used by Chen correspond to the discourse topic/foreground-explanation/background distinction.

- (4.7) *Nei-xie shumu shu-shen da.*  
 those tree tree-trunk big  
 Those trees have big trunks.

Chafe feels that in the sentence above, the subject is *shu-shen*, not *nei-xie shumu*, because ‘if one considers ... what bigness is predicated of ..., it is not “those trees”, but rather their trunks. What the topics appear to do is to limit the applicability of the main predication to a certain restricted domain. The bigness of trunks applies within the domain of those trees’ (p. 50). The problem with this view is that it assumes that bigness is the only thing being predicated. Actually, the nature of having big trunks can be said to be the main predication in this sentence. That is, the topic in this sentence is the trees, and the assertion made about them is that they have big trunks (see above, §1.2.3, for the definition of ‘assertion’).

Cheng’s analysis of two types of topic, in my evaluation, is similar to Givón’s (1984:137; cf. also Givón 1983) discussion of the hierarchical structure of discourse, where he posits two functionally and syntactically distinct structures: thematic structure and topic maintenance structure. Cheng criticizes Chen 1984 (cited as Chen’s 1983 UCLA M.A. thesis) for distinguishing between topic continuity and semantic continuity, a distinction that parallels Givón’s, so Cheng may not agree with this evaluation. For him ‘the discourse continuity is only the hierarchical structure of sentences in a discourse, and is not a semantic structure’ (p. 12).

In his discussion of the example given in (4.5), Cheng says that his discourse topic sentence is a sentence without a topic (*zhuti*), as the entire sentence is the topic of the discourse itself (1988:7). This description is similar to that of Lambrecht’s ‘sentence focus’ structure (see §1.2.3), which involves no pragmatic presupposition, and therefore has no topic. This is distinguished from a ‘predicate-focus’ structure, in which there is a topic and a comment about that topic. Sentence focus sentences are often presentational in

nature; one of their discourse functions is to present or introduce (make accessible) referents which can then be commented on using topic-comment structures (predicate focus structures). These sentence-focus structures are marked structures, both in terms of frequency of occurrence and in terms of morphology, and simply by the fact that they usually contain full noun phrases (cf. Fox 1987). Hopper (1979:215) also points out the connection between focus type and discourse structure:

One frequently, in fact typically, finds ... that the focus structure of the backgrounded clause is different from that of the foregrounded clause. In backgrounded clauses, there is a greater likelihood of topic changes and of new information being introduced in the preverbal position (i.e., indefinite subjects). In foregrounded clauses, ... it is unusual for completely new information to be introduced in the subject; more often, subjects are highly presuppositional, and the new material in the story is introduced in the predicate, either in the verb or in the combination of verb plus complement.

It would seem then that the sentences marked as 'discourse topics' in Cheng's diagram then should be sentence-focus structures, while the sentences of the 'explanations' should be predicate-focus structures, but this is not always the case. Cheng's view differs from Lambrecht's, in that sentences that begin with pronouns or some other topic NP can be discourse topics, but for Lambrecht, a sentence with a topic in initial position would not be a sentence-focus structure.

There is one example where I feel this difference leads Cheng to a mistaken analysis of the discourse structure of a text. In his analysis of the following passage, from Chen 1984:11, Cheng claims that the first utterance is the discourse topic of the whole discourse, and the second utterance is a sub-discourse topic that has the third utterance as an explanation.

- (4.8) a. Wo<sub>j</sub> shi kanjian hao shu<sub>i</sub> Ø<sub>j</sub> jiu mai Ø<sub>i</sub>;  
 1sg COP see good book(s) then buy  
 I buy whatever books (I) find to be good;
- b. Ta<sub>k</sub> ne, Ø<sub>i</sub> pianyì Ø<sub>k</sub> cai mai Ø<sub>i</sub>,  
 3sg PART cheap then buy  
 As for him, only (if the books) are cheap, (will he) buy (them);
- c. Ø<sub>i</sub> bu pianyì Ø<sub>k</sub> jiu bu mai Ø<sub>i</sub>.  
 not cheap then not buy  
 if (they) are not cheap, (he) won't buy them.

The problem with this analysis is that the first utterance could not be said 'cold', that is, without some background, some higher topic, such as 'talking about book buying, ...'. Cheng feels that the discourse topic provides a semantic intention which is then clarified by the explanations, and it is to this semantic intention that one must refer in interpreting<sup>131</sup> pronominalized referents. This being the case, the first utterance of the example above is defective in that it does not provide all of the necessary semantic intention.

One other problem with Cheng's analysis is the question of linear order vs. hierarchical structure. As mentioned earlier, he includes interruptions within the hierarchical structure of the discourse, so that a remark made to a third participant, unrelated to the discourse between the first and second participants would be given a node on the flow chart in its discourse continuity structure. The example Cheng gives is the

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<sup>131</sup>I use 'interpreting' rather than 'understanding' because to use the latter 'might imply a view of discourse in which communication is the simple encoding and decoding of "thoughts" or "meanings" in linguistic packages' (Green & Morgan 1981). That is, comprehension of a discourse text involves much more than the knowledge of language.



equivalent of the narrator of the example given above saying *Little brother, stop making so much noise! We're talking!* between the second to last and last clauses. The problem with this is that though the speaker is the same, the addressee and the discourse schema are different. This is then actually a separate discourse, and so should not be diagrammed within the structure of the main discourse (though the structure of the main discourse may determine where the breaks can come). That is, though the tangential discourse impinges on the main discourse because of its position in linear order, simple linear order must be kept distinct from hierarchical discourse structure.

Another minor problem is that Cheng criticizes Li & Thompson 1979 by saying that that paper 'over and over emphasizes that deletion of pronouns in discourse has no relationship to the grammatical structure of discourse' (p. 11). He corrects (rightly) a misanalysis of some of Li & Thompson's data, but incorrectly assumes this mistake in the data shows that their analysis of complete reliance on pragmatics is wrong. The problem is how do we define 'grammatical structure'? What Li & Thompson actually said was that

... zero-pronouns can occur in any grammatical slot on the basis of coreferentiality with an antecedent that itself may be in any grammatical slot, at some distance, or not even present. The fundamental strategy in the interpretation of zero-pronouns in Chinese discourse, then, is inference on the basis of PRAGMATIC INFORMATION PROVIDED BY THE DISCOURSE and our knowledge of the world (1979:320—emphasis mine).

The fact that syntactic FUNCTIONS are not of prime importance does not mean syntactic STRUCTURE is not important. The italicized part of the quote above can refer to the different encodings given to foreground vs. background clauses, and the difference in structure between sentence-focus structures and predicate-focus structures (see above). In fact Li & Thompson's principle of conjoinability of clauses makes reference to 'the SYNTACTIC and semantic properties of those clauses' (1979:330—emphasis mine).

Another example of how discourse structure influences interpretation of zero anaphora is the following, from Lao She's *Luotuo Xiangzi* (*Camel Xiangzi*):<sup>132</sup>

- (4.9) a. Hu Guniang<sub>i</sub> yixiang yediaowuqiang guan le,  
Hu Miss always unconstrained used-to ASP  
Miss Hu had always been used to an unconstrained lifestyle,
- b. [Ø<sub>i</sub> jintian tou shang jiao xia dou daban zhe,  
today head up foot down all dressed-up DUR  
today was all dressed up,
- c. Ø<sub>i</sub> erqie dei zhuangmozuoyang de yinchou keren,<sub>j</sub>  
and must in-an-affected-way AP entertain guest  
and had to treat the guests with affected courtesy.
- d. Ø<sub>j</sub> ji wei tao dajia de chengzan,  
both in-order-to get everyone GEN praise  
This was for the purpose of inviting praise from the others,
- e. Ø<sub>j</sub> ye wei zai Xiangzi mianqian louyishou.  
also in-order-to LOC Xiangzi front show-off  
and also to show off in front of Xiangzi.
- f. Ø<sub>i</sub> Shangbantian dao juede zhe guai you ge yisi.  
morning though feel this quite have CL meaning  
In the morning (she) felt it was fun.

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<sup>132</sup>Lao She 1978:126. This passage was cited in Chen 1986:153, but Chen made several mistakes in the transcription and transliteration, so I am going by the original. Chen misanalyzes the zeros as referring to Miss Hu in all of the clauses, and gives this as an example of maintained 'subject' reference.

- g. Gandao guowu, Ø<sub>i</sub> yin you dian pifa,  
arrive afternoon because have a-little tired  
Just past noon, (though,) because (she) was a bit tired,
- h. Ø<sub>i</sub> jiu juechu taoyan,  
then feel bored  
(she) began to feel bored,
- i. Ø<sub>i</sub> ye po xiang zhao shei jiaoma yi chang.  
also quite want find someone quarrel one CL  
and felt like finding someone to quarrel with.

In this example, the zeros in clauses a-c and f-g all refer to Miss Hu, and could be replaced by the third person pronoun or a nominal anaphor. The zeros in clauses d-e refer to the entire proposition expressed in clauses a-c; they could only be replaced by a deictic pronoun (*zhe* 'this'). The *zhe* 'this' in clause f also refers to the entire bracketed proposition. Clauses a-c set up a discourse topic (the bracketed proposition) and a sentence or topic-chain topic (Miss Hu); clauses d-e are an explanation of why the proposition expressed in the discourse topic is a fact, and clauses f-i continue the narrative about Miss Hu within the scope of the discourse continuity. This structure of main line-explanation-main line allows us to be able to interpret the referents of the zero anaphors properly.

#### 4.5. Perspective Framing

In a very insightful recent paper, Li & Zubin (1990), building on the work of Kuroda 1973, Fillmore 1981, Langacker 1985, *inter alia*, point out that in discussing discourse structure and referent tracking, it is important to recognize two distinct types of perspective framing, REPORTIVE and EXPRESSIVE. They show that 'the internal structure of these frames as well as frame shifting and embedding phenomena are responsible for a

host of textual coding properties, one of which is the choice of referring expression [i.e. type of anaphora—RJL]' (Li & Zubin 1990:5).

The differences between the two types can be summarized in the following chart (from Li & Zubin 1990:8):

<u>Reportive frame</u>	<u>Expressive frame</u>
1. communicative—directed at an addressee, coding takes addressee into account	1. non-communicative—coding does not take addressee into account, may not even be directed at an addressee
2. non-expressive—reports 'objectively' about the story world, which may include the internal state of an experiencer	2. expressive—directly and vividly presents mental representation of experiencer, which may include aspects of the story world
3. abbreviated summary presentation of the story world, including as experiencer's mental representation	3. full, expansive, detailed presentation of experiencer's mental representation
4. may report events as distant in space-time	4. a here-and-now, blow-by-blow presentation of the story world (through an experiencer)
5. indirect, transformed coding of experiencer's cognitive state	5. direct coding of experiencer's cognitive state
6. experiencer is equivalent to other focal characters in the story world	6. experiencer is qualitatively different from other characters in the story world
7. experiencer may or may not be at the deictic center	7. experiencer is by definition at the deictic center of the story world
8. experiencer is part of discourse model, hence must be coded.	8. experiencer is the origin of, hence NOT part of discourse model, and is thus not coded

Following are examples of represented (expressively framed) thought (the second clause of (4.10a)), perception (4.10b), and feelings/emotions (4.10c), contrasted with reported (reportively framed) thought (4.11a), perception (4.11b), and feelings/emotions (4.11c) (all from Li & Zubin 1990:7):

(4.10) a. **Represented thought:**

Li Ming hanliumanmian. Tamen zhen de faxian le zhe shi ziji  
 Li Ming sweat-flow-full-face 3pl real AP discover ASP this COP self

gan de ma?  
 do NOM QP

Li Ming was sweating. Did they really discover that self did this?

b. **Represented perception:**

Zhuangkuo de Beijing cheng zai yanqian zhankai.  
 grand GEN Beijing city LOC eye-front spread-open  
 The city of Beijing spread out before (him).

c. **Represented feelings/emotions:**

Yi zhen beishang yong le shang lai.  
 one CL sadness well ASP up come  
 A wave of sadness welled up (in him).

(4.11) a. **Reported thought:**

Li Ming haipa tamen yijing faxian zhe shi shi ta gan de.  
 Li Ming afraid 3sg already discover this affair COP 3sg do NOM  
 Li Ming was afraid that they had already discovered that he did it.

**b. Reported perception:**

Li Ming fukan zhe Beijing cheng.

Li Ming look-over DUR Beijing city

Li Ming looked over the city of Beijing.

**c. Reported feelings/emotions:**

Li Ming hen nanguo.

Li Ming very sad

Li Ming felt very sad.

What we have discussed so far in this chapter is reportive narrative. The patterns of anaphora based on linear and hierarchical continuity discussed above do not work in the same way in narratives in the expressive frame.<sup>133</sup> One important difference is that, in the expressive frame, activation, and the type of referent coding associated with it, is not a function of what is in the mind of the speaker or hearer/reader, as these two participants are irrelevant within that frame, but is a function of what is in the mind of the experiencer in the narrative. Because of this, referents unknown to the hearer/reader may be coded as active or accessible because they are known or in the mind of the experiencer, and referents active or accessible to the hearer/reader may be coded as unidentifiable to the experiencer. To give one example, in the following expressively framed passage (from Li & Zubin 1990:10), which is the beginning of a novel, the experiencer is coded as a zero anaphor when first introduced in (4.12d) (and also in (4.12e)), though we the readers have no idea

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<sup>133</sup>Li & Zubin also discuss other aspects of the expressive frame that differ from the reportive frame, such as the metonymic substitution of body parts for the experiencer, whereas we saw above (§3.3.6), in the reportive frame, body parts are not generally salient to the discourse. See also Zubin, Chun, & Li 1990 for discussion of the relationship between perspective framing and the interpretation of reflexives (another type of anaphora) in Chinese and Korean.

who it is, and the third person pronoun in (4.12d) codes a referent also unidentifiable to us, but active for the experiencer:

- (4.12) a. ... Yu, hai zai xia, dan mingxian de bian xiao le.  
 rain still DUR fall but obvious AP change little ASP  
 The rain was still falling, but (it) had become obviously lighter.
- b. Bian cheng niu-mao ban de yusi, feifeiyangyang  
 change become ox-hair like GEN rain-thread softly-spreading  
 (It) became like thin threads of rain, softly spreading
- c. liao de ren lian shang liang-sou-sou de.  
 brush CD person face on cool  
 and cooling to the face.
- d. Ø Gen zhe ta chu zhan, Ø zou chu na men-re wu-zhuo de qifen.  
 follow DUR 3sg exit station walk exit that stuffy dirty GEN atmosphere  
 Following him, (she) exited the station, (she) walked out of that stuffy, dirty atmosphere.
- e. Ø Likai mo-jiang-jie-zhong de ren-liu. Ø Yi ke ye mei-you ting...  
 leave crowded GEN people-stream one moment even not stop  
 (She) left the crowded stream of people. (She) didn't stop for even a moment...

This example would seem to violate the rule that a referent must be introduced (in order to make it active) before it can be coded as active with a zero pronoun, but this is only an apparent violation: if we understand the two perspective frames as two separate discourse (story) worlds, then we do not need to set up two systems for explaining the coding of anaphora, we need only recognize the differences in coding as a function of the two discourse worlds having different salient cognitive centers (experiencer vs. addressee).

#### 4.6 Conclusion

In this chapter we have seen the interplay of the two relational systems (semantics and pragmatics) used in Chinese grammar in the interpretation of zero anaphora. The evidence shows that interpretation of zero anaphora is based solely on inference. For proper interpretation of zero anaphora in Chinese, the hearer must rely on the semantics of the referents (and real world knowledge) and the structure of the discourse (including taking into account the perspective frame); there is no recourse to syntactic functions<sup>134</sup> in referent tracking in Chinese. Therefore, any analysis of Chinese syntax must be based on the discourse level, not restricted to the clause or sentence level.

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<sup>134</sup>In two other papers on discourse referent tracking, Chen 1987 and Liu 1984, the number of subject, object and indirect object zero anaphors out of a sample of 57 clauses that contained zero anaphors is given, but no definition of 'subject' etc. is given other than to say that the arguments were assigned syntactic functions based on prototype sentences. In Chen 1987 there is in fact a statement to the effect that the subject position is where the topic usually is, so usually the topic is put in subject position (Chen 1987:369). This being the definition of 'subject', it is small wonder that 75.4% of the zero anaphors in his sample are 'subjects'.



## Chapter V

### Conclusions and Diachronic Considerations

#### 5.1. Summary and Conclusion

In Chapter II we investigated the question of syntactic functions in Chinese, and also the question of syntactic rules that can change syntactic functions. In §2.1 we looked at various constructions in Chinese in order to determine if a restricted neutralization of semantic roles could be found that would point to the existence of the grammaticalized syntactic function 'subject' in that language. We found no restriction on the neutralization of semantic roles, so we must assume that Chinese has not grammaticalized a subject.

In §2.2 we looked at whether there is behavioral or coding evidence for the establishment of a grammaticalized syntactic function 'direct object', particularly whether the *ba* construction could be considered an object marker. We found that there was no behavioral evidence, and also that the *ba* construction could not be considered an object marker, as again we found no evidence of restrictions on the neutralization of semantic roles. As there is no other marking for object (word order being pragmatically or semantically determined, as discussed in Chapter III), we must conclude that Chinese has likewise not grammaticalized an object. The conclusion then for these two sections is that there is no case marking in Chinese because there are no syntactic or morphological cases to mark.

In §2.3 we looked at the question of passives in Chinese, particularly whether the *bèi* construction could be considered a relation changing passive construction. We found that there is no consistent semantic relationship between the pre-*bèi* NP and the verb, that

the agent NP is not 'suppressed' or demoted, and that the verb is not intransitivized. There are then no grounds for considering the *bèi* construction a passive in the syntactic sense.

In Chapter III we saw that the organization of sentence grammar was based on focus structure, not the definiteness or indefiniteness of the referents in the sentence, with the unmarked focus position being the clause-final slot (generally immediately post-verb, except with ditransitives). We looked at several constructions that are grammaticalizations of (have as part of their conventional meaning the coding of) particular types of focus structure. It is this coding of information structure that determines word order, and as the unmarked focus position is post-verbal, the most common word order is verb-medial.

In Chapter IV we took the results from Chapters II and III and applied it to larger texts. We found that just as determination of semantic role within the sentence is pragmatically based, so too is the determination of the proper referents of zero anaphors. We discussed the structure of discourse, and how this structure interacts with information structure, discourse genre (perspective frame), and real world semantics in the interpretation of anaphora.

What we have then in Modern Mandarin Chinese is a language that is organized almost entirely according to pragmatic principles at all levels above the noun phrase. Discourse markers (see for example Biq 1990) and the focus-structure marking particles of certain constructions aid in this pragmatic interpretation, but these should not be seen as syntactic case or passivization markers; syntactic considerations are secondary to real world semantics and pragmatics.

## **5.2. Diachronic Considerations**

### **5.2.1. Introduction**

In the rest of this chapter I will try to link up what we have found in Modern Mandarin to Old Chinese and Sino-Tibetan as a whole. Without going into details, as this would require another lengthy monograph, I will present some of the facts about Old Chinese and Tibeto-Burman that lead me to believe that these languages had the same, or even more radical, pragmatically organized nature as Modern Mandarin (see the references cited for examples and full arguments). It is this nature that allows us to make the connection between the Chinese and Tibeto-Burman branches of the family on the grammatical level.

If we are to establish a definite link between the different branches of Sino-Tibetan, we must explain the divergences in word order: Modern Chinese is generally verb-medial with adjective-noun, genitive-head, relative-head, and number-measure/classifier-noun order; on the Tibeto-Burman side, Karen and Bai are also generally verb medial, and have relative-head, and genitive-noun order, but have noun-adjective, and noun-number-measure order, while the rest of the Tibeto-Burman languages all have verb-final, noun-adjective (and secondarily adjective-noun), genitive-head, relative-head, and noun-number-measure order. The first question to ask is which came first, verb-medial or verb-final, adjective-noun or noun-adjective, noun-number-measure or number-measure-noun order? The second question is how did whichever languages changed do so? The first question, though logically prior, cannot be answered until we have possible answers to the second question; determining the most likely course of developments will give us our answer to the first question.

### 5.2.2. Old Chinese

As mentioned in Chapter I, I began this study with Modern Mandarin because of the need for native speakers. Having determined the nature of grammatical relations in at least one stage of the language, we have a solid base from which to work in trying to understand the nature of grammatical relations in other, less accessible periods of the language. If Givón (1979a,b) is correct in assuming that languages develop from having more pragmatically based grammatical relations to having more syntactically based relations, then the hypothesis should be that since grammatical relations in Modern Mandarin are heavily weighted in favor of pragmatic factors, we should find the same or an even stronger tendency toward pragmatic relations in Old Chinese.

K. Wang (1986) and Herforth (1987) both argue that Old Chinese is very much a discourse-based language, so much so that individual sentences very often cannot be interpreted properly outside the full context in which they appeared. Both authors give examples of what Herforth refers to as ‘radically ambiguous’ passages, where a particular clause, or even string of clauses, can have multiple interpretations if removed from the context in which it appeared. Serruys (1981:356) states that in the oracle bone inscriptions (the earliest Chinese) ‘there are no particles to mark either concessive or conditional subordinate clauses; EVERYTHING SEEMS TO BE IMPLIED BY CONTEXT’ (emphasis added). Shen (1986) feels that in Old Chinese grammatical categories are even more obscure than in Modern Mandarin. This radical ambiguity even extends to where, in NP<sub>1</sub> V NP<sub>2</sub> constructions, NP<sub>1</sub> and NP<sub>2</sub> can both be either actor or undergoer, depending on the context or knowledge about the referents represented by the NPs (K. Wang 1986). In other words, the actor-before-the verb—undergoer-after-the-verb pattern we see in transitive clauses in Modern Mandarin does not necessarily hold in Old Chinese. Gao

(1987:295) gives examples from the oracle bone inscriptions where the actor and the undergoer, and even the goal, ALL appear AFTER the verb.

Discussions of word order in Old Chinese generally start out with a statement to the effect that the most common word order is verb-medial for transitive sentences, just as in Modern Mandarin, so word order has been basically stable, but that there are a number of marked word order patterns, particularly 'SOV' type sentences (e.g. Cheung 1975, L. Wang 1980, Dai 1981, Cheng 1983, Gao 1987). These sentence types, with the undergoer (or goal) immediately before the verb, are usually said to be restricted to cases where the undergoer (or goal) is a pronoun or question word, as in (5.1), from the *Zuozhuan* (5th cen. BC—the highlighted words are the 'preposed objects'):

(5.1) Jun wang zhi bu xu, er qun chen shi you,  
ruler exile this not worry-about but group vassal this worry-about

hui zhi zhi ye. (Xi Gong, Year 15)  
compassion GEN utmost PRT

The ruler is not concerned with his own banishment, yet is worried about his vassals; this is really the height of compassion.

Yu (1980, 1981, 1987) gives examples to show that this so-called 'reverse'<sup>135</sup> clausal order of undergoer immediately before the verb is not limited to pronouns in negative and question constructions. He gives the function of this word order as

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<sup>135</sup>This is the common term for this construction, but as L. Wang argues (1980:366), this implies it is a marked order. It is in fact not marked for pronouns, and is the overwhelmingly most common, or 'normal' order.

‘emphasizing’ the undergoer.<sup>136</sup> Yu argues in particular that the deictic pronouns of Old Chinese, *shi* (是) (\*d j i ɣ x) and *zhi* (之) (\*t j ə ɣ), are cognate to Tibetan *de* ‘that’ and ‘*di*’ ‘this’,<sup>137</sup> and that the word order exhibited by these pronouns in these ‘inverted’ sentences is the original Sino-Tibetan order.<sup>138</sup> He sees Tibetan as having the more conservative word order, as it retains these patterns, though also relates the preverbal position of contrastive elements in Old Chinese to similar patterns in Modern Chinese. Yu argues that the other examples of marked word order, such as noun-attribute (as in *sang rou* (桑柔) ‘tender mulberry’, *Qu Xia* (区夏) ‘Xia District’) and noun-adposition order (he gives examples of *yu* (于), *zai* (在), and *yi* (以)),<sup>139</sup> are also remnants of the original Sino-Tibetan

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<sup>136</sup>Almost all of the authors cited in this section fail to make the distinction between referents that are set off because they are contrastive (focal), and those which are simple topics being reintroduced into the discourse. As the constructions discussed here are narrow focus constructions (including question-word questions), rather than saying that they ‘emphasize’ the undergoer, this word order should be seen as focusing it. See Serruys 1981 for evidence of the contrastive nature of the preverbal position, and Takashima, to appear, for contrastiveness within the cleft constructions with the archaic copulas *wei* and *hui*.

<sup>137</sup>Coblin (1986:149) lists Chinese *shi* (时) (\*d j ə ɣ) ‘this’ and *shi* (是) ‘this, that’ with Tibetan ‘*di* and *de*, but does not include *zhi* (之), though Yu (1981:83) equates *shi* (时) with *zhi* (之). (The reconstructed forms are from F. K. Li 1982.) Yu (1987:39) also equates the Old Chinese copula *wei* (惟) (\*g w j i d) with the Modern Tibetan copula *red*, but in this I think he is mistaken, as *red* does not appear in Classical Tibetan texts, so is a late development.

<sup>138</sup>L. Wang (1980:356) also suggests that with pronouns the preverbal order may have been the original standard order, ‘as it is in French’, but does not make the connection between this suggestion and the possibility that the order of pronouns may reflect an older general word order pattern, as it does in French.

<sup>139</sup>Evidence of these can also be seen in the fixed expressions *suoyi* (所以) ‘therefore’—lit. ‘pronoun + postposition’, *heyi* (何以) ‘why, how’, *hezai* (何在) ‘where’—both lit.

word order. (All of the authors mentioned in the first sentence of this paragraph give examples of these word order patterns, but don't make the connection with older stages of the language.)

In the oracle bone inscriptions, we see the contrastive use of word order (but with focus position being immediately preverbal) in pairs such as the following, taken from Serruys 1981:334):<sup>140</sup>

- (5.2) a. Yu        yu Zu    Ding  
           perform-exorcism to Ancestor Ding  
           Perform an exorcism to Ancestor Ding.
- b. Wu yu Zu    Ding    yu.  
       donot to ancestor Ding perform-exorcism  
       Don't perform an exorcism to Ancestor Ding

It would seem from this and the many examples like it in the corpus of Old Chinese, that immediate preverbal position is the focus position, at least in contrastive sentences. Having

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'what + postposition', *shiyi* (是以) 'because'—lit. 'that + postposition', etc. (L. Wang 1980, Shen 1986—see also Dai 1981, Shen 1986, and the discussion of Sun\*1987 below). Shen (1986:138) also gives examples of *zai* (在) 'locative verb' with the preposition *yu* (于), where the verb is sentence-final, as in (i) (from the *Zuozhuan*):

- (i) Wang Ying zhi shi, yu ci zai yi.        (Zhao Gong, 24)  
       destroy Ying GEN beginning at here LOC PRT  
       The destruction of Ying began with this.

<sup>140</sup>These divinations were made as statements, often in sets, each one testing a particular course of action, etc. (Keightley 1978). The divinations given here are part of a set testing whether it is to Zu Ding or to some other ancestor that the exorcism is to be performed.

immediate preverbal focus position is generally a characteristic of verb-final languages (cf. Comrie's discussion (1981:57, 1988) of focus position in Hungarian).

Qin & Zhang (1985) argue that the early Chinese expressions of 'you (有) + country name' (*You Shang* (有商) 'Shang Country', *You Xia* (有夏) 'Xia Country', etc.) should be seen as an examples of noun-attribute order, with *you* meaning 'country'. They point out that noun-attribute order is not at all uncommon in the earliest Chinese, especially in names of places and people, as in *Qiu Shang* (邱商) 'Shang Hill', *Di Yao* (帝尧) 'Emperor Yao', *Zu Yi* (祖乙) 'Ancestor Yi', etc.

Sun (1987) discusses the history and distribution of the preposition phrases with *yi* (以). He shows that the adpositional phrase (AP) can occur before or after the verb, and that the adposition itself can be prepositional or postpositional, the only restriction being that the postpositional AP cannot appear postverbally. Sun suggests that based on this pattern, the postpositional, preverbal AP is the archaic order. Based on topic continuity counts of the type used in Givón 1983, he argues that the position of the prepositional AP before or after the verb is related to discourse-pragmatic factors—the preverbal type is more likely to be used in contrastive contexts. Interestingly, he found that when it occurred with the deictic pronoun *shi* (是) 'that', *yi* ONLY appeared postpositionally. Again we see what seems to be a more conservative sentence pattern with pronouns.

Cheung (1975) discusses the 'movement' of verbal quantifiers from preverbal position in the early texts to postverbal position in later Chinese. Compare the two sentences below:

- (5.3) a. Wu ri san xing wu shen.  
 1sg day three examine 1sg body  
 I reflect on myself three times every day.



- b. Wo mei tian fanxing san ci.  
 1sg every day self-reflect three times  
 I reflect on myself (my actions) three times every day.

(5.3a), with the quantifier in immediate preverbal position, is from the Analects of Confucius (5th cen. BC); (5.3b), with the quantifier in post-verbal position, is a modern translation. As a verbal quantifier is used when the assertion is about the number of times one does something, it would follow that a change of focus position from immediate preverbal position to postverbal position would entail a corresponding movement of such quantifiers.

Cheung (1975) also discusses the change in the order of elements in nominal quantifier phrases. In Modern Chinese the order is always (except in listings/catalogues) 'number + measure/classifier + noun'. In Old Chinese, the order was 'noun + number + measure (there are few or no classifiers)' or 'number + noun'. Cheung feels these are unconditioned variant forms, while Takashima (1985, 1987) gives a pragmatic explanation to the variation—the former is used when the number is focal, and latter when it is not. Whether Takashima's pragmatic explanation is correct or not, it is significant that the common order with measures (noun + number + measure) is the same as that of most Tibeto-Burman languages.

Chou (1961) and Dai (1981) both analyze all sentences in Old Chinese as topic-comment structures, and include 'subject'-predicate sentences as one type of topic-comment sentence (what is meant by 'subject' here is semantic—the topic is the actor of the verb). Shen (1986) argues instead that at least in the texts he studied (the *Zuozhuan* and *Mencius*), topic-comment structures should be considered as distinct from 'subject'-predicate structures, in that their discourse functions are different. Topic-comment structures are evaluative discourse, while 'subject'-predicate structures are narrative

discourse. For both Dai and Shen, though, alternate word order patterns exist for pragmatic reasons: to set off a particular element as either a topic or a comment. There are very few restrictions on alternate word orders; in fact some elements that cannot 'topicalize' freely in Modern Mandarin do so regularly in Old Chinese, such as the 'pivot'<sup>141</sup> NP of a serial verb construction. Just as we have seen for Modern Mandarin, in Old Chinese there are also 'topic-comment within a topic-comment' structures. Shen (1981:130-31) argues that the structure of Old Chinese is very different from that of Indo-European languages, in that in Old Chinese form directly reflects function, and that studies of Old Chinese have suffered because of trying to work within the 'frame' of Indo-European grammar. In particular, Shen feels that 'subject' is not a definable category in Old Chinese.

We find no evidence of passives in Old Chinese (Gao 1987).<sup>142</sup> The oldest form of what is referred to as a 'passive' by those who argue for this category (the *yu* (予) 'passive') is actually not a separate construction with a passive meaning; the passive reading is an interpretation of the structure based on the context and the semantics of the referents. Cikoski (1976:3) claims the *yu*-passive 'is not a genuine passive at all, but a congeries of active-voice idioms mistakenly lumped together'. Yao (1988) argues that the other (later) structure referred to as a passive, '*jian* (見) V (+ *yu* X)' also is not inherently or historically passive, and developed out of a passive interpretation of a non-passive

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<sup>141</sup>The use of 'pivot' here is from Chao 1968; it refers to the NP that occurs between the two verbs of a serial construction and is an argument of both verbs (generally the undergoer of the first verb and the actor of the second verb). In general, this NP cannot appear in topic position in Modern Mandarin; only a few (at least partially) grammaticalized verbs allow this, and in those cases the verb *lai* 'come' must be inserted between the two main verbs.

<sup>142</sup>I have not found evidence of passives at any stage of Chinese, but even for those who argue for a passive construction in Chinese, it was not a feature of the earliest Chinese (e.g. Tang & Zhou 1985, Peyraube 1988).

structure because of the semantics of the referent represented by X. Shen (1986) studied every sentence in the *Zuozhuan* (5th cen. BC) and Mencius (4th cen. BC) and found no structural passives, only what he calls 'pseudo-passives' (the same as my analysis above for Modern Mandarin, §2.19): topic comment structures that allow multiple interpretations because of the semantics of the referents. Shen states clearly that these are not the same as passives in Indo-European languages.

Relative clauses in the earliest Chinese (which according to Chen 1956:133 and Gao 1987:283 is based on, and close to, the spoken language of the day—13th cen. BC) do not have any overt relational marking; they are simply placed before the noun, with no additional marking (Serruys 1981:356). This is the common pattern for verb-final languages (cf. Greenberg 1966).

There is no clear distinction between classes of verbs, such as transitive and intransitive, as intransitives can be made causative by simply appearing with a following undergoer NP. Even if the verb appears with only one NP, it may be either transitive or intransitive depending on the context (L. Wang 1980:375 ff.; Li & Thompson 1976b). This is relevant to the determination of syntactic functions, as pointed out by Klimov (1984:217) in his discussion of objects: 'the unviability of a distribution of verbs into transitives and intransitives, and of a differentiation between a nominative and an accusative case, renders the opposition of direct and non-direct objects impossible'.

The above are just a few of the facts that suggest that Old Chinese was very likely even more pragmatically based language than Modern Mandarin, and that there was a change in word order, possibly from verb-final to verb-medial, because of a change in focus position.

### 5.2.3. Tibeto-Burman

#### 5.2.3.1. Introduction

In this section we will look at some of the facts about Tibeto-Burman languages to see if grammatical relations might also be more heavily weighted in favor of pragmatic factors rather than syntactic factors, as in Chinese. As the verb agreement systems<sup>143</sup> of Tibeto-Burman are said to code the 'subject' in those languages that have them, and as the agreement systems are said to be a type of ergative marking, the questions of the dating and nature of the agreement systems in Tibeto-Burman are relevant to the discussion of the nature of grammatical relations in Sino-Tibetan. Therefore, we will begin the discussion of Tibeto-Burman with a discussion of the nature and history of the agreement paradigm.

Since the mid-1970's, the question of whether or not an agreement system should be reconstructed for Proto-Tibeto-Burman (PTB) has been a controversial topic, but because of the large amount of work published arguing in favor of reconstructing a verb agreement system for PTB, especially by James J. Bauman (1974, 1975a, 1975b, 1979) and Scott DeLancey (1980, 1983, 1988, 1989, 1990), many people have begun to accept the existence of such a system in PTB as received knowledge. In a recent paper on verb agreement systems in Tibeto-Burman, Scott DeLancey states that 'There can no longer be any serious doubt that a system of verb agreement must be attributed to Proto-Tibeto-Burman' (DeLancey 1988:1). In LaPolla 1989 I raised several serious doubts about the theoretical and methodological bases for reconstructing a verb agreement system for PTB. Here I will simply repeat the main arguments given in LaPolla 1989 against seeing verb

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<sup>143</sup>By 'verb agreement system' I am only referring to the marking of participants in the clause with clitic pronouns, not to evidential systems like that in, for example, Lhasa Tibetan.

agreement as a characteristic of the protolanguage; see the original paper for the full arguments.

The essential characteristics of the verb agreement system that the PTB verb agreement system proponents argue for are, according to DeLancey (1990:6), 'the personal suffixes 1st person \*-*ŋa*, 2nd person \*-*na*, and a split ergative agreement pattern in which agreement is always with a 1st or 2nd person argument in preference to 3rd, regardless of which is subject or object.'

### 5.2.3.2. Geographic/Genetic Distribution

An argument often made in favor of a PTB verb agreement system is that 'this pattern is manifested in at least one language in every recognized subbranch of the family except for Lolo-Burmese and Karen' (DeLancey 1988:1). This is not as solid an argument as it may seem. As Thurgood (1984b:3) points out, 'Tibeto-Burman subgrouping is in its infancy; not only does the composition of lower-level units still pose numerous questions, but the composition of higher-level units remains almost completely open.' With the large number of languages in the Tibeto-Burman family (Bauman 1979 puts it at over 200), the 20 or so languages that have verb agreement systems are nowhere near a majority, and almost all of them are in the Rung (Thurgood 1984a,b), Kiranti, or Kuki-Chin-Naga branches of Tibeto-Burman. The possibility that these languages form a higher-level grouping cannot be dismissed (see Ebert 1988).

Aside from the possibility of shared innovation within a subgroup, there is also the question of geography. These languages are almost all geographically contiguous, forming a ring around the edge of the Tibetan plateau from northwest China down along the southern edge of the plateau, including the Himalayan region, forming what Sun (1983,

1985) refers to as an ‘ethnic corridor’, an area of large-scale language contact, multilingualism, and mutual influence, and a path along which many of the nationalities moved when they migrated south. Thus language contact, shared innovation within a subgroup, or a combination of the two are all possibilities. The most logical possibility, that one or more languages in the family innovated a verb agreement system and it spread geographically (possibly aided by similar features in local non-TB languages), has never been addressed in any of the literature arguing for a PTB verb agreement system.<sup>144</sup>

### 5.2.3.3. Time Depth

Those languages that do not have verb agreement systems, possibly 90% of all Tibeto-Burman languages, have *no trace whatsoever* of ever having had one.<sup>145</sup> These languages include four of the five languages for which we have writing systems more than two hundred years old, the best examples being Tibetan (7th cen.) and Burmese (11th cen.). It is highly unlikely that Tibetan and Burmese would both have lost every trace of their verb agreement systems while Tangut (12th cen.) has a totally regular, etymologically transparent verb agreement system that shows no signs of age. In Tangut (Kepping 1975, 1979, 1981, 1982) the agreement morpheme marks that SAP (speech act participant—i.e.

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<sup>144</sup>Bauman (1974:144) does mention areal (Lolo-Burmese and Barish) influence as a possible reason why some verb agreement systems *don't* have the complex number distinctions that other languages have. Those without such distinctions would supposedly have ‘leveled out’ the distinctions because of contact with the morphologically simpler languages.

<sup>145</sup>By ‘trace’ here, I mean either some remnant of an originally full system which no longer has any agreement functions, possibly some phonological alternation in the verb stems, or unexplained verbal suffixes (cf. Wolfenden 1929 on the possibility that some TB verbal prefixes were originally pronominal).

1st or 2nd person) most affected by/involved in the action of the predication (the terms 'subject' and 'object' are used because Kepping uses them, but I have not seen any evidence that these categories actually exist in Tangut):

'SUBJ'	'OBJ'	PRONOM. CLITIC	INTRANSITIVE		FREE PRONOUNS	
1	2	-na	1sg.	-ŋa	1sg.	ŋa
1	3	-ŋa	2sg	-na	2sg	na
2	1	-ŋa	3sg	∅	3sg	∅
2	3	-na				
3	1	-ŋa				
3	2	-na				
3	3	∅				

Agreement is with the SAP even when the SAP is the indirect object or the possessor of the object if it is the only SAP in the sentence (Kepping 1982). These facts make it clear that agreement is related to SAP affectedness, and not syntactic function. This system also was optional, and does not seem to have been used in anything like the majority of clauses even in the Tangut texts that Kepping studied. Kwanten (1982) in fact could not find any trace of it in two Tangut texts he studied.<sup>146</sup>

The etymological transparency of the agreement systems (the independent pronouns become attached to the verb) and their clear discourse function marking the most

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<sup>146</sup>Two other Tangut scholars, Nishida (1964-66) and Sofronov (1968), have also analyzed Tangut as a non-pronominalizing language (both cited in Kepping 1975 and Kwanten 1982).

salient speech act participant<sup>147</sup> (Ebert 1987, DeLancey 1981) show that they are relatively recent grammaticalizations of discourse prominence.

#### 5.2.3.4. Theoretical/Methodological Considerations

The discussion of Tangut points up a difference in methodology between myself and most of those supporting a PTB verb agreement system: DeLancey, Bauman, LaRaw Maran (e.g. 1978) and others reconstruct the most complex system possible based on the data from a few languages, and consider those languages that have the most complex systems, such as Gyarung, as the most conservative (DeLancey 1990:7). For example, Bauman (1974:134) suggests that a complex system such as that for Nocte, with a tense-aspect split, is closer to the original PTB VAS than a simpler system such as that of Tangut or Kham, languages which would supposedly have 'leveled out' the tense-aspect system.

In doing diachronic syntax, we should reconstruct only those features for which we can show no clear line of development, i.e. opaque = archaic; we should reconstruct only those shared patterns for which we can find no motivation.<sup>148</sup> This is what I meant by the term 'deconstruction' in the title of my 1989 paper: morphology is built of

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<sup>147</sup>The coding of speaker-hearer involvement is marked in various ways aside from this particular agreement pattern in many TB languages; see for example Caughley 1980, Toba 1980, and Watters 1980 for three different systems within Nepalese TB languages.

<sup>148</sup>Cf. the following quote from Meillet (Watkins 1969:17), pointed out to me by Gary Holland:

*La grammaire comparée doit se faire en utilisant les anomalies — c'est à dire les survivances — bien plus que les formes régulières ... Les traités de grammaire comparée ont souffert de ce que, pour la restitution de l'état initial, l'importance attribuée aux formes normales des états de langue historiques est trop grande.*



grammaticalizations (cf. Hopper 1987, Thompson 1988), so we should strip back the layers of grammaticalization from the grammar until we can go no further. What is left is what we should 'reconstruct'.

The methodological difference just mentioned also highlights a difference in the understanding of the way grammaticalization works. I follow Lehmann (1985) in assuming that grammaticalization involves the 'attrition' (loss of integrity) of a sign, so that as grammaticalization progresses, there is a lessening in the phonological and semantic weight (including demotivation) of a sign so that the stages will be as follows (Lehmann 1985:309):

lexically		free		clitic		agglutinative		fusional
empty	>	personal	>	personal	>	personal	>	personal
noun		pronoun		pronoun		affix		affix

Along with attrition there is the concomitant 'paradigmatization', 'obligatorification' (loss of paradigmatic variability), 'condensation' (reduced scope), 'coalescence' (increased bondedness), and 'fixation' (loss of syntagmatic variability) (Lehmann 1985:305-309). We see advanced stages of all of these processes in the complex verb agreement system languages, the prime example being Jingpo (Maran 1978). This is part of the reason why, among the verb agreement systems that do exist in Tibeto-Burman languages, Tangut should be considered the most archaic and least grammaticalized. Maran (1978), on the other hand, argues exactly the opposite position, that morphology is 'stripped loose' and then becomes lexicalized, and that the highly complex and rigid morphology of Jingpo is closer to the archaic pattern. Bauman (1974:137) has all of the transitive suffixes 'initiating in a syncretic system', and tries to show how non-syncretic affixes develop from syncretic ones.

### 5.2.3.5. The Question of Ergativity <sup>149</sup>

It does not seem proper to me to speak of, for example, the Tangut verb agreement system as an ergative or split ergative system, as it is clearly not marking semantic role or syntactic function, but simply discourse prominence. Even Kepping, who supports the idea of PTB ergativity, says that ‘verbal agreement too [as well as noun marking] gives us no grounds for assigning Tangut to either the nominative or the ergative type.’ (1979:267). If we accept Du Bois’s (1985, 1987) association of absolutive marking with the information status ‘new’ and accusative marking with discourse pressures to mark the topic, then this should be seen as an accusative system rather than an ergative one, since these clitic pronouns are typical of the most unmarked topics (Lambrecht 1986). A similar line of reasoning is given in Givón 1980, where ergative morphology is said to be semantically based on the contrast of agent vs. non-agent, and is in conflict with discourse-pragmatic pressures towards the pragmatically based nominative morphology. In Givón 1976, it is shown that verb agreement systems such as these are topic-related phenomena which develop historically from topical anaphoric pronouns.

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<sup>149</sup>As discussed in the Chapter I, I am taking as the minimum definition of syntactic ergativity a system in which the S & P roles are consistently treated the same way by constructions in the language, while the A role is treated differently. In terms of morphological ergativity, the same basic pattern must hold: the S and P roles must be marked the same way (possibly zero marking), while the A role is marked differently. Morphological ergativity does not imply syntactic ergativity. Many TB languages have ergative ‘case’ markings on particular NPs, a type of dependent-marking, but I am dealing here only with marking on the verb, a type of head-marking. The two are quite different.

The type of agreement system we are talking about here is very clearly one based on person rather than clause syntax or semantic role<sup>150</sup>. This gives us no grounds for assuming ergativity in the proto-language. In fact in Dulong (a phonologically very conservative language—LaPolla 1987), in some cases where both SAPs are involved in a clause, the agreement can vary depending upon whose involvement the speaker wants to emphasize (Sun 1982:93-94).<sup>151</sup>

Another language where the basis of agreement is still pragmatic is Hayu. Boyd Michailovsky (1988:111-113) has shown that the verb agreement system in Hayu is clearly not ergative (though the language has ergative marking on the nouns), as agreement is with whichever argument is highest on the person hierarchy 1 > 2 > 3, REGARDLESS OF CASE ROLE.

Nichols (1986:114) has suggested that '[h]ead-marked patterns contribute to a flat syntax which minimizes intra-clause and inter-clause structure, freeing a language to concentrate on the grammaticalization of discourse prominence and cohesion. In fact it turns out that it is precisely for head-marking languages that a number of traditional grammatical questions prove to be somewhat moot, because pragmatic and discourse relations (rather than strictly syntactic relations) are being grammaticalized.' As the older agreement systems are clearly pragmatically-based grammaticalizations of the discourse

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<sup>150</sup>See also Dryer 1986 on the reasons why the type of agreement we are talking about (which Dryer calls 'primary object' marking) functions to mark the pragmatic category of topicality and so is unrelated to questions of ergativity or accusativity.

<sup>151</sup>As Martine Mazaudon has pointed out to me (pers. com.), the possibility of choice such as that in Dulong might be more common in TB languages than has been noted, as linguists are often loath to report variation that would confuse a nice neat system!

prominence of SAPs, there is no justification for reconstructing an ergative system of agreement for PTB.<sup>152</sup>

### 5.2.3.6. Head-marking vs. Dependent-marking

In her outline of the facts and implications of head-marking vs. dependent-marking morphology (see above §2.3.7), Nichols (1986) did not make reference to any languages in Tibeto-Burman, but the bulk of Tibeto-Burman languages (those without verb agreement systems) are solidly dependent-marking; those languages with verb agreement systems, a type of head marking, also have many dependent-marking features. The question, then, is which is older, the dependent-marking type or the head-marking (actually mixed) type? Nichols found that in several respects ‘head-marking patterns appear to be favored and universally preferred’ (p. 101). She suggests that, based on her study, ‘... in the event that we have two clearly related languages with clearly cognate morphology, one of them strongly head-marking and one strongly dependent-marking, we should reconstruct the dependent-marking type’ (p. 89). This then is one typological argument for not

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<sup>152</sup>There is also the methodological problem that in most of the papers on Tibeto-Burman verb agreement systems, (Sherard 1986 is a welcome exception), comparisons are done on highly simplified and selected parts of total agreement systems, and little is said of how the affixes are really used. For example, Bauman (1979:423) gives neat paradigms for Vayu and Chepang, comparing the intransitive subject and transitive object suffixes of each language to show how ergative they are, with only a parenthetical aside mentioning that these correspondences only hold when the subject of the transitive clause is 3rd person. As we have seen in Tangut, the basic pattern of agreement is with any SAP in the sentence, regardless of role, if the other participants in the clause are non-SAPs, clearly a pragmatic rather than a structural principle. This type of paradigm comparison then is of no use in trying to prove ergativity.

reconstructing a verb agreement system for PTB. Two further arguments, also based on typological data, support this view.

There is a continuum across the Tibeto-Burman languages with verb agreement systems in terms of the strength of head-marking. We can see for example the beginnings of head-marking in Angami Naga (Giridhar 1980), where only kinship and body-part terms are head-marked for possession (and only certain stative verbs have person agreement), and its full development in Gyarong (Qu 1984), where all nouns (and verbs) can be head-marked. This is in concord with Nichols' observation that the development of head-marking of nouns for possession will begin with cases of inalienable possession. We see the same process of dependent- to head- or double-marking (and not the opposite) through cliticization of pronouns occurring in other language families, such as the Oregon Penutian groups (Silverstein 1979), and the Pama-Nyungan languages of Australia. In the latter, just as in Tibeto-Burman, there is 'cliticization of pronouns, ... loss of core cases, and expansion of the head-marked treatment of inalienable possession' (Nichols 1986:99).

There are many ways for head-marking to develop: 'they may arise as isolating languages become agglutinating, and pronouns are cliticized to verbs ... or they may develop from dependent-marking languages, through migration and clisis' (Nichols 1986:88). It is just such cliticization of pronouns to verbs that we see in the Tibeto-Burman verb agreement system languages. We can see the development of very similar verb agreement systems in other parts of Asia (e.g. in Turkic and Mongolian languages—Comrie 1980a, and in eastern Siberian languages—Comrie 1980b), and in North America and Australia, as mentioned above. Dependent-marking, on the other hand, evolves only 'through extensive use of boundary shifting ... so that the adposition becomes an affix on its former dependent', as occurred in the western languages of the Uralic family (Nichols 1986:88). We see no evidence of this process in Tibeto-Burman morphology. In fact in a language such as Written Tibetan, the occurrence of modifiers between the head and the

postpositions would effectively block this type of reanalysis. The dependent-marking system, or at least a non-head-marking system, must then be the original pattern.

### 5.2.3.7. The Nature of Proto-Tibeto-Burman

Bauman (1979:430) suggests that there is a drift away from what he has defined as ergativity, but not towards accusativity, rather towards ‘non-ergativity’, as there are no unequivocally accusative Tibeto-Burman languages. He sees this ‘non-ergativity’ as the endpoint of historical change in Tibeto-Burman. I propose the opposite: that Tibeto-Burman began as a morphologically simple ‘role-dominated’ language (similar to our analysis of Chinese above). On this view, the typical Lolo-Burmese role-dominated system (epitomized by Lahu—Matisoff 1973) is closest to the original PTB system of grammatical relations, rather than being the most degenerate, as assumed by those supporting a PTB verb agreement system. Following are a few facts about some of the Tibeto-Burman languages I am familiar with that also lead to this conclusion, including commonalities with Chinese.

Like Old Chinese, verb classes are not clearly defined, and there are no voice oppositions; ‘the transitive/intransitive and active/passive distinctions are basically alien to Lahu grammar’ (Matisoff 1976:419). Though Lahu does not have an agreement system similar to those in the pronominalizing languages, it does make a distinction between speech act participants and non-speech act participants in its system of verb particles. The particle *lâ* (derived from *lâ* ‘come’) is used for indicating that the action indicated by the verb is for the benefit of (or affects) a speech act participant, which contrasts with the grammaticalized verb *pî* ‘give’, which, when used as an auxiliary verb, indicates that the action indicated by the verb is for the benefit of (or affects) a non-speech act participant (Matisoff 1973, to appear). The salient/non-salient distinction also shows up in Lahu, in

the marking of some NPs. There is a marker, (*thà ?*), used occasionally in Lahu to set off a particular constituent in a sentence. It will mark an otherwise salient referent as being a non-agent,<sup>153</sup> as when there is an actor and a human undergoer or goal argument. In these cases it will mark the undergoer or goal as a non-agent in order to avoid confusion (Matisoff 1973:155-8; to appear:6). It is used only when needed for clarity, especially when the NP in question is not in the normal immediate-preverbal focus position. Burmese has a marker, *kou*, that has the same function (Wheatley 1982). Similarly, a focal agent (which appears after the undergoer) is marked in Yi (a non-ergative language) with the marker *-a ʒ¹* (Wheatley 1984).

Like most verb-final languages, in Burmese (Wheatley 1982), focus position is immediately preverbal, with the topic occurring in sentence-initial position. Wheatley gives the same 'dispensable' analysis of 'subject' in Burmese (i.e. that 'subjects' are not an essential part of the sentence) as we gave to Chinese above (§2.1.7). It also has the same type of topic-comment structure and 'double nominative' (topic-comment within topic-comment) structure that Chinese has. Burmese is also as free as Chinese in being able to relativize on any constituent. Within the noun phrase, Burmese and Lahu both have the same order of noun-number-measure/classifier as Old Chinese, and in fact use the same pattern of reduplicating the noun to act as the classifier, as in Burmese *cùn tacùn* 'island one island' and Lahu *yè t ê yè* 'house one house' (cf. Old Chinese *ren yi ren* 'person one person').

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<sup>153</sup>The referent marked this way will often be focal, and will be contrastive if the semantics of the sentence would be clear without the marker (Matisoff 1976:423). Since this marker identifies a referent as a non-agent, if the agent is focal, the agent will be in the immediate-preverbal focus position, and the non-agent argument will take *thà ?* even though it is not focal.

According to Anderson (1987), who followed much the same methodology as we outlined for Chapter II, Old Tibetan has no syntactic pivot, and no relation changing rules such as passive or antipassive. Sherpa (a Tibetan dialect) is discussed by Givón (1984b) as a language which has not grammaticalized a direct object. There is a preverbal focus position, and whatever referent is in focus will appear there.

Genetti (1988) shows how in Newari pragmatics can determine the morphological marking of the topic of a topic chain (clause chain). If the clauses in a chain share a common actor, then that actor will be marked as either ergative or absolutive<sup>154</sup> depending on which verb of the chain is the dominant information (as defined above, §1.3). That is, given the two sentences below (from Genetti 1988:31), if the dominant information is what the actor did after killing the goat, then (5.4a) would be used; if the dominant information is what the actor did before he left, then (5.4b) would be used.

- (5.4) a.    wɔ̃ duku syan-a -a won-ɔ̃  
           3sg goat kill-PTCL -NF go -PAST<sup>155</sup>  
           He killed the goat and left.
- b.    wɔ̃-ɔ̃ duku syan-a -a won-ɔ̃  
           3sg-ERG goat kill-PTCL -NF go -PAST  
           He killed the goat and left.

This is clear evidence of pragmatic factors outweighing semantic and syntactic factors.

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<sup>154</sup>Newari is morphologically, but not syntactically, ergative.

<sup>155</sup>The interlinear glosses used here are PTCL: participial verb form, NF: non-final clause marker (marks the non-final clauses in a chain).



In terms of word order, it would seem that the languages that have changed are Bai, Karen, and Chinese. Bai possibly changed its word order because of the heavy influence of Chinese on the language (the Bai are one of the most Sinicized of the minorities of China). Almost exactly as in Old Chinese, Bai has both verb-final and verb-medial order with transitive verbs, with verb-final order occurring in particular in negative and question sentences! There is also a special particle, *no* 𑜃𑜂𑜆, for marking animate referents as non-agents, as in Lahu. Also interesting about the use of the different word order patterns is that the older people prefer the verb-final order, whereas the younger and more Sinicized people prefer the verb-medial order (all of the above based on the information in Xu & Zhao 1984). This would seem to point to the change in word order as being relatively recent. Karen (Solnit 1986) has some similar word order patterns, with genitives and nominal modifiers coming before the verb, while adjectival and verbal modifiers follow the verb, and number and classifier follow the noun. Karen does not appear to have a preverbal focus position; from the data in Solnit 1986, it seems that focus position is sentence-final as in Modern Chinese, but I cannot be sure without access to native speakers. Karen possibly changed because of the influence of the surrounding Tai languages (Wheatley (1984:350) gives Tai and Mon-Khmer influence as the possible source for both Karen and Chinese verb-medial order). Both of these languages, like Old Chinese, seem to be at a halfway point between the typological ideals of verb-final and verb-medial order. We see the seeds of the possible decline of verb-final syntax in the serializing constructions in Yi and Angami Naga that put the goal argument after the verb (Wheatley 1984, 1985).

In conclusion then, there seems to be some evidence that of the languages in Sino-Tibetan, it is Chinese, Bai, and Karen that have changed their word orders, and that there is a common core of pragmatic factors which outweigh syntactic factors in many of the languages in the family. It is then not unreasonable to propose that Proto-Sino-Tibetan was a morphologically simple, pragmatically controlled, verb-final, noun-attribute, language. I hope to be able to present more evidence in favor of this analysis in future work.

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