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Pragmatic relations and word order in Chinese*

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1. Introduction

In LaPolla 1990, I presented arguments to show that Chinese is a language in which there has been no grammaticalization of the syntactic relations "subject" and "object". This being the case, then syntactic relations cannot be what determines word order in Chinese. In this paper I will argue that, aside from a semantic rule that the actor of a verb, if expressed, must precede that verb, it is pragmatic relations (information structure) that are the main determinants of word order in Chinese.[1] Though writing about a situation that exists for French and Italian, in the following quote Lambrecht 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. (Lambrecht 1986:38)

As Li and 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 and Thompson 1981:19 for similar arguments). Much has been written about the importance

of "topic" in Chinese (e.g. Li and Thompson 1974a, 1976, 1981; Barry 1975; Tsao 1979), but the importance of pragmatic relations ("focus structure" — see definition below) in determining syntactic structure is not that well understood. What I explore then in this paper is focus structure and its grammaticalization in the word order patterns of Chinese.

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 outgrowth of the Prague School notion of Functional Sentence Perspective, though it goes far beyond the simple concepts of "theme" – "rheme". We will discuss two aspects of information structure: focus structure and the cognitive properties of discourse referents.

In the following introduction, it is not my intention to develop a theory of information structure, as this has already been done by Lambrecht. I will here only be presenting a summary of those aspects of information structure (as presented in Lambrecht's work) that are relevant to Chinese. Please see Lambrecht (to appear), for a complete and detailed analysis of information structure.

The concept of focus structure, as defined in Lambrecht (to appear) will be the center of interest in our discussion of information structure:

> *Focus structure*: A grammatical system used to mark the focus of the assertion in a sentence by setting it off against the pragmatic presupposition.

By "grammatical system" is meant a particular use of intonation, morphology, word order, special "constructions", or a combination thereof. We then need to define the terms *pragmatic presupposition*, *assertion*, and *focus of the assertion*:

> *Pragmatic presupposition*: The set of propositions evoked in an utterance which the speaker assumes the hearer already knows or believes or is ready to take for granted at the time of speech.
>
> *Pragmatic assertion*: The proposition which the hearer is expected to know or believe or take for granted as a result of hearing the utterance.
>
> *Focus* (or *focus of the assertion*): That portion of a proposition whereby the assertion differs from the presupposition.

The pragmatic presupposition, a propositional notion, 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. As the assertion includes both the presupposition (and the topic) and the focus, it is a pragmatically structured proposition, a proposition *in context*. It is not the case that every utterance has a topic (see below), or that every sentence involves an explicit 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).[2]

Lambrecht (1986, 1987, 1989, to appear) distinguishes three main types of focus structure: "predicate focus", "narrow focus", and "sentence focus". ***Predicate focus*** is statistically the most common of the three. It involves an assertion with an unmarked topic-comment structure.[3] There is a topic that is within the presupposition; the domain (scope) of the focus is then the comment (predicate), and within this there is an unmarked focus position, usually the object position (see also Givón 1979b:51-53 on this last point). Lambrecht gives examples (1a-d) (1989:5), to which I have added the Chinese equivalent:

(1)	Q:	How's your car?	
	A:	a. *My car/it broke down.*	English (subject-predicate)
		b. *(La mia macchina) si è rotta.*	Italian (subject-predicate)
		c. *(Ma voiture) elle est en panne.*	French (topic- subject-predicate)
		d. *(Kuruma wa) koshoo-shi-ta.*	Japanese (topic-comment)
		e. *(Wo de che zi) huai le.*	Chinese (topic-comment)

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 French, Italian, Japanese, and Chinese, completely unexpressed (as shown by the parentheses around the topics).

Lambrecht's second type of focus structure is the *narrow focus* or "contrastive focus" structure. In a narrow focus structure only a single NP is in

focus; the rest of the assertion is within the presupposition, as in the examples in (2) ((2a-d) from Lambrecht 1989:8; the focused NP is in bold).

(2) Q: I heard your motorcycle broke down?

A:	a. *My car broke down.*	English (NP focus accent)
	b. *È la mia **macchina** che si è rotta.*	Italian (*è*-cleft)
	c. *C'est ma **voiture** qui est en panne.*	French (*c'est* cleft)
	d. ***Kuruma** ga koshoo-shita.*	Japanese (*ga*-marking)
	e. *Shi wo **chezi** huai le.*	Chinese (*shi*-cleft)[4]

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 (3).

(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)

Again it is important to emphasize 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).[5]

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 on the focused constituent. Therefore, (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 *How many days leave did Miss Zhao ask for last month?*, depending on whether the prosodic stress is placed on the temporal phrase, the actor, or the modifier of the final NP respectively (Teng 1985.).

(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 focus 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 so is often referred to as thetic, as opposed to categorical (e.g. Sasse 1987). It is generally presentational, presenting either a state of affairs or a new referent (Sasse's "event-central" or "entity-central"). 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, intonation, or word order similar to those of an object (Lambrecht 1989:10).

(5) Q: What happened?

A:	a. *My car broke down.*	English (accented subject NP)
	b. *Mi si è rotta **la macchina**.*	Italian (inverted subject NP)
	c. *J'ai **ma voiture** qui est en panne.*	French (clefted subject NP)
	d. ***Kuruma** ga koshoo-shi-ta.*	Japanese (morphol. marking)

Chinese does not have a grammaticalized subject or object, but the relevant NP (what otherwise might be interpreted as a topic) must still be shown to be non-topical in a sentence focus construction. B's answer in (6) is one type of sentence focus structure in Chinese.[6]

(6) A: *Fasheng le shenme shi?*
happen ASP what affair
'What happened?'

B: *Gang lai le yi da dui* ***liumang.***
just-now come ASP one big group hoodlum
'A group of hoodlums just arrived.'

In this example the "big group of hoodlums" is marked as non-topical by its postverbal position. It is then not a statement about the hoodlums, but merely asserts that the event of their appearance occured.

One important point we can see from all the examples above is the different ways languages have of marking the different types of focus structure, which gives us a window on the interactions and precedence relations (which type of relation takes precedence over another) between syntactic, semantic and pragmatic relations. We see that in English syntactic relations control the syntactic structure, and are relatively unaffected by pragmatic relations, while in Italian and French pragmatic relations take precedence over syntactic relations in determining syntactic structure. In Chinese pragmatic relations are not subject to syntactic factors, but take a back seat to semantics if the verb has an argument that is an actor (i.e. agent, effector). We will look at the different constructions involved below, but first we will look at the NPs involved in the constructions.

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

An NP is *referential* if the speaker intends for it to refer to a particular entity which exists within a particular universe of discourse, with continuous identity over time (cf. Givón 1978:293, Du Bois 1980:208). This referential NP 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 will then treat it as identifiable. A referential NP is *specific* if it is identifiable to the speaker, regardless of whether it is identifiable to the addressee or not. If the individual identity of the referent is not important to the speaker, it is *non-specific* (as in *I'm looking for a mouse* — it could be one I just lost (specific), or any mouse I happen to come across (non-specific)). Generics, predicative NPs, and nouns that occur in compounds (e.g. *bear-hunting*) or are under the scope of negation are all non-referential.[7] This gives us the hierarchy of referential NPs (excluding the specific-non-specific contrast) as presented in Figure 1.

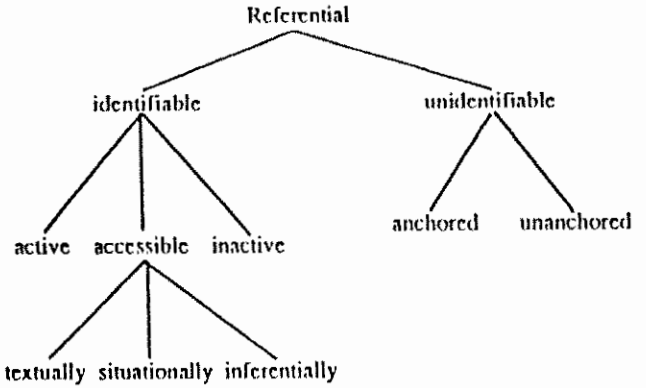

Figure 1. The cognitive states of referential NPs in discourse

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* can be said to be the grammatical coding of an NP as to whether or not the speaker assumes the referent of the NP is identifiable to the addressee, though this is a rough definition, as the relationship between definite coding, to the extent that it exists, and the cognitive statuses of referents varies greatly between languages.

It is also important to emphasize the distinction between the activation status of a referent and the information structure categories introduced above. The former involves the cognitive statuses of discourse referents, while the latter involves the relations between discourse referents and propositions.

2. The question of "definiteness"

The first question we will discuss is the types of codings NPs can have in Chinese in relation to their activation states, and whether or not word order is involved in marking "definiteness" or identifiability in Chinese, as is often assumed. Mullie (1932:160-168) outlined a 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. Mullie'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 emphasized" (1932:166) (see 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. (See below for discussion of the presentative constructions.)

Y. R. Chao (1968:76-77) stated 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". Teng (1975) and Zhu (1982) also give similar analyses. It is significant that each of these scholars stated 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 and Thompson 1975, an attempt is made to formalize this relationship between word order and the "definiteness" of the NPs of a sentence in Chinese. They give the following "tendency" (p. 170):

> *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 and Thompson propose a set of refinements (p. 184):

> *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.[8]

Tendency A has been supported by data from quantitative discourse analyses of Chinese texts, such as Sun and Givón 1985 and M. Wang 1988.

Sun and 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 and Givón's own data *support* Tendency A. A similar study (M. Wang 1988) done with the same methodology used by Sun and Givón came up with results that also support Li and Thompson's hypothesis.

Though there is this tendency, Li and 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 and 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.

2.1 *Coding on the NP*

Each type of discourse referent in Chinese may be represented in several ways. A referent that is active will often be represented by a zero or overt pronoun, but can also be expressed as a bare lexical NP or one preceded by a genitive phrase or by a deictic pronoun (including a numeral plus classifer phrase if the number of the referents is important).[9]

(7) A: *Zhangsan$_i$ jintian lai guo ma?*
Zhangsan today come ASP Q
'Has Zhangsan come (in) today?'
B: *Ø$_i$ meiyou, keshi (ta$_i$) yi huir hui lai, [ta$_i$ de*
N-A but (3SG) one time will come 3SG GEN
chezi]$_i$ you wenti.
vehicle have problem
'No, but he'll be in in a little while, his car has a problem.'
A: *(([Ta$_i$ de) chezi]$_j$) you you wenti le! Ø$_j$*
((3SG GEN) vehicle) again have problem ASP
zhen shi lan huo.
really COP rotten goods
'His car has problems again! It's really a piece of junk.'

In this example, Zhangsan is inactive (or accessible) 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. (7)). An unanchored 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:

(8) *Wo$_j$ zuijin mai le yi shuang xiezi$_i$, keshi Ø$_j$ chuan*
1SG recently buy ASP one pair shoes but wear
le Ø$_i$ yi ci Ø$_i$ jiu po le.
ASP one time 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, and are 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 either not have the numeral plus classifier, or will have the classifer, but not the numeral.[10] 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 *gongren* 'worker' in the following example:

(9) *Xuexiao de yi ge gongren zuotian chu le*
school GEN one CLASS worker yesterday produce ASP
che-huo.
car-accident
'Yesterday one of the workers in the school got into a car accident.'

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

(10) a. *Ta shi ((yi) ge) gongren.*
3SG COP ((one) CLASS) 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*
one CLASS person ASP uninteresting GEN time will
xiang he jiu.
think drink liquor
'When a person is bored s/he will think of drinking liquor.'

In (10a), the predicative phrase 'a worker' can be coded in Chinese as a bare noun, a classifer plus noun, or 'one' plus classifier plus noun. In (10b), the generic 'person' is coded as a bare NP, while in (10c) it takes a numeral and classifer.

Following is a summary of the types of representations each type of referent may have:

Type of referent	**Possible codings**
Active	zero, pronoun, bare NP, with deictic pronoun
Accessible	pronoun, bare NP, with deictic pronoun
Inactive	bare NP, with deictic pronoun
Unanchored Unidentifiable	bare NP, (numeral +) classifier
Anchored Unidentifiable	genitive phrase, relative clause
Non-referential	bare NP, (numeral +) classifier

From the point of view of the type of NP which represents a particular referent, we can see that Chinese can generallly distinguish between active and non-active identifiable referents by the use of 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.

Chen (1986:16-17) considers all NPs marked with a genitive phrase or relative clause to be "definite" (so, for example, the topic in (9), 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 "indeterminate" NPs, according to Chen, are interpreted by the addressee as "definite" or "indefinite" on the

basis of "syntactic or discourse contexts" (1986:19). Given these facts, and the fact pointed out by Chafe (1976:39) and Givón (1978:319) that since the deictic (demonstrative) pronouns do not lose their deictic force when used for "definitization" they cannot be seen as simply marking "definitization", I would argue that Chinese does not have a grammatical category of definiteness, but simply several means for expressing the pragmatic category of identifiability.

In terms of position of an NP in a sentence, there are few restrictions based on the semantic or pragmatic status of the referent of that NP.[11] Generic (10b-c), uniquely identifiable (11a-b), and any overtly marked NPs (either definite or indefinite — (12a-d)) can appear before or after the verb, without a change in pragmatic status (Chen 1986:37; see also the refinements to Li and Thompson's Tendency A given above) (The relevant items are in bold type; (12a) is from Fan 1985:322, originally from a New China News Agency bulletin.)

(11) 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.'

(12) a. *Liang ge Shaoxianduiyuan xiang Xu Haifeng he*
two CLASS **Young-Pioneer(s)** towards Xu Haifeng and
Wang Yifu xian le xian hua he hong lingjin.
Wang Yifu give ASP 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** CLASS **painting**
'Today the teacher gave me **a painting**.'

c. *Nei ge ren jintian mei lai.*
that CLASS **person** today N-A come
'**That person** didn't come today.'

d. A: *Che shang chule nei ge ren yiwai,*
vehicle on aside-from that CLASS person aside-from
hai you shenme ren?
still have what person
'Who else is on the train aside from that person?'

B: *Jiu zuo nei ge ren.*
only sit **that** CLASS **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):

(13) 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 "definiteness". Only Givón 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. (1978:319)

I propose that it is not identifiability that is coded by word order, but focus structure. If we look beyond the identifiability of the referents of noun phrases, we can see that Tendency A is actually only one part of a more general tendency to have the focus at the end of the sentence (cf. note by Dragunov in Wang 1982:106; Huang and Davis 1988:9), or at least postverbal (in the case of cleft constructions). 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 and 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 postverbal 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 the much-hedged statements by other scholars, if we say that *topical or non-focal NPs occur preverbally and focal or non-topical NPs occur post-verbally*.[12] In this generalization I include non-focal NPs with topical NPs because aside from topical NPs, which will generally be sentence initial, non-focal NPs (secondary topics, non-referential NPs used adverbially, etc.) can also appear preverbally, albeit in non-initial position. I also include non-topical (including non-referential) NPs with focal NPs because in a predicate focus structure a focal NP will appear postverbally to mark it as focal, while in an event-central thetic phrase a non-topical NP will appear post-verbally to mark it as non-topical (see below for examples). Focal and non-topical NPs can both appear postverbally because they share the characteristic of NOT being an entity that an assertion is predicated of.

3. Marked focus constructions[13]

Word order in Mandarin is "consistently" verb medial (Li and 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. By "marked" I simply mean statistically less common. 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". 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 sentence focus sentence cannot have the same structure as a predicate focus sentence. A presentative structure must be used to prevent a potentially topical NP from being interpreted as a topic. Following we will examine both entity-central or event-central sentence focus structures, and discuss the focus structure of incorporation constructions.

3.1 *Entity-central presentative sentences*

Entity-central presentative sentences introduce a new referent into a discourse. They do this by placing the new referent in the postverbal focus position.[14] Li and Thompson (1981:509-519) classify these into two types, those which simply state the referent's existence or location (the "existential presentative sentence"), and those which introduce the referent with a verb of motion. This difference is exemplified in (14) (Li and Thompson's (2) and (3), p. 509-10):

(14) a. *(zai) yuanzi-li you yi zhi gou.*
(LOC) yard-inside exist one CLASS dog
'In the yard there is a **dog**.'

b. *Lai le yi ge keren.*
come ASP one CLASS guest
'There came a **guest**.'

Sentences with the existential verb *you*, as in (14a) have two possible structures, the one given in (14a) and that in (15) (Li and Thompson's (7), p. 511):

(15) *You yi zhi gou zai yuanzi-li.*
exist one CLASS dog LOC yard-inside
'There is a **dog** in the **yard**.'

Li and 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 (14a) 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 (14a) and (15) the yard is in the same state of identifiability — it is identifiable (this is the unmarked state for locatives — Van Valin 1975); the "definiteness" of the yard then cannot be important here. What is different between the two is the focus structure. In (15) the yard is identifiable, so it is not being introduced as a new referent, as the dog is, yet it is focal (both clauses in (15) contain focal NPs). In (14a) *yuanzi-li* 'in 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 is generally not the topic of a topic chain, for example, or even simple cross-

clause coreference:

(16) a. *Yuanzi li you junren$_i$ danshi Ø$_i$ bu duo.*
yard inside have soldier(s) but not many
'There are **soldiers** in the yard, but not many.'

b. **Yuanzi li$_i$ you junren$_i$ danshi Ø$_i$ you kuan, Ø$_i$*
yard inside have **soldier**(s) but also wide
you da.
also big

Li Naicong (p.c.) points out that the following sentence, in which the locative seems to be the topic of a topic chain, is grammatical:

(17) *Yuanzi li you junren, hai you ji liang*
yard inside have soldier(s) also have several CLASS
tankeche, suoyi Ø xiande hen yongji.
tanks so appears very crowded
'In the yard there are **soldiers** and some **tanks**, so it looks quite crowded.'

In this case, though, the topic of *xiande hen yongji* 'appears very crowded' cannot be *yuanzi-li* 'in the yard' with a locative sense, but must be *yuanzi* 'the yard' (or possibly *yuanzi-li*, with a nominal meaning, 'the inside of the yard'), as *yuanzi-li* with a locative sense is an abbreviation of *zai yuanzi-li* 'in the yard', with the locative verb *zai*. This difference is significant. In the sentence initial position of (17), *yuanzi-li* and *zai yuanzi-li* are both permissible, but replacing the zero anaphor before *xiande hen yongji* with *zai yuanzi-li* would be ungrammatical. (See also the discussion of (19) below.)

The second type (i.e. (15)), with the locus and presentative phrases reversed is not an existential presentative sentence like (14a), as assumed by Li and Thompson, but is actually an example of what Li and Thomson (1981:611-618) call the "realis descriptive clause sentence", a two-clause structure[15] where a referent is introduced in the first clause, and then an assertion is made about it in the following clause (both of which are part of the same sentence; see below).[16]

A second point about Li and Thompson's analysis of existential presentative sentences is that Li and Thompson equate them with possessives (p. 513). In their analysis, the only difference between a sentence such as (14a) and (18) (Li and Thompson 1981:513, ex. (14)) is that (18) has an animate locus.

(18) *Ta you san ge haizi.*
3SG exist three CLASS child(ren)
'He has **three children**.'

Yet there is an important difference in focus structure between (18) and (14a). In (14a) the locus can take the locative verb *zai;* that is, it is a separate clause (of the type in a serial verb construction), 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 (18), *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 (14a). Guo (1990:24-25) distinguishes between existential structures and what he refers to as "possessive subject" sentences on the basis of whether there is a "positional" particle (in example (19b), *li* 'inside') in the sentence initial NP. Without the positional particle, the initial NP is a topic in a sentence that says something about what happened to that topic; with the positional particle, the sentence-initial NP is not a topic, it is simply the location of the event or entity. Guo gives the following examples:

(19) a. *Ta si le yi ge erzi.*
3SG die ASP one CLASS son
'One of his sons died (on him).'

b. *Tou li si le yi ge ren.*
head inside die ASP one CLASS person
'Someone among the leaders died.'

This distinction is clearest when the sentence initial NP is a location, as in (20). Without a positional particle, the sentence initial NP is not a locative, as in the existential sentences, but is a topic in a possessor relation to the post-verbal NP:

(20) *Dongwuyuan pao le yi zhi xiongmao.*
zoo run ASP one CLASS panda
'The zoo lost a panda (by its running away).'

A difference similar to that between (14a) and (18) obtains between sentences such as (14a) and those such as (21), 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.

(21) *Waimian shi yi zhi gou.*
outside COP one CLASS 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 (14a), 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 (21), the fact that the pre-copula NP is under discussion is clearly part of the presupposition (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 (18)) then are different from the first type of existential presentative sentence (as in (14a), (15)): the first type, similar to *there* sentences in English, is comprised of either a simple thetic statement asserting the existence of an entity in a particular location (15), or a biclausal sentence focus statement involving a statement about the existence of some entity and its location (14a); the other two sentence types are both single-clause sentences with clear topic-comment structures.

The second type of "existential presentative sentence" discussed by Li and Thompson (1981:611-618) (and mentioned just 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 and 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. (22b) is their (75), p. 611):

(22) a. *(Waimian) you yi ge ren xiang jian ni.*
(outside) have one CLASS 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 CLASS **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 CLASS 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, but (22a) does not have exactly the same focus structure as (22b) or (22c): (22a) has a simple presentational clause, which asserts the existence of an entity, as discussed above, followed by a predication. The first clause simply allows the referent to become active in the discourse; the second clause makes an assertion about it.[17] In (22b), on the other hand, there are two topic-comment type 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 topic of the second clause. The same structure can be assigned to (22c). It might be argued that in all three of these examples the first clause functions only to introduce a referent, yet the first clause is making an assertion about a topic (e.g., in (22c) 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.

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), a construction usually considered ungrammatical in English, but nonetheless used very often. It is a structure where the speaker wishes to express a proposition about a referent being introduced, but is forced by the constraints on information structure (cf. 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 and other languages.

This is a type of core-coordination where the two cores share an argument.[18] The structure created, then, is tighter than simple juxtaposition. Though I talk about the referent being introduced in the first clause 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 both new and a topic.

Li and Thompson point out the semantic similarity between these structures and relative clauses,[19] 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 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. (1981:614)

It would seem from this quote that they are talking about identifiability. They give the examples in (23) (their (84), p. 614) as evidence of the semantic difference between realis descriptive sentences and sentences with relative clauses:

(23) a. *Wo mai le yi jian yifu tai da.*
1SG buy ASP one CLASS 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 CLASS 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. Yet the discourse status of the class of the referent is not what is important here. New information may be presented in the presupposed format of a restrictive relative clause as long as it is relatively unremarkable information, i.e. not the focus of the assertion (Du Bois 1980:223; see also Cumming 1984:369). What is important is that in (23a) an assertion is being made about the clothing, that it is too big. No such assertion is being made in (23b). That is, in (23a) there are two assertions, that I bought a piece of clothing, and that it is too big; in (23b) there is only one assertion, that I bought a piece of (a particular type of) clothing. If anything is incidental, it is 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 and Thompson clearly 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).

We now turn to presentative sentences which involve a verb of motion. In this construction, the new referent occurs immediately after the verb of motion (Li and Thompson 1981:517-19), such as we saw in (14b), repeated here:

(14) b. *Lai le yi ge keren.*
come ASP one CLASS guest
'A **guest** came.'

This type of structure cannot be used with all intransitive verbs of motion, though; verbs such as *gun* 'roll', and *pa* 'climb' used alone cannot introduce a referent. They must be in a construction with another clause, as in exx. (14a) and (15), or appear in construction with presentative verbs that act as complements of result, as in (24):

(24) *pa chu lai le yi zhi laohu.*
climb exit come ASP one CLASS tiger
'A **tiger** climbed out.'

Li and Thompson do not give a reason for this difference, but what seems to be going on involves two different semantic factors. One is the aspect of the verbs involved: only a verb that is temporally bounded can be presentative (cf. Kuno 1972:300). The other factor is the meaning of the verbs involved: verbs such as *pa* 'climb' 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. Lambrecht (1989:29) suggests that verbs such as 'arrive' are presentational due to their "inherent lexical content", and verbs such as 'call' may be construed as 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.[20]

3.2 *Event-central thetic sentences*

In "event-central" presentative sentences, what is being asserted is the existence (happening) of an event, not the existence of an entity, so this type of

structure will often not include referentially specific NPs. It is possible to have a referential NP in this type of structure, but it will be "pragmatically non-referential" (Givón 1981), that is, a referential NP can be treated as non-referential when it is not salient in the discourse (see ex. (26a)). The prototypical examples of the "event-central" 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, though the NPs 'rain' and 'snow' in the sentences in (25), below, are not referentially specific (do not refer to some specific rain or snow — are "non-manipulable" in the framework of Hopper and Thompson 1984, 1985), and not topical, and so are placed in postverbal position:

(25) a. *Xia yu le.*
fall rain ASP
'It's raining.'

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

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.

An event-central expression can also appear as the comment in a topic-comment structure. In these cases, generally the topic is the possessor of, or is in some way related to, the NP in the event-central expression. We can see the difference between event-central comments about a topic and an unmarked predicate focus structure from the examples in (26):

(26) a. *Ta si le fuqin.*
3SG die ASP father
'His **father** died.'

b. *Ta de fuqin si le.*
3SG GEN father die ASP
'His father **died**.'

(26a) involves "possessor ascension", and 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). On the other hand, (26b) is a predicate focus statement about the topic 'his father', who died.

This structure is also possible with proper names appearing in postverbal position, as in the following example, which could be the brigade-leader's response to his superior's request for information about how the battle went, and could not be interpreted as a statement about Zhangsan and Lisi:

(27) *Dui li si le Zhangsan, Lisi.*
Brigade inside die ASP Zhangsan Lisi
'In (our) brigade Zhangsan and Lisi died.'

The unitary nature of the event-central phrase is evident in one type of aspectual marking that can appear with these structures. 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-central 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) (see also the discussion of the use of the adverb *you* 'again' in this type of structure in Teng 1974):

(28) a. *Ta si guo yi pi ma.*
3SG die ASP one CLASS 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 preverbal NP must be interpreted as the topic of the verb and therefore can only experience the action of the verb once:

(29) a. **Ta you yi pi ma si guo.*
3SG have one CLASS 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, this structure is the pragmatic equivalent of noun incorporation. In languages with grammatically marked incorporation, incorporation of a subject noun into an intransitive verb converts a simple categorical (topic-comment) judgement into a thetic statement, and incorporation of a subject or object noun into a transitive verb can convert a double categorical (topic-comment within topic-comment) judgement into a simple categorical statement (Sasse 1984:260). In Chinese there is no marking of incorporation other than word order and possibly intonation, but the pragmatic effect is the same (see below for more on pragmatic incorporation).

There are examples of postverbal NPs that are identifiable in structures that look like presentational structures, but these are actually event-central constructions, as in (30) (Li and Thompson's (30), p. 517), where the postverbal NPs are proper names:

(30) *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.'

McCawley (1988:7) considers 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'". L. Li (1986:350) also claims that the NP following *zhi* 'only' must be "indefinite" (*wu ding*). The problem here is distinguishing between a referent's discourse status (identifiability) and information structure: it is true that the NP is being treated as non-topical, but being non-topical does not mean it is necessarily "indefinite".

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

(31) a. *Suiran lai le Lisi/nei ge ren, keshi ...*
although come ASP Lisi/that CLASS person but
'Although Lisi/that person has come, ...'

b. *Ruguo fasheng zhe jian shiqing, jiu ...*
if happen this CLASS affair then
'If that happens, then ...'

c. *Zicong zou le Zhangsan yihou, jiu ...*
from go ASP Zhangsan after then
'Ever since Zhangsan left, ...'

In these examples the post-verbal referent is identifiable, but it is not focal in the way that *Zhangsan* is in (30) (it is not contrastive). It is also not a topic. In adverbial clauses such as these, the proposition is pragmatically presupposed; there is no predication in the information-conveying sense of this word. The predicate then is not to be construed as being about the postverbal NP; the postverbal NP 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 *Pragmatic incorporation*

NPs that are not crucially involved in the assertion, that is, that are not topical or focal, can also appear in constructions where they act as modifiers of the verb (and so are within the comment), as is the case with the instruments incorporated into the verbs in (32):

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

The type of NP in this construction is preverbal but non-topical. We can see from this that simply being in preverbal position does not make an NP "definite", nor does it make it a topic. The fact that it is non-referential may preclude it from being "definite", but it does not preclude it from being a topic, nor does not being in sentence initial position preclude it from being at least a secondary topic (see the discussion of (33) below). It is simply the semantics of the combination, and the lack of any possible relevant topic-comment association that leads the hearer to infer an instrumental meaning for the preverbal NP.

A different type of pragmatic incorporation is the double nominative (Teng 1974) (or possessor ascension — Fox 1981) structure. This structure

incorporates a comment about a body part and the body part itself into a comment about the possessor of the body part. 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),[21] the body part is pragmatically incorporated into the comment, and the possessor of the body part becomes the topic about which the comment is made.[22]

(33) a. *Wo duzi e le.*
1SG belly hungry ASP
'I'm hungry.'

b. *Wo tou teng le.*
1SG head hurt ASP
'I have a headache.'

In this type of double-topic construction, the main topic ('1sg' in both examples) is semantically the possessor of the secondary topic ('belly'/'head'), but it is not grammatically marked as such, as the secondary topic has been incorporated into the comment about the main topic. There is also a comment about the secondary topic.[23] 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 (cf. Tsao's (1987) treatment of the *ba* construction).

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 Chinese, though, this proposition is not expressed in a sentence focus structure, but in the type of predicate focus structure involving pragmatic incorporation of the body part. 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.

4. Conclusions

What I have tried to show in this discussion of word order in Chinese is that

(a) verb medial word order has the function of distinguishing topical or non-focal NPs from focal or non-topical NPs, not "definite" and "indefinite" NPs, and (b) constructions have developed in Chinese which allow the topical (non-focal) and focal (non-topical) elements in marked focus structures to be clearly distinguished. In short, I would argue that in order to understand syntactic structures in Chinese, we need to make clear the role of pragmatic and semantic relations, and the interactions between them, in determining those structures.

Abbreviations used in glosses

LOC= locative verb; N-A= negative aspect marker; NOMLZR= nominalizer; for further abbreviations, see list on pp. ix.

Notes

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1. 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, a language of the Eastern Cushitic group, which also has pragmatically determined word order.

2. 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).

3. By 'unmarked' here I mean the statistically most common type of sentence, where the comment follows the topic without involving a cleft or other type of 'marked' construction.

4. (2e) would be the equivalent of a "stressed focus *it*-cleft". An example of what would be an example of the equivalent of a *wh*-cleft (contra Teng 1979), as defined in Prince 1978 is (i):

(i) *Wo mei mai de shi cai.*
1SG N-A buy NOMLZR COP vegetables.
'What I didn't buy was *vegetables*.'

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).

5. 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.

6. I did not use an example exactly parallel to the ones in (5) because the presence of the first person pronoun and the semantics of the argument in the example complicate the point I am trying to make. These complications are discussed in Section 3.

7. It is 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 NPs, but at the same time can be topical, as if they were referential (Givón 1984:413). For the purposes of this paper I will treat them as non-referential NPs.

8. The need for at least two of these refinements was due to Li and Thompson's earlier analysis (cf. Li and Thompson 1974b) of *bei, zai*, and other phrase-forming morphemes as prepositions. If instead we recognize (as Li and Thompson themselves do in later papers) that these morphemes, which in Old Chinese, and in some cases also in Modern Chinese, are verbs, are still not completely grammaticalized, we can do away with Refinements 3 and 4.

9. For examples other than those given here, 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.

10. See C. Sun 1988 for a discourse based study showing that there is a tendency for the representation of a referent which is "thematically important" to have the numeral plus classifier phrase when that referent is first introduced into the discourse, and for the representation of a referent which is not "thematically important" to not include the numeral plus classifier phrase; see also Lambrecht, to appear, p. 67, for cross-linguistic evidence of the numeral plus classifier vs. plain classifer strategy.

11. As mentioned in the Introduction, it is necessary to separate the pragmatic status of the referent of the NP in the mind of the speaker/hearer from the pragmatic relations that the NP is involved in.

12. 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".

13. Due to space limitations, only sentence focus structures will be discussed here. A number of other word order patterns are dealt with in LaPolla, in preparation.

14. It is not necessarily the case that all new referents are introduced with one of the following presentative constructions. Herring (1989) 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.

15. The juncture here is actually on a level lower than the clause, and a type of nexus different from both coordination and subordination, giving us what has often been called a serial verb construction. See the discussion below of example (22), and particularly note 18.

16. 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.

17. This is where we can see the interaction of semantic and pragmatic factors. It is necessary to use this construction in this case, rather than the "inversion" type as seen in (14h), because the argument in focus is the actor of the verb *xiang* 'think' as opposed to the undergoer of the predicate 'arrived'. Since an actor must always precede the verb, the biclausal construction allows the focal actor to both appear in the focal position of the *you* clause and still be in its proper preverbal position vis-à-vis *xiang*.

18. See Van Valin 1984, 1993 for discussion of juncture and nexus types, and Hansell 1993 for a discussion of some juncture-nexus types in Chinese. Essentially, a CORE is the verb and its direct arguments, and does not include the entire clause; *coordination* is a juncture type where the two elements are non-embedded and non-dependent, as opposed to *cosubordination* (non-embedded but dependent) and *subordination* (embedded).

19. Tai 1973:661-663 in fact posits this form as the "underlying" form for all relative clauses. 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 all 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". There are cases where the line is not so clear, as in the following attested example (from H. Sun 1982:297):

(i) *Zang-Mian yuzu zhong hai you xuduo zhongyao yuyin*
Tibeto-Burman family middle still have many important phonetic
xianxiang qi genyuan zhide tantao . . .
phenomenon GEN origin deserve investigation
'In the Tibeto-Burman languages there are many phenomena whose origins are worthy of investigation.'

This example differs from the earlier examples in the inclusion of the phrase *qi genyuan* 'GEN origin', which makes this look very much like a post-head relative, something that Chinese supposedly does not have!

20. Expressed in the form of a decompositional semantic representation, *lai-le* 'come, arrive' would be [BECOME be-at′(x)], where x is a theme (the predicate being a stative verb), whereas *pa* 'climb' would be [pa′(x)], where x is an effector/agent (the predicate being an activity verb). As effector/agents cannot appear postverbally, we can see why only in the structure in (24) can the argument appear postverbally with *pa* 'climb': it is a combination of the two predicates, the state predicate providing the theme status, which then allows the argument to appear postverbally: [pa′(x) BECOME be-at′(x)] (see Van Valin 1993 for discussion of this type of semantic decomposition).

21. See also Hopper and 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).

22. 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.

23. See Teng 1974 for arguments why the sentence initial NP is a distinct topic not in the same NP as the affected body part and why the secondary topic should be seen as incorporated into the predication about the primary topic.

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