

Topic and Topic-Comment Constructions in Mandarin Chinese

Author(s): Dingxu Shi

Source: *Language*, Vol. 76, No. 2 (Jun., 2000), pp. 383-408

Published by: Linguistic Society of America

Stable URL: <https://www.jstor.org/stable/417661>

Accessed: 03-11-2018 18:56 UTC

JSTOR is a not-for-profit service that helps scholars, researchers, and students discover, use, and build upon a wide range of content in a trusted digital archive. We use information technology and tools to increase productivity and facilitate new forms of scholarship. For more information about JSTOR, please contact support@jstor.org.

Your use of the JSTOR archive indicates your acceptance of the Terms & Conditions of Use, available at <https://about.jstor.org/terms>



Linguistic Society of America is collaborating with JSTOR to digitize, preserve and extend access to *Language*

TOPIC AND TOPIC-COMMENT CONSTRUCTIONS IN MANDARIN CHINESE

DINGXU SHI

Hong Kong Polytechnic University

This article attempts to provide a precise definition for topic and to derive most of the properties of topic from this definition. The main assumption is that the topic-comment construction is a syntactic device employed to fulfill certain discourse functions. Topic is always related to a position inside the comment. Since topic has no independent thematic role but always depends on an element inside the comment for its thematic role, it has no syntactic function of its own. This dependence relationship is subject to locality constraints.*

Topic-comment constructions are found in a wide range of languages (Comrie 1981) and have attracted much research interest from Chinese linguists ever since Chao made the now famous suggestion that 'the grammatical meaning of subject and predicate in a Chinese sentence is topic and comment, rather than actor and action' (1968:69). Over the past decade or so, three major views have emerged from the sometimes heated debate about the relationship between topic and subject in languages like Chinese. The first is a modified version of the tradition started by Ma (1898/1983), which maintains that subject-predicate is the fundamental relationship between VP and preverbal NP(s). If there are two or more preverbal NPs, the VP and the NP closest to it will form a unit known as *zhǔwèi duǎnyǔ wèiyǔ* 'a predicate which is itself a subject-predicate phrase', which can take another NP as the subject (see Lü 1986b). In other words, there could be as many subjects in a sentence as the number of preverbal NPs and topics do not exist in Chinese.

The second view pushes to its limit the dichotomy between topic-prominent languages and subject-prominent languages (Li & Thompson 1976) by claiming that syntactic notions like subject and object are not grammaticalized in Chinese. The argument is that information structures rather than syntactic structures are used in Chinese to convey information and that the only notions grammaticalized in Chinese are topic and focus (LaPolla 1990, 1993). There could be more than one topic in a sentence, if there are two or more NPs in front of the verb.

The majority of linguists working on Chinese seem to support the third view, that both topic and subject exist in Chinese as separate grammatical notions and the two can exist in the same sentence (Li & Thompson 1976, 1981, Tsao 1979, 1990, Huang 1982, Li 1990, Jiang 1991, Tan 1991, Xue 1991, Ning 1993, Qu 1994, Shyu 1995). This is the underlying assumption of this article.

1. THE DEFINITION OF TOPIC. Although there is a majority opinion on the coexistence of topic and subject, there is no consensus on the status and definition of the notions. A common practice is to list the distribution and properties of topic and subject and then to use these properties as criteria for determining whether a given preverbal NP is a topic or a subject. Li and Thompson (1976), for example, list seven general properties of topic. Tsao (1979, 1990) modified their analysis and listed six properties of Chinese topics, as shown in 1.

* I am grateful to Bernard Comrie, Joseph Aoun, Audrey Li, Liejiong Xu, Walter Bisang, Robert Bauer and the two anonymous referees for their help. All mistakes, of course, are mine. Some of the findings in this article come from a research project funded by the Hong Kong Polytechnic University (P161); I gratefully acknowledge HK PolyU's generous support.

- (1) a. Topic invariably occupies the S-initial position of the first clause in a topic chain.
- b. Topic can optionally be separated from the rest of the sentence in which it occurs overtly by one of the four particles *a* (*ya*), *ne*, *me*, and *ba*.
- c. Topic is always definite.
- d. Topic is a discourse notion; it may, and often does, extend its semantic domain to more than one clause.
- e. Topic is in control of the pronominalization or deletion of all the coreferential NPs in a topic chain.
- f. Topic, except in clauses in which it is also subject, plays no role in such processes as true reflexivization, Equi-NP deletion, and imperativization.

These properties are then cited as evidence for Tsao's argument that the NP inside the so-called *bǎ* construction is a secondary topic (Tsao 1987a) and that the so-called verb-copying construction¹ is a deverbalized secondary topic (Tsao 1987b).

It is generally agreed that topics in Chinese tend to have the properties listed in 1 (A. Li 1990, Jiang 1991, Qu 1994), but it does not seem appropriate to replace the definition of topic with these properties. In order to establish the definition of a linguistic entity, it is preferable to identify a limited number of features unique to the entity than to list all its properties. Empirically, many properties listed in 1 are so general that many other elements in a Chinese sentence have them as well. If these properties are cited as criteria to determine whether a given element is a topic, then confusion is very likely to arise, especially when some of the properties are considered optional (Tsao 1987a, 1987b).

The word *zuótiān* 'yesterday' in 2, for example, carries definite reference and plays no role in such processes as true reflexivization, Equi-NP deletion and imperativization. One of the four particles *a*, *ne*, *me* or *ba* can optionally appear after it, as shown in 3a. When another clause is added to 2 to elaborate on the person Xiao Zhang, the two clauses may share the same time frame, as in the case of 3b. It is not unreasonable to argue that the NP *zuótiān* 'yesterday' in the first clause of 3b extends its domain to the second clause and controls the deletion of an identical NP *zuótiān* 'yesterday' in the latter.

- (2) Xiǎo Zhāng wǒ zuótiān jiàn-guo.
Xiao Zhang I yesterday meet-ASP²
'Xiao Zhang, I met yesterday.'
- (3) a. Xiǎo Zhāng wǒ zuótiān a jiàn-guo.
Xiao Zhang I yesterday PART meet-ASP
'Xiao Zhang, I met yesterday.'

¹ VERB-COPYING CONSTRUCTION refers to phrases like the *zǒulù* 'walk-road' in (i). The term implies that the verbal morpheme *zǒu* 'walk' in *zǒulù* is a copy of the main verb *zǒu* that takes the morpheme *de*.

(i) Tā zǒu-lù zǒu-de hěn kuài.
he walk-road walk-DE very fast
'He walks fast.'

² The following abbreviations are used in this article: ASP, aspect marker; CL, classifier; PART, particle; DE, the morpheme *de*, which occurs between a relative clause and the NP it modifies, or the morpheme *de*, which introduces a complementary phrase.

- b. Xiǎo Zhāng wǒ zuótiān jiàn-guo, bú xiàng yǒu-bìng de
 Xiao Zhang I yesterday meet-ASP not like have-sickness DE
 yàngzi.
 appearance
 'Xiao Zhang, I met yesterday (and he) did not look like being sick.'

Apparently, the NP *zuótiān* 'yesterday' in the first clause of 3a and 3b has all the properties listed in 1 except for 1a, which requires an S-initial position for the NP in question. It becomes possible to argue that the NP *zuótiān* 'yesterday' should be treated as a topic, if the S-initial requirement could be loosened a little.³ The same argument applies to the NP *wǒ* 'I' in 3a and 3b as well.

The most natural reading of the first clause in 2 is for the initial NP *Xiǎo Zhāng* to bear the thematic role of patient and the second NP *wǒ* 'I' to have the thematic role of agent. Unmarked preverbal agent NPs are usually treated as subjects in languages like Chinese (Chafe 1976, Tan 1991) and time phrases between subject and VP are generally considered temporal adverbials that modify the VP or the whole clause (Li & Thompson 1981, A. Li 1990). The most common analysis is therefore to treat NP *wǒ* 'I' in 2 as a subject and *zuótiān* 'yesterday' as an adverbial of time. It is generally agreed that a patient NP in the initial position of an active sentence should be treated as a topic since it appears in a marked position instead of the usual object position (J. Huang 1982, A. Li 1990, Jiang 1991, Shyu 1995). The sentence-initial patient NP *Xiǎo Zhāng* in 2 is therefore most likely to be analyzed as a topic. If *wǒ* 'I' and *zuótiān* 'yesterday' in 2 are also treated as *prima facie* topics, topic will become a general notion that includes both marked NPs and unmarked NPs. In other words, all preverbal definite NPs in a sentence would be treated as topics regardless of their surface position and syntactic functions. Given the fact that the verb-copying constructions and the NP in a *bǎ* phrase are also treated as topics in this line of analysis (Tsao 1987a, 1987b), then it becomes questionable whether the notion topic defined in such a way captures any grammatical generalization.⁴

If it is undesirable to use loosely assembled properties as the definition for topic, an alternative will be to invoke structural descriptions as the definition. This is usually the strategy adopted by people working with the generative grammar and a specific structural position is often assigned to topic (J. Huang 1982, Jiang 1991, Ning 1993,

³ As a matter of fact, this is the argument for treating the NP inside a *bǎ* phrase as a secondary topic (Tsao 1987a) and for analyzing the so-called verb copy as a secondary topic (Tsao 1987b). By pushing the idea of topic chain formation a little further, Tsao managed to argue that the *bǎ* NP and the verb copy in fact occur in clause-initial positions so that the two elements have all the properties of topic. If his argument could be adopted, it would be possible to argue that the NP *zuótiān* 'yesterday' in 3b has all the properties listed in 1.

⁴ It might be argued that the notion of topic could be defined in such a way that it captures the generalization that topic is the only entity that has the properties 1d and 1e, namely, the only entity that extends its domain to more than one sentence and is in control of the pronominalization or deletion of all the coreferential NPs in a topic chain (cf. Tsao 1987a, 1987b). There is, however, strong evidence that other NPs have these properties as well (Shi 1989). The indefinite postverbal patient NP *shǒu xīn gē* 'a new song' in the first clause of (i), from Wang & Wang 1992, for example, is apparently in control of the deletion of the coreferential NP in the second clause.

(i) Wǒ xué-le [shǒu xīn gē], EC, tǐng hǎo-tīng.
 I learn-ASP CL new song rather nice-listen
 'I have learned a new song (and it) is rather nice.'

Shyu 1995). The structural description has the obvious advantage of being precise but a structural position alone is not always sufficient to unequivocally identify the topic, because the topic is usually considered a derived element with no independent thematic role and its relation with the verb varies from case to case. In view of the difficulties, Xu and Langendoen (1985:20) provide the relational definition of topic in 4. This is analogous to the standard relational definition of subject as NP of S.

- (4) [_S X [_S . . . Y . . .]], where X is a major category and Y, possibly empty, is related to X.

If the notion that 'Y is related to X' could be understood as that the two elements are coreferential and bear the same thematic role, such a definition would establish an indirect relation between the topic and the verb. Most topics can be identified in this way. Syntactic definitions like 4 fail to account for the semantic and discourse properties that are incorporated into definitions like 1 (cf. Cadiot 1992).

In an effort to preserve the insight of previous studies and to bridge some of the gaps, my study centers around the thesis that the topic-comment construction in Chinese is a grammatical device used to fulfill certain discourse functions and it is derived from basic sentence structures via syntactic operations. Topic and comment are thus defined as in 5.

- (5) A TOPIC is an unmarked NP⁵ (or its equivalent) that precedes a clause and is related to a position inside the clause; a topic represents an entity that has been mentioned in the previous discourse and is being discussed again in the current sentence, namely, topic is what the current sentence is set up to add new information to.⁶ The clause related to the topic in such a way is the comment.

This definition of topic is based on its structural position, its structural relationship with the verb and its discourse function. Other properties are considered secondary and derived. The definiteness condition on the topic, for example, now comes as a consequence of the requirement that the topic represents an entity already mentioned in the previous discourse. Such an entity is invariably represented by a definite NP in the current discourse, since its identity is known to all parties concerned and can be unequivocally determined.

An interesting issue related to the definiteness condition is the so-called generic topic. It has often been claimed that topics in Chinese are either definite or generic, and genericity is sometimes considered a defining property of topic (Li & Thompson 1981). The problem is that there seem to be some constraints on what kind of generic NP can function as the topic. A commonly assumed one is whether the speaker and the hearer share knowledge about the class of entities represented by the generic NP (cf. Kuno 1973, Dahl 1974, Givón 1983). If this assumption is on the right track, then whether the NP representing that class of entities should be considered definite or generic becomes an issue.

The same condition can be reformulated under the definition established here to

⁵ The sentence-initial NP overtly marked with phrases like *lián . . . dōu* 'even . . . all' will not be of concern here. See Lee 1986 and Huang 1996 for discussion.

⁶ The definition can be extended to partially cover the so-called contrastive topics (Tang 1992). To a certain extent, it should also be applicable to topics that are accessible from extratextual knowledge, namely, the so-called new topic (Chafe 1976, Halliday 1985, Petöfi 1988, Tao 1996). These two issues will be discussed in another paper.

avoid the problem. If an NP represents a class of entities, it can function as a topic only when the class of entities has been discussed in the previous discourse. For example, the sentence-initial bare NP *gǒu* ‘dog’ in 6 is ambiguous between two topic readings. When 6 follows a sentence like 7a, the topic refers to the particular dog mentioned in the first sentence and is definite.⁷ If the previous discourse contains a sentence like 7b, the topic will refer to dogs as a class. Whether the NP *gǒu* ‘dog’ can be considered generic in this case becomes irrelevant to its topic-hood.

- (6) *Gǒu wǒ jiàn-guò.*
 dog I see-ASP
 i. ‘The dog I have seen.’
 ii. ‘Dogs I have seen.’
- (7) a. *Tā bàba mǎi-le yì-tiáo gǒu, yì-zhī māo.*
 her father buy-ASP one-CL dog one-CL cat
 ‘Her father bought a dog and a cat.’
 b. *Cháng-jàn de chǒngwù yǒu gǒu, māo hé tùzi.*
 often-see DE pet have dog cat and rabbit
 ‘Common pets include dogs, cats and rabbits.’

There is another advantage to integrating discourse factors into the definition of topic. It has often been observed that Chinese speakers use topic-comment constructions because they tend to first present the main thing they want to talk about and then organize their thoughts into a sentence to elaborate on the issue (J. Chen 1982, Lü 1986b, cf. Chao 1968). Although the observation fits the general communication pattern of Chinese speakers, certain constraints on what can come first in an utterance have apparently been overlooked. An obvious case is that not everything a person wants to talk about, even if it is the main thing, can be syntactically presented as a topic. The NP *yí-jìàn shì* ‘a matter, something’ in 8 apparently represents what the speaker wants to talk about, but it cannot be introduced first as the topic in this case.

- (8) **Yí-jìàn shì wǒ xiǎng gàosù māma.*
 one-CL matter I want tell mother

Only when the entity or the event in question has been discussed in the previous discourse, as in the case of 9, will the NP representing it be able to function as a topic. The NP in 9 carries definite reference.

- (9) *Dìdi jīntiān táo-xué. Zhè-jìàn shì wǒ xiǎng gàosù māma*
 younger.brother today skip-school this-CL matter I want tell mother
 ‘My kid brother skipped school today. I want to tell mother about this.’

There is a way to bypass the constraint, however. The speaker or writer can introduce the NP representing a new event with a minimal sentence, such as the first one in 10, which has a null subject and a simple predicate with *yǒu* ‘have, there be’ as the main verb. Although this kind of sentence provides little information, it introduces an entity into the current discourse and the entity can then be discussed in a following sentence

⁷ As pointed out by a referee, the definite reading of the topic in 6 may not be available to speakers from the south. In most northern dialects of Chinese, a bare NP can have either an indefinite reading or a definite one (Gao 1994, Zhang & Fang 1996). But in several southern dialects, notably Cantonese and Wu dialect, a bare NP can carry only an indefinite reading, while the equivalent of a bare definite NP is the sequence of bare classifier plus noun (Cheng & Sybesma 1999). Speakers with a background in these dialects are unlikely to get the definite reading of the sentence-initial bare NP in 6 when they speak Mandarin.

as given information. The two sentences in 10 thus work together to fulfill the communicative function of a topic-comment construction in the sense that the first one introduces the main issue and the second one elaborates on it.⁸

- (10) Yǒu yí-jiàn shì, wǒ xiǎng gàosù māma.
 have one-CL matter I want tell mother
 'There is something (and) I want to tell mother (about it).'

2. DANGLING TOPICS. A fundamental assumption underlying the definition of topic in 5 is that topic is in a predication relation with the comment in the sense of Williams 1980. The comment is an open clause that has a gap, namely, a position filled by an empty category or a resumptive pronoun, which is coreferential with the topic. The semantic relationship between topic and comment is built on the basis of this coreference relation.

In terms of the Chinese communication strategy that speaker tends to first present the main thing he wants to talk about and then organizes thoughts into a sentence to elaborate on the issue, the assumption is that when the speaker produces the sentence to elaborate on the NP, he makes sure that the NP is a component of the sentence. The NP does not appear in the sentence as a full NP but occurs as a null form or as a resumptive pronoun in order to avoid repetition.

It has often been claimed that certain kinds of topics in Chinese are not selected or subcategorized by the verb of the comment, that is, they are not related to any structural position inside the comment (Li & Thompson 1981, Tsao 1990, LaPolla 1990, Ning 1993). These are sometimes termed Chinese-style topics in contrast to the so-called English-style topics, which are subcategorized by the verb (Chafe 1976, Xu & Langendoen 1985, Huang 1994). A so-called aboutness relation between the topic and comment is believed to be the only thing needed to make the topic-comment construction acceptable (cf. Chao 1968). If we accept this claim, then it will not only invalidate the definition assumed here but will also have a profound impact on theories of typology, semantics, and syntax.

A serious weakness of the claim is that the concept of aboutness has not been clearly defined syntactically. There have been some attempts to define the notion in broad semantic terms (Chafe 1976, Li & Thompson 1981) or pragmatic terms (Huang 1994), but the concept remains so vague that it can be easily altered to fit any situation. Huang (1994:162), for example, tries to explain what the aboutness relation is and defines the well-formedness condition of topic (comment) constructions as 11.

- (11) In a topic construction, some constituent of the comment clause or the comment clause as a whole must say something about the topic.

Unfortunately, the notion of 'say[ing] something about' is almost as vague as the concept of aboutness. In some cases, when a constituent in the comment is believed to have said something about the topic, what is being referred to is the coreferential relation between the two. In other cases, where some constituent of the clause or the comment as a whole is believed to have said something about the topic, the explanation

⁸ It is interesting to note that the event represented by *yí-jiàn shì* 'an issue' is a piece of old information to the speaker but it is new to the hearer. The event is represented by an indefinite NP because it is introduced into the current discourse for the first time. What determines the status of a given event or entity seems to be whether it is part of the knowledge shared by the speaker and the hearer (Grice 1975, 1978). I will address this issue further in a separate article.

differs from case to case and it becomes impossible to establish any generalization of the conditions.

Actually, certain topic-comment constructions are not acceptable even when the comment does say something about the topic. In the topic-comment construction of 12, for instance, the comment has an embedded clause that spells out the content of the topic *zhè-jian dà shì* ‘this big issue’ and the relationship between the topic and the embedded clause in 12 can be represented by an equational sentence like 13. The comment in 12 should therefore be saying a lot about the topic, but the topic-comment construction is not acceptable at all. The concept of aboutness or the definition in 11 apparently does not offer much help in accounting for cases like this.

- (12) **Zhè-jian dà shì wǒ zhīdào Zhāng Xiàozhǎng cízhí-le.*
 this-CL big issue I know Zhang Principal resign-ASP
 (13) *Zhè-jian dà shì jiù shì Zhāng Xiàozhǎng cízhí-le.*
 this-CL big issue exactly be Zhang Principal resign-ASP
 ‘The big issue is that Principal Zhang has resigned.’

Another problem for the Chinese-style or nongapping topic claim is the lack of solid empirical evidence in support of it. Six types of dangling topics, that is topics that are not subcategorized by the verb in the comment and are therefore not related to any position inside the comment, have been identified in the literature. Upon close inspection, however, it is discovered that none of them really represents a topic NP that is related to the comment on the aboutness ground only.

The first type of dangling topic is found in sentences like 14 (from Huang 1982), which is associated with an idiomatic expression. The string *wǒ kàn nǐ, nǐ kàn wǒ* ‘I look at you and you look at me’ in 14 has the appearance of a complete coordinate sentence and there seems to be no position left in it for the initial NP *tāmen* ‘they’. It is therefore claimed that *tāmen* ‘they’ is a topic not related to any position inside the comment (Huang 1982).

- (14) *Tāmen wǒ kàn nǐ nǐ kàn wǒ.*
 they I look you you look me
 ‘They look at each other.’

The dangling-topic analysis here relies crucially on the assumption that the string *wǒ kàn nǐ nǐ kàn wǒ* ‘I look at you and you look at me’ not only has the appearance of two conjoined clauses, but also behaves like a coordinate sentence. The problem is that the string actually does not have the interpretation or the functions of a sentence. The pronouns *wǒ* ‘I’ and *nǐ* ‘you’ in this case do not refer to any antecedent NP and the string is not about a staring game between the speaker and the listener. The only available interpretation for the string is a nonliteral phrasal one: ‘look at each other’. In the similar case of 15, the NPs *dà-yú* ‘big fish’ and *xiǎo-yú* ‘small fish’ cannot be interpreted as aquatic animals and the string *dà-yú chī xiǎo-yú* does not yield a literal reading of fish cannibalism. It can only be interpreted as ‘to act according to the law of the jungle’, namely, (for the strong ones) to take over the weak one’s business in competition.

- (15) *Tāmen dà-yú chī xiǎo-yú.*
 they big-fish eat small-fish
 ‘They act according to the law of the jungle.’

Neither the lexical items used in these strings nor their order can be altered. The strings should be treated as idiom chunks that cannot be further analyzed. They actually

function as predicates, and their predicate status also provides an explanation for their relationship with adverbs like *zhuānmén* 'specially'. As shown by the contrast between 16a and 16b, this type of adverb can occur between the subject and the predicate but not before the subject. The fact that *zhuānmén* 'specially' occurs between *tāmen* 'they' and the idiom chunk in 17 (compare 15) will be the expected pattern if the idiom chunk is analyzed as the predicate and, consequently, the initial NP as the subject. By the same reasoning, the initial NP *tāmen* 'they' in 14 should also be considered the subject of an idiomatic predicate.

- (16) a. *Tāmen zhuānmén qīfù wǒ.*
 they specially bully me
 'They are bullying me exclusively.'
 b. **Zhuānmén tāmen qīfù wǒ.*
 specially they bully me
 (17) *Tāmen zhuānmén dà-yú chī xiǎo-yú.*
 they specially big-fish eat small-fish
 'They are doing nothing but acting according to the law of the jungle.'

The sentence-initial NP *tāmen* 'they' in 18a (from Teng 1974) is an example of the second type of dangling topic. The main characteristic of sentences with this type of dangling topic is an initial NP followed by a WH-word licensed by the emphatic morpheme *dōu* 'all'. They are usually considered a subtype of the so-called double-nominative constructions⁹ (Teng 1974), which are *prima facie* topic-comment constructions in the framework of Li and Thompson (1976, 1981). Since no possessive marker can occur between the sentence-initial NP and the WH-word in these sentences, as shown in 18b, these sentences are considered prototypical topic-comment constructions with no gap in the comment. The claim is that the WH-word is the subject and the initial NP is the topic which is not related to any position inside the comment.

- (18) a. *Tāmen shéi dōu bù lái.*
 they who all not come
 'They (topic), none of them are coming.'
 b. **Tāmen de shéi dōu bù lái.*
 they 's who all not come

But there is strong evidence that the WH-word in these sentences does not have the status of subject. A salient property of subject in Chinese is that it must precede certain modal verbs such as *kěyǐ* 'may', *huì* 'will' and *néng* 'can'. The contrast between 19a and 19b indicates that a sentence will not be acceptable if these modals precede the subject. The WH-word in question, however, can follow these modals legitimately, as shown in 20. This is hard to explain if the WH-word is a subject.

⁹ The term DOUBLE-NOMINATIVE CONSTRUCTION refers to sentences like (i). In most cases, a possessive marker *de* can occur between the first and second NPs, as shown in (ii).

- (i) *Dàxiàng bízi cháng.*
 elephant nose long
 'Elephant, nose is long.'
 (ii) *Dàxiàng de bízi cháng.*
 elephant 's nose long
 'Elephant's nose is long.'

- (19) a. Tāmen kěyǐ bù lái.
 they may not come
 ‘They may not come.’
 b. *Kěyǐ tāmen bù lái.
 may they not come
 (20) Tāmen kěyǐ shéi dōu bù lái.
 they may who all not come
 ‘None of them may come.’ *lit.* ‘They may anyone not come.’

When a WH-word occurs to the left of an emphatic morpheme *dōu* ‘all’, which has a domain over everything to its left (Lee 1986, Huang 1996), the WH-word will yield an interpretation equivalent to that of a universal quantifier (Li 1992). *Shéi* in 18a can thus only be interpreted as ‘anyone’ but not ‘which person’. Such a WH-word is optional in the sense that its deletion will not affect the acceptability of the sentence or significantly change its interpretation. Sentence 21 is therefore as good as 18a and the two have almost identical interpretations.

- (21) Tāmen dōu bù lái.
 they all not come
 ‘None of them are coming.’

Actually, the WH-word in this case behaves more like a quantifier than an ordinary NP. It can only alternate with a few universal quantifiers like *yí-ge* ‘(any)one’, *dàjiā* ‘everyone’ or *quán* ‘all’, but not with a referential NP, as shown in 22. The sentence in 23 has the same interpretation as 18a but the adverb *quán* ‘all’ is more likely to function as an adverbial than as a subject. Its equivalent *shéi* ‘who/anyone’ in 18a is likely to be a quantificational adverbial as well. The sentence-initial NP *tāmen* ‘they’ in 18a is simply the subject of the sentence.

- (22) *Tāmen Xiǎo Zhāng hé Xiǎo Lǐ dōu bù lái.
 they Xiao Zhang and Xiao Li all not come
 (23) Tāmen quán dōu bù lái.
 they all all not come
 ‘They are all not coming.’

The third type of dangling topic appears in sentences like 24 (from Li and Thompson 1976), which is overtly marked by adverbs like *xìngkuī* ‘fortunately’, *kěxī* ‘pitifully’ and *yào-bú-shì* ‘if not for’. As in the case of 24, the adverb appears between an initial NP and a complete clause and there seems to be no obvious relation between the initial NP and any position inside the clause. Hence the dangling-topic analysis for the initial NP.

- (24) Nà-suǒ fángzi xìngkuī qù-nián méi xià-xuě.
 that-CL house fortunate last-year not snow
 ‘That house, fortunately it didn’t snow last year.’

The structure of these sentences is actually more complicated than it looks. Morphemes like *xìngkuī* ‘fortunately’, *kěxī* ‘pitifully’ and *yào-bú-shì* ‘if not for’ are known as connective adverbs which work in pairs (Liu et al. 1983). The adverb *xìngkuī* ‘fortunately’, for example, is part of the pair *xìngkuī* . . . *bùrán* ‘fortunately . . . otherwise’ or the pair *xìngkuī* . . . *cái* ‘fortunately . . . therefore’. The first part of the phrase introduces an adverbial clause of cause and the second part ushers in the main clause

about the effect or the would-be effect. Exx. 25a and 25b are typical of sentences introduced by such connective adverb pairs.

- (25) a. Xìngkuī qù-nián méi xià-xuě bùrán nà-suǒ fángzi zǎojiù
fortunate last-year not snow otherwise that-CL house already
tā-le.
collapse-ASP
'Fortunately it didn't snow last year, otherwise that house would have collapsed.'
- b. Xìngkuī qù-nián méi xià-xuě nà-suǒ fángzi cái méi yà-sǐ rén.
fortunate last-year not snow that-CL house thus not crash-die people
'Fortunately it did not snow last year so that the house did not collapse and crush anyone.'

If the subject NP of the main clause in 25a refers to an entity discussed in the previous discourse, then it is possible to put the NP at the sentence-initial position as a topic and leave its original position empty, as in the case of 26.

- (26) Xiǎo Lǐ bān-dào yì-suǒ jǐ-shí-nián de pò fángzi lǐ
Xiao Li move-to one-CL several-ten-year DE tumble-down house inside
qù-le. Nàsuǒ fángzi xìngkuī qù-nián méi xià-xuě, bùrán zǎojiù
go-ASP that-CL house fortunate last-year not snow otherwise already
tā-le.
collapse-ASP
'Xiao Li moved to a tumble-down house that is very old. As for that house, fortunately it did not snow last year, otherwise (the house) would have collapsed.'

A prominent feature of these connective adverb pairs is that the second adverb can sometimes be omitted together with the clause it ushers in (Lü et al. 1980). People usually accept the remaining part because the residue is overtly marked by the connective adverb as incomplete and, in an appropriate context or situation, the missing part is recoverable. In the conversation in 27, for example, the preferred strategy is for the second speaker to refrain from spelling out the horrible scenario that would have happened if it did snow in the previous year, and native speakers can sense the would-be dire consequence of the snow without actually hearing it.

- (27) A: Xiǎo Lǐ xiànzài de fángzi zěnmeyàng?
Xiao Li now DE house how
B: Nà-suǒ fángzi xìngkuī qù-nián méi xià-xuě.
that-CL house fortunately last-year not snow
A: 'How is the house Xiao Li is staying now?'
B: 'That house, fortunately it did not snow last year, (otherwise the house . . .)'

Note that the connective adverb is an essential part of the incomplete sentence. If the adverb is missing, as in the case of 28 (cf. 24), the sentence will lose its marked status and the topic will become a real dangling one. Such a sentence will no longer be acceptable.

- (28) *Nà-suǒ fángzi qù-nián méi xià-xuě.
that-CL house last-year not snow

The best-known sentence with this type of dangling topic is 29, which appears first in Chao 1968 and is then cited in almost every discussion of topics (Li & Thompson

1976, 1981, Huang 1982, Xu & Langendoen 1985, LaPolla 1990, Xie 1990, 1992, Jiang 1991, Ning 1993, Huang 1994, Shyu 1995, Chen 1996).

(29) *Nà-chǎng huǒ, xìngkuī xiāofáng-duì lái-de kuài.*

that-CL fire fortunately fire-brigade come-DE-fast

i. 'As for that fire, fortunately the fire brigade came quickly, (otherwise it) ...'

ii. 'At the time of that fire, fortunately the fire brigade came quickly, (otherwise) ...'

The most interesting feature of sentence 29 is that it allows two readings. In the first reading, the sentence-initial NP has a status similar to that of the initial NP in 24, that is, it is related to the subject position of a main clause, as in 30a. In the second reading, the sentence-initial NP *nà-chǎng huǒ* 'that fire' functions as a temporal adverbial of a main clause, that is, it is related to a position between the connective adverb and the subject in the main clause, as shown by the resumptive form *nà-cì* 'that time' in 30b. In either case, the NP can be considered a topic when the fire is something mentioned in the previous discourse. The existence of a main clause is overtly marked by the connective adverb *xìngkuī* 'fortunately'.

(30) a. *Nà-chǎng huǒ xìngkuī xiāofáng-duì lái-de kuài, bùrán jiù huì shāo-sǐ bù-shǎo rén.*
that-CL fire fortunately fire-brigade come-DE-fast otherwise really
will burn-die not-few people

'As for that fire, fortunately the fire brigade came quickly, otherwise (it) would have killed many people.'

b. *Nà-chǎng huǒ xìngkuī xiāofáng-duì lái-de kuài, bùrán nà-cì wǒmen dōu huì shāo-sǐ.*
that-CL fire fortunately fire-brigade come-DE-fast otherwise
that-time we all will burn-die

'As for that fire, fortunately the fire brigade came quickly, otherwise we would all have been burnt to death at that time.'

It is worth noticing that if the connective adverb *xìngkuī* 'fortunately' is taken away from 29 to produce a sentence like 31, the first reading of the NP *nà-chǎng huǒ* 'that fire' will no longer be available, but the second reading will survive under a different interpretation for the sentence in which the matrix clause is what used to be the adverbial clause of 29 and *nà-chǎng huǒ* 'that fire' is the sentential adverbial. Anyway, in all the readings of both 24 and 29, the topic is always related to a position inside the comment.

(31) *Nà-chǎng huǒ xiāofáng-duì lái-de kuài.*

that-CL fire fire-brigade come-DE-fast

'At the time of that fire, the fire brigade came quickly.'

The fourth type of dangling topic is represented by the sentence-initial NP *zhè-jian shìqíng* 'this matter' in 32 (from Li & Thompson 1976, 1981). The argument for the dangling status of *zhè-jian shìqíng* 'this matter' is that it is not in a subject-predicate relation with the string *nǐ bù néng guāng máfán yí-ge rén* 'you cannot just bother one person' and it has no selectional relation with the main verb *máfán* 'bother' in the string (Li & Thompson 1976, 1981, Xie 1992).

(32) *Zhè-jian shìqíng nǐ bù néng guāng máfán yí-ge rén.*

this-CL matter you not can only bother one-CL person

'This matter (topic), you can't just bother one person.'

The argument against the dangling-topic analysis in this case is mainly based on the fact that subject and object are not the only positions for nominal elements to occupy. A common position for NPs is the oblique object of adjunct adverbial PPs. The NP *zhè-jàn shìqíng* 'this matter' in either 33a or 33b is related to the verb in this way (Lü1986a).

- (33) a. Nǐ wèi zhè-jàn shìqíng bù néng guāng máfán yí-ge rén.
 you for this-CL matter not can only bother one-CL person
 'You cannot just bother one person about this matter.'
 b. Wèi zhè-jàn shìqíng nǐ bù néng guāng máfán yí-ge rén.
 for this-CL matter you not can only bother one-CL person
 'For this matter, you cannot just bother one person.'

In many cases the preposition can be omitted from the Chinese adverbial PP without altering the meaning (Lü 1986a). Ex. 34 thus yields the same interpretation as 33a does. If the preposition *wèi* 'for' in 33b is dropped, the remaining portion will be 32, which actually should be glossed as '(for) this matter, you cannot just bother one person'. The NP *zhè-jàn shìqíng* 'this matter' is marked as definite so it must represent an event known to the addresser as well as the addressee. The NP can be considered a topic but it is certainly related to a position inside the comment. It is therefore not a dangling topic.

- (34) Nǐ zhè-jàn shìqíng bù néng guāng máfán yí-ge rén.
 you this-CL matter not can only bother one-CL person
 'You cannot just bother one person (for) this matter.'

There are more than fifty prepositions in Chinese (Liu et al. 1983). Some of them, such as *cóng* 'from' and *gēnjù* 'according to', cannot be omitted from PPs and these PPs will not be involved in the discussion about dangling topics. There is another group of PPs that are associated with the dangling topics in a particular way. The complement in these PPs is an NP headed by a so-called locative particle, such as *shàng* 'top', *lǐ* 'inside', *fāngmiàn* 'side' and so on (Li & Thompson 1981). Functioning as sentential adverbials, such PPs can occur either in the sentence-initial position or between the subject and the VP, as in 35a and 35b respectively.

- (35) a. Zài shēngwù-lúnlǐxué fāngmiàn wǒ shì ménwài-hàn.
 on bioethics side I be layman
 'With regard to bioethics, I am a layman.'
 b. Wǒ zài shēngwù-lúnlǐxué fāngmiàn shì ménwài-hàn.
 I on bioethics side be layman
 'I am a layman with regard to bioethics.'

The head of these PP adverbials can sometimes be dropped without altering the interpretation of the sentence. Sentences 36a and 36b thus yield the same reading as their counterparts 35a and 35b do.

- (36) a. Shēngwù-lúnlǐxué fāngmiàn wǒ shì ménwài-hàn.
 bioethics side I be layman
 'With regard to bioethics, I am a layman.'
 b. Wǒ shēngwù-lúnlǐxué fāngmiàn shì ménwài-hàn.
 I bioethics side be layman
 'I am a layman with regard to bioethics.'

The status of locative particles has always been controversial (see Li & Thompson 1981, Li 1990, Tang 1990), but there is general agreement that some of the locative

particles are optional in the sense that their presence or absence does not affect the interpretation of the sentence. The sentences in 37 thus have almost the same meaning as those in 36. When the preposition and locative particle are both taken away, the adverbials in question become bare NPs. If the NP happens to occupy the sentence-initial position and represents an entity that has been discussed in the previous discourse, as in the case of 37a, the NP can be considered to be a topic. There has been argument that 37a has a so-called Chinese-style topic (Huang 1994:163), but the topic is obviously related to a position inside the comment.

- (37) a. Shēngwù-lúnlǐxué wǒ shì ménwài-hàn.
 bioethics I be layman.
 'With regard to bioethics, I am a layman.'
 b. Wǒ shēngwù-lúnlǐxué shì ménwài-hàn.
 I bioethics be layman.
 'I am a layman with regard to bioethics.'

The fifth type of dangling topic is the sentence-initial NP in sentences like 38 (from Li & Thompson 1976). The main characteristic of these sentences is that they consist of two sets of NPs but have no verb to head the predicate. Since the predicate in a modern Chinese sentence is usually a VP, a PP or an AdjP, it is argued that the relationship between *nà-zhǒng dòuzi* 'this kind of beans' and *yì-jī sānshí-kuài qián* 'one catty¹⁰ for thirty dollars' can only be that of topic-comment based on aboutness (Li & Thompson 1976, Song 1987). According to this analysis, the topic is apparently not related to any position inside the comment (NP).

- (38) *Nà-zhǒng dòuzi yì-jī sānshí-kuài qián.*
 that-CL beans one-CL thirty-CL money
 'That kind of beans [topic], one catty is thirty dollars.'

A crucial assumption underlying the dangling-topic analysis in this case is that the relationship between the two sets of NPs in sentences like 38 can be nothing but that of topic-comment. However, it has often been argued that an NP can be used as the predicate in modern Chinese under certain circumstances and it can take another NP as the subject. The so-called nominal predicates are often found in spoken Chinese (e.g. Lü et al. 1980, Liu et al. 1983, Li 1986). The issue is thus which analysis provides an accurate generalization of the facts.

An important feature of the initial NP in sentences like 38 is that the NP does not have to be definite. For example, the initial NP *yì-zhī qīngwā* 'one frog' and *liǎng-zhī qīngwā* 'two frogs' in the two (conjoined) clauses of 39 (from Li 1986), which also consist of NPs only, are obviously not definite. It is generally agreed that a topic must be definite but a subject does not have to be (e.g. Li & Thompson 1976, 1981, Tsao 1990, Tan 1991, Shyu 1995). It is therefore more reasonable to analyze the two initial NPs as subjects than to treat them as topics.

- (39) *Yì-zhī qīngwā sì-tiáo tuǐ, liǎng-zhī qīngwā bā-tiáo tuǐ.*
 one-CL frog four-CL leg two-CL frog eight-CL leg
 'A frog (has) four legs and two frogs (have) eight legs.'

Another property of the initial NP here is that it can fall into the domain of the emphatic marker *shì*. The NP *nà-zhǒng dòuzi* 'that kind of beans' in 40a is thus being emphasized because it is marked by *shì*. It has long been noticed that the emphatic

¹⁰ Catty is an old weight-measurement unit in China. It is the equivalent of 500 grams in the official system in China between 1950 and 1988.

marker *shì* can appear right before the VP, the adverbial or the subject of a sentence but it cannot occur in front of the topic or after the verb (Teng 1979, Huang 1991, Shi 1994). Sentence 40b is thus unacceptable because the emphatic marker *shì* appears in front of the topic NP *zhè-zhǒng dòuzi* 'this kind of beans' and has scope over it. Given the contrast between 40a and 40b, it seems more reasonable to consider the initial NP in 40a to be a subject rather than to analyze it as a topic that is not related to any position inside a clause.

- (40) a. *Shì nà-zhǒng dòuzi yì-jīn sānshí-kuài qián.*
 be that-CL beans one-CL thirty-CL money
 'It is that kind of beans that is worth thirty dollars a catty.'
 b. **Shì zhè-zhǒng dòuzi wǒ mǎi-le.*
 be this-CL beans I buy-ASP

The status of the NP *yì-jīn sānshí-kuài qián* 'a catty for thirty dollars' in sentence 38 is another issue to be considered. Although it has the appearance of a nominal element, such a phrase can be modified by certain adverbials that can occur only between subject and predicate, such as the *cái* 'just' in 41a.¹¹ Similarly, certain modals that always occur between subject and VP can appear between the two sets of NPs, as shown in 41b and 41c.¹²

- (41) a. *Nà-zhǒng dòuzi cái yì-jīn sānshí-kuài qián.*
 that-CL beans just one-CL thirty-CL money
 'That kind of beans is worth just thirty dollars a catty.'
 b. *Nà-zhǒng dòuzi huì yì-jīn sānshí-kuài qián.*
 that-CL beans will one-CL thirty-CL money
 'That kind of beans will be worth thirty dollars a catty.'
 c. *Nà-zhǒng dòuzi bìxū yì-jīn sānshí-kuài qián.*
 that-CL beans must one-CL thirty-CL money
 'That kind of beans should be worth thirty dollars a catty.'

According to the nominal-predicate analysis, the NP *yì-jīn sānshí-kuài qián* 'a catty for thirty dollars' has the status of a predicate. It is therefore quite natural for such an NP to follow a modal or to be modified by an adverbial. According to the dangling-topic analysis, however, the same NP is a comment related to the topic on the aboutness ground only. The exact nature of the comment in this case has never been clearly stated, but given the claim that it has no position related to the topic, the comment is likely to be treated as a pure NP. It is therefore hard to explain why such an NP can be the

¹¹ Adverbials in Chinese can only occur before the verb (Li & Thompson 1981). The fact that adverbials like *cái* 'just' can only appear between the subject and the predicate is shown by the contrast between i and ii below.

- (i) *Wǒmen cái dào jiā.*
 we just arrive home
 'We just arrived at home.'
 (ii) **Cái wǒmen dào jiā.*
 just we arrive home

¹² Certain modals in Chinese can occur between the subject and VP as well as before the subject, as in the case of (i). They are not included in the discussion here.

- (i) *Yīnggāi nǐ qù.*
 should you go
 'It should be the case that you go.'

Some other modals, such as *yuànyì* 'will, be willing to', represent the volition of a human being. They are not included in the discussion, either.

complement of a modal or can be modified by an adverbial that can only have scope over a predicate. It seems that the nominal-predicate analysis should be preferred. The initial NPs in sentences 38, 39 and 40 thus should have the status of subject.¹³ Some of them may also have the status of topic, but they are certainly related to a position in the comment.

The sentence-initial NP *wù-jia* ‘price of things’ in 42 (from Chen 1996) represents the sixth type of dangling topic. As indicated by the glossary, the second NP *Niǚyuē* ‘New York’ is treated as the subject of the comment. The predicate *zuì guì* ‘most expensive’ in 42 is an adjective phrase that takes one argument only. Since that argument position is assumed to be occupied by *Niǚyuē* ‘New York’ and *wù-jia* ‘price of things’ is not likely to be a modifier, it is argued that *wù-jia* can only be a topic not related to any position inside the comment.

- (42) *Wù-jia Niǚyuē zuì guì.*
 thing-price New York most expensive
 ‘Speaking of the price of things, New York is the most expensive.’

The dangling topic analysis in this case is based on a particular reading assigned to 42 in which the NP *Niǚyuē* is interpreted as the entity being most expensive. But a more natural reading for 42 is that the price of things is the highest in New York, that is, it is more natural to treat *Niǚyuē* as a locative adverbial and *wù-jia* as the subject. The two readings can be tested by examining the distribution of adverbs and modals in the sentence. Like the adverb *zhuānmén* ‘specially’ discussed with reference to sentence 16, adverbs like *yídìng* ‘certainly’ and *jīngcháng* ‘often’ can occur only between the subject and the predicate but not before the subject. This type of adverb can appear between the two initial NPs in 42, as shown in 43.

- (43) *Wù-jia yídìng Niǚyuē zuì guì.*
 thing-price certainly New York most expensive
 ‘The price of things is certainly the highest in New York.’

Similarly, modals like *huì* ‘will’, which cannot occur before the subject (see discussion on ex. 19), can appear between the two initial NPs in 42, as shown in 44. The distribution pattern is hard to explain if *Niǚyuē* is the subject but will be the expected one if the same NP is an adverbial after the subject. The sentence-initial NP *wù-jia* ‘price’ should thus be treated as subject. It could be a topic but not a dangling one.

- (44) *Wù-jia huì Niǚyuē zuì guì.*
 thing-price will New York most expensive
 ‘The price of things will be the highest in New York.’

In conclusion, a structural relationship does exist between dangling topics and their comment. The so-called Chinese-style topic-comment constructions do not form a natural class that exhibits unique properties.

3. THE LOCALITY CONSTRAINTS. Given the assumption that the comment is an open clause with a gap inside and that there is a coreferential relation between the topic and the gap, the question that naturally arises is, is the relationship between the topic and the gap subject to any constraint?

¹³ As pointed out by one of the referees, there is another way to establish the predicate status of the second NP in these cases. It is possible to assume that the second NP is part of a VP predicate and the verb has been dropped when certain contextual conditions are met. This possibility will not be pursued here. See Shi 1993 for discussion.

Many linguists, mainly those working within the framework of transformational grammar (Huang 1982, Li 1990, Jiang 1991, Shyu 1995), have claimed that this relationship is subject to locality constraints, but there have also been numerous arguments against the existence of locality constraints (Li & Thompson 1976, 1981, Xu & Langendoen 1985, LaPolla 1990, Cheng 1991). The discussion in this section will concentrate on the facts related to locality constraints but not on the technical details of various theories.

The argument for locality constraints is built on the distinction between a gap related to the topic and a resumptive pronoun with the same function. Although it is always possible to replace a gap with a resumptive pronoun, the preferred strategy in Chinese is to avoid the pronoun whenever possible (cf. Li & Thompson 1979). In certain cases, however, a resumptive pronoun is the only choice and a gap will render the topic-comment construction unacceptable. This usually happens when the topic is related to an element inside a so-called island and the restriction is commonly known as locality constraint. The difference in acceptability between 45a and 45b (from Yao 1979) is thus attributed to the location of the topic-related element, which is inside a relative clause, as well as the appearance of the element, which is a gap in 45a and a resumptive pronoun in 45b.

- (45) a. *Lǐ Yǒu_k a, [IP t_i gǎn shā 0_k] de rén_i hái méi shēng-chūlái ne.
 Li You PART dare kill DE person yet not born-out PART
 b. Lǐ Yǒu_k a, [IP t_i gǎn shā tā_k] de rén_i hái méi shēng-chūlái ne.
 Li You PART dare kill he DE person yet not born-out PART
 'As for Li You, the person who dares to kill him is yet to be born.'

Similarly, because the topic-related element occurs inside an adverbial clause in 46a and 46b (from Wang & Wang 1992), whether the gap is replaced by a resumptive pronoun is apparently the main factor responsible for the difference in acceptability between the two sentences.

- (46) a. *Gāo Qiáng_j na, Zhōu Huá wèile [CP 0_j méi lái] zhèng shēngqì
 Gao Qiang PART Zhou Hua because not come just mad
 ne.
 PART
 'As for Gao Qiang, Zhou Hua is being mad because he did not come.'
 b. Gāo Qiáng_j na, Zhōu Huá wèile [CP tā_i méi lái] zhèng
 Gao Qiang PART Zhou Hua because he not come just
 shēngqì ne.
 mad PART
 'As for Gao Qiang, Zhou Hua is being mad because he did not come.'

Within the framework of generative transformational grammar, the standard explanation for locality constraints is that the relationship between the topic and the gap is established by movement or chain formation; while adverbial clauses and relative clauses are islands that block the movement or barriers that interfere with the chain (J. Huang 1982, A. Li 1990, Shyu 1995). In terms of traditional grammar, a common explanation for locality is that the constraints apply when the distance between the topic and the gap is too long (J. Li 1995).

Appositive clauses are often treated as islands as well. The location of the gap and the presence of a resumptive pronoun would thus be considered responsible for the contrast between 47a (from Wang & Wang 1992) and 47b.

- (47) a. Yáng Guànhuá wǒ kěshì zǎo-jiù zhīdào [_{CP} tā pìng-le
 Yang Guanhua I really longtime-ago know he get-ASP
 yī-jí de] shì le.
 first-class DE issue PART
 'As for Yang Guanhua, I have heard the news long ago that he was
 promoted to Class One.'
- b. *Yáng Guànhuá wǒ kěshì zǎo-jiù zhīdào [_{CP} 0 píng-le
 Yang Guanhua I really longtime-ago know get-ASP
 yī-jí de] shì le.
 first-class DE issue PART

The argument against locality constraints is based mainly on cases where a gap occurs inside a so-called island. In ex. 48 (from L. Cheng 1991), for example, the topic NP *zhèxiē huà* 'these pictures' is related to the object position in the relative clause modifying *rén* 'person' and the sentence is acceptable even though the position related to the topic is filled by a gap.

- (48) Zhèxiē huà_i wǒ dōu méi jiàn-guo [_{CP} xǐhuān 0_i de] rén.
 these picture I all not see-ASP like DE person
 'For all these pictures, I have not seen a person who likes them.'

Sentence 49 (from Xu & Langendoen 1985) is another example of a gap occurring in a so-called island. The gap related to the topic occurs inside a subject clause, which is a commonly assumed island (e.g. A. Li 1990), but the sentence is obviously acceptable. The contention, therefore, is that island constraints have no effect on the relationship between a Chinese topic and its gap.

- (49) Zhèxiē shì_k wǒ juéde [_{CP} tā shuō 0_k] bù héshì.
 these thing I think he say not proper
 'These things, I think it's not proper for him to say.' *lit.* 'These things, I think that he talks about them is not proper.'

The behavior of topic-related gaps inside islands apparently yields two patterns, which in turn have led to two opposite conclusions. There seems, however, to be a nonstructural reason for the difference. The topics in 48 and 49 both represent nonhuman entities. It is well known that the Chinese third person pronoun for nonhuman entities has a phonetically null realization in most cases¹⁴ (Li & Thompson 1981) but it has all the syntactic and semantic properties of overt third person pronouns. It seems that the generalization covers resumptive pronouns as well, given the fact that when the null form in 49 is replaced by a resumptive pronoun, as in 50, the sentence is at best marginal.

- (50) ??Zhèxiē shì_k wǒ juéde [_{CP} tā shuō tāmen_k] bù héshì.
 these thing I think he say they not proper
 'These things, I think it's not proper for him to talk about them.'

If the null resumptive pronoun explanation is on the right track, the expectation is that sentences like 48 and 49 will no longer be grammatical if the topic NP represents

¹⁴ The only arguable exception to this generalization is the pronoun functioning as an oblique object. Preposition stranding is strictly prohibited in Chinese (see e.g. Li & Thompson 1981). When the object of a preposition is a pronoun for an inanimate entity, the null pronoun will create a seemingly stranded preposition. A common strategy is to drop the preposition as well. In some rare cases where the presence of a preposition is obligatory, a pronoun *tā* 'it' or *tāmen* 'they' will be used.

human beings. The unacceptable status of sentences 51 and 52, which resemble 48 and 49 respectively, indicates that the expectation is right.

- (51) *Zhèxiē xuéshēng_k wǒ dōu méi jiàn-guo [_{CP} xǐhuān 0_k de] rén.
 these student I all not see-ASP like DE person
 'For all these students, I have not seen a person who likes them.'
- (52) *Zhèxiē nǚháizi_k wǒ zǎo-jiù zhīdào [_{CP} nǐ qù zhǎo 0_k] huǐ yǒu
 these girl I longtime-ago know you go look.for will have
 wèntí.
 problem
 'These girls, I knew beforehand that it will be a problem for you to go
 and look for them.' *lit.* 'These girls, I knew you go look for (them) is
 a problem.'

There is enough empirical evidence to support the claim for structurally determined locality constraints and the counterexamples can be accounted for by nonstructural factors. It is therefore reasonable to conclude that the relationship between a topic and its gap is subject to structural restrictions.

4. GRAMMATICAL FUNCTIONS OF TOPIC. Given the assumption that a topic is related to a position inside the comment clause, then the natural consequence is that the topic NP has no independent thematic role of its own and plays no role in syntactic processes that involve specific thematic roles or structural positions, unless the topic is related to the position and has that thematic role. However, arguments have been made about specific grammatical functions topics are supposed to have. These issues are the main concern of this section.

In his detailed discussion of Chinese topics Tsao (1979) points out that a topic is in control of the pronominalization or deletion of all the coreferential NPs across sentence boundaries. It seems possible to consider this process a syntactic function but it is apparently a special one. Although a topic may control the deletion of coreferential NPs, the NPs being deleted can have any thematic role and, as long as a resumptive pronoun is deployed, can occur in any position within the comment clause. A reasonable explanation for this process is that the NPs being deleted actually occur in the position of topic (Shi 1989). It is then a process that involves two or more topics. This special syntactic process will be discussed in a separate paper.

When Li and Thompson (1976) argued that Chinese is a topic-prominent language, one major piece of evidence they cited was that a topic in Chinese can be relativized, that is, a topic-comment construction can function as a relative clause with the topic position related to the head noun. Since they argued that the topic in sentences like 38 (repeated here) is not related to any position inside the comment, their claim is that topic enters the process of relativization on its own right, as in the case of 53 (their 74).

- (38) Nà-zhǒng dòuzi yì-jīn sānshí-kuài qián.
 that-CL beans one-CL thirty-CL money
 'That kind of beans [topic], one catty is thirty dollars.'
- (53) Wǒ bù xǐhuān nà-zhǒng [_{IP} 0_j yì-jīn sānshí-kuài qián] de dòuzi_j.
 I not like that-CL one-CL thirty-CL money DE beans
 'I don't like the beans that cost thirty dollars a catty.'

Li and Thompson's argument hinges crucially on the assumption that the sentence-initial NP in 38 is a dangling topic. If the NP in question has the status of a subject, as pointed out in §2, its relativization should not be considered a special syntactic

function of topic. In view of this, Jiang (1991) adopts Kuno's (1973) analysis of Japanese relative clauses and argues that all relative clauses in Chinese were topic-comment constructions at a certain stage, that is, an NP must be topicalized first in order to be relativized. He presents two main reasons for this analysis. One is that relativization and topicalization are subject to almost the same structural constraints. The other reason is that the similarities between the two processes will be easily accounted for if topicalization is assumed to be the first step of relativization. If Jiang's argument is correct, then topic will be the only element that can be relativized.

Jiang's argument is mainly internal to the generative transformational theory and should be evaluated in the same way. As pointed out in Ning 1993 and Qu 1994, the main problem for Jiang's analysis is that the similarities between topicalization and relativization can be equally well accounted for by other theory-internal assumptions. For example, if it is assumed that both processes belong to the same type of operation such as the so-called A'-movement, the similarities are also expected. The A'-movement analysis has the additional advantage of allowing certain differences between the two processes.

Jiang's analysis also encounters some empirical problems. Topic is always definite, as pointed out by Li & Thompson 1976 and Tsao 1990, but the NP being relativized does not have to be. The head of the complex NP in 54 (from Li 1986) is such an example and it is impossible for this NP to be topicalized.

- (54) Qǐng huànyàn yí-xià [_{IP} wǒ gāng cǎijí t_i] de liǎng-ge biāoběni.
 please analyze a-bit I just collect DE two-CL sample
 'Please analyze two samples I just collected.'

But not all topic-comment constructions have corresponding relative clauses. As pointed out by P. Chen (1996), the topic in sentence 55a cannot be relativized, because 55b is not acceptable. It is hard for Jiang to explain why 55b is unacceptable, since he only assumes topicalization to be the first step for relativization but does not establish any constraint to regulate the process.

- (55) a. Shuǐguǒ wǒ zuì xǐhuān chī xiāngjiāo.
 fruit I most like eat banana
 '(Among) all fruits, I like to eat bananas the most.'
 b. *[_{IP} wǒ zuì xǐhuān chī xiāngjiāo] de shuǐguǒ
 I most like eat banana DE fruit

There seems to be no strong evidence to support the claim that topic enters relativization on its own right and therefore has relativization as its syntactic function.

The most salient claim about syntactic functions unique to Chinese topics comes from certain analyses of comparative constructions. Li and Thompson (1981:569) set up the schema in 56 as the basic pattern for Chinese comparative constructions and claim that 'X must be the subject or the topic of the verb phrase that expresses the dimension'.

- (56) X comparison word Y (adverb) dimension

LaPolla (1990, 1993) goes one step further to argue that topic is the only item that can be compared, namely, the X in 56 can only be a topic. It is commonly assumed that the derivation of comparative constructions involves certain syntactic processes (Chomsky 1977, Huang 1982). If one accepts LaPolla's argument (1990), then being the item to be compared is a syntactic function unique to a topic NP.

The argument that topic is the item being compared is mainly based on sentences such as 57 (2.13 of LaPolla 1990), where the comparison word *bǐ* and its object Y

occur between the two initial NPs of a double-nominative construction. Since the first NP in a double-nominative construction is assumed to be a prototypical topic (Li & Thompson 1981, LaPolla 1990), the element being compared in 57 seems to be the topic.

- (57) Xiàng bǐ xióng bízi cháng.
 elephant compared.to bear nose long
 'Elephants have longer noses than bears.'

McCawley (1989) contends that topic should not be considered a possible candidate for the focus of comparison. He cites Li and Thompson's (1981) own examples like 58a and 58b, and argues that the two sentences in 58 are ungrammatical because the item being compared is the topic.

- (58) a. *Gǒu bǐ māo wǒ xǐhuān.
 dog compared.to cat I like
 b. *Gǒu wǒ bǐ māo xǐhuān.
 dog I compared.to cat like

LaPolla (1990:44) tries to explain away bad examples like 58a,b by stipulating that '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 *bǐ*)'. His argument is therefore that 58a,b are bad because they have two topics outside the scope of the assertion.

The scope of comparison in Chinese comparative constructions is actually more complicated than what Li and Thompson (1981) have stated with 56. The details will be discussed in another article; suffice it to say that in examples like 59 (from Wang & Wang 1992) the scope of comparison apparently includes temporal and locative adverbials as well as the subject.

- (59) Wǒ jīntiān zài jiā lǐ bǐ
 I today at home inside compared.to
 píngshí zài tuán lǐ hái máng.
 usual.time at troupe inside even busy
 'Today I am even busier at home than I would usually be at the troupe.'

The main issue to be cleared up here is whether topic is the only item in a sentence that can be compared or, to put it differently, can or should the item being compared have some other grammatical functions?

The Chinese comparative constructions associated with the preposition *bǐ* 'in comparison with, compared to' actually have a very simple structure. As a PP adverbial modifying the predicate, the *bǐ* phrase delimits the range in which the predicate is true with regard to the subject (Zhu 1983, Zou 1992). For example, if a *bǐ* phrase is added to a simple statement (e.g. 60a) the new sentence 60b is no longer a general statement but becomes a specific statement that the listener is tall in comparison with the speaker. It is a little misleading to use English comparative sentences as the gloss for this kind of sentence.

- (60) a. Nǐ gāo.
 you tall
 'You are tall.'
 b. Nǐ bǐ wǒ gāo.
 you compared.to I tall
 'You are taller than I am.' *lit.* 'You are tall in comparison with me.'

Like many other Chinese PPs, the *bǐ* phrase cannot occur before the subject (Liu et al. 1983). Ex. 58a is therefore syntactically ill formed, but 58b is structurally well formed but semantically absurd. If the NP in the *bǐ* phrase is replaced by one representing a human being who is capable of feeling, as in 61, the sentence will become acceptable.¹⁵

- (61) Gǒu wǒ bǐ nǐ gèng xǐhuān.
 dog I compared.to you more like
 'Dogs, I like them more than you do.'

The comparison relation in 61 is between the subject *wǒ* 'I' and the NP *nǐ* 'you' in the *bǐ* phrase. Such a relation of course differs from that intended for 58b by McCawley (1989) and LaPolla (1990). The comparison relation in 58b is meant to be between the *bǐ* NP and the topic which is related to the object position. In Chinese, the comparison relation between a *bǐ* NP and an object NP cannot be established when the object belongs to a so-called simple predicate, as shown by 62. If the object position in such a predicate is occupied by a null form related to a topic, as in 58b, (repeated here), the comparison relation is not available either.

- (62) *Wǒ bǐ māo xǐhuān gǒu.
 I compared.to cat like dog
 intended 'I like dogs more than I like cats.'
 (58) b. *Gǒu wǒ bǐ māo xǐhuān.
 dog I compared.to cat like

If the object belongs to a subtype of the so-called complex predicates, as in the case of 63¹⁶ (from Haoran 1964), it may function as the item being compared. In this case, there is an extra adjective phrase *hóng* 'red' which occurs after the object and holds a predication relation with the object. A *bǐ* phrase may appear between the object and the extra adjective phrase to delimit the range in which the predication relation holds.

- (63) Tā áo yè áo de yǎnjīng
 he stay.late night stay DE eye
 bǐ jī pìgǔ hái hóng.
 compared.to hen asshole even red
 'He stayed awake into the night for so long that his eyes are even redder
 than a hen's rear end.' *lit.* 'He, by staying late into the night, stayed
 until his eyes were red in comparison with the hen's rear end.'

If the eyes in question in 63 have been mentioned in the previous discourse, as in the conversation in 64, the speaker may use a different tactic to construct the sentence so that the NP *yǎnjīng* 'eye' will function as the topic and be related to the object

¹⁵ The word *gèng* 'more' is added to 61 to make the sentence sound smoother. Given the discourse function of topic, 61 is likely to occur as the second pair-part in a conversation, with (i) as the first pair-part. It is natural for the NP *gǒu* 'dog' to become the topic when it is mentioned again and it is equally natural to modify the verb *xǐhuān* 'like' with *gèng* 'more' when the verb is used again.

(i) Wǒ hěn xǐhuān gǒu.
 I very like dog
 'I like dogs very much.'

¹⁶ A question might arise whether the NP after the verb *áo* 'stay (late into the night)' in 63 has the status of object. The consensus among Chinese linguists now is that the NP is the object. A piece of commonly cited evidence is that the NP in question can occur in a so-called *bǎ* phrase, as in (i).

(i) Tā áo yè bǎ yǎnjīng áo de bǐ jī pìgǔ hái hóng.
 he stay-late night BA eye stay DE compared.to hen asshole even red
 'He stayed awake into the night for so long that his eyes are even redder than a hen's rear end.'

position in the comment. The topic in the second turn in 64 is then the item being compared and the sentence remains acceptable.

- (64) A: Tā yǎnjīng jìnlái méishì ba?
 he eye recently OK PART
 B: Yǎnjīng a, tā áo yè áo de
 eyes PART he stay.late night stay DE
 bǐ jī pìgǔ hái hóng.
 compared.to hen asshole even red
 A: 'Are his eyes OK these days?'
 B: 'As for his eyes, he stayed awake into the night for so long that they are even redder than a hen's rear end.'

Note that in 61 and 64 there are two NPs outside the assertion. They both fit the description of topic in LaPolla's framework (1990). LaPolla's stipulation that there can only be one topic outside the assertion of comparison therefore does not fit the facts.

There remains one issue to be cleared, though. Given the fact that the *bǐ* phrase cannot occur before the subject, sentences like 57 (repeated here) are expected to be ungrammatical, but they are actually not so bad.

- (57) Xiàng bǐ xióng bízi cháng.
 elephant compared.to bear nose long
 'Elephants have longer noses than bears.'

The reason 57 is acceptable is to be found in the syntactic properties of the so-called double-nominative construction that occurs in this sentence. Tsao (1990) has pointed out that double-nominative constructions do not form a homogeneous group. Taking their syntactic behaviors into consideration, two types of double-nominative constructions can be identified. The first type, represented by sentences like 65a, is characteristic of the apparently loose relation between the two nominal elements. Adverbs like *jīngcháng* 'often' for example, can occur between the two nominals, as shown in 65b, even though they usually cannot occur before a subject (see the discussion of 16). Similarly, certain modals, such as *huì* 'will' in 65c, can appear between the two nominals even though they cannot appear before the subject in normal cases (see also the discussion of 19). Given this pattern, it is not surprising that a *bǐ* phrase can occur between the two nominals in sentences like 65d.

- (65) a. Wáng Tàitai tóu téng.
 Wang Mrs. head ache
 'Mrs. Wang is having a headache.'
 b. Wáng Tàitai jīngcháng tóu téng.
 Wang Mrs. often head ache
 'Mrs. Wang often has a headache.'
 c. Wáng Tàitai bú huì tóu téng.
 Wang Mrs. not will head ache
 'Mrs. Wang will not have a headache.'
 d. Wáng Tàitai bǐ Lǐ Tàitai hái jīngcháng tóu téng.
 Wang Mrs. compared.to Li Mrs. even often head ache
 'Mrs. Wang is having headaches more often than Mrs. Li does.'

Sentence 66a represents the other type of double-nominative construction. The two preverbal nominals in this type behave more like a single NP than the other type in

that no adverbial or modal can separate the two, as shown in 66b and 66c respectively. Similarly, no *bǐ* phrase can appear between the two nominals in comparative constructions like 66d.

- (66) a. Lǐ Tàitai nǚér piàoliang.
 Li Mrs. daughter beautiful
 'Mrs. Li's daughter is very beautiful.'
- b. *Lǐ Tàitai fēicháng nǚér piàoliang.
 Li Mrs. extremely daughter beautiful
- c. *Lǐ Tàitai bú huì nǚér piàoliang.
 Li Mrs. not will daughter beautiful
- d. *Lǐ Tàitai bǐ Wáng Tàitai nǚér piàoliang.
 Li Mrs. compared.to Wang Mrs. daughter beautiful
intended: 'Mrs. Li's daughter is more beautiful than Mrs. Wang's daughter.'

Tsao's (1990) explanation for the contrast between these two types of double-nominative constructions is in essence that both types have a single subject-predicate structure. The difference is that in 65a the second preverbal nominal has undergone some kind of reanalysis so that it has become part of the predicate, namely, *tóu téng* 'headache' has become an idiomatic chunk. The second preverbal nominal in 66a, in contrast, is the head of an NP in which the first nominal is the specifier. Since PP adverbials can modify a predicate but not an NP head, the patterns in 65 and 66 are what is to be expected. If Tsao's explanation is correct, the double-nominative in 57 can be considered more or less the same as the one in 65d so that a *bǐ* phrase can occur between the two preverbal nominatives, that is, between the subject and its predicate.

To sum up, in Chinese comparative constructions that are based on the *bǐ* phrase the item(s) being compared is/are determined by the structural position of the item(s) and the availability of a predication relation that satisfies certain semantic requirements. The position of topic does not fall within the domain of comparison although the topic NP may be related to a position that does and is therefore compared indirectly. There seems to be no evidence for specific syntactic properties unique to the topic except for topic deletion across sentence boundaries.

5. CONCLUSION. My main goal was to provide a precise definition for topic and to derive most of the properties of topic from the definition. The assumption underlying this definition is that topic has no independent thematic role but always depends on an element inside the comment for its thematic role. The assumption is compatible with the fact that every topic is related to a position in the comment and that topic has no independent syntactic function except when two topics are involved. Given the nature of the dependence relation between topic and the position inside the comment, it is natural for the relation to be subject to locality constraints.

REFERENCES

- CADIOT, PIERRE. 1992. Matching syntax and pragmatics: A typology of topic and topic-related constructions in spoken French. *Linguistics* 30.57–88.
- CHAFE, WALLACE. 1976. Givenness, contrastiveness, definiteness, subjects, topics and point of view. Subject and topic, ed. by Charles Li, 27–55. New York: Academic Press.
- CHAO, YUEN-REN. 1968. A grammar of spoken Chinese. Berkeley: University of California Press.
- CHEN, JIANMIN. 1982. Hànyǔ kǒuyǔlǐ de zhuījīā xiànxàng [The afterthought in spoken Chinese]. *Yǔfǎ yánjiū yǔ tànsuǒ* [Studies and explorations in grammar] 1.117–32.

- CHEN, PING. 1996. Pragmatic interpretation of structural topic and relativization in Chinese. *Journal of Pragmatics* 26.389–406.
- CHENG, LAI-SHEN LISA. 1991. On the typology of WH-questions. Cambridge, MA: MIT dissertation.
- , and RINT SYBESMA. 1999. Bare and not-so-bare nouns and the structure of NP. *Linguistic Inquiry* 30.4.509–42.
- CHOMSKY, NOAM. 1977. On WH-movement. *Formal syntax*, ed. by P. Culicover, T. Wasow, and A. Akmajian, 71–132. New York: Academic Press.
- COMRIE, BERNARD. 1981. *Language universals and linguistic typology*. Chicago: University of Chicago Press.
- DAHL, ÖSTEN. 1974. Topic-comment structure revisited. *Topic and comment, contextual boundness and focus*, ed. by Östen Dahl, 1–24. Hamburg: Helmut Buske Verlag.
- GAO, QIAN. 1994. Chinese NP structures. *Journal of Chinese Linguistics* 32.475–510.
- GIVÓN, TALMY. 1983. Topic continuity in discourse: An introduction. *Topic continuity in discourse*, ed. by Talmy Givón, 1–42. Philadelphia: John Benjamins.
- GRICE, H. PAUL. 1975. Logic and conversation. *Syntax and semantics*, vol. 3: *Speech acts*, ed. by Peter Cole and J. L. Morgan, 41–58. New York: Academic Press.
- . 1978. Further notes on logic and conversation. *Syntax and semantics*, vol. 9: *Pragmatics*, ed. by Peter Cole, 113–28. New York: Academic Press.
- HALLIDAY, M.A.K. 1985. *An introduction to functional grammar*. London: Edward Arnold.
- HUANG, C-T. JAMES. 1982. Logic relations in Chinese and the theory of grammar. Cambridge, MA: MIT dissertation.
- . 1991. On be and have in Chinese. *Essays in memory of Professor Fangkwei Li*, ed. by Institute of History and Philology, Taipei, 43–62.
- HUANG, SHIZHE. 1996. Quantification and predication in Mandarin Chinese: A case study of *dou*. Philadelphia: University of Pennsylvania dissertation.
- HUANG, YAN. 1994. *The syntax and pragmatics of anaphora*. Cambridge: Cambridge University Press.
- JIANG, ZIXIN. 1991. Some aspects of the syntax of topic and subject in Chinese. Chicago: University of Chicago dissertation.
- KUNO, SUSUMU. 1973. *The structure of the Japanese language*. Cambridge, MA: MIT Press.
- LAPOLLA, RANDY. 1990. *Grammatical relations in Chinese: Synchronic and diachronic considerations*. Berkeley: University of California, Berkeley dissertation.
- . 1993. Arguments against 'subject' and 'direct object' as viable concepts in Chinese. *Bulletin of the Institute of History and Philology* 63.759–812.
- LEE, THOMAS H-T. 1986. *Studies on quantification in Chinese*. Los Angeles: University of California, Los Angeles dissertation.
- LI, AUDREY. 1990. *Order and constituency in Mandarin Chinese*. Dordrecht: Kluwer.
- . 1992. Indefinite WH in Mandarin Chinese. *Journal of East Asian Linguistics* 1.125–56.
- LI, CHARLES, and SANDRA THOMPSON. 1976. Subject and topic: A new typology of language. *Subject and topic*, ed. by Charles Li, 457–89. New York: Academic Press.
- , ———. 1979. Third-person pronouns and zero-anaphora in Chinese discourse. *Syntax and semantics*, vol. 12: *Discourse and syntax*, ed. by Talmy Givón, 311–36. New York: Academic Press.
- , ———. 1981. *Mandarin Chinese: a functional reference grammar*. Berkeley: University of California Press.
- LI, JINQUAN. 1995. Jǔfǎ chéngfèn de huàtíhuà [The topicalization of syntactic elements]. *Yǔfǎ yánjiū yǔ tànsuǒ* [Studies and explorations in grammar] 1.224–36.
- LI, LINDING. 1986. Xiàndài Hànyǔ jùxíng [Contemporary Chinese sentence patterns]. Beijing: Commercial Press.
- LIU, YUEHUA; WENYU PAN; and WEI GU. 1983. Shíyòng Hànyǔ yǔfǎ [Practical grammar for contemporary Chinese]. Beijing: Press of Foreign Language Teaching and Research.
- LÜ, SHUXIANG. 1986a. Hànyǔ jǔfǎ de língfúxíng [The flexibility of Chinese syntax]. *Zhongguo Yuwen* [Chinese Linguistics] 1.
- . 1986b. Zhǔwèi wèiyǔ jù lǐ [Instances of subject-predicate phrase as predicate]. *Zhongguo Yuwen* [Chinese Linguistics] 5.334–40.

- , LINDING LI; JIAN LIU; JIYAN FAN; YOUWEI SHI; FANGLIAN FAN; ZONG MENG; SHUJUN MA; ZHU LI; JIANMIN CHEN; KAIDI ZHARR; HUAIDE ZHENG; and BAOXIANG TAO. 1980. *Xiàndài Hànyǔ bābǎi cí* [Eight hundred words in contemporary Chinese]. Beijing: Commercial Press.
- MA, JIANZHONG. 1898/1983. *Mǎshì wéntōng* [A grammar by Ma]. Shanghai/Beijing: Commercial Press.
- MCCAWLEY, JAMES. 1989. Notes on Li and Thompson, Mandarin Chinese: A functional reference grammar. *Journal of the Chinese Language Teachers Association* 24.19–42.
- NING, CHUNYAN. 1993. The overt syntax of relativization and topicalization in Chinese. Irvine, CA: University of California, Irvine dissertation.
- PETŐFI, JÁNOS S. (ed.) 1988. Text and discourse constitution. New York: Walter de Gruyter.
- QU, YANFENG. 1994. Object noun phrase dislocation in Mandarin Chinese. Vancouver: University of British Columbia dissertation.
- SHI, DINGXU. 1989. Topic chain as a syntactic category in Chinese. *Journal of Chinese Linguistics* 17.223–62.
- . 1993. Discourse topic continuity and syntactic reduction. *Berkeley Linguistics Society* 19.313–22.
- . 1994. The nature of Chinese emphatic sentences. *Journal of East Asian Linguistics* 3.81–100.
- SHYU, SHU-ING. 1995. The syntax of focus and topic in Mandarin Chinese. Los Angeles: University of Southern California dissertation.
- SONG, YUZHU. 1987. *Guānyu zhǔwèi wèiyǔ jù de fānwéi he lèixíng* [On the typology of sentences with a subject-predicate phrase as the predicate]. *Nankai Xuebao* [Journal of the Nankai University] 5.
- TAN, FU. 1991. Notion of subjects in Chinese. Stanford, CA: Stanford University dissertation.
- TANG, CHIH-CHEN JANE. 1990. Chinese phrase structure and the extended X'-theory. Ithaca, NY: Cornell University dissertation.
- . 1992. *Tā mǎile bǐ sǐzhì* and Chinese phrase structure. Paper presented at the first international conference on Chinese linguistics, Taipei.
- TAO, HONGYIN. 1996. Units in Mandarin conversation. Amsterdam: John Benjamins.
- TENG, SHOUHSIN. 1974. Double nominatives in Chinese. *Language* 50.455–73.
- . 1979. Remarks on cleft sentences in Chinese. *Journal of Chinese Linguistics* 7.101–14.
- TAO, FENGFU. 1979. A functional study of topic in Chinese: The first step towards discourse analysis. Taipei: Student Book Co.
- . 1987a. A topic-comment approach to the *ba* construction. *Journal of Chinese Linguistics* 15.1–54.
- . 1987b. On the so-called 'verb-copying' construction in Chinese. *Journal of the Chinese Language Teachers Association* 22.13–44.
- . 1990. Sentence and clause structure in Chinese: A functional perspective. Taipei: Student Book Co.
- WILLIAMS, EDWIN. 1980. Predication. *Linguistic Inquiry* 11.203–38.
- XIE, TIANWEI. 1990. Topic structure in Chinese and lexical functional grammar. Paper presented at the second North America conference on Chinese linguistics.
- . 1992. An examination of the topic-prominence of Chinese language learners' interlanguage. Pittsburgh: University of Pittsburgh dissertation.
- XU, LIEJONG, and D. TERENCE LANGENDOEN. 1985. Topic structures in Chinese. *Language* 61.1–27.
- XUE, PING. 1991. Syntactic dependencies in Chinese and their theoretical implications. Victoria, BC: University of Victoria dissertation.
- ZHANG, BAOJIANG, and MEI FANG. 1996. *Hànyǔ gōngnéng yǔfǎ yánjiū* [Studies of Chinese functional grammar]. Nanchang: Jiangxi Education Press.
- ZHU, DEXI. 1983. *Guānyu 'bǐzì' jù* [On the *bi* constructions]. *Yǔfǎ yánjiū yǔ tànsuǒ* [Studies and explorations in grammar] 1.7–8.
- ZOU, SHAOHUA. 1992. 'Bǐ' zì jù de jīxíng tèzhēng [Positive features of comparative sentences]. In *Yǔfǎ yánjiū yǔ tànsuǒ* [Studies and explorations in grammar] 6.217–29.

DATA SOURCES

- HAORAN. 1964. *Yànyáng tiān* [Shining days]. Beijing: People's Literature Press.
WANG, HAILING, and SHUO WANG. 1992. *Ai nǐ méi shāngliáng* [No negotiation in love].
Beijing: Huayi Press.
YAO, XUEYIN. 1979. *Lǐ Zichéng*. Beijing: Chinese Youth Press.

Department of Chinese and Bilingual Studies
Hong Kong Polytechnic University
Hong Kong
[ctdshi@polyu.edu.hk]

[Received 16 April 1998;
accepted 9 September 1999]