The Topic-Prominence Parameter

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Abstract

This article aims to recast the properties of topic-prominent languages and their differences from subject-prominent languages as documented in the functionalist literature into the framework of the Principle-and-Parameter approach. It provides a configurational definition of the topic construction called Topic Phrase (TP), with the topic marker as its head. The availability of TP enables topic prominent languages to develop various topic structures with properties such as morphological marking; cross-categorial realization of topics and comments; and mutiple application of topicalization. The article elaborates the notion of topic prominence. A topic prominent language is characterized as one that tends to activate the TP and to make full use of the configuration. Typically, it has a larger number and variety of highly grammaticalized topic markers in the Lexicon and permits a variety of syntactic categories to occur in the specifier position and the complement position of TP.

1. Introduction

The distinction between topic-prominent languages (TPL) and subject- prominent languages (SPL) was first introduced in Li and Thompson (1976) and has since been widely accepted by linguists as a typology to classify languages. This article aims to recast the properties of TPL and their differences from SPL into the framework of the Principle-and-Parameter approach. Following Li and Thompson, we take Chinese as a typical example of TPL and expect our proposal applies to other TPL as well.

The properties of TPL are well-documented in the literature of functionalist grammar, notably in Li and Thompson (1976) and Tsao (1979). From the structural point of view, a typical TPL distinguishes itself from other languages in the following respects:

- A topic is related either to a particular constituent within the comment that follows or to the comment as a whole.
- Such a relation is characterized by unbounded dependency and exemption from the familiar island conditions is commonplace.
- Multiple application of topicalization is permissible.
- Syntactic categories other than noun phrases can be topicalized.
- A topic may occur clause internally as well as initially.
- A topic may be morphologically or lexically marked.

The means should be available in Universal Grammar (UG) for languages to develop various topic structures to realize these and other properties. A language that chooses to activate such means is parametrically different from one that chooses not to. In terms of language acquisition, a child sets the parameter by turning the switch to one or the other

direction in response to evidence from the data containing topics it is exposed to in the early stage of language learning.

This article is an elaboration of the Topic-Prominence Parameter. It concentrates on the common properties of the topic construction, with little attention to the differences between various topic structures¹. It is organized as follows. Section 2 is a summary of some of the important facts observed in the literature about the relation between topic and comment in Chinese. Section 3 compares three alternative ways to designate the structural position of the topic, with a view to providing a basic syntactic configuration to represent the topic construction in general. Section 4 demonstrates how languages like Chinese may make full use of the configuration to develop properties characteristic of TPL. Our proposal provides a unified account of a number of structures that can be subsumed under the topic construction. A summary is made in Section 5.

2. Topic and Comment*

The facts presented in this section constitute the basis for proposing a syntactic configuration to represent topic construction in Chinese.

The topic sentence in Chinese contains three elements in the following order: (i) a topic, which is typically a noun phrase, but can be other syntactic categories as well; (ii) a topic marker adjacent to the topic; and (iii) a comment, which is typically, though not necessarily, a clause. It will be shown later that whatever syntactic form it takes, semantically a comment is a predication or contains a predication. A topic marker need not be phonetically realized, though phonetic realization is always possible. This implies what cannot be followed by a topic marker is not a topic. So the marker is not a filler, which can be inserted anywhere in a sentence to mark a pause. Whereas the topic marker can be empty, the topic itself cannot. Neither can the comment. Throughout the article we do not consider expressions that do not occur initially but can be defined as topics in terms of information structure. We claim that structurally the conjunction of (i), (ii) and (iii) is a necessary and sufficient condition for a topic construction.

A semantic relation exists between the topic and the comment which is often characterized roughly as aboutness. The comment is, in a broad sense, about the topic.² The aboutness relation shows itself in one of the following ways.

The topic may be related to an empty element in the comment. A typical example is provided below, in which the topic is most naturally interpreted as the understood object. A comma will be placed after a topic marker or a topic in the Chinese example sentences. However, it should not always be interpreted as a pause in speaking or a punctuation mark in writing.

(1) Shuguo, wo xihuan fruit I like 'Fruit, I like.'

In this article any sentence that contains one or more topics is regarded as a topic construction "Topic construction" is used as a general term covering a variety of topic structures. A syntactic configuration beginning with a topic is called a Topic Phrase. The internal structure of a Topic Phrase will be shown later.

^{*} Glosses used in the examples: CL-classifier, DAT-dative, MOD-modality particle, NOM-nominative, RSP-resultitive particle, SFP-sentence final particle, TOP-topic marker.

For other views on the topic-comment relation, see Schlobinski and Schütze-Coburn (1992).

It was proposed, first in C.-T.Huang (1982), that such a topic structure is derived by an operation identical to the movement of *wh*-phrases in forming interrogative sentences in English.

The topic may be coreferential with an overt element, a pronoun or a full noun phrase, as well as a null expression in the comment. Similar cases are found in English, known as dislocation in the literature.

(2) Zhege ren, wo bu xihuan ta this person I not like him 'This person, I don't like him.'

There may exist a relation other than coreferentiality between the topic and an expression in the comment. It is a part-whole relation in (3) and an inclusive relation in (4) below.

- (3) Zheke shu, yezi da this tree leaves large 'The leaves of this tree are large.'
- (4) Shuiguo, wo xihuan pingguo fruit I like apple 'As for fruit, I like apples.'

Leaves are part of a tree and apples form a subset of fruits. Where there is an inclusive relation, the topic is always the superordinate term, while the expression in the comment is its hyponym. The reverse order is not acceptable.

(5) *Pingguo, wo xihuan suigguo apple I like fruit

Topic structures exemplified by (3) and (4) have no word-for-word translations in English. Various attempts have been made to solve the so-called "double subject" problem. For instance, Schlobinski and Schütze-Coburn (1992) argue that the first NP in (3) is syntactically and semantically a modifier of the adjacent NP, thus denying the sentence the status of a topic structure. But their proposal does not apply to (4) and many other sentences similarly structured as (3) or (4). Furthermore, the topics in (3) and (4) cannot be analyzed, without obvious manipulation of the structure, as the result of some element originally in the comment being moved to the front for some reason.³

Finally, the topic may be related to the comment as a whole, but not specifically to a single expression in it. A classic example that has been repeatedly cited by linguists working on Chinese topicalization since Chao (1968) is (6).

(6) Neichang da huo, xingkui xiaofangdui lai de zao that big fire fortunately fire-brigade came early 'As for that big fire, fortunately the fire brigade came early.'

The topic here is what Chafe (1976) calls a Chinese style topic, which is not found in grammatical sentences in English and other European languages.

In early transformational grammar, it was proposed in Thompson (1973) that the deep structure of (4) is wo xihuan pingguo shuiguo '*I like apples fruit.'

Recently Shi (1992) and Yuan (1996) have independently argued that (6) is incomplete by itself. To make it complete, the hearer must make his contribution by supplying an understood sequel, for instance:

(7) cai mei zaocheng sunshi consequently not cause damage 'consequently (it) didn't cause damage.'

When the topic structure (6) is expanded to include (7), an empty element appears and can be interpreted as coreferential with the topic in (6). The entire stretch is called a topic chain⁴. Obviously, their objective is to show that a topic must be related to a particular expression in the comment and, if possible, to prove that a topic invariably binds a trace.

It is not clear how completeness on the extra-sentential level is defined. Once on that level, island conditions on topic movement, etc. that have been developed exclusively for sentence grammar, will no longer be relevant anyway. The point at issue is more relevance than completeness. Where a topic identifies something to be commented on, it is generally possible to reword the comment or expand it so that the topic becomes more transparently relevant. Even if one could define completeness, the proof they have in mind does not follow from the requirement of completeness. It takes little reflection to see that (7) is merely one of the possible sequels to (7). Alternatives such as (8), serve the purpose equally well.

(8) women cai mei sunshi shenme we consequently not lose anything 'consequently we lost nothing.'

There is no empty category in (8) coreferential to the topic in (6). One may argue that it contains an implicit argument, which is the potential causer of loss. Similarly, it is possible to introduce an implicit adjunct in other cases. But this sort of explanation simply shows that the topic is required to be semantically, not syntactically, related to an element within the comment.

Aware of this problem, Shi (1992) tries to draw a distinction between (6) + (7) and (6) + (8) by assigning the following interpretations respectively:

- (9) a. = (6) + (7) As for that big fire, fortunately the fire brigade came early, Consequently, it did not cause damage.
 - b. = (6) + (8) At the time of that big fire, fortunately the fire brigade came early. Consequently, we lost nothing.

But other Chinese speakers do not feel the contrast and accept the alternative interpretations without difficulty:

(10) a. At the time of that big fire, fortunately the fire brigade came early, Consequently, it did not cause damage.

⁴ The topic chain may well be a discourse notion as in such cases the sentence boundary in Chinese is not clear-cut.

b. As for that big fire, fortunately the fire brigade came early. Consequently, we lost nothing.

Whether *neichang da huo* is interpreted as an entity or as an event is one thing, and whether the NP binds a single constituent in the comment or not is quite another. There is no correlation between them. In our opinion, whichever way the NP is interpreted, it is a topic as long as it occurs in the topic position and can be followed by a topic marker.

Maintaining the observation and analysis made by Chao (1968) and accepted by Li and Thompson (1976) and many other grammarians, we regard the following as a semantic condition on the topic:

(11) A topic is semantically related to an expression, null or overt, in the comment or to the comment as a whole. The relation between them can be one of coreferentiality, inclusion, part-whole, etc.

Henceforward, we will use this semantic requirement as one of the diagnostics for the topic construction. A stronger claim one could make is that the comment is a one-place predicate related to the topic, which is either an argument or an adjunct. But to move in this direction one should propose a mechanism to cover part-whole relation as well as operator-variable relation.

3. Configuration of Topic Construction

There are at least three ways to represent the topic construction, with the topic occurring in the specifier position of CP, or in a position adjoined to IP, or in the head position of another functional phrase called Topic Phrase (TP). We provide reasons why we prefer the latter.

3.1. Topic as Spec of CP?

In Huang (1982)'s representation of the Chinese topic construction, a topic is analyzed as taking the complementizer position (COMP) of S'. In the current version of phrase structures, a moved wh-phrase takes the specifier position of the functional phrase Complementizer Phrase (CP) as the head position of CP is reserved for the complementizer (C) itself. This analysis is motivated by the observation that in some languages a wh-phrase and C may co-occur, with the former to the left of the latter. However, placement of a topic in Spec of CP in Chinese would seem much less well-motivated. A topic in Chinese is not a moved wh-phrase and it never has a chance to meet C.

There has been a heated debate as to whether topic structures in Chinese are the results of wh-movement. It is not the main concern of this article whether the relation between the topic and the relevant expression in the comment is subject to the island conditions. Readers are referred to the articles representing both views, C.-T. Huang (1982), C.-T. Huang and Li (1995), etc. on the one hand, and Xu and Langendoen (1985), C.-R. Huang (1991), etc. on the other. But it should be clear from the facts documented in the literature that a topic binding a trace or variable in the comment is not a necessary requirement of the topic construction in Chinese. One may choose to treat some topics as derived by movement, if one wishes. For instance, Shyu (1995) renames a base-generated topic as a major subject, to be distinguished from the syntactic subject, i.e. subject in the ordinary

sense, on the one hand and from the moved topic on the other hand.⁵ Evidently, it is difficult to maintain the position that all topics, including the ones in (3), (4), (6), etc., originate from somewhere in the comment.⁶

Before one is convinced that a topic occurs in Spec of CP, one would like to know what C and CP are in Chinese in the first place. For years grammarians have been trying hard to find a complementizer or complementizers in Chinese. Tang (1989) considers sentence final particles expressing modality, such as *ba*, *le*, *ma*, *ne*, the most likely candidates⁷. However, Chinese sentence-final particles differ from the complementizers in English and other languages in two important respects.

First, Chinese sentence-final particles do not have the property that motivates the nomenclature. It is argued in Ouhalla (1992) that a complementizer is basically a nominalizer, whose function is to nominalize an otherwise verbal clause, thus turning it into a complement. This is why it occurs only in an embedded clause or in a sentential subject, but never in a main clause. It also explains why a gerundive clause, which is already nominal in nature, does not need a complementizer. In Chinese, on the contrary, a sentence final article closes a main clause, rather than an embedded clause. It therefore does not complementize anything.⁸

Secondly, two sentence final particles can co-occur in a single clause. In English, that introduces a statement and whether a yes-no question. As no clause can be semantically a statement and a question at the same time, they never meet. Sentence final particles in Chinese form a relatively large class, each member having its own specific modality meaning. Since the meanings they carry are not always mutually exclusive, co-occurrence does not necessarily lead to contradiction. The following sentence is taken from Tang (1989:235).

(12) wo chi wanle fan le

I eat finish rice sfp
'I've eaten the rice.'

This sentence can be turned into a question simply by adding another sentence final particle, the interrogative particle ma.

(13) Ni chi wanle fan le ma you eat finish rice SFP SFP 'Have your eaten the rice?'

It is well-known that in some languages a COMP position can be filled by a complementizer and a wh-phrase together. In Chinese, however, even a COMP filled with two complementizers is not ungrammatical. So one would not expect Chinese to have constraints like that effects, that lead to the postulation of the Empty Category Principle. Thus, the proposal of putting a topic in CP has little theoretical motivation.

Shyu makes a further distinction between the focused topic and the topic without focus. Such differences fall outside the scope of our study.

There is no strong evidence that the position for moved wh-phrases in European languages is the position for topic in Chinese, especially when one notes that it is argued in Müller and Sternefeld (1993), etc. that topicalization in European languages does not involve wh-movement.

⁷ But in the end he rejects the analysis, according to Gasde and Paul (1996:286).

The only exception is de, which can occur in an inner clause. But a closer inspection reveals that it closes any categories that function as modifiers, NPs and PPs as well as clauses.

Law (1990) in her study on Cantonese final particles identifies the issue and tries to solve the problem of doubly-filled COMP by claiming that while *le* is situated in the head position of CP, *ma* goes to the specifier position of CP. Her argument is that when Spec of CP is occupied by *ma*, a particle marking a yes-no question, a *wh*-phrase cannot enter. This is what is expected, given the LF-movement hypothesis in Huang (1982). However, if this proposal is adopted, a topic can take neither the head nor the Spec position of the CP.

In view of the fact that little is in common between CP in English and TP in Chinese, instead of equating TP with CP, we propose to view TP as an alternative to CP. Put in a slightly different way, one can say that both CP and TP are available in universal grammar, but a language may choose to activate one or both of them. TPL like Chinese naturally make more use of TP as compared with SPL. It may use CP for sentence final particles or clause initial conjunctions. But I will not consider CP further in this article.

3.2. Topic Adjunction to IP?

From the beginning of studies in generative grammar, adjunction of YP to XP has had an important place as an easy device for elements put away from the positions in which they were to be interpreted. The analysis of a topic as adjoined to IP dates back to Baltin (1982). As the theory evolved, movement and rearrangement tended to bifurcate. On the one hand the movement operation may be formulated as Move α , for which adjunction, if used at all, is mainly for theory internal purposes. On the other hand adjunction is now restricted to operations such as scrambling, extraposition, VP-adjunction, etc. which Chomsky (1995:324) suggests should be excluded from the framework of principles as something beyond the core computational properties of the language faculty. Chinese topicalization cannot be identified with wh-movement. As has been shown earlier, at least some topic structures obviously do not involve movement. But it is possible that all topics are the result of displacement, rearrangement, scrambling? If so, adjunction may be the right analysis.

Scrambling is common in Germanic languages and Japenese. While Japanese has case markers to distinguish scrambling from topicalization, there is no similar morphological indication in Chinese. Prima facie, Chinese topicalization does share some of the properties of scrambling in Germanic languages discussed in Müller and Sternefeld (1993). Whereas topicalization in Germanic languages can take place only once, scrambling can be easily reiterated, similar to multi-topic structures in Chinese. For instance, the following sentence involving scrambling cited in Müller and Sternefeld (1993:480) can be rendered into Chinese.

- (14) dass dem Fritz i die Geshichte_j [IP niemand t i t j glaubt] that the-DAT Fritz the story nobody-NOM believes '...that nobody believes Fritz's story.'
- (15) Zhangsan a, tade shuofa [mei ren xiangxin] Zhangsan TOP his story no person believe

We will address multi-topic structures further in Section 4.2.

There is another apparent similarity between topicalization in Chinese and scrambling in Germanic languages. In most Germanic languages, embedded topicalization is licensed only in special contexts, following a small number of bridge verbs, while on the other

hand no lexically-based restriction applies to scrambling. In Chinese topicalization in embedded clauses is common. 10

On the other hand, topicalization in Chinese differs from scrambling in Germanic languages and Japanese in two crucial respects, permission of resumptive pronouns and unbounded dependency. The existence of an optional resumptive pronoun is illustrated in (2). The similarity between the German topic structure in (16) and the Chinese topic structure in (17) shows that like Germanic topicalization, but unlike Germanic scrambling, Chinese topicalization is not clause-bound.

- Pudding glaube ich [dass sie mögen würde]
 Pudding believe I that she would like
 'Pudding, I believe she would like.'
- (17) Buding, wo xiangxin [ta hui xihuan]
 Pudding I believe she would like
 'Pudding, I believe she would like.'

Furthermore, when two elements in the embedded clause are topicalized, one or both of them can appear at the beginning of the main clause. All three sentences below are grammatical.

- (18) Zhejian shi, [ta shuo [youxie ren [ta mei gaosu]]] this matter he say some people he not tell '*This matter, he said that, some people, he didn't tell.'
- (19) youxie ren, [ta shuo [zhejian shi [ta mei gaosu]]] some people he say this matter he not tell '*Some people, he said that, this matter, he didn't tell.'
- (20) zhejian shi, youxie ren, [ta shuo [ta mei gaosu]] this matter some people he say he not tell

To summarize, while the topic construction in Chinese is less restrictive as compared with its counterparts in Germanic languages, it is not the same as scrambling. Rather, occurring in the leftmost position, the topic in Chinese takes the most natural place. In TPL like Chinese, the topic construction represents the canonical form. If the subject in SPL has a position of its own at all levels of representation, the topic in TPL should likewise be assigned its own position. We therefore prefer not to treat topics as adjoined to IP, as adjunction now tends to be used for minor rearrangement of word order.

3.3. Topic Phrase

We now consider the last of the three alternatives, analyzing the topic construction in Chinese. as a functional phrase called Topic Phrase, abbreviated as TP. This is the analy-

⁹ Japanese has long-distance scrambling, but we will not address the issue here, cf. Saito (1992) and his discussion of Webelhuth's hypothesis.

It has been observed in Lu (1994) and Fu (1994) that topicalization in some types of embedded clauses is not as unlimited as in main clauses. But such a limitation does not alter the fact that topicalization does apply to a large variety of embedded clauses in Chinese.

sis adopted in Gasde and Paul (1996), though no arguments are provided there in support of their choice.

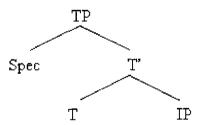
Compared with the two alternative analyses discussed in subsections 3.1 and 3.2 respectively, this treatment does full justice to the vitality of the topic and prevalence and abundance of topic structures in TPL. In SPL the relative linear or hierarchical order of subject, verb and object is the backbone of the sentence structure. Any deviation from the norm of a language is a derivation resulting from operations of movement or rearrangement of a certain constituent. Wh-movement and IP-adjunction are mechanisms used to give rise to syntactic variation. In TPL, however, the topic is as important as, if not more important than, the subject in the sentence structure. If UG provides CP for SPL, it should provide TP for TPL as well. Alternatively, one may say that CP and TP are one and the same maximal projection above IP. Individual languages may choose to exploit either or both.

Now we look into the internal structure of TP. Since it is not clear how agreement and tense are represented in Chinese or what roles AGR and TNS play in Chinese sentential structures, throughout this article we use Inflection Phrase (IP), without breaking it into Agreement Phrase and Tense Phrase. Thus TP is used here exclusively to stand for Topic Phrase, not Tense Phrase.

Following Gasde and Paul (1996), we take TP as the maximal projection of its head, a functional category T, which is the topic marker such as *ne*, *me*. What immediately precedes T and is marked by it, is the topic itself, which occurs in the specifier position under TP. Henceforward, we define topicalization of a constituent as attaching a topic marker, overt or null, to it, without implication of movement. We will take the capability of taking a topic marker as another diagnostic for a topic in addition to (11). The complement of T, typically an IP, is the sister of T. Deviating from Gasde and Paul (1996), we prefer not to represent CP either above TP or below it in the analysis of topic structures in Chinese for reasons stated earlier.¹¹

The configuration of TP is as follows.

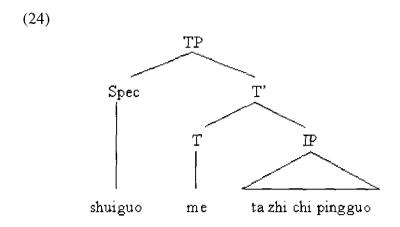
(22)



The topic structure in (23) can be represented as (24) with details under IP unspecified.

(23) Shuiguo me, ta zhi chi pingguo fruit TOP he only eats apples 'As for fruits, he eats apples only.'

In Chomsky (1977), a topic structure is derived from the base rules: S"→TOP S', S'→COMP S. In Gasde and Paul (1996), it is the other way round. There is no empirical evidence in favor of either of the options. In Chinese the topic and the complementizer never meet, if sentence-final particles are taken as complementizers. While CP is head-final, TP always takes a complement to the right of the head. Thus a topic occurs at the very beginning of a sentence and a modality particle at its very end.



In the current version of the Principle-and-Parameter approach, the Minimalist Program gives up the traditional notion of having a single configuration as the starting-point of derivation and claims that syntactic structures are built through generalized transformation that joins already formed trees. In this spirit, one may assume that a topic structure is formed in the following manner. In the computational component of grammar, an IP may be targeted by the computational system to expand and project. Another constituent formed by lexical items from the Lexicon may be inserted above the IP as its topic, resulting in a larger tree, that is, TP. Alternatively, if the IP is not targeted for expansion, the sentence will not have a topic. For those who prefer to take some topic structures as derived by a movement operation, they may assume that in such cases the topic position is filled by a constituent from within the IP instead of from outside. When all the lexical items taken from the Lexicon are put together and operations completed, the TP is ready to meet the interface conditions at LF and PF. Later in Section 4 it will be shown that TPL are such that they expand IP into TP more frequently, expand categories other than IP into TP, and insert categories other than NP when forming TP.

It should be noted that other devices are also available in Chinese to indicate a topic. A topic can be introduced by an element with more lexical meaning than the purely grammatical forms which we call topic markers, e.g. shuodao 'speaking of', guanyu 'as for'. They can co-exit with topic markers, which means they should not be regarded as topic markers.

- (25) Shuodao zhege wenti me, wo you yijian speak-of this problem TOP I have opinion 'Speaking of this problem, I have my opinion.'
- (26) Guanyu zhege wenti me, wo you yijian speak-of this problem TOP I have opinion 'As for this problem, I have my opinion.'

4. Properties of TPL

With (22) as the basis, we will show that the parametric variations of TPL from SPL arise as the natural consequences of expansion, projection, generalized transformation, etc. of the constituents in (22).

4.1. Head of TP

UG recognizes a number of functional heads as universal across languages. But not all of them are lexicalized or morphologically marked in all languages. An example readily available is that Chinese lacks lexical or morphological forms of AGR. Likewise, not all languages have lexical or morphological forms of T. A parametric variation across languages with regard to topic prominence is that some languages or dialects have a richer T system than others, just as some languages have richer AGR than others. Taking this view, one may attribute the parametric variation between languages to the lexical differences of their functional heads in conformity with the spirit of the Minimalist Program advocated in Chomsky (1995) and elsewhere.

TPL are more likely to have topic markers. A typical example cited in Li and Thompson (1976) is Lisu, a language spoken in Thailand, in which the topic marker is *nya*. According to Cheng (1991), Bunun, an Austronesian language spoken in Taiwan also has topic markers *qai*, *a*, etc. It has subject and object markers as well. However, when an expression is the subject and the topic at the same time, the subject marker is subdued but the topic marker survives. In Japanese, where both topic and subject are prominent, one finds a marker for each.

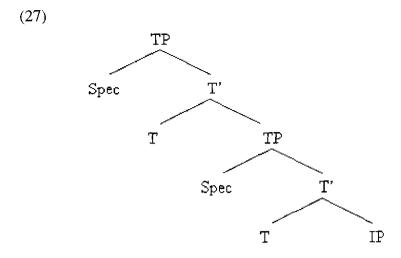
A richer T system means a larger number and variety of topic markers. It also means the existence of forms exclusively used for the purpose of marking topics. Mandarin makes use of a number of topic markers, a, ba, me, ne, ya, etc., which also serve as sentence final particles. The Wu Dialect of Chinese has forms that mark topics only. Shanghainese, a representative of Wu, uses a number of topic markers, a, meq, neq, to, zy, the last two of which are used as topic markers only. This fact correlates with other TPL properties. Shanghainese is more typically topic-prominent than Mandarin in terms of the variety of topic structures used and the frequency of their occurrence. The Lexicon of TPL typically contains a syntactic category of functional words or morphemes that can be inserted under the head of TP in the same way as the Lexicon of SPL possesses a category of AGR morphemes. In Chinese, the members of the set of topic markers may overlap with those that belong to the set of sentence-final particles. Alternatively, one may assume that they belong to one single lexical set and may take either a positive or a negative value of the feature [TOP] in a sentence.

4.2. Complement in TP

In a typical TPL, constituents other than IP can also be targeted by the computational system of grammar to expand into TP.

4.2.1. TP as Complement in TP

To derive multi-topic structures, we assume that TP can be recursive, where T takes another TP as its complement.



The example in cited (15) has this configuration. The following sentences are more typical illustrations of double-topic structures.

- (28) Zhejian shi, youxie ren, ta mei gaosu this matter some people he not tell "?This matter, some people, he didn't tell."
- (29) Zaocan, mianbao, ta zhi chi yi pian breakfast bread he only eats one slice 'As for breakfast, he eats one slice of bread only.'

Recently Shyu (1995:110) argued that Chinese generally does not allow multiple application of topicalization. In her terminology, *zaocan* and *mianbao* in (29), are not topics but what she calls major subjects. To deny the grammaticality of multi-topic structures, one should explain why sentences like (28) are grammatical. It is easy to construct some unacceptable sentences containing two topics. But they may be unacceptable for other reasons. Consider Shyu's example.

(30) *Gei Lisi, cong meiguo, Zhangsan jile yiben shu to Lisi from USA Zhangsan send one book 'To Lisi, from the USA Zhangsan sent a book.'

This sentence sounds unacceptable because out of context one can hardly see the motivation of using a double-topic structure. Imagine that Zhangsan's parents are complaining that he sends presents to his wife, but not to them and, in particular, they are unhappy because he sent them nothing from the US. We now have a context for using the double-topic construction. Someone can pacify his parents by saying:

(31) Gei fumu, cong meiguo, ta queshi mei ji sheme, keshi cong biede to parents from USA he indeed not send anything but from other difang ta jile bu shao dongxi place he send not little thing 'To his parents, from the USA, he didn't send anything, but from other places he did send a lot of things.'

Reiteration of topicalization is available in Chinese, but it should not be abused in distourse.

4.2.2. VP as Complement in TP

The system of grammar can target a VP to expand into a TP by generalized transformation. There are several types of VP structures that have TP over them.

One type is the kind of sentences involving what is referred to as object preposing in Ernst and Wang (1995). An illustration is provided in (32).

(32) Wo zaocan, bu chi I breakfast not eat 'Breakfast, I don't eat.'

Ernst and Wang compare two hypotheses for deriving sentences like (32) below. One of them, which they call the double topicalization hypothesis, involves two-step movement: starting from (33), moving the object NP to the sentence-initial position, resulting in (34), and then moving the other NP across the one moved, resulting in (32) finally.

- (33) Wo bu chi zaocan
 I not eat breakfast
 'I don't eat breakfast.'
- (34) Zaocan, wo bu chi breakfast I not eat 'Breakfast, I don't eat.'

An alternative analysis, called VP-adjunction hypothesis, derives (32) directly from (33) by moving the object NP and adjoining it to the VP, thus skipping the intermediate structure.

Providing a number of convincing arguments, e.g. topicalization analysis, adjunct distribution, presence of emphatic markers, restrictions on embedded topicalization, position of modals, etc. to support the latter against the former, they conclude that at least some object-preposed sentences cannot be derived by two-step movement.

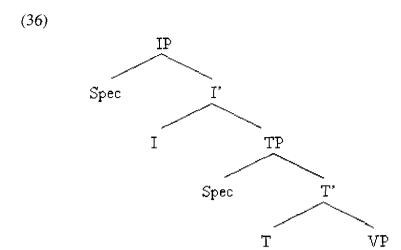
But at least some NPs preceding the verb cannot be derived by one-step movement, either, for some other reasons. Compare (35) with (32).

(35) Wo zaocan, bu chi mianbaoI breakfast not eat bread'I don't eat bread for breakfast.'

In (35), since the verbal complement position is occupied by another NP *mianbao*, it is impossible to move *zaocan* back as *mianbao zaocan* or *zaocan de mainbao* is unacceptable.

We, therefore, propose to represent the structure of (32) and (35) uniformly as follows. 12

We will not address the question whether the subject NP is moved from the Spec of VP into the Spec of IP or is originated in the latter position. See Aoun and Li (1993).



Another type of the TP-over-VP construction is the double object construction. The sentence below is a typical example.

(37) Ta gei erzi yizhuang fangzi he give son one house 'He gave his son a house.'

The dative object can be topicalized by inserting a topic marker like me after it.

(38) Ta gei erzi me, yizhuang fangzi; nuer me, yizhi zuanjia he give son TOP one house daughter TOP one diamond-ring 'He gave his son a house and gave his daughter a diamond ring.'

One may question whether the NP *erzi*, once followed by a topic marker, must be analyzed as a topic and no longer as a dative object. This is comparable to the case where the subject in a simple SVO construction is topicalized by inserting a topic marker.

(39) Erzi me, you yizhuang fangzi son top have one house 'The son has a house.'

There have always been conflicting views among traditional grammarians. Some take *erzi* in (39) to be a topic, followed by an empty subject. Others prefer not to invoke the notion of empty subject. In the latter's grammatical system, *me* marks a subject as well as a topic. A better example to show that a TP may top a VP in a double object construction is one in which the topicalized NP has a dative object following it and semantically related to it in the way stated in (11). An example is given below.

(40) Ta gei erzi yijia me, mei ren yijian liwu he give son family TOP every person one gift 'He gave everybody in his son's family a gift.'

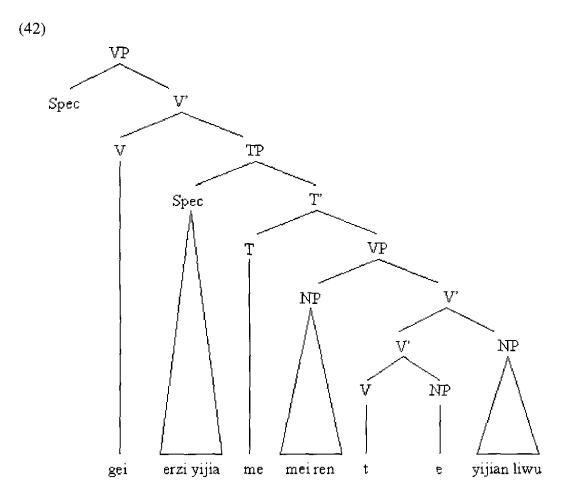
In (40) the NP with the topic marker is semantically related to another NP mei ren 'everybody', which is the dative object of the verb gei 'give'. The kind of aboutness relation

is typical of the topic construction, parallel to the relation between the topicalized NP and mei ren in (41).¹³

(41) Erzi yijia me, mei ren dele yijian liwu son family TOP every person got one gift 'In his son's family, everybody got a gift.'

If erzi yijian in (41) is a topic, so is the same expression in (40).

How should such a topic structure be syntactically represented? One way is to adopt the VP shell analysis proposed in Larson (1988). Thus *mei ren* in (40) is within an inner VP which is the complement of a TP as in (42)¹⁴.



Alternatives to the above analysis are available. For instance, one may analyze the dative object and the NP that follows as a small clause associated with the semantics of possession, following Kayne (1984) or as a Predicate Phrase, an umbrella term for both full clause and small clause, following Bowers (1993).

The complement of T in TP is required to be an instance of predication in a broad sense at least to avoid overgeneration. ¹⁵ This is why TP cannot top a double object structure where the positions of the two objects are reversed. In Mandarin Chinese, the indi-

Although erzi yijia and meige ren can enter into a possessive relation with or without a possessive marker de in between, in (39) such a relation is ruled out by the presence of the topic marker me.

t is the trace of the verb gei and e stands for the NP mei ren.

We need not be concerned with the various definitions and implementations of predication proposed by linguists, for instance, in the chapters in Cardinaletti and Guasti (1995).

rect object must precede the direct object, if it is not introduced by a preposition. But in Cantonese, the order is reversed.

- (43) a. Deidih bei mh baak man keuih dad gave five hundred dollars him 'Dad gave him five hundred dollars.'
 - b. *Deidih bei keuih mh baak man dad gave him five hundred dollars

The direct object in (43a) cannot take a topic marker as the two NPs appearing in such an order is not a small clause in terms of Kayne's (1991, 1993) theory of possessive have and be, and cannot be regarded as an instance of predication even in a broad or loose sense. What happens if for some reason, e.g. to show contrast, the indirect object must be topicalized? Interestingly, it is forced to adopt the Mandarin word order, preceding the direct object.

Deidih bei Mingh-jai ne, jauh mh baak man, Fan-neui ne, jauh dad gave Mingh (m) TOP MOD five hundred dollar Fan (f) TOP MOD yat baak man one hundred dollar 'Dad gave his son Mingh five hundred dollars and his daughter Fan one hundred.'

In the Wu dialect, represented by Shanghainese, both the Mandarin and Cantonese orders are available.

- (45) a. Baba peq ng paq kue i dad gave five hundred dollar him 'Dad gave him five hundred dollars.'
 - b. Baba peq i ng paq kue dad gave him five hundred dollar

Again, a topic marker is found only when the indirect object comes first.

- (46) a. Baba peq ngitsy meq, ng pa kue; noeng meq, iq paq kue dad gave son TOP five hundred dollar daughter TOP one hundreds dollar 'Dad gave his son five hundred dollars and his daughter one hundred.'
 - b. *Baba peq ng pa kue meq, ngitsy; iq paq kue meq, noeng dad gave five hundred dollar top son one hundred dollar top daughter 'Dad gave his son five hundred dollars and his daughter one hundred.'

There is a third type of TP-over-VP construction to be discussed shortly in Section 4.3.3.

4.2.3. NP as Complement in TP

An NP can be a comment occurring in the complement position of TP, if it has the property of predication.

It is observed in Tang (1992), etc. that in the following sentences the NP in the form of a numeral plus a classifier has such a property.

(47) Ta maile bi san zhi shu liang ben he bought pen three cL book two cL 'He bought three pens and two books.'

Arguably, the quantificational expression in (47) is predicative and the NP before it can take topic markers just as the indirect objects in the above examples.

(48) Ta maile bi me, san zhi shu me, liang ben he bought pen TOP three CL book TOP two CL

The so-called frequency expression is also said to be predicative. As expected, a topic marker can precede it.

(49) Wo jianguo neige ren me, san ci I saw that person TOP three times

That the postverbal NP has the property of predication receives the following supporting evidence.

- (50) a. Wo jianguo neige ren me, you san ci I saw that person TOP have three times
 - b. Wo jianguo neige ren me, cai san ci I saw that person top only three times

The verb you may be inserted before san ci as in (50a). In (50b) one finds the adverbial cai, which usually appears before a verbal expression, not a nominal expression.

Whether an NP used in this way should be represented as a predicate phrase is not the concern here.

4.3. Specifier of TP

Another property of TPL is that various categories of constituents can play the role of topic. The specifier position of TP is not limited to NPs.

4.3.1. PP as Specifier

It is well-known that a locative expression in the form of a prepositional phrase or post-positional phrase can be topicalized. So is a temporal expression as either PP or NP.

(51) Huoche shang me chengke keyi zai canche li yongshan train on TOP passenger may PREP dining-car in dine 'On the train, passengers can dine in the dining-car.'

The semantic relation between the topic huoche shang and another PP zai canche li in the comment is a part-whole relation. The latter can be replaced by a proform like zai nar

'there', or by an empty category. Any of these forms, full PP, proform, empty category are common, in topic structures.

The existence of sentences like (51) does not alter the fact that NP is the basic form for the topic. ¹⁶ Although both forms in (52) and (53) are acceptable, the preference of a bare NP in (52) and one with the preposition *zai* in (53) is well-known and the contrast is significant.

- (52) a. Huayuan li xuduo lao ren da taijiquan garden in many old people play shadow-boxing 'In the garden, many old people are playing shadow-boxing.'
 - b. Zai huayuan li xuduo lao ren da taijiquan
- (53) a. Xuduo lao ren huayuan li da taijiquan many old people garden in play shadow-boxing
 - b. Xuduo lao ren zai huayuan li da taijiquan

While (52a) is preferable to (52b), (53b) is preferable to (53a). Evidently, an NP is more appropriate in the sentence-initial topic position and a PP more appropriate in the VP-initial adverbial position. But (53a) is perfect when *huayuan li* is interpreted as a topic over VP, when, for instance, a contrast between the garden and another place is intended.

4.3.2. IP as Specifier

It is also well-documented that a clause can be a topic. Recently Gasde and Paul (1996) showed that causal adjunct clauses and conditional clauses are base-generated in Spec of IP. Analysis of conditional clauses as topics dates back to Haiman (1978). But other IPs can be topicalized as well.

- (54) Zhangsan hui pianren, wo bu xiangxin Zhangsan capable cheat I not believe 'That Zhangsan is capable of cheating, I don't believe.'
- (55) Zhangsan hui pianren, wo bu xiangxin zhezhong shuofa Zhangsan capable cheat I not believe this story '(Zhangsan is capable of cheating)¹⁷ I don't believe the story.'
- (56) Zhangsan hui pianren, wo bu xiangxin ta hui zheyang zuo Zhangsan capable cheat I not believe he will so do '(Zhangsan is capable of cheating) I don't believe he will do so.'
- (57) Zhangsan hui pianren, wo xiang ta zhi will hong xiaohar Zhangsan capable cheat I think he only will hoodwink children '(Zhangsan is capable of cheating) I think he can only hoodwink children.'

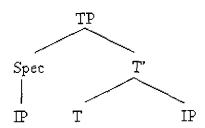
¹⁶ Some grammarians regard huoche shang as an NP rather than a PP.

Since English does not have a topic structure corresponding to the Chinese sentence, meaning: I don't believe the story that Zhangsan will cheat, we put the topic in brackets in the translation of this and the following sentences. The English translations of the examples may sound acceptable with a pause and rise in intonation. However, they are not on the same status as the Chinese counterparts.

(58) Zhangsan hui pianren, xingkui women zaoyi you fangbei Zhangsan capable cheat fortunately we already have precaution '(Zhangsan is capable of cheating) fortunately, we have already taken precautions.'

In each of the above sentences, the initial clause can be followed by a topic marker and is related to the rest of the sentence in one of the ways summarized in (11). It is most naturally analyzed as a sentential topic in the following configuration.

(59)



4.3.3. VP as Specifier

A VP can also be a topic sitting above another VP. The following three examples are from three different dialects, Mandarin, Cantonese and Shanghainese respectively.

- (60) Ta zuo shi, zongshi zuo de yitahutu he do things always do RSP messy 'Whatever he does, he makes a mess of it.'
- (61) Mohng, jauh gam mohng la¹⁸ hope then so hope sfp 'Well, that's what we hope.'
- (62) I gong euo meq, gong veqle he speak words TOP speak not 'He can't speak well.'

This construction is sometimes analyzed as derived by the operation of a verb copying rule, cf. Tai (1989), Hsieh (1992). The term verb copying is not general enough, however, to cover cases where the two verbs involved are not identical.

(63) Ta shaozai me, buguoshi cao jidan, zhu baicai he cook TOP merely scramble eggs boil cabbage 'As for cooking, he can only scramble eggs and boil cabbage.'

The first VP is more general in meaning and the second one more specific. The two of them are related, again, in a manner described in (11). To reverse the order of the superordinate expression and the hyponymous expression would result in an ungrammatical sentence. It is a typical semantic property of the topic construction.

¹⁸ This example is cited from Matthews and Yip (1994: 75).

To summarize, we have shown in Section 4 that in a typical TPL like Chinese other constituents than NP, namely, TP, VP, IP, PP can also take a topic marker and be joined as a topic to another constituent tree to form a TP syntactically and enter into an aboutness relation with the comment semantically.

5. Summary

- Syntactically, a topic construction contains a functional category called Topic Phrase, a configuration with a topic marker as its head, illustrated in (22).
- Semantically, in a topic construction there is an aboutness relation between the topic and the comment, which is a predication or contains a predication. The aboutness relation can be realized in various ways as exemplified and summarized in (11).
- Some languages have a comparatively richer T system than other languages in the same sense as some languages have a comparatively richer AGR system than other languages. Hence the Topic-Prominence Parameter.
- A language is topic-prominent if it has a larger number and variety of topic markers in the Lexicon, and permits a variety of syntactic categories to occur in the specifier position and the complement position of TP.

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