

The Derivation of Chinese Topic Constructions through the Lens of the Minimalist Program

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Abstract: As a topic-prominent language, topics play a vital role in the information structure of sentences and have always been the focus of theoretical linguistics. This paper reanalyzes Chinese topic constructions within the Phase-based framework of the Minimalist Program. It is found that the notion of internal topics should be dispensed with and all topics, base-generated or moved, are situated in the left periphery of the clause to check the relevant features. At the CP phase, the head of the Topic Phrase inherits the topic feature of the phase head. Multi-topicalization essentially boils down to the fact that the topic feature is inherited multiple times. Besides, this paper holds that only those constituents that function as arguments possess abstract Case features and therefore there is no need for base-generated topics to participate in the Case-checking process.

Keywords: Topic Construction, the Minimalist Program, Phase, Feature Inheritance

1. INTRODUCTION

From a cross-linguistic perspective, topic is a ubiquitous phenomenon in natural languages (Comrie 1981). Typological studies (Li & Thompson 1976) have revealed that Chinese is a typical topic prominent language. Topics play an extremely important role in the composition of sentences, comparable to subjects in subject prominent languages. Zhao Yuanren (1968) first introduced the concept of "topic" into the grammatical analysis of modern Chinese, and scholars of various linguistic persuasions have been exploring it with great enthusiasm until now. The current consensus is to regard topic as a basic component of syntactic structure, not just a pragmatic concept (Xu and Liu 2007). Typologically speaking, the basic word order of modern Chinese is Subject-Predicate-Object (Subject-Verb-Object), but in many cases the object can be moved before the verb, after the subject, or directly before the subject, leading to an ostensible subject-object-predicate sentence type or object-subject-predicate sentence type, as in (1):

- (1) a. Zhangsan xihuan zheben shu.
Zhangsan like this-CL book
"Zhangsan likes this book."
b. Zhangsan zheben shu xihuan.
Zhangsan this-CL book like
"Zhangsan likes this book."
c. Zheben shu zhangsan xihuan.
this-CL book Zhangsan like
"Zhangsan likes this book."

It can be argued that "zhebenshu" (this book) in (1) is moved out of its base position and a trace is left in the original position. However, as a typical topic-prominent language, there are some topic sentences that are not derived via movement, such as (2):

- (2) a. Nachang da huo, xinkui xiaofangyuan lai de kuai.
 that-CL big fire, fortunately fire-brigade come DE quick
 “As for that big fire, fortunately the fire bridge came quickly.”
- b. Nake shu, hua xiao, yezi da.
 that-CL tree, flower small leaf big
 “As for that tree, it has small flowers but big leaves.”

There is no obvious gap in the main clause of such sentences, and the topic component is semantically related to the main clause. It is usually considered that such topics are directly generated in the left periphery of the clause.

Numerous scholars have explored topic structures in the framework of generative grammar (Huang 1982, 1987; Xu &Langendoen 1985; Wen & Tian 2011; Paul 2015), but given the complexity of Chinese topic structure itself, there is no consensus on its derivation, and the licensing mechanism needs to be further explored in depth. In addition, most studies have not conducted detailed analyses of the Case features of topic structures. In this paper, we attempt to provide a unified analysis of Chinese topic structure through the operation of feature inheritance within the phase-based derivation model of Minimalism. The paper is structured as follows: Part 2 is brief introduction to the Minimalist Program. Part 3 outlines some major arguments against sentence internal topics. Part 4 is a detailed syntactic derivation of Chinese topic constructions. Part 5 touches on Case issues in topic constructions. Part 6 concludes the paper.

2. THE MINIMALIST PROGRAM

In the early 1990s, generative grammar evolved from the Government and Binding theory to the minimalist Program, and the economy principle took a central place in syntactic research. According to Minimalism, merge is the basic operation of syntactic construction, which belongs to the primitive category of universal grammar and is the product of genetic mutation in human brain (Chomsky1995, 2005; Xu 2009). Merge includes two kinds: Internal Merge and External Merge. At the same time, Merge must comply with the extension condition, otherwise the derivation will crash. Instead of extracting lexical items directly from the lexicon, the lexical items needed for Merge are first selected from the lexicon to form a Lexical Array. Also, in order to reduce the burden of syntactic operations and thus increase the efficiency of operations, spell-out is not implemented until the end of the entire operation process, but proceeds phase by phase.

Phase is currently a central concept in the minimalist study. The introduction of phase theory has changed the previous syntactic derivation model. Spell-out is not done once the derivation ends but in stages (Chomsky 2001, 2004, 2008). Phases have independent interface properties and are semantically complete propositional structures. Usually, *v**P and CP count as phases, the former being verb phrases in which all the theta roles are satisfied, and the latter being complete clauses with tense and inflection. Once a phase is formed, its complements immediately undergo spell-out, as shown in figure 1. For example, once *v* is merged, its complement VP is immediately spelled out; after C is merged, its complement TP is immediately spelled out.

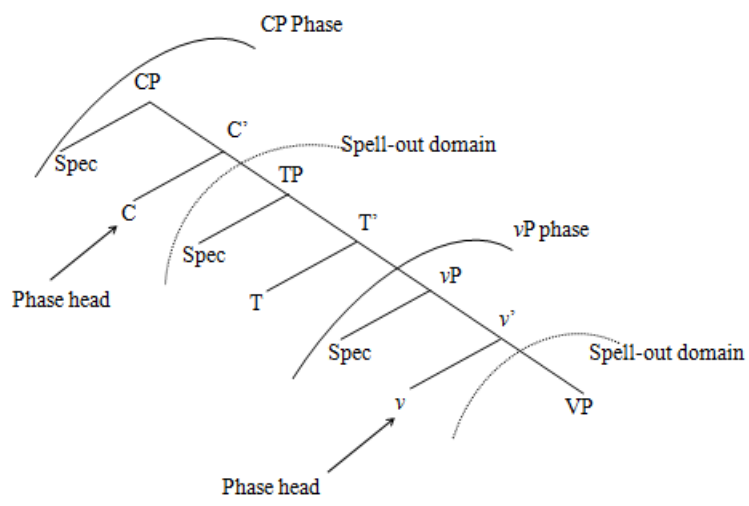


Figure 1. CP and vP phases

Any constituent within the spell-out domain cannot participate in further syntactic operations; only when the constituent moves to the edge of the phase can it participate in the relevant operations in the next stage (Figure 2). Chomsky calls this the Phase Impenetrability Condition (PIC), expressed as follows (Chomsky 2000:108):

In phase α with head H, the domain of H is not accessible to operations outside α , only H and its edge are accessible to such operations.

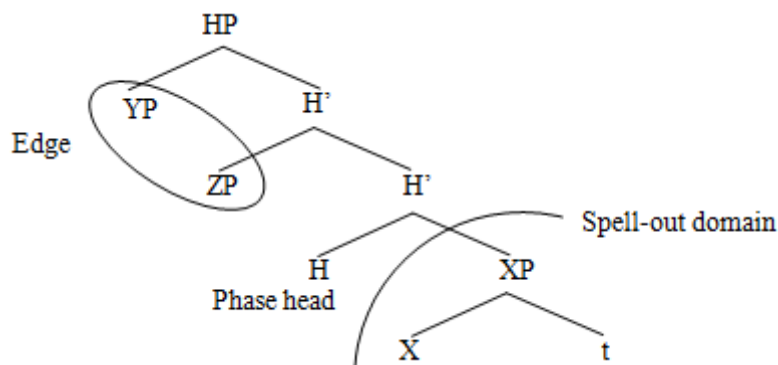


Figure 2. The spell-out domain and edge of a phase

Chomsky argues that all operations take place at the phase level. TP does not have the status of a phase, so its head T can't probe downwards. The tense features and agreement features that T has are inherited from the Phase head C. In the lexicon T does not have these features, but only has the corresponding features when T is selected by C. T inherits the phi-features through its local relationship with C, leading to agreement and movement. In this way, T can be activated for relevant operations only when C is merged, as in figure 3.

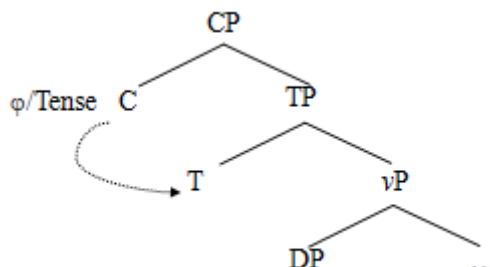


Figure 3. C-to-T inheritance

3. AGAINST SENTENCE INTERNAL TOPICS

Chinese is a topic-prominent language, which means that not only can topics be base-generated, but also multiple topics are theoretically possible. If it can be shown that the illusory VP-peripheral topic is actually the result of external topicalization, then at least in those cases we are examining, the concept of internal topicalization can be abandoned with no empirical or theoretical disadvantages.

The following two examples show the contrast:

- (3) a. Zheben shu wo kan-guo.
 this-CL book I read-Asp
 "This book, I have read."
 b. Wo zheben shu kan-guo.
 I this-CL book read-Asp
 "I have read this book."

Chinese is an SVO language, and when the object doesn't appear in its canonical position, it is assumed that there is movement involved in the derivation. The question is what kind of movement it has undergone. This issue has intrigued linguists for decades. The first example is uncontroversially a

case of left-peripheral topicalization since *zhebenshuis* moved to the initial position of the clause immediately before the subject. In the second example, *zhebenshu* is sandwiched between the subject and the predicate, which has led many researchers to conclude that *zhebenshu* is a sentence-internal VP-peripheral topic/focus (Shyu 1995; Zhang 2001; Paul2002; et al.). To mark the differences between internal clause-initial objects and clause-internal objects, different pairs of terms have been proposed: *discourse topic* versus *focus topic*, *primary topic* versus *secondary topic*, *main topic* versus *subtopic*, *external topic* versus *internal topic*.

At first sight, this analysis appears to be plausible. First, it has been demonstrated that in some languages, there are a host of functional projections encoding topics and foci between IP and VP, parallel to those in the left periphery of the clause (Belletti 2004). Second, according to phase-based computation, sentences are built from the bottom phase by phase. The two strong phases *vP* and *CP* are independent syntactic objects and their existence provides a conceptual basis for the parallel behavior of *vP* periphery and *CP* periphery.

However, upon closer scrutiny, this view can't be maintained in Chinese both conceptually and empirically and therefore reanalysis is called for.

First, this is not desirable from a minimalist perspective. It has been a central tenet of the Minimalist Program that the study of language should comply with the Principle of Economy, including methodological economy and substantive economy. Methodological economy is related to theoretical parsimony and simplicity just like Occam's razor: Among competing hypotheses, what prevails is the one with the fewest assumptions. In other words, simpler theories are always preferable to more sophisticated ones.

In the cases at hand, when the topicalized phrase is moved to the *CP* periphery, it is in [*Spec, TopicP*], which is the specifier position of external topic phrase. When it is moved to the *VP* periphery, it is moved to the specifier position of internal topic phrase. In accounting for the differences between the two sentences, the two concepts of internal topic and external topic have to be posited. That is against the methodological economy of Minimalism. Given the fact that external topic is both conceptually necessary and empirically unavoidable, a unified approach using only external topic is to be championed.

Second, a deeper analysis reveals that the pre-verbal topicalized phrase is not in the *VP*-peripheral position. In most literature, researchers have merely focused on structures consisting of subject, verb and object. Linguists have agreed on the partitioning of a clause into three prolific domains, namely the thematic domain, the agreement domain and the discourse domain (Grohmann 2003). In analyzing Chinese topic constructions, the agreement domain has not been taken into account. In simple *SOV* sentences, it is hard to pinpoint whether the object is in the left periphery of *VP* or elsewhere since there is no overt element in the inflectional domain. Negators and modals are supposed to be in the inflectional domain. It should be noted that whether negators are analyzed as adverbs or functional heads does not affect our analysis as long as they are in the inflectional domain. The following facts show that the structure is grammatical only when *zhebenshu* is before *bu* or *mei*.

- (4) Zhangsan zheben shu bu xihuan.
Zhangsan this-CL book not like
"Zhangsan doesn't like this book."
- (5) Zhangsan zheben shu mei kanguo.
Zhangsan this-CL book not read-Asp
"Zhangsan hasn't read this book."
- (6) *Zhangsan bu zheben shu xihuan.
Zhangsan not this-CL book like
Intended meaning: Zhangsan doesn't like this book.
- (7) *Zhangsan mei zheben shu kanguo.
Zhangsan not this-CL book read-Asp
Intended meaning: Zhangsan hasn't read this book.

When it comes to modals, the situation is kind of complicated. It has been proposed that there are four types of modals: evidential modals, epistemic modals, deontic modals and dynamic modals. They are projected in the following order:

Evidential Modals> Epistemic Modals >Deontic Modals>Dynamic Modals
Using *xianran*, *keneng*, *bixu* and *yuanyi* as diagnostic tests, we can obtain the following results.

- (8) (Xianran) Zhangsan (xianran) zheben shu (xianran) xihuan.
obviously Zhangsan obviously this-CL book obviously like
“It is obvious that Zhangsan likes this book.”
- (9) (Keneng) Zhangsan (keneng) zheben shu (keneng) xihuan.
possibly Zhangsan possibly this-CL book possibly like
“It is likely that Zhangsan likes this book.”
- (10) (*Bixu) Zhangsan (?bixu) zheben shu (bixu) kanwan.
*obligatorily Zhangsan ?obligatorily this-CL book obligatorily read-finish
Intended meaning: Zhangsan must finish reading this book.
- (11) (*Yuanyi) Zhangsan (*yuanyi) zheben shu (yuanyi) kanwan.
*willingly Zhangsan *willingly this-CL book willingly read-finish
Intended meaning: “Zhangsan is willing to finish reading this book.”

For evidential and epistemic modals, *zhebenshu* can appear either before or after them, whereas for deontic and dynamic modals, *zhebenshu* should precede them. This means that there is no functional topic projection immediately before VP and *zhebenshu* should move further to the CP domain. The scattered topic projections in this domain explain why the various word orders in the first two sentences are acceptable. The topic element moves to [Spec, TopicP], which is an A-bar position. The main argument stems from reconstruction, which allows a moved element to be interpreted at the original site rather than in the surface position. There are binding-theoretical reconstruction effects in A-bar movement.

- (12) Taziji_i, Xiaoming_i hen xihuan [taziji_i].
himself, Xiaoming very like himself
“Xiaoming likes himself very much.”
- (13) Zhangsan_i, Xiaoming zhidao ta_j hen xihuan [Zhangsan]_i.
Zhangsan, Xiaoming know he very like Zhangsan
“Xiaoming knows that he likes Zhangsan very much.”

In (12), *taziji* must be reconstructed to the object position, where it is bound by *Xiaoming* according to Condition A of Binding Theory. In (13), reconstruction of *Zhangsan* results in the contra-indexation of *Zhangsan* with *ta* according to Condition B of Binding Theory.

Third, TP adverbs and or Tense heads behave similarly to modals in topic constructions. *Yijing* and *ganggang* are TP adverbs which are assumed to be licensed in the inflectional domain. In addition, such words as *jiang* and *jiangyao* are usually treated as the phonetic realizations of tense heads. Look at the following contrast:

- (14) Ta zheben shu yijing kanguole.
he this-CL book already read-Asp
“He has already read this book.”
- (15) *Ta yijing zheben shu kanguole.
he already this-CL book read-Asp
Intended meaning: He has already read this book.
- (16) Ta zheben shu jiangyao kanwanle.
he this-CL book will read-finish-Asp
“He will finish reading this book.”
- (17) *Ta jiangyao zheben shu kanwanle.
he will this-CL book read-finish-Asp
Intended meaning: he will finish reading this book.

These examples also point to the fact that *zhebenshu* is not in the VP periphery.

Last, the following two sentences can receive a unified analysis if internal topics are done away with.

- (18) Zhangsan zhebu dianying hen xihuan.
Zhangsan this-CL movie very like
“Zhangsan likes this movie very much.”
- (19) Zhangsan zhebu dianying ta hen xihuan.
Zhangsan this-CL movie he very like
“Zhangsan likes this movie very much.”

The two sentences are virtually identical except that in the latter sentence there is a resumptive pronoun *ta* that is coreferential with *Zhangsan*. Following the minimalist spirit, they should have similar derivational processes. Whatever the derivational steps are, *zhebudianding* in the latter doesn't undergo internal topicalization. If so the first sentence does not either.

I have argued that the internal-topicalization approach faces a number of problems or even challenges. The best way to avoid them is to seek new alternative solutions and the following section is an attempt at this.

4. THE SYNTACTIC DERIVATION

Now, let's look at the derivation of the following sentence:

- (20) Xiaoming zheben shu hen xihuan.
 Xiaoming this-CL book very like
 "Xiaoming likes this book very much."

I assume that in this sentence, both *Xiaoming* and *zhebenshu* have [+topic] features, and no matter whether we adopt the criterial approach or feature-checking approach, they end up being in [Spec, TopicP].

The lexical items to be merged are not directly accessed from the lexicon. Lexical items are selected from the lexicon to constitute the numeration/lexical array. Meanwhile, to reduce the computational burden and improve the computational efficiency, sentences are spelled out phase by phase rather than in one fell swoop. According to this phase-based model, the sentence is made up of two phases, *vP* and CP. Each lexical sub-array is as follows:

vP:{ *v*, Xiaoming, xihuan, zhebenshu }

CP:{ C, Topic¹, Topic², T }

4.1. The Derivation of *vP* Phase

Xihuan is a two-place predicate, having a full argument structure. Apart from Case features and ϕ features, *Xiaoming* and *zhebenshu* have [+topic] features as well and all uninterpretable features must be checked and deleted to guarantee output convergence. The verb *xihuan* merges with *zhebenshu* to derive the VP. VP is then selected by the light verb *v*. The external argument *Xiaoming* is merged in [Spec, *vP*]. The strong phase nature of *vP* demands that its complement be spelled out before the derivation continues. *Zhebenshu* has interpretable phi-features and unvalued Case features and *v* has uninterpretable phi-features that are unvalued. As a result of the Agree operation between *v* and DP, both the phi-features of *v* and the Case features of DP get valued. Meanwhile, the affixal nature of *v* causes the main verb to adjoin to it. Incidentally, the Case feature of *Xiaoming* has not been valued at this stage, but located in [Spec, *vP*], it can be valued at the next phase level. As has been mentioned, *zhebenshu* has [+topic] feature, if it is spelled out at the *vP* phase, then the resulting derivation will crash. The only alternative is that *zhebenshu* moves to the edge position of *vP* periphery, where it can participate in further syntactic operations (Figure 4).

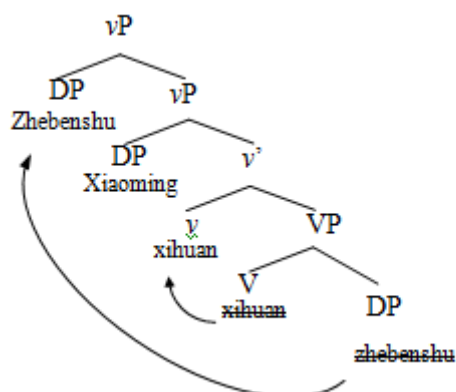


Figure 4. The derivation of *vP* phase

4.2. The Derivation of CP Phase

After the transfer of *v* complement, the derivation continues to the next strong phase of CP. At the CP phase, T selects *v*P and projects to TP and Topic selects TP and projects to TopicP. Because both *Xiaoming* and *zhebenshu* have [+topic] features, it is expected that there are two topic projections.

Our analysis actually follows in the footsteps of Rizzian research on the left periphery (Rizzi 1997). He argues that left periphery of the clause contains several independently-motivated functional projections, as shown below:

$$\text{ForceP} > \text{TopP}^* > \text{FocP} > \text{TopP}^* > \text{FinP} > \text{IP}$$

However, this is in conflict with Chomsky’s idea of feature inheritance. Chomsky argues that all operations take place at the phase level. Being in a local relationship with C, T inherits ϕ features from C. The intervening topic phrase and the focus phrases disrupts the local relationship between C and T. Accordingly, T is unable to inherit the features from C. The tension can be resolved by assuming that [+Topic] and [+Focus] features are also inherited from C (Figure 5). Briefly speaking, when C is merged in the derivation, its features are inherited by Topic, Focus and T simultaneously and the related phrase are merged in [Spec, TopicP], [Spec, FocusP] and [Spec, TP] respectively. Chinese permits multiple topics, meaning that the [+Topic] feature can be inherited multiple times.

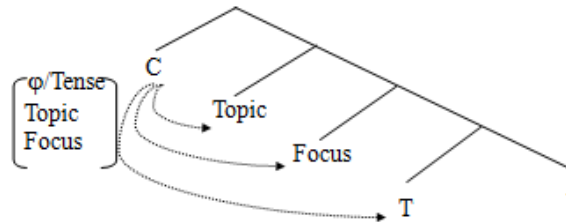


Figure 5. Feature inheritance by Topic, Focus and T

At a specific phase, different heads can probe their respective Goals simultaneously as long as the output converges.

Xiaoming and *zhebenshu* are situated in [Spec, *v*P] and the Equidistance Principle ensures that they are equidistant from a certain projection. Topic can probe [Spec, *v*P], namely *Xiaoming* and *zhebenshu*, but T can only target the inner specifier of *v*P, namely *Xiaoming*, because only the ϕ features of *Xiaoming* and those of T match.

At the CP phase, there are two topic phrases, TopicP¹ and TopicP², and each topic head can probe either *zhebenshu* or *Xiaoming*. If Topic¹ probes *Xiaoming*, and Topic² probes *zhebenshu*, the resulting construction is: *Xiaoming zhebenshu xihuan*. Conversely, if Topic¹ probes *zhebenshu*, and Topic² probes *Xiaoming*, the resulting construction is: *Zhebenshu Xiaoming xihuan*. The two derivations are shown in Figure 6 and Figure 7 respectively.

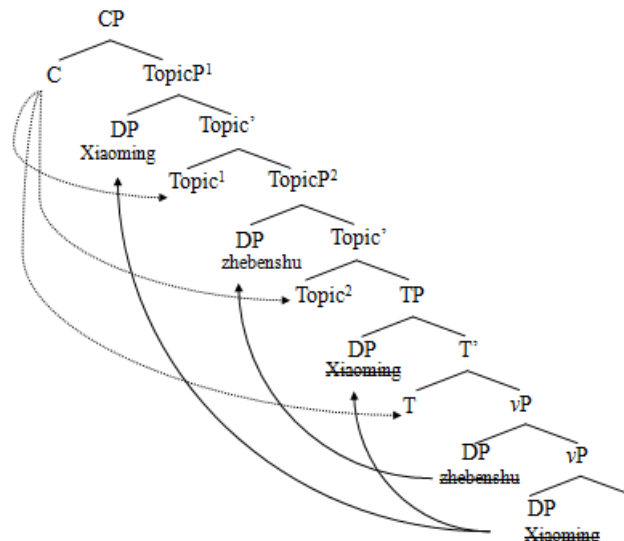


Figure 6. The derivation of “Xiaoming zhebenshu xihuan.”

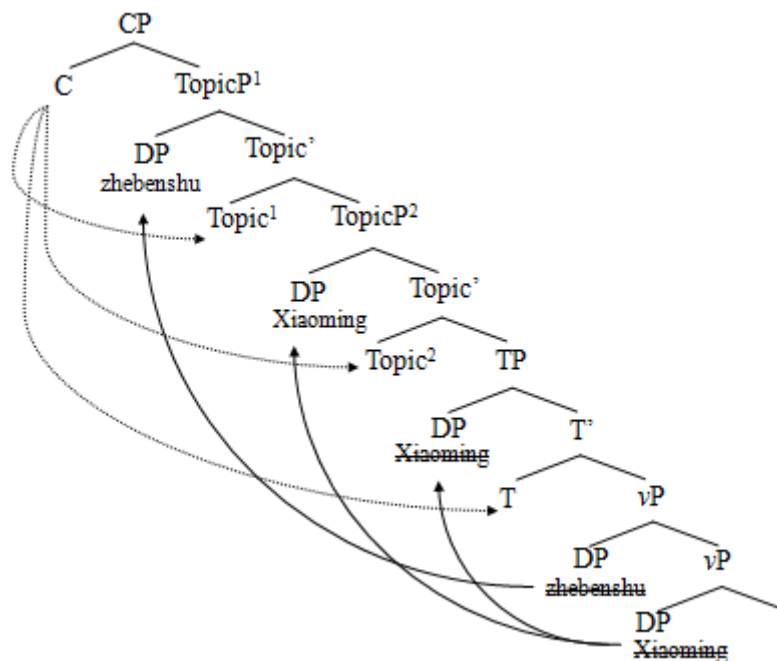


Figure 7. The derivation of “Zhebenshu Xiaoming xihuan.”

Sometimes, it is the case that either *Xiaoming* or *zhebenshu* has [+topic] feature or neither has topic feature. Thus, we have the following table:

Table 1. Topic feature differences in the lexical arrays

	Xiaoming	Zhebenshu	Lexical arrays	Examples
A	[+topic]	[+topic]	{C, Topic ¹ , Topic ² , T, v, Xiaoming, xihuan, zhebenshu }	Xiaoming zhebenshu xihuan. Zhebenshu Xiaoming xihuan.
B	[+topic]	[-topic]	{C, Topic, T, v, Xiaoming, xihuan, zhebenshu }	Xiaoming xihuan zhebenshu.
C	[-topic]	[+topic]	{C, Topic, T, v, Xiaoming, xihuan, zhebenshu }	Zhebenshu Xiaoming xihuan.
D	[-topic]	[-topic]	{ C, T, v, Xiaoming, xihuan, zhebenshu }	Xiaoming xihuan zhebenshu.

As can be seen from Table 1, the same lexical array can give rise to different structures, such as the two examples in A. They have the same semantic interpretation and are cases of true optionality. In addition, different lexical arrays can generate the same structure with different interpretations such as A and C, B and D.

In the derivation, it is assumed that topic projections are recursive and this approach is superior to a multi-specifier approach and multi-adjunction approach. First, according to X-bar principle, each head has one specifier and one complement. Second, if we follow Kayne’s LCA (Kayne 1994; Nunes 2004), it is impossible to determine the linear order of multi-specifiers or multi-adjuncts. Third, sometimes Chinese has overt topic markers like *ne* and *ma*, which are supposed to lexicalize the topic head, and the recursive topic heads can accommodate them quite easily.

With this double-topicalization approach, the problems mentioned previously evaporate immediately. Since TopicP lies in the left periphery of CP, it is natural that topicalized phrases precede tense phrase, negators and root modals.

According to the copy theory of movement, when a category is moved, an identical copy is left behind, with the higher copy c-commanding the lower one. To avoid the failure of linearization, one of the two copies, more often than not the lower one, must be deleted in the phonological component. However, the pronoun can be the copy spell-out of some traces.

With respect to the motivation of topicalization, Chomsky argues that this is the perfect division of labor between External Merge and Internal Merge. Topic is a discourse/semantic feature, which can’t

be satisfied by External Merge because External Merge is often related to argumental semantics. The only way is to resort to Internal Merge, according to which the topicalized phrase is merged at [Spec, TopicP]. From this perspective, the purpose of movement is to meet the duality of semantics. When it comes to Chinese, this is not entirely correct. As a topic-prominent language, Chinese permits base-generated left-peripheral topics which don't function as arguments.

5. CASE ISSUES IN TOPIC STRUCTURES

Case is quite an old and familiar notion in traditional grammar. Many languages exhibit overt morphological markers, such as German, Japanese and Russian, and still some languages have impoverished cases or no cases at all, such as Italian, English and Chinese. In GB, Chomsky (1981, 1986) argues that all languages have abstract Case and differences among languages are the overt manifestation of morphological cases. Case theory, an innate module in UG, is supposed to handle abstract Case.

Case Filter: Every overt noun phrase must be assigned abstract Case under government configuration.

Government is defined as follows:

Government: α governs β iff:

(i) α m-commands β and

(ii) there is no barrier γ that dominates β but does not dominate α .

(21) a. *The barber to marry Mary is unusual.

b. *It was seen Jack.

The first sentence (21-a) is ruled out because "the barber" is Caseless and the second sentence (21-b) is ungrammatical in that the passive participle is not a Case assignor. The following are acceptable because the complementizer *for* and INFL are Case assignors.

(22) a. For the barber to marry Mary is unusual.

b. Jack was seen.

Chomsky later claims that Case Filter is a stipulation and can actually be derived from Theta Criterion. For a noun phrase to receive a thematic role, it must be visible. The very existence of Case is to guarantee the visibility of noun phrases (Wen 2002:134). With this visibility condition in place, Case Filter needn't exist independently as a UG module. If a noun phrase has not been assigned Case, it is invisible; once invisible, it can't receive a thematic role, in violation of Theta Criterion. In Minimalism, Case is treated as an uninterpretable feature of the noun phrase, which must be checked and deleted in the course of computation.

Whatever the analysis, there is no denying that Case plays a vital role in generative syntax and should be maintained as much as possible. However, when it comes to analyzing Chinese topics, there arise non-trivial challenges. In Chinese not all topics are derived by means of movement. As a typical topic-prominent language, Chinese also permits base-generated topics in [Spec,TopicP], such as (2), repeated here as (23).

- (23) a. Nachang da huo, xinkui xiaofangyuan lai de kuai.
that-CL big fire, fortunately fire-brigade come DE quick
"As for that big fire, fortunately the fire bridge came quickly."
b. Nake shu, hua xiao, yezi da.
that-CL tree, flower small leaf big
"As for that tree, it has small flowers but big leaves."

From the two examples, it can be seen that there are no syntactic gaps or traces in the comment and therefore *nachangdahuo* and *nakeshu* are base-generated topics. This is where the challenge lies: what is the Case of base-generated topics? Of course, topic head is not a Case-assignor, for if it were so, moved topics would be assigned Case twice. I entertain the hypothesis that only arguments need Case in a clause. The number of arguments is determined by the main predicate. *Nachangdahuo* and *nakeshu* are not arguments of the clause. Rather, they simply function as the topics and have the property of referentiality. Accordingly, they are directly licensed by Topic head and it is not necessary for them to have Case at all.

Surely this assumption appears to be ad hoc for Chinese topics. If so, we are just shifting the burden of explanation. Can this analysis be supported from the study of other languages? Fortunately, languages with rich case morphology can provide us with penetrating insights into the underlying mechanism. Russian is a case in point. It has both left dislocation and topicalization (Bailyn 2012). In Russian, different verbs require nouns with different cases. For instance, the object of “*practice*” is in the instrumental case and the object of “*help*” is in the dative case. The topicalized phrase is in a case related to its underlying position while the left dislocated constituent is always in the nominative case. Look at the following contrast:

- (24) a. Mark zanimaetsja jogoj kazjyj den.
 Mark-NOM practice yoga-INSTR every day
 “Mark does yoga every day.”
 b. Jogoj Mark zanimaetsja kazjyj den.
 yoga-INSTR Mark-NOM practice every day
 “Mark does yoga every day.”
 c. Joga Mark ej zanimaetsja kazjyj den.
 yoga-NOM Mark-NOM it-INSTR practice every day
 “Yoga, Mark does it every day.”
- (25) a. Svjascennike casto poogajut Borisu.
 priests-NOM often help Boris-DAT
 “Priests often help Boris.”
 b. Borisu svjascennike casto poogajut.
 Boris-DAT priests-NOM often help
 “Priests often help Boris.”
 c. Boris svjascennike casto emy poogajut.
 Boris-NOM priests-DAT often him-DAT help
 “Boris, priests often help him.”

They are related to how the two types of structures are derived. It has generally been accepted that Russian topicalization involves a movement process while left-dislocation involves a base-generation one. However, the question of why the left dislocated items have nominative forms still hasn’t been answered. Pereltsvaig (2007) argues that the instances of the nominative in such sentences correspond to the lack of syntactic case specification and are thus instances of morphological default forms rather than having the nominative checked by functional heads. This amounts to saying that nominative case in these examples is not checked syntactically but surfaces as the default case. This analysis can be extended to Chinese with slight changes. Chinese is lacking in morphological case, which means that nouns without abstract Cases don’t have overt case morphology at all. In the minimalist terminology, abstract Case features participate in syntactic computation. Though phonetically indistinguishable from moved topics in Chinese, base-generated topics are fundamentally different from moved topics as far as Case features are concerned.

6. CONCLUSION

In this paper, a more systematic analysis of the topic structure of modern Chinese is carried out within the framework of the minimalist program. The analysis concludes that there is no internal topic structure in modern Chinese. No matter whether it is a base-generated topic sentence or a movement-generated topic sentence, the topic is essentially located at the left periphery of the sentence, checking the [+Topic] feature. In the CP phase, the topic head inherits the topic feature of C. Multiple topics are essentially the result of topic features being inherited multiple times. The analysis in this paper fully demonstrates that the analytic tools provided by the minimalist program are effective in analyzing topic sentences in Chinese. The analysis uses fewer concepts and operations to unify various types of topic sentences, which is consistent with both the basic tenets of the minimalist program and the linguistic facts of Chinese. Moreover, through recourse to feature inheritance, this paper can maintain the basic viewpoints of phase theory as well the split-CP hypothesis.

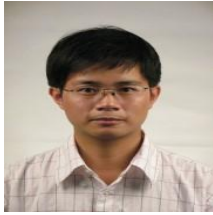
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REFERENCES

- [1] Bailyn, John. 2012. *The Syntax of Russian*. Cambridge: Cambridge University Press.
- [2] Belletti, Adriana. 2004. Aspects of the low IP area. In *The structure of CP and IP. The Cartography of Syntactic Structures*, Volume 2, ed. Luigi Rizzi, 16–51. New York: Oxford University Press.
- [3] Chao, Yuan Ren. 1968. *A Grammar of Spoken Chinese*. Berkeley and Los Angeles: University of California Press.
- [4] Chomsky, Noam. 1981. *Lectures on Government and Binding*. Dordrecht: Foris.
- [5] Chomsky, Noam. 1986. *Knowledge of Language: Its Nature, Origin and Use*. New York: Praeger.
- [6] Chomsky, Noam. 1995. *The Minimalist Program*. M.I.T., Cambridge, Mass.: MIT Press.
- [7] Chomsky, Noam. 2000. Minimalist inquiries: The framework. In R. Martin, D. Michaels & J. Uriagereka(eds.), *Step by step: Essays on Minimalist Syntax in Honor of Howard Lasnik*, (pp. 89-155). Cambridge, Mass.: MIT Press.
- [8] Chomsky, Noam. 2001. Derivation by phase. Kenstovicz, M. (ed.), *Ken Hale: A Life in Language*, Cambridge, MA: MIT Press, 1-52.
- [9] Chomsky, Noam. 2004. Beyond explanatory adequacy. Belletti, A. (ed.), *Structures and Beyond*, Oxford: Oxford University Press, 104-131.
- [10] Chomsky, Noam. 2005. Three factors in language design. *Linguistic Inquiry* 36, 1-22.
- [11] Chomsky, Noam. 2008. On phases. C. Otero, R. Freidin& M.-L. Zubizarreta (eds.), *Foundational Issues in Linguistics*, Cambridge, Mass.: MIT Press, 133- 166.
- [12] Comrie, Bernard. 1981. *Language Universals and Linguistic Typology*. The University of Chicago Press.
- [13] Grohmann, Kleanthes K. 2003. *Prolific Domains. On the Anti-Locality of Movement Dependencies*. Amsterdam: John Benjamins.
- [14] Huang, C. -T. James. 1982. *Logical Relations in Chinese and the Theory of Grammar*. PhD dissertation.
- [15] Huang, C. -T. James. 1987. Remarks on Empty Categories in Chinese. *Linguistic Inquiry* 18:321-337.
- [16] Kayne, Richard. 1994. *The Antisymmetry of Syntax*. Cambridge, MA: MIT Press.
- [17] Li, C., & Thompson, S. A. {1976}. Subject and topic: A new typology. In C. Li (Ed.), *Subject and Topic* (pp. 457-489). New York: Academic Press.
- [18] Nunes, Jairo. 2004. *Linearization of Chains and Sideward Movement*. Cambridge, MA:MIT Press.
- [19] Paul, Waltraud. 2002. Sentence-internal Topics in Mandarin Chinese: The Case of Object Preposing. *Language and Linguistics* 3: 695-714.
- [20] Paul, Waltraud. 2015. *New Perspectives on Chinese Syntax*. Berlin/Munich/Boston: De Gruyter Mouton.
- [21] Pereltsvaig, A. 2007. *Copular Sentences in Russian: A Theory of Intra-clausal Relations*. Dordrecht, the Netherlands: Springer.
- [22] Rizzi, Luigi. 1997. "The fine structure of the left periphery." *Elements of Grammar: A Handbook of Generative Syntax*. Ed. Liliane Haegeman. Dordrecht: Kluwer. 281-337.
- [23] Shyu, Shu-ing. 1995. *The Syntax of Focus and Topic*. Dissertation. University of Southern California, Los Angeles.
- [24] Wen Binli. 2002. *Introduction to Contemporary Syntax*. Beijing: Foreign Language Teaching and Research Press.
- [25] Wen, Binli and Tian, Qilin. 2011. The phase-based movement analysis of possessive topic constructions. *Modern Foreign Languages* (4):331-338
- [26] Xu Liejiong and Liu Danqing. 2007. *Structure and Function of Topics*. Shanghai: Shanghai Education Press.
- [27] Xu Liejiong. 2009. *Generative Grammar: Standard theory to Minimalist Program*. Shanghai: Shanghai Education Press.
- [28] Xu Liejiong and D. Terence Langendoen. 1985. Topic Structures in Chinese. *Language* 61(1): 1-27.
- [29] Zhang, Niina. 2001. Object shift in Mandarin Chinese. *Journal of Chinese Linguistics* 28:201-246.

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