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Chinese-style topics as indexicality

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‘Topic’ is one of the most studied and the least understood subjects in Chinese linguistics. One major problem is the so-called ‘Chinese-style topics/ dangling topics’. Shi (2000) was the first to establish a typology of Chinese-style topics. Later studies were primarily concerned with the validity of his typology (Huang & Ting 2006; Pan & Hu 2002, 2008) and with how Chinese-style topics, if they exist, are semantically licensed (Hu & Pan 2009). More problematic and less discussed is the question as to how Chinese-style topics are syntactically derived. Based on previous studies and new tests, I argue that Chinese-style topics do exist, although not only in Chinese and not all Shi’s six types are Chinese-style topics. I only identify Shi (2000)’s types 3 and 4 as Chinese-style topics, contrary to the conclusion of all previous studies. Furthermore, I argue that the Chinese-style topics which I identify share properties which non-Chinese-style topics do not have, namely Chinese-style topics necessarily or preferably stand before other topics and do not show Weak Crossover and Relativized Minimality effects. To explain these properties, I adopt Giorgi (2010)’s Indexicality Hypothesis and propose that Chinese-style topics, which have the interpretable [*i*Deictic] feature, sit at the specifier of the C-SpeakerP at the leftmost layer of the CP. This approach can shed new light on the famous dichotomy, that of topic-prominent languages vs. subject-prominent languages (Li & Thompson 1976).

Keywords: Chinese-style topic, Weak Crossover, Relativized Minimality, Indexicality Hypothesis, C-SpeakerP

‘Topic’ is one of the most studied and the least understood subjects in Chinese linguistics. On the one hand, it is defined differently by different researchers. For example, while Li & Thompson (1981: 15) adopt a semantic definition in terms of ‘aboutness’, Shi (2000: 386) gives a syntax-based definition. On the other hand, the definition the researcher adopts can influence her analysis. For instance in the generative framework, Xu & Langendoen (1985) suggest that Chinese topic structures should be defined semantically and are not formed by movement, but Shi (2000) argues for movement. Huang, Li & Li (2009: 207) present a compromise position:

the topics related to a gap in the comment clause are derived by movement while those with no gap are base-generated. Another major problem is the so-called ‘Chinese-style topics/ dangling topics’,¹ first pinned down by Chafe (1976) and followed recently by Shi (2000), Huang & Ting (2006), Pan & Hu (2002, 2008) and Hu & Pan (2009). Shi (2000) was the first to establish a typology of Chinese-style topics:

Type 1

- (1) *Tamen, wo kan ni, ni kan wo.*
 PRO².3.PL PRO.1.SG look PRO.2.SG PRO.2.SG look PRO.1.SG
 ‘They look at each other.’
- (2) *Tamen, da yu chi xiao yu.*
 PRO.3.PL big fish eat small fish
 ‘They act according to the law of the jungle.’

Type 2

- (3) *Tamen, shei dou bu lai.*
 PRO.3.PL who all NEG come
 ‘None of them are coming.’

Type 3

- (4) *Na chang huo, xing kui xiaofangdui lai de kuai.*
 DEM CL fire fortunately fire brigade come DE fast
 i. ‘As for that fire, fortunately the fire brigade came quickly, (otherwise)...’
 ii. ‘At the time of that fire, fortunately the fire brigade came quickly, (otherwise)...’

Type 4

- (5) *Zhe jian shiqing ni bu neng guang mafan yi ge ren.*
 DEM CL matter PRO.2.SG NEG can only bother one CL person
 ‘As for this matter, you cannot just bother one person.’

1. In the literature, both terms are used as alternatives. In the following discussion, I will use only Chinese-style topics, because it is in particular in Chinese and in Chinese linguistics that this construction has been discussed in detail. By no means have I assumed that Chinese-style topics exist only in Chinese, as will be shown in the following discussion.

2. The abbreviations used in this article are: 1/2/3 ‘first/second/third person’, ACC ‘accusative’, ART ‘article’, ASP ‘aspect’, AUX ‘auxiliary’, CL ‘classifier’, COMP ‘complementizer’, DAT ‘dative’, DEM ‘demonstrative’, EXCLAM ‘exclamation’, FUT ‘future tense’, GEN ‘genitive’, NEG ‘negative’, NOM ‘nominative’, PART ‘participle’, PAST ‘past tense’, PL ‘plural’, POSS ‘possessive’, PRO ‘pronoun’, PTCL ‘particle’, REL ‘relativizer’, SG ‘singular’.

Type 5

- (6) *Na zhong douzi, yi jin sanshi kuai qian.*
 DEM CL beans one CL thirty CL money
 ‘One catty of that kind of beans is thirty dollars.’

Type 6

- (7) *Wu-jia Niuyue zui gui.*
 thing-price New York most expensive
 ‘The price of things is the highest in New York.’

Later studies were primarily concerned with the validity of his typology (Huang & Ting 2006; Pan & Hu 2002, 2008) and with how Chinese-style topics, if they exist, are semantically licensed (Hu & Pan 2009). There seems to be no consensus for the first question yet. More problematic and less discussed is the question as to how Chinese-style topics are syntactically derived. Based on previous studies, I argue that Chinese-style topics do exist, although not only in Chinese and not all Shi’s six types are Chinese-style topics. I only identify Shi (2000)’s types 3 and 4 as Chinese-style topics, contrary to the conclusion of all previous studies. Furthermore, I argue that the Chinese-style topics which I identify, i.e., types 3 and 4, share properties which non-Chinese-style topics do not have, namely Chinese-style topics necessarily or preferably stand before other topics and do not show Weak Crossover and Relativized Minimality effects. To explain these properties, I adopt Giorgi (2010)’s Indexicality Hypothesis and propose that Chinese-style topics, which have the interpretable [*i*Deictic] feature, sit at the specifier of the C-SpeakerP at the leftmost layer of the CP. Of particular interest here is a new insight concerning Chinese-style topics and their having greater semantic/ pragmatic scope than other topics. This is because they are C-SpeakerP constituents which occupy the leftmost periphery of an utterance, given that they have deictic features that anchor them not only in the world of discourse but also in the real world. This is also relevant to our understanding of Chinese-style topics as a discursive device and crucially also as a discursive device for the speaker to select their perspectives. Furthermore, this approach can shed new light on the famous dichotomy, that of topic-prominent languages vs. subject-prominent languages (Li & Thompson 1976).

In Section 1, I define ‘topic’ in semantic terms, i.e., a topic is something that the comment is about. In Section 2, I argue that Chinese-style topics, as a particular type of topic, should satisfy the semantic aboutness condition given in the definition of topic in Section 1 and thus, in order to be distinguished from other types of topics, Chinese-style topics should be defined in morphosyntactic terms. More importantly, the morphosyntactic properties of Chinese-style topics should

not be ascribed to more general principles at work at other levels of the language in question. In Section 3, after reviewing previous studies on Chinese-style topics (Shi 2000; Huang & Ting 2006; Pan & Hu 2002, 2008; Hu & Pan 2009), I propose four new tests: *ne/shuodao*-test, deletability, types of NPs/DPs and relativization, which lead to the conclusion that only types 3 and 4 of Shi (2000)'s six types are Chinese-style topics. In Section 4, I propose a new derivation for Chinese-style topics, based on Giorgi (2010)'s Indexicality Hypothesis. The last section concludes this study.

1. Topic: definition and properties

By 'topic' I mean the constituent which "identifies the entity or set of entities under which the information expressed in the comment constituent should be stored in the common ground content" (Krifka 2007:41; Krifka & Musan 2012:28), for example:

(8) *Mary, I saw her yesterday.*

Mary in (8) is the topic, while *I saw her yesterday* is the comment clause.³

This definition reflects the naïve speakers' intuition. Put in simpler terms, a topic is something that the comment is about. The 'aboutness-based' definition of topic is also adopted by many linguists, including Kuno (1972), Gundel (1974, 1985, 1988), Dik (1978), Reinhart (1981) and Lambrecht (1994). I do not think the fact that the aboutness definition does not say anything about the syntactic properties of the topic is a problem because even if the topic can be coded formally (Creissels 2006: §28; Mereu 2009; Krika & Musan 2012: §6), formal marking is neither sufficient nor necessary for the identification of topics. Even the so-called topicalizers do not mark all topics: for example, in Japanese, *wa*-less topics do exist (Takita 2014). The initial position in many languages is the default position for topics (Gundel & Fretheim 2006:186), but the initial position alone is not a sufficient condition (Prince 1998). The variety of topic marking at the morphosyntactic level renders all attempts to define topics in morphosyntactic terms futile.

Note that it is important not to limit topics in Chinese to unmarked NPs, as in Shi (2000:386).⁴ This is only because Chinese is an isolating language which

3. In clear cases of topicalization such as (8), topic and comment are suitable labels, but in less clear cases, they are problematic, because using them without proving that there are indeed a topic and a comment begs the question. In the following discussion, if necessary, I use more neuter terms 'initial element' and 'nuclear clause' to refer to doubtful topics and comments.

4. In fact, Shi's definition is not restricted to unmarked NPs only, but NPs and their equivalent, without specifying what he means by 'equivalent'. This should include DPs and pronouns, but

has almost no morphology at all. Zero-marking is just the normal case, no matter whether it be for topics or for other categories. The condition of unmarkedness is neither sufficient nor necessary for a precise definition of topic.

2. Chinese-style topic: definition

It seems that Chafe (1976) was the first to distinguish English-style topics and Chinese-style topics,⁵ without giving a precise definition. Later studies (Shi 2000: 388; Pan & Hu 2008) assume that Chinese-style topics are topics which are not selected or subcategorized by the predicate or the verb in the comment and which are not related to a syntactic position in the comment.

If we agree that topics can only be defined in semantic terms and that the Chinese-style topic is one type of topic, we have to agree that Chinese-style topics must satisfy the semantic condition which is satisfied by topics in general, i.e., a topic is something that the comment is about. Furthermore, if Chinese-style topics are indeed a special type of topics different from other types of topic, especially from English-style topics, they must have formal properties (phonetic, phonological, morphosyntactic, etc.) that other kinds of topics do not have. The syntax-based definition of the Chinese-style topic given above highlights two properties particular to Chinese-style topics: they are not selected or subcategorized by the predicate or the verb in the comment and they are not related, formally or semantically, to a syntactic position in the comment. These properties are sufficient and necessary for the identification of Chinese-style topics, even if Chinese-style topics can have other properties that distinguish them from other types of topics, as I will later show.

Previous studies implicitly, but wrongly, assume that Chinese-style topics must be zero marked. That Chinese-style topics should not or cannot be formally marked is neither a sufficient condition nor a necessary condition for the definition of Chinese-style topics. First of all, it is possible to use *shuodao* lit. ‘mentioning,

excludes other types of topics, for example, VPs:

- (1) *Youyong, wo ke bu hui.*
 swim PRO.1.SG on the contrary NEG can
 ‘As for swimming, on the contrary, I cannot.’

One may argue that *youyong* ‘to swim’ is nominalized here. This assumes that in Chinese verbs have non-nominalized forms and nominalized forms, but this has not received consensus in Chinese linguistics, as far as I know.

5. As a historical note, Chafe (1976) is concerned with the cognitive considerations of six notions as listed in the title (i.e., givenness, contrastiveness, definiteness, subjects, topics and point of view). His discussion on topics is neither central to his study nor exhaustive wrt to a particular language.

talking about” (and some other synonymous expressions) to introduce topics in Mandarin,⁶ even if this may make the sentence less ‘Chinese’:

- (9) (*Shuodao*) *zhe jian shiqing ni bu neng guang mafan yi*
 talking about DEM CL matter PRO.2.SG NEG can only bother one
ge ren.
 CL person
 ‘As for this matter, you cannot just bother one person.’

Xu & Langendoen (1985: 19) observe that “Chinese contains ‘English style’ topic structures ... and that English contains ‘Chinese style’ topic structures,” but they (and others) have never taken (10) into consideration in the study of Chinese-style topics:

- (10) *As for this matter, you cannot just bother one person.*

According to the above definition of the Chinese-style topic, (*as for*) *this matter* is indeed a Chinese-style topic. The reason why (10) and similar constructions in English are not studied in terms of Chinese-style topics is certainly not that *this matter* is related to a syntactic position in the comment *you cannot just bother one person*, but that *this matter* is formally marked with *as for*, contrary to Chinese-style topics in Chinese, which normally have no formal marking at all. However, zero-marked Chinese-style topics do exist in English (Lambrecht 1994: 193):

- (11) (Talking about how to grow flowers) *Tulips, you have to plant new bulbs every year.*
 (12) (Lecturer in an introductory linguistic course) *Other languages, you don’t just have straight tones like that.*

Lambrecht calls such constructions “unlinked topic construction,” i.e., “detached lexical noun phrases which have no anaphoric link with a pronominal topic expression inside the clause” (Lambrecht 1994: 193), just like what we would call Chinese-style topics. English differs from Chinese in that in English “this construction oc-

6. One may object that *shuodao* is not a grammaticalized topicalizer. I totally agree with this. The point I want to make here is not that *shuodao* is a topicalizer, but that it can indeed be used to introduce topics. I am not pinning down its grammatical category, but it seems reasonable to accept that one of its functions is to introduce topics.

A reviewer also points out that if (6) and (7) are translated into English by using topic-comment configuration, such as “As for that kind of bean, one catty costs thirty dollars” and “As for the price of things, it is the highest in New York.,” then it seems that there is nothing special about the original Chinese topic pattern, and arguably, (6) and (7) should not be treated as Chinese-style topics, which supports the position of the present study.

curs frequently in spontaneous spoken language but is not considered acceptable in writing” (Lambrecht 1994: 193) while in Chinese it can appear in writing.

Therefore the zero-marking of Chinese-style topics in Chinese (and in other languages) is not an intrinsic property of Chinese-style topics. In my opinion, in order to see whether Chinese-style topics in Chinese are fundamentally different from other types of topics in Chinese and from Chinese-style topics in other languages, we need to see whether Chinese-style topics in Chinese have formal properties (phonetic, phonological, morphosyntactic, etc.) that do not exist in other types of topics in Chinese and do not exist in Chinese-style topics in other languages. More importantly, these properties should not be due to more general principles at work at other levels of the language in question. They should be and must be particular to Chinese-style topics only. Given that Chinese is an isolating language which has almost no morphology at all, zero-marking is just the normal case in general, whether for English-style topics or Chinese-style topics in Chinese. This isolating morphology is the general principle which has no necessary connection with topic marking, but is only a more general principle at work at almost every level of Chinese. Saying that zero-marked topics — Chinese-style topics or non-Chinese-style topics — are a new category seems no more reasonable than saying that zero-marked subjects or objects are new types of subjects or objects. Thus, the zero-marking of Chinese-style topics in Chinese should not be the distinctive feature that distinguishes Chinese-style topics in Chinese from those in other languages. Note that zero-marked topics are also found in other isolating languages, for example in Thai (Smyth 2002: 117) (13) and in Malinke (Creissels 2009: 163–164) (14):

- (13) *aahāan thūi lǎa raw ɕa kin phrũŋ nūi*
 food REL remain PRO.1.PL FUT eat tomorrow
 ‘The food that is left over, we’ll eat it tomorrow.’

- (14) *Wùlú hàtò_i n d’ á_i hàga*
 dog rabid 1.SG ASP 3 kill
 ‘The rabid dog, I have killed it.’

Having abandoned the idea that Chinese-style topics must be zero-marked, we must look for other properties which separate Chinese-style topics from other types of topics. In fact, the question of whether Chinese-style topics exist at all is still debatable.

3. Chinese-style topics: to be or not to be

3.1 Previous analyses

Based on his own typology given in (1)–(7), Shi (2000) concludes that the third type is the only Chinese-style topic, while Huang & Ting select the fourth type. Others are either subjects or adjuncts.

Table 1. Shi (2000) vs. Huang & Ting (2006)

types	Shi (2000)	Huang & Ting (2006)
1.	Subject	Subject
2.	Subject	Subject
3.	NP topic or NP adverbials	NP adverbials
4.	PP-reduced form	NP topics or PP-reduced form
5.	Subject	Subject
6.	Subject	Subject

The first type has two sub-types. In the first sub-type

- (15) *Tamen, wo kan ni, ni kan wo.*
 PRO.3.PL PRO.1.SG look PRO.2.SG PRO.2.SG look PRO.1.SG
 ‘They look at each other.’

wo ‘I’ and *ni* ‘you’ are not real pronouns which must have an antecedent in the context. Shi analyzes the sentence-initial element as the subject and the following proposition as an idiomatic expression which “does not have the interpretation or the functions of a sentence” (Shi 2000: 389). Pan & Hu (2002, 2008) not only notes that Shi does not define what an idiomatic expression is, but also gives similar examples with *wo* and *ni* without the nuclear clause being an idiomatic expression (Pan & Hu 2008: 1974):

- (16) *Tamen, ni zhize wo bu dui, wo baoyuan ni*
 PRO.3.PL PRO.2.SG blame PRO.1.SG NEG right PRO.1.SG complain PRO.2.SG
bu hao, ni bu fu wo, wo ye
 NEG good PRO.2.SG NEG convince PRO.1.SG PRO.1.SG also
bu fu ni.
 NEG convince PRO.2.SG
 ‘They blame each other and make complaints about each other, and none of them would be convinced by the other.’

Huang & Ting (2006) show that the nuclear clause of the first subtype can have aspect markers such as progressive *zai* and conclude that the idiom chunks behave like regular predicates rather than comments.

I agree with Pan & Hu on the vagueness of Shi's use of idiomatic expression. Understood in a simple way, idiomatic expressions are fixed expressions, where 'fixed' means that prototypical idiomatic expressions cannot be changed at all or only marginally changed (de Groot 2012:§13.5).⁷ However, the two propositions of the nuclear clause in (15) can be inverted:

(17) *Tamen, ni kan wo, wo kan ni.*

Admitting that the nuclear clause of (15) is indeed an idiomatic expression, it is still unclear why idiomatic expressions cannot be comment clauses or predicates. For example, in English, idiomatic expressions can function both as predicates and as comments:

(18) *(As for) Mary, she puts/put/is putting her foot in it.*⁸

In (18) the idiomatic expression *put her foot in it* can express different tenses, thus functioning as a normal predicate, and it is (part of) the comment with regard to *Mary*, which is the topic. Following Shi and Huang & Ting's reasoning, there cannot be topicalization in (18), as in (15). However, there is indeed a topic-comment structure in (18).

As for the second subtype:

(19) *Tamen, da yu chi xiao yu.*
 PRO.3.PL big fish eat small fish
 'They act according to the law of the jungle.'

Shi (2000:389) notes that "neither the lexical items used in these strings nor their order can be altered,"⁹ thus there is another idiomatic expression here. He further uses *zhuanmen* "specially" to test the subjecthood of the initial element, because *zhuanmen* occurs only between the subject and the predicate. Pan & Hu (2002, 2008) give examples with Chinese-style topics but which are compatible with *zhuanmen*. Instead, they resort to the set-member relation between the topic and

7. "These are idiomatic in the sense that their meaning is noncompositional, requiring a separate lexical rule analogous to the rule that gives the sense of a word..." (Chomsky 1980/2005:149). Besides, Chomsky's discussion on idiomatic expressions are still enlightening and enriching, though written almost 40 years ago.

8. 'Put one's foot in it' means to offend someone greatly.

9. If the criterion of fixed order is retained for (15), then it should not be an idiomatic expression, given (17).

the comment to license the topic. As against this idea, Huang & Ting (2006) show that the single set cannot satisfy the set-member relation between the sentence-initial element and the nuclear sentence:

- (20) *Zhangsan, da yu chi xiao yu.*
 ‘Zhangsan bullies the weaker.’

Again, I think that Shi and Huang & Ting’s reasoning is untenable, because as in the first subtype, whether or not there is an idiomatic expression in the sentence cannot be determinative of the nature of the sentence-initial element. What concerns us is whether there is a relation of topic-comment, but we do not have to care about the status of the comment, whether it is a normal predicate or an idiomatic expression. Topic and comment are mutually interrelated rather than one determining or being determined by the other.

The second type of Shi’s Chinese-style topics has a pronoun in the sentence-initial position followed by a *wh*-word:

- (21) *Tamen, shei dou bu lai.*
 PRO.3.PL who all NEG come
 ‘None of them are coming.’

According to Shi, the *wh*-word, i.e., *shei* ‘who’, is more like a quantifier than an ordinary NP, thus he translates *tamen shei* as ‘none of them’. Pan & Hu (2002, 2008), who call into question Shi’s reluctance to recognize that quantifiers can function as the subject, propose that it is precisely the *wh*-word that should be the subject of the sentence. Hence the sentence-initial element, *tamen*, is the topic.

For the third type, Shi recognizes topicalization.

- (22) *Na chang huo, xingkuai xiaofangdui lai de kuai.*
 DEM CL fire fortunately fire brigade come DE fast
 i. ‘As for that fire, fortunately the fire brigade came quickly, (otherwise)...’
 ii. ‘At the time of that fire, fortunately the fire brigade came quickly, (otherwise)...’

But he adds that the nuclear clause is only part of the comment with another clause omitted. Thus the sentence-initial topic is related more to the omitted clause than to the nuclear sentence. Pan & Hu (2002, 2008) give examples where an omitted clause cannot license the sentence-initial element. Thus the recoverability analysis does not necessarily hold. Instead, Pan & Hu resort to a cause-effect relation to explain the semantic relation between the sentence-initial element and the nuclear sentence, which explanation Huang & Ting (2006) attack by means of counterexamples. Instead, they consider the sentence-initial element as an adverbial, because it is not subcategorized by the verb.

Besides the arguments given above against the recoverability analysis, I think that it is fundamentally untenable to resort to the notion of fullness when discussing sentences, because what is a complete sentence is simply undefinable. Intuitively, a complete sentence is at least ‘semantically complete’. However, in logical terms this intuition proves to be untenable. Imagine that there is a sentence *S* which refers to all the entities in the universe where the sentence is pronounced, say 3 entities, *a*, *b* and *c*:

$$S = \{a, b, c\}$$

S should be semantically complete. However, now that *S* itself is also an entity in the universe, *S* that comprises of *a*, *b* and *c* is not semantically complete, because it lacks *S* itself. In other words, in order for *S* to be complete, *S* must include itself too:

$$S' = \{a, b, c, S\}$$

However, in this case, *S'* is not equal to *S*, because $S' = \{a, b, c, S\}$ and $S = \{a, b, c\}$. This is an instance of Russell’s paradox. Therefore, it is impossible to give an infallible definition of ‘semantically complete’. To some extent, all sentences are incomplete. However, this certainly does not mean that speaking is impossible: speakers and listeners can decide, in a quite arbitrary manner, whether a sentence is semantically complete or not. In other words, psychologically speaking, every sentence can be semantically complete (and none can be so).

It seems also impossible to consider the question in syntactic terms. The simplest test consists in seeing whether the sentence is still complete if the sentence-initial element is omitted. As a native Chinese-speaker I can perfectly accept (23) as a syntactically complete sentence:

- (23) *Xingkuai xiaofangdui lai de kuai.*
 fortunately fire brigade come DE fast
 ‘Fortunately the fire brigade came quickly!’

Furthermore, Huang & Ting’s reasoning is even more problematic: they analyze the sentence-initial element as an adverbial but not as a topic according to non-subcategorization. In fact the Chinese-style topic, by definition, is simply not subcategorized by the verb. In other words, it is impossible to distinguish adverbials and Chinese-style topics in terms of non-subcategorization.¹⁰

10. Note that Haiman (1978) identifies conditionals as topics. In a sense, adverbial clauses, especially temporals and conditionals, are topic constructions since they prepare the reader to more easily interpret the upcoming clause (mental staging or framing function). This means that more generally than is considered, adverbials can indeed be topics. A reviewer also points out that in previous studies, some sentential adverbs, such as *generally*, *fortunately*, are analyzed as topics, too.

For the fourth type, Shi's analysis is that the sentence-initial element is a PP adverbial with a covert preposition, for example, *wei* "for", and (24) is derived from¹¹ (25):

(24) *Zhe jian shiqing ni bu neng guang mafan yi ge ren.*
 DEM CL matter PRO.2.SG NEG can only bother one CL person
 'As for this matter, you cannot just bother one person.'

(25) *Ni wei zhe jian shiqing bu neng guang mafan yi ge ren.*
 PRO.2.SG for DEM CL matter NEG can only bother one CL person
 'You cannot just bother one person about this matter.'

Besides the examples given by Pan & Hu (2002, 2008), which preposition-dropping analysis cannot account for, Huang & Ting show that Shi's analysis cannot apply to other similar constructions:

(26) *(*Wei*) *zhe jian shiqing Zhangsan dajia le.*
 for DEM CL matter Zhangsan fight ASP
 'For this matter, Zhangsan fought.'

In spite of this, Huang & Ting still agree with Shi's preposition-dropping analysis, but unlike him propose that the sentence-initial element can be generated by movement and thus should not be considered a Chinese-style topic.

I think that these analyses have confused the sentence-initial element's pragmatic role and its morphological marking. As has been said above, there is no universal formal marking for topics. It is impossible to determine whether the sentence-initial element is a topic by its morphology alone. Saying that the sentence-initial element is a reduced PP adverbial with a covert preposition is to recognize that it is not subcategorized by the verb, so a reduced PP adverbial can be a Chinese-style topic a priori.

Huang & Ting's movement analysis, as an argument in favor of non-topic analysis of the sentence-initial element, is not decisive. In fact, topic constructions in Chinese can either be based-generated or derived by movement. It has been shown that English-style topics in Chinese occupy [Spec, CP] and are subject to the Strong Crossover Condition (Huang 1982) and to the Empty Category Principle (Chen 1995) and thus should be generated by movement. On the other hand, Xu & Langendoen (1985) observe that topicalization in Mandarin is not subject to the subjacency condition:

11. Or 'based on', in more neutral terms.

- (27) *Zhe ben shu_i wo renwei e'_i e_j du guo e_i de ren_j bu duo.*
 DEM CL book PRO.1.SG think read ASP REL man NEG many
 *‘This book, I think there are not many people who read.’

They thus conclude that e_i in the comment clause should be interpreted as a non-overt pronominal, rather than as a variable. Its antecedent is the coindexed topic (i.e., *zhe ben shu* ‘this book’), which is externally merged rather than internally merged. Thus, movement, at least for the time being, is neither a sufficient nor a necessary condition for the identification of Chinese-style topics. See Section 4 for more discussion.

(28) is Shi’s fifth type:

- (28) *Na zhong douzi, yi jin sanshi kuai qian.*
 DEM CL beans one CL thirty CL money
 ‘One catty of that kind of beans is thirty dollars.’

Based on the fact that a topic must be definite, but a subject does not have to be, Shi thinks that it is more reasonable to analyze the initial element as a subject than as a topic. He also resorts to the test of emphatic *shi*, which cannot occur in front of the topic or after the verb, to support the above analysis. Pan & Hu (2002, 2008) give counterexamples to the two tests and propose the set-member account again, where the sentence-initial element is the set and the nuclear sentence expresses the member.

Huang & Ting (2006)’s point of view is simply that ‘even though Shi’s test for distinguishing subject and topic based on *shi* ‘be’ does not hold, his theory fares better in accounting for empirical facts than the one proposed by Pan & Hu.’

Shi’s definiteness test is problematic, because definiteness is too vague a notion and can be further decomposed into specificity and genericity at the least (Lyons 1999). Importantly, in Chinese, generic indefinite NPs¹² can indeed be topics:

- (29) *Yi ge ren, ruguo pingshi bu zhuyi duanlian shenti, kending rongyi shengbing.*
 one CL person if usually NEG care to take exercise body certainly
 easily be ill
 ‘A person, if he does not usually do exercises, he is easily ill.’

12. A reviewer also points out that an indefinite NP can also be the topic, and this kind of topics may have a cardinal reading:

- (1) *Yi pian lunwen, wo hai keyi yingfu.*
 one CL paper PRO.1.SG still can handle
 ‘One paper, I can still handle.’ (More than one, there will be too much...)

Note that this sentence is ambiguous, in that besides the reading given above, it can also mean ‘One paper, I can still handle, but as for a book, I cannot.’ Orally, the prosody can disambiguate.

Reinhart (1981) proposes that topics only have to be referential, thus specific indefinites can be topicalized. Shi's definiteness condition is too vague to identify the sentence-initial element as a subject rather than as a topic.

For the sixth type, reproduced as (30)

- (30) *Wu-jia Niuyue zui gui.*
 thing-price New York most expensive
 'The price of things is the highest in New York.'

Shi uses two tests: adverbs like *yiding* "certainly" and *jingchang* "often" which can only occur between the subject and the predicate but not before the subject, and modals like *hui* "will" which cannot occur before the subject. The distribution of such adverbs and modals proves at most that the sentence-initial element is a subject or a non-Chinese-style topic. Pan & Hu (2002, 2008) give examples against the adverb test, without mentioning the modal test. They still resort to the set-member relation to explain the relation between the sentence-initial element and the nuclear clause. Huang & Ting (2006) give counter-examples against this set-member account and return to Shi's analysis.

To summarize, Shi and Huang & Ting's analyses only recognize some of the six types as Chinese-style topics while the other types are either subjects or adjuncts. Contrary to them, Pan & Hu see all of them as Chinese-style topics. In my opinion, Shi and Huang & Ting make at least two mistakes in their analysis. First, they assume that sentence-initial elements are either topics or subjects/adjuncts, but in fact they can be both. Since the topic appertains to the information structure, it does not necessarily correspond to any grammatical function a priori. The information structure (i.e., topic, focus, etc.) and the grammatical functions (i.e., subject, object, etc.) can, but not necessarily, overlap. A topic is not by default an argument or an adjunct. Huang & Ting, even though they did not pin down this point, seem to agree with me implicitly. Second, and in relation to the first mistake, Shi and Huang & Ting wrongly insist on morphological marking of topics. To repeat the point once again, there seems to be no universal morphological marking for topics. Having recognized this, one would not see a PP adverbial with a covert preposition for the fourth type, because whether there is a preposition before the topic cannot determine or undermine the status of the topic in any case. Topicness and the use of the preposition are irrelevant.

Given the above misunderstanding, Shi and Huang & Ting's conclusions are dubious. This, though, does not automatically validate Pan & Hu's conclusion. I now propose further tests which clarify the status of the sentence-initial elements.

3.2 New tests and a new proposal

The first test proves that all the sentence-initial elements are topicalizable while the last three tests prove that some of the sentence-initial elements are more like adjuncts than arguments, i.e., are more likely not to be subcategorized by the verb and thus should be considered Chinese-style topics.

First, even if there is no grammaticalized topicalizer in Mandarin, *ne* can sometimes mark the topic (Lin 1984),¹³ but, in case there are more than one topics in the sentence, it can only mark one topic and often (though not always) the highest of these (i.e., left-most in linear terms):

- (31) *Shuiguo (ne), xiangjiao (*ne) zui haochi.*
 fruit NE banana NE most delicious
 ‘As for fruits, bananas are the most delicious.’

ne itself cannot validate or license a topic, but can only force or reinforce the topic reading. The element marked with *ne*, if it can be interpreted correctly, is by default interpreted as a topic; if it cannot be interpreted at all, then no topic reading is possible.

- (32) **Shuiguo ne lisi hui jia le.*
 fruit NE Lisi go back home ASP
 *‘As for fruits, Lisi went home.’

(32) in Chinese like in English is gibberish. No topic-comment interpretation can be generated, in spite of *ne*.¹⁴

13. A reviewer points out that *ne* can also be used as a pause marker:

- (1) *Tanbai shuo ne, ...*
 frank speak NE
 ‘Frankly speaking, ...’
 (2) *Zhangsan renwei ne, ...*
 think NE
 ‘Zhangsan thinks...’

First of all, I totally agree with this reviewer on the multifunctionality of *ne*. This in no case undermines *ne*’s function of marking the topic. However, some native Mandarin speakers, including myself, feel that (1) and (2) are somewhat ‘slightly’ topicalized, at least more than without *ne*. The functionality of *ne* is far from being well understood. I leave this question for further research.

14. Note that this is not related to the non-grammaticalization of *ne*, because (32) in Japanese with *-wa* is also gibberish.

Besides, *ne* is often said to mark contrastive topics only, although contrastive topics are not incompatible with Chinese-style topics, because the very topic can be contrastive and Chinese-style at the same time. Note that the existence of contrastive topics is brought into question

For Shi's six types of Chinese-style topics, the initial elements, once marked with *ne*, naturally generate topic interpretation. This means that the initial categories are potential topics. It would be less judicial to deny their topicalizability, thus their potential topichood.

Another expression which can introduce topics in Chinese is *shuodao* "mentioning, talking about" (see above Section 2). Interestingly, *shuodao* is compatible only with some of Shi's six types:

(33) a. **Shuodao tamen/Lisi he Zhangsan*,¹⁵ *wo kan ni, ni kan wo.*

b. **Shuodao tamen/Lisi he Zhangsan, da-yu chi xiao-yu.*

(34) **Shuodao tamen/Lisi he zhangsan, shei dou bu lai.*

(35) *Shuodao na-chang huo, xingkui xiaofangdui lai de kuai.*

(36) *Shuodao zhe-jian shiqing, ni bu neng guang mafan yi-ge ren.*

(37) *Shuodao na zhong douzi, yi jin sanshi kuai qian.*

(38) *Shudoao wu-jia Niuyue zui gui.*

It can be seen that Shi's first two types cannot be introduced by *shuodao* while the other four types can. This may lead us to distinguish the first two types from the others in terms of topicalizability.

Second, given that the Chinese-style topic should not be selected or subcategorized by the predicate or the verb in the comment and are not related to a syntactic position in the comment, it behaves somewhat like an adjunct. By adjuncts I mean 'non-arguments', so typically they are syntactically optional elements and semantically modify their head (Haegeman 1994:40; Crystal 2003:11–12; Baker & Bengeveld 2012:146; Brown & Miller 2013:12). If so, Chinese-style topics, like adjuncts, can be deleted without the comment becoming an open proposition:

(39) *Tom worked in France for 2 years from 1980 to 1982.*

(40) (~~*As for*~~) *Tom, he worked in France during 2 years from 1980 to 1982.*

The deletion of one or all of the adjuncts in (39) would not transform *Tom worked* into an open proposition, just like the deletion of (*as for*) *Tom* in (40). It is worth noting, however, that this test yields different results when applied to the six types of the so-called Chinese-style topics:

recently (Titov 2013). If this is on the right track, *ne* does not mark contrastive topics only, but topics in general.

15. I here add *Lisi he Zhangsan* "Lisi and Zhangsan", because *shuodao* sometimes is less compatible with pronouns such as *tamen* "they, them".

- (41) a. *Famen, wo kan ni, ni kan wo.*
 b. *Famen, da-yu chi xiao-yu.*
- (42) *Famen, shei dou bu lai.*
- (43) *Na-chang huo, xingkui xiaofangdui lai de kuai.*
- (44) *Zhe-jian shiqing ni bu neng guang mafan yi-ge ren.*
- (45) *Na zhong douzi, yi jin sanshi kuai qian.*
- (46) *Wu-jia Niuyue zui gui.*

A native Mandarin speaker like me feels intuitively that type 1 (41) and type 6 (46) are clearly open propositions. Even if the second sub-type of type (1) (41.b) can be a complete sentence, it cannot have the idiomatic reading but means “Big fish eat small ones.” Type 2 (42) and type 5 (45) seem capable of standing alone but in fact something is indeed missing, though less clearly than for types 1 and 6. (42) means “Nobody is coming” (as opposed to the intended reading “None of them is coming”) and (45) means “One catty (of that thing) is thirty dollars” (as opposed to the intended reading “One catty (of that kind of beans) is thirty dollars”). On the contrary, type 3 (43) and type 4 (44) are perfectly complete sentences. This shows that, to some extent, the sentence-initial elements in types 1, 2, 5 and 6 (i.e., (41), (42), (45) and (46) respectively) are not readily deletable without the whole sentences becoming an open proposition; and that in the other examples, there are adjunct-like elements in that they are not obligatory. Thus types 3 and 4 (i.e., (43) and (44) respectively) are more likely to be Chinese-style topics than the other four types.

Third, it seems that not all types of NPs/DPs can be the sentence-initial elements in the six types of the so-called Chinese-style topics. In Table 2, I have systematically replaced the sentence-initial elements of the six types with five types of NPs/DPs (i.e., generic bare NPs, proper nouns, DPs with an overt demonstrative, pronouns and quantified indefinites), without changing the nuclear clauses.

Types 1 and 2 are alike: all kinds of NPs/DPs are allowed in the sentence-initial position; types 5 and 6 are less permissive: only generic bare NPs and proper nouns are possible, but always only have the generic reading; and types 3 and 4 are the most ‘fastidious’ because only DPs are possible. It has been noted that indefinite NPs, including bare NPs or quantified NPs, are often prohibited from the topic position in Chinese (Huang, Li & Li 2009: 294–295), unless they can be interpreted otherwise. It does not seem wrong to deduce that the more an element is topical, the less likely it is that it can be an indefinite NP, i.e., a bare NP or a quantified NP; and vice versa. Types 1 and 2 can easily accept bare NPs and quantified NPs in the sentence-initial position, thus are the least likely to be topic constructions. Types 5 and 6, which accept bare NPs but not quantified NPs, are thus more topical. Note

Table 2. Types of NPs/DPs of the sentence-initial elements in the six types of the so-called Chinese-style topics*,**

TYPES OF NPs/DPs	GENERIC BARE NPS	PROPER NOUNS	DPS [DP DEM N]	PRONOUNS	QUANTIFIED INDEFINITES
types of sentence-initial elements	e.g., <i>zhongguoren</i> 'Chinese persons'	e.g., <i>Zhangsan</i> , <i>Zhangsan he Lisi</i> 'Zhangsan and Lisi'	e.g., <i>na ge/xie/jige ren</i> 'that/those/those several person(s)'	e.g., <i>ta(men)</i> 'he/she/they'	e.g., <i>yi/san ge N</i> 'one/three N'
1.	√ (<i>Laoshimen</i> ... 'Teachers ...')	√ (<i>Zhangsan he Lisi</i> ...)	√ (<i>Na xie ren</i> ...)	√	√ (<i>Ji ge ren</i> ... 'Several persons ...') : specific definite reading only
2.	√ (<i>Yanyuanmen</i> ... 'Actors ...')	√ (<i>Zhangsan he Lisi</i> ...)	√ (<i>Na xie ren</i> ...)	√	√ (<i>San ge ren</i> ...) : specific definite reading only
3.	× (<i>*Huo</i> , ... 'Fire, ...')	N/A	√	N/A	× (<i>*Yi chang huo</i> ... 'A fire ...')
4.	× (<i>*Gongzuo</i> , ... 'Work, ...')	N/A	√	N/A	× (<i>Yi jian shiqing</i> ... 'One matter ...')
5.	√ (<i>Huanggua</i> ... 'Cucumbers ...')	√ (<i>Maotai</i> ... 'The Maotai wine ...'): generic reading only	× (<i>*/? Na ge/xie shuiguo</i> , ... 'That/those fruit(s) ...')	N/A	× (<i>*Yi/ji ge douzi</i> ... 'One/Several beans...')
6.	√ (<i>Huanggua</i> ... 'Cucumbers ...')	√ (<i>Maotai</i> ... 'The Maotai wine ...'): generic reading only	× (<i>*Na ge/xie shuiguo</i> , ... 'That/those fruit(s) ...')	N/A	× (<i>*Yi/ji ge douzi</i> ... 'One/Several beans...')

* 'N/A' here means that it is impossible to find suitable proper nouns (colon 2) and pronouns (colon 4) compatible with the nuclear clauses. I refrain from inventing similar examples with other nuclear clauses, because this may radically change the relation between the initial element and the nuclear clause, thus affect the acceptability judgement. As result, one may ask whether 'N/A' is a decisive proof, as a reviewer has pointed out. I recognize this dilemma, but it seems better to choose the lesser of two evils, i.e., N/A (instead of inventing controversial examples).

** Note that by [DP DEM N], I exclude DPS such as *na zhong N* 'that kind of N', because they are fundamentally different from *na ge/xie N* 'that/those N'. In *na zhong N*, but not [DP DEM N]. In other words, *zhong* is different from *ge* (i.e., a classifier) and *xie* (i.e., a plural morpheme), as it is a noun. In spoken Mandarin, it is possible to omit the classifier, *nei (ge) ren* 'that (CL) person', but it is never possible to omit *zhong*: *nei ren* can never mean *nei zhong ren*. *Xie* as a quantifier cannot be omitted either, but clearly this is different from *zhong*'s non-omittability, unless one recognizes *zhong* as a quantifier, too: a conclusion still more illogical than *zhong* as a classifier. I thank a reviewer for having raised the question.

- (53) *shei dou bu lai de [na ji ge ren]*
 who all NEG come REL DEM several CL person
 ‘the several persons none of whom are coming’
- (54) **(xingkui) xiaofangdui lai de kuai de [na chang huo]*
 fortunately fire brigade come DE fast REL DEM CL fire
 (See Huang, Li & Li 2009: 212)¹⁶
 Intended meaning: ‘the fire such that (fortunately) the fire brigade come quickly’
- (55) **ni bu neng guang mafan yi ge ren de [na jian shiqing]*
 you NEG can only bother one CL person REL DEM CL matter
 Intended meaning: ‘the matter such that you cannot just bother one person’
- (56) ?*yi jin sanshi kuai qian de [na zhong douzi]*
 one catty thirty CL money REL DEM CL bean
 (compare *sanshi kuai qian yi jin de na zhong douzi*)
 Intended meaning: ‘that kind of beans such that one catty is thirty yuan’
- (57) **Niuyue zui gui de [wujia]*
 New York most expensive REL price
 Intended meaning: ‘the price which is the highest in New York’

Still, types 1 and 2 can be relativized easily, while the others cannot or can be only marginally relativized. Even if this does not prove that there is undoubtedly a subject-predicate relation in types 1 and 2 or that there are indeed Chinese-style topics in the other four types, it is at least reasonable to infer that the sentence-initial elements in the last four types should not be subjects.

To summarize the four tests discussed above, the *ne/shuodao*-test shows that the sentence-initial elements of all the six types are topicalizable, i.e., potential topics, though the first two types are less topicalizable than the other four. Further tests show that types 1 and 2 are alike, 3 and 4 are alike and 5 and 6 are alike, in terms of deletability, types of NPs/DPs and relativization:

16. One reviewer wonders if the ungrammaticality of (54) is due to the fact that words like *xingkui* ‘fortunately’ are better used in direct speeches than in indirect speeches. However, as can be seen from (54), the sentence is still ungrammatical without *xingkui*, thus relativization seems to be the best explanation for its ungrammaticality.

Table 3. Tests on sentence-initial elements

	types 1 and 2	types 3 and 4	types 5 and 6
tests on sentence-initial elements			
deletion with the nuclear sentence becoming an open proposition	yes	no	(almost) yes
types of NPs/DPs	all	DPs	DPs and bare NPs
relativization	yes	no	hardly or no

Given this, my first conclusion is that the sentence-initial elements of the first two types should not be considered Chinese-style topics, given that they seem to be subcategorized by the verb. They are probably subjects, but due to lack of space I cannot analyze them in any further detail. My second conclusion is that the sentence-initial elements of types 3 and 4 should be considered Chinese-style topics, which I will analyze in greater detail later. My third conclusion is that the sentence-initial elements of types 5 and 6 are topicalized NPs which are part of another NP:

- (58) $NP_2 [_{NP1} N_1 t_{NP2}], \dots$
 Type 5: $[_{NP2} na\ zhong\ douzi] [_{NP1} yi\ jin\ t_{NP2}]^{17}$
 Type 6: $[_{NP2} wujia] [_{NP1} niuyue\ t_{NP2}]$

The bigger NP (i.e., NP_1) is subcategorized by the verb/predicate. Covertly, it has another NP (i.e., NP_2 , *na zhong douzi* for type 5 and *wujia* for type 6) as part of it, although NP_2 is overtly before NP_1 . N_1 modifies or qualifies NP_2 .¹⁸ This means that the sentence-initial element (i.e., NP_2) is necessarily not subcategorized by the verb/predicate because there is no direct semantic or syntactic relationship between NP_2 and the verb/predicate. Nonetheless, NP_2 is indeed topicalized. Given that neither NP_2 nor Chinese-style topics are selected or subcategorized by the predicate or the verb in the comment, it is possible to confuse them. However, the NPs like NP_2 in (58) are fundamentally different from Chinese-style topic NPs/DPs.

In type 6, *niuyue* is the modifier of *wujia*. There is a genitive relation between them, i.e., *niuyue wujia* means ‘New York’s price (of things)’. The raising of *wujia* to the sentence-initial position is a case of possessum raising, as in French (Tellier & Valois 2006:§6, §8):

17. To be exact, *na zhong douzi* is a DP and *yi jin* a quantifier phrase. Labelling them as NPs does not radically affect my analysis.

18. ‘Modify’ and ‘qualify’ are used very loosely here. Due to lack of space, I cannot give a detailed analysis about this modification relation. Instead, I only assume that N_1 describes NP_2 in a particular way, or restricts its meaning in some way, as ‘modify’ and ‘qualify’ are most often understood in traditional grammar. I thank a reviewer for having raised the question.

- (59) *J' ai lu la préface de ce livre.*
 NOM.1.SG. AUX read.PAST.PART ART foreword GEN DEM book
 'I read the foreword of the book.'
- (60) *J'en ai lu la préface. (en = de ce livre)*
- (61) *Je lui ai coupé la main.*
 NOM.1.SG DAT.3.SG AUX cut ART hand
 'I cut his hand.'

Even if the analysis of such constructions has long been a battleground between raising versus control, recent studies (Landau 1999, Deal 2013) provide new arguments in favor of raising. Without demonstrating this analysis in detail due to lack of space, I assume, that this also applies to type 6 and other similar constructions, as represented in (58): *wujia* raises from [*niuyue wujia*].

Another type of Chinese-style topic, though not included in Shi's typology, should also be considered a case of possessum raising, i.e., involving an NP-movement from inside a bigger NP (Shi 2000: 401):

- (62) *Shuiguo wo zui xihuan chi xiangjiao.*
 fruit PRO.1.SG most like eat banana
 '(Among) all fruits, I like to eat bananas the most.'

Huang, Li & Li (2009:203) assume the following representation for (62):

- (63) *Shuiguo, wo zui xihuan [(shuiguo zhong de) xiangjiao].*
 among

They doubt that *shuiguo* is moved from within the bigger NP *shuiguo zhong de xiangjiao*, given (64) (Huang, Li & Li 2009:203):

- (64) **Zhangsan, wo zui xihuan [(Zhangsan de) baba].*
 PRO.1.SG most like GEN father
 'Zhangsan, I like Zhangsan's father the most.'

However, (64) is not a real counter-example to (62)/(63), because the relation between *shuiguo* and *xiangjiao* is different from the one between *Zhangsan* and *baba*: fruit is the superordinate to banana, the hyponym, but it is hard to see any logical link between *Zhangsan* and father. Thus, (64) is semantically unacceptable rather than ungrammatical.

Following the analysis of possessum raising for type 6, (62) is derived from (63), i.e., *shuiguo (zhong) de* raises from [*(shuiguo (zhong) de) xiangjiao*].

As for type 5, note that the sentence-initial NP and the second-position NP can both be omitted without the sentence becoming completely ungrammatical,

although less acceptable, because native Chinese-speakers would feel that neither sentence is semantically complete:

(65) (?) *Na zhong douzi, yi jin sanshi kuai qian.*

(66) (?) *Na zhong douzi, yi jin sanshi kuai qian.*

Also, it is possible to replace *yi jin* by other NPs denoting the quantity, e.g., *sanjin* “three catties”, *yidui* “one pile” or *liangche* “two trucks”. All these lead us to assume that *na zhong douzi* and *yi jin* form a quantified NP:

(67) *yi jin na zhong douzi*
 one catty DEM kind bean
 ‘one catty of that kind of beans’

Thus the linear order *na zhong douzi yi jin* of type 5 is derived via quantifier floating, i.e., the NP *na zhong douzi* has raised from the QP *yi jin na zhong douzi*, as given above in (58). I assume Sportiche (1988)’s approach to quantifier floating in French:

(68) *Tous les enfants ont vu ce film.*
 all ART children AUX see.PAST.PART DEM movie
 ‘All the children have seen this movie.’

(69) *Les enfants ont tous vu ce film.*
 ART children AUX all see.PAST.PART DEM movie
 ‘All the children have seen this movie.’

Like (69), where the DP *les enfants* raises without the quantifier *tous*, *na zhong douzi* raises with the quantifier *yi jin* left behind, whereby the linear order is *na zhong douzi yi jin*.¹⁹

19. In fact, what is left behind is not the quantifier alone, but the quantifier with a classifier (i.e., *jin* “catty”). This is only because the classifier in Mandarin can stay with the quantifier without any overt NPs:

(1) *wo yao san ge (pingguo).*
 PRO.1.SG want three CL apple
 ‘I want three (apples).’

But the classifier cannot stay with the NP alone, without any quantifiers, unless the phrase classifier + NP is the direct object and means “one”/“a”:

(2) *wo yao ge pingguo.*
 PRO.1.SG want CL apple
 ‘I want one/an apple.’

(3) **ge pingguo san kuai.*
 CL apple three CL
 Intended meaning ‘One/An apple costs 3 kuai.’

Other arguments also suggest that *na zhong douzi yi jin* should be formed via quantifier floating. First, *yi jin* can sit in the sentence-final position:

(70) *Na zhong douzi sanshi kuai qian yi jin.*

This suggests that *yi jin* may be externally merged in a lower position below the VP. It can be, but does not necessarily have to be, internally merged to a higher position above VP. This is exactly what happens to *tous* in French in (68) and (69).

More interestingly, in the case of relativization, *yi jin* is preferably sentence-final rather than sentence-initial:

(71) *?yi jin sanshi kuai qian de [na zhong douzi]* (See (56))

(72) *sanshi kuai qian yi jin de [na zhong douzi]* (See (56))

The contrast between (71) and (72) seems to be in favor of the hypothesis that in main clauses, *yi jin* undergoes raising to a higher position in the CP, but in relative clauses, this position inside the CP is no longer available. This is a clear case of the root phenomenon.

Second, even if *yi jin na zhong douzi* can hardly occur in the sentence-initial position (i.e., subject position, see (73)), they can nonetheless appear in the post-verbal position, for example, in the object position (see (74)).²⁰

(73)*/?? *Yi jin na zhong douzi sanshi kuai qian.*

(74) *Wo yao yi jin na zhong douzi.*
 PRO.1.SG want
 'I want one catty of that kind of beans.'

This means that *yi jin na zhong douzi* is a quantifier phrase, like *tous les enfants* in French.

Third, Gundel (1999) distinguishes the semantic/pragmatic topic from the syntactic topic in analyzing the following topicalized quantified phrases:

(75) *Most middle-class Americans, when they look at the costs plus the benefits, they're going to be much better off.*

(76) *Any company, if they're worth 150 million dollars, you don't need to think of ...*

20. This contrast needs explaining, and in particular the impossibility for *yi jin na zhong douzi* to stand in the preverbal position. This may be due to the definiteness of *na zhong douzi*, because without *na zhong*, *yi jin douzi* can be in the subject position:

(i) *Yi jin douzi sanshi kuai qian.*

In any case, (74) does prove that *yi jin na zhong douzi* can form a constituent.

She argues that the semantic/pragmatic topics are not the whole dislocated phrases, which are syntactic topics, but the entities which are quantified (i.e., the N-set). In other words, the quantifier is part of the syntactic topic phrase (i.e., dislocated phrase) but is not part of the semantic/pragmatic topic. Hence the above examples could be paraphrased as follows:

- (77) *(As for) Middle-class Americans, when most of them look at the costs plus the benefits, they're going to be much better off.*
- (78) *(As for) Companies, if any one of them is worth 150 million dollars, you don't need to think of...*

This is very similar to my analysis of type 5: *na zhong douzi yi jin* as a whole forms the syntactic topic phrase while *na zhong douzi* is the semantic/pragmatic topic. The syntactic topic as a whole stands in the sentence-initial position, but the semantic/pragmatic topic is even more 'sentence-initial' than the syntactic topic in that it is in the first part of the syntactic topic. Even if Gundel does not resort to quantifier floating to give a principled analysis of such constructions, it can be clearly seen that this should be on the right track. Last but not least, note that in the paraphrased sentences (77) and (78), the topic — or rather the semantic/pragmatic topic — can be introduced by *as for*, which is often used in English to introduce (new) topics.

To summarize, types 5 and 6 do involve topicalization. The topics are not Chinese-style topics, but NPs that raise from inside another NP:

- (79) $NP_2 [{}_{NPI} N_1 t_{NP2}] (= (58))$

Given that NP_2 is not subcategorized by the verb/predicate of the comment, it is not surprising that it is confused with Chinese-style topics, which are not subcategorized by the verb/predicate either. However, I have argued that the topicalization resulting from (58)/(79) is different from topicalization *à la* Chinese-style and has properties that Chinese-style topics do not have. It is important to distinguish types 5 and 6 from authentic Chinese-style topics.

After excluding types 1, 2, 5 and 6, I come to the conclusion that only types 3 and 4 are authentic cases of Chinese-style topics:

Type 3

- (80) *Na chang huo, xingkui xiaofangdui lai de kuai.*
 DEM CL fire fortunately fire brigade come DE fast
 i. 'As for that fire, fortunately the fire brigade came quickly, (otherwise)...'
 ii. 'At the time of that fire, fortunately the fire brigade came quickly, (otherwise)...'

Type 4

- (81) *Zhe jian shiqing ni bu neng guang mafan yi ge ren.*
 DEM CL matter PRO.2.SG NEG can only bother one CL person
 ‘As for this matter, you cannot just bother one person.’

Before analyzing them in detail, I think it is necessary to distinguish Chinese-style topics and topicalized adjuncts. Semantically, adjuncts, topicalized or not, often denote time, place, manner, etc., but Chinese-style topics rarely have such denotations. Among the six types of the so-called Chinese-style topics discussed until now, none denotes time, place or manner. Categorically, adjuncts can be nouns or adverbs, but Chinese-style topics are often, if not only, NPs/DPs. A priori, adverbial adjuncts are not always replaceable by NPs/DPs. Syntactically, topicalized adjuncts, if detopicalized, can occupy places other than the initial position in the sentence, while Chinese-style topics can rarely, if ever, have positions other than the initial position. In other words, adjuncts are positioned quite flexibly while Chinese-style topics are rigid in position. This may be because adjuncts can be detopicalized without losing its (semantic/thematic) role in the sentence but Chinese-style topics, a priori, cannot be detopicalized at all. Once detopicalized, Chinese-style topics cannot even be interpreted, for example:

Type 3

- (82) *Na chang huo, xing kui xiaofangdui lai de kuai.*
 DEM CL fire fortunately fire brigade come DE fast
 i. ‘As for that fire, fortunately the fire brigade came quickly, (otherwise)...’
 ii. ‘At the time of that fire, fortunately the fire brigade came quickly, (otherwise)...’

(83) **Xing kui xiaofangdui lai de kuai, na chang huo.*

(84) **Xing kui na chang huo xiaofangdui lai de kuai.*

Type 4

- (85) *Zhe jian shiqing ni bu neng guang mafan yi ge ren.*
 DEM CL matter PRO.2.SG NEG can only bother one CL person
 ‘As for this matter, you cannot just bother one person.’

(86) **Ni bu neng guang mafan yi ge ren, zhe jian shi.*

Thus, if a topicalized element that is non-subcategorized by the verb denotes times, place or manner and is more adverbial than nominal and can have other positions than the initial position, then it is rather a (topicalized) adjunct. Last but not least, like the tests for other constructions, it is important to note that none of the three

tests given above (i.e., semantic, categorical and syntactic) are self-sufficient. The more tests are satisfied, the more canonical the adjunct is.

4. Derivation and representation of Chinese-style topics: Chinese-style topics as indexicality

There are mainly two approaches to topic structures in Mandarin in existing literature: external merge (i.e., base-generation) (Li & Thompson 1976; Xu & Langendoen 1985) and internal merge (i.e., movement) (Shi 2000). A compromise position seems to better suit the data, as represented by Huang, Li & Li (2009: 207). The topic related to a gap in the comment clause is derived by movement while those with no gap are base-generated.²¹ Following this reasoning, English-style topics, given the gap in the comment, are derived by movement (e.g., (87)) while Chinese-style topics, with no gap, are derived by base-generation.

- (87) *Zhangsan, wo renshi _.*


 Zhangsan PRO.1.SG know
 'Zhangsan, I know him.'

Shi (2000) argues in favor of internal merge for all topic structures in Mandarin. His idea is that in spite of being dangling, Chinese-style topics are related in one way or another to the comment clause. Thus it should be possible to 'reconstruct' (or '(re-)invent') the morphosyntactic context in which Chinese-style topics appear. Derivationally, Chinese-style topics are all externally merged first in the comment clause, originally with the morphosyntactic marking which corresponds to their semantic interpretation, before raising to the sentence-initial position. (88) is derived from (89) and (90) from (91):

Type 3

- (88) *Na chang huo, xingkui xiaofangdui lai de kuai.*
 DEM CL fire fortunately fire brigade come DE fast
 i. 'As for that fire, fortunately the fire brigade came quickly, (otherwise)...'
 ii. 'At the time of that fire, fortunately the fire brigade came quickly, (otherwise)...'

21. Note that Aoun & Li (2003) on Chinese relative clauses arrive at the same conclusion based on a similar reasoning.

- (89) *Na chang huo, xingkui xiaofangdui lai de kuai* (~~cai~~ ~~neng~~ ~~putie~~ ~~nachang~~ ~~huo~~)
 only can put out

Type 4

- (90) *Zhe jian shiqing ni bu neng guang mafan yi ge ren.*
 DEM CL matter PRO.2.SG NEG can only bother one CL person
 'As for this matter, you cannot just bother one person.'
- (91) *Zhe jian shiqing ni bu neng* (~~weite~~ ~~zhjian shiqing~~) *guang mafan yi-ge ren.*
 for

However semantically motivated and self-evident such an analysis seems to be, it suffers from severe problems, the most important being that the reconstruction, more semantically based than syntactically motivated, is rather arbitrary. There can be more than one possible reconstruction. (90) could also be derived from (92) or (93):

- (92) *Zhe jian shiqing ni bu neng* (~~weite~~ ~~banhao~~ ~~zhejian shiqing~~) *guang mafan yi-ge ren.*
 for, in order to do well
- (93) *Zhe jian shiqing ni bu neng* (~~yinwei~~ ~~zhejian shiqing~~) *guang mafan yi-ge ren.*
 because (of)

One may invoke a principle of economy so as to restrict the possibilities of reconstruction: reconstruct as little as possible. This may select (91) as the optimal reconstruction. However, this criterion is more difficult to apply to (88)/(89) where more than a PP must be reconstructed. It is possible to imagine hundreds of thousands of possible reconstructions among which there would be equally economical ones. Admitting that economy can indeed do the work, one still has to give a more operational definition of economy than 'as little as possible'. Are three words more economical than four words? Or is a VP reconstruction more economical than a PP reconstruction? The most economical solution seems to reconstruct nothing at all. The reconstruction is eliminated by the criterion on which it is based.

Thus, I cannot agree with Shi's reconstruction analysis and keep to the external merge of Chinese-style topics outside the comment clause. It is necessary to pin down the exact position of external merge. The null hypothesis is [Spec, TopP] in the complementizer layer, following Rizzi (1997)'s Split-CP Hypothesis:

- (94) [ForceP [TopP* [FocP [TopP* [FinP [IP]]]]]]

An important difference between the topic and the focus, as noted by Rizzi (1997:290–291), is that a clause can have as many consistent topics as possible while there is one and only one structural focus. In Chinese, topics can indeed be recursive, no matter whether there is a Chinese-style topic or not. There can be other topics in the two types of Chinese-style topics which I identified above:

Type 3

- (95) *Na chang huo, xingkui xiaofangdui lai de kuai.*
 DEM CL fire fortunately fire brigade come DE fast
 i. ‘As for that fire, fortunately the fire brigade came quickly, (otherwise)...’
 ii. ‘At the time of that fire, fortunately the fire brigade came quickly, (otherwise)...’
- (96) [_{Topic1} *Na chang huo*] [_{Topic2} *xiaofangdui*] *xingkui lai de kuai.*
 ‘As for that fire, the fire brigade, fortunately they came quickly.’

Type 4

- (97) *Zhe jian shiqing ni bu neng guang mafan yi ge ren.*
 DEM CL matter PRO.2.SG NEG can only bother one CL person
 ‘As for this matter, you cannot just bother one person.’
- (98) [_{Topic1} *Zhe jian shiqing*], [_{Topic2} *Lisi*], *ta zongshi mafan wo yige ren.*
 PRO.3.SG always PRO.1.SG
 ‘As for this matter, Lisi, he always bothers me only.’

Xiaofangdui in (96) and *Lisi* in (98) are also topicalized, possibly assigned to the recursive TopPs in Rizzi’s hierarchy:

- (99) [_{ForceP} [_{TopP*} *Nachanghuo* [_{FocP} [_{TopP*} *xiaofangdui* [_{FinP} [_{IP} ...]]]]]]]]
 (100) [_{ForceP} [_{TopP*} *zhejianshiqing* [_{FocP} [_{TopP*} *Lisi* [_{FinP} [_{IP} ...]]]]]]]]

This analysis, though not wrong, is not the whole story. The main issue is that it cannot explain the differences between Chinese-style topics and English-style topics in terms of syntactic derivation. It is not enough to argue that Chinese-style topics are purely externally merged while English-style topics are first externally merged before being internally merged, though they all sit at [Spec, TopP] at the end of the derivation. In fact, some English-style topics in Chinese are argued to be externally merged only, for example those violating locality conditions (Huang, Li & Li 2009: 208):

- (101) **Lisi_i wo renshi [henduo [[e_i xihuan] de] ren.*
 Lisi PRO.1.SG know many like RELperson
 ‘*Lisi_i, I know many people who e_i likes.’

- (102) **Lisi_i, wo hen xihuan [[e_i chang ge] de] shengyin*.
 Lisi PRO.1.SG very like sing song DE voice
 ‘*Lisi_i, I like the voice with which e_i sings.’

(101) and (102) would be grammatical both in Chinese and in English if the gap *e* was replaced by a suitable pronoun, say *ta* “he” in Chinese and *he* in English:

- (103) *Lisi_j, wo renshi henduo ta_j, xihuan de ren*.
 ‘Lisi_j, I know many people who he_j likes.’
- (104) *Lisi_i, wo hen xihuan ta_j, changge de shengyin*.
 ‘Lisi_i, I like the voice with which he_j sings.’

Undoubtedly, *Lisi* in (103)–(104) is the topic. A priori it is more likely to be directly externally merged in the sentence-initial position, as argued by Huang, Li & Li (2009:§6.1.2). Thus, external merge at [Spec, TopP] cannot distinguish Chinese-style topics from at least some English-style topics.²²

I assume that the Chinese-style topic, as distinct from the English-style topic, has the [Topic] feature and the [Deictic] feature. Both features are interpretable, i.e., [*i*Topic] and [*i*Deictic]. [*i*Topic] is evident. By [*i*Deictic], I mean that Chinese-style topics must be anchored in the real world to be interpreted correctly. This feature has been proposed for demonstratives by Diessel (1999:§3.1.1), Lyons (1999: 107–113), Giusti (2001) and Brugè (2002), among others. Contrary to definite articles, which, as complex shifters, ‘anchor’ the DP in the discourse (i.e., make it referential (Jakobson 1957)), demonstratives are simple shifters (Jakobson 1957) in that they only anchor the DP in the real world, not in the discourse. In other words, demonstratives are deictic while definite articles are not. They differ in the [Deictic] feature and this feature explains the nature of demonstratives as being simple shifters. It allows demonstratives to anchor the DP [_{DP} DEM N] in the real world, but not in the discourse. Demonstratives thus maximize the effect of contextual accessibility. Remember that the two types of Chinese-style topics identified above are both DPs marked with an overt demonstrative, i.e., [_{DP} DEM N].²³ Since the demonstrative has the [*i*Deictic], the Chinese-style topic phrase [_{DP} DEM N] can get the same feature by percolation. Consequentially, Chinese-style topics, as

22. One reviewer points out another analysis about (101)–(104): a topic structure containing a trace and a topic structure containing a resumptive pronoun are derived differently. The former, derived by movement, is subject to locality conditions and gives rise to island effects, while the latter, base-generated, is not subject to locality conditions and does not give rise to any island effect. This idea is worth examining in more detail. I leave this for future research.

23. This certainly does not mean that all DPs with demonstratives are potential Chinese-style topics, but only that some of them, and only these, can be Chinese-style topics.

distinct from English-style topics, must be anchored in the real world. Anchoring Chinese-style topics in the universe of discourse only is insufficient for licensing them properly. This explains why Chinese-style topics are almost exclusively found in discourse-oriented²⁴ languages, like Chinese and Japanese (Takita 2014). These languages resort more frequently to contextual information than English-style languages, which seem to focus more on grammatical information. Even if English can express what Chinese-style topics express, there must be formal marking, for example, *as for* in English and *quant à* in French.²⁵ Interestingly, like in Chinese, topics introduced by *as for* in English cannot be indefinite (Lambrecht 1994: 152):

(105) **As for a strange guy, I saw him last night.*

Generic expressions are possible:

(106) *As for strange guys, I met a lot.*

Lambrecht (1994: 152) explains this in terms of contextual accessibility: the phrase *as for* NP (as well as similar phrases in other languages) can be appropriately used only if the NP referent is already a potential topic in the discourse at the time the phrase is used, i.e., if the referent is contextually accessible. In Chinese, Chinese-style topics are often zero-marked, but contextual accessibility must still be satisfied, hence the obligatory use of demonstratives. As I have argued, demonstratives as simple shifters can maximize the effect of contextual accessibility.

Interestingly, in spoken French, one may find zero-marked Chinese-style topics, too:

(107) *Cet incendie, heureusement que les pompiers sont
DEM fire fortunately COMP ART fire brigade AUX
venus à temps!
come.PAST.PART. in time
Lit. 'This fire, fortunately the fire brigade arrived in time.'*

(108) *Ce livre, qu'est-ce que je me suis ennuyé!
DEM book EXCLAM NOM.1.SG ACC.1.SG AUX get bored.PAST.PART
Lit. 'This book, how bored I got!'*

24. Note that 'discourse-oriented' is opposed to 'grammar-oriented' in that the former is more contextually dependent. Therefore 'discourse' in 'discourse-oriented' is different from 'discourse' in previous paragraphs, where 'discourse' is opposed to 'context', or 'the real world'. The two 'discourse's' have just the opposite meaning, unfortunately.

25. The case in Japanese and in Korean is different, because these two languages have grammaticalized topicalizers, which a priori are not particular to Chinese-style topics, but used for all kinds of topics. Therefore it is wrong to say that in Japanese and in Korean Chinese-style topics alone are marked.

- (109) *Ce métier on se déplace tous les jours.* (Rowlett 2007: 178)
 DEM job NOM.3.SG ACC.3.SG move all ART days
 ‘In this job you’re on the move every day.’

Some of the native French-speakers whom I consulted accepted them promptly while the others rejected them immediately at first glance. But after I asked them to imagine a suitable context, they gradually admitted that (107)–(109) are not totally unacceptable,²⁶ but still insisted that they are not ‘good French’ and that a well-educated Frenchman would never use them readily.²⁷ In fact, these utterances belong to what Frei (1929) and Zribi-Hertz (1994) call *Français avancé*. French of this particular register is used almost only orally in familiar or relaxing contexts. According to Koch & Oesterreicher (1990: 10–11), this spoken variety of French requires a high degree of contextual support, that is, it resorts more often to extra-linguistic indices than standard French. De Cat (2007: §3.2.5) even argues that spoken French is a discourse configurational language, at the same level as Chinese (see also É. Kiss (1995)). Note that if the demonstratives *ce(t)* ‘this/that’ in (107)–(109) are replaced by the definite article, the sentences are simply unacceptable for all the native French-speakers consulted, no matter what context they are pronounced in.²⁸ This clearly shows that (107)–(109), or rather the sentence-initial Chinese-style topics in French, must be anchored in the real world. Anchoring them in discourse is not enough.²⁹

However, there are indeed Chinese-style topics without demonstratives:

- (110) *Zuotian de huo, xingkui xiaofangdui lai de kuai.*
 yesterday GEN fire fortunately fire brigade come DE fast
 ‘As for yesterday’s fire, fortunately the fire brigade came quickly,
 (otherwise)...’

26. Rowlett (2007: 214, fn 82) also notes that contextualization can change native French speakers’s judgment on French examples.

27. Rowlett (2007: 178), following Gadet (1997), notes that such sentences are very informal.

28. It sees that demonstrative-markedness is rather a strong tendency than a sine qua non condition, because there are indeed Chinese-style topics with the definite article in French (Rowlett 2007: 178):

- (i) *Le même argent on peut payer un loyer.*
 ART same money NOM.3.SG can pay ART rent
 ‘At that price you can afford to pay rent.’

Nonetheless, note that *le même argent* is translated by “at that price”.

29. Besides, Rowlett (2007: 197) also notes that French Chinese-style topics, like Chinese Chinese-style topics, must precede English-style topics and are restricted to the clause-initial position. See below.

The absence of the demonstrative does not mean that the topic in (110) does not have the [*i*Deictic] feature. *Zuotian de huo* should still be interpreted according to the context where it is uttered: it does not necessarily mean “yesterday’s fire”, but “the fire of the day before the day when the utterance is uttered”. It means “yesterday’s fire” only if it is uttered now and here. This means that *zuotian de huo* has the [*i*Deictic] feature, too.³⁰ Without *zuotian (de)*, (110) would be incomprehensible. Logically, *zuotian (de)* should have the [*i*Deictic] feature. It is only by percolation that the whole DP has also the very feature.

I adopt Giorgi (2010)’s Indexicality Hypothesis and assume that Chinese-style topics, though first externally merged at [Spec, TopP], should later be internally merged at the specifier of a functional projection higher than the TopP in the complementizer layer. This higher functional projection is represented in the left-most projection in the complementizer layer, which Giorgi dubs ‘C-speaker’. She begins with the question “how does the syntax interact with the context” and shows that the naïve answer, i.e., that there is no real interaction, cannot be totally right because “there are indexical components in language that cannot be as easily put aside and outside syntax” (Giorgi 2010:2). Indexicals are linguistic expressions whose meaning remains stable while their reference shifts from utterance to utterance (Giorgi 2010: 1), for example pronouns and demonstratives, among others. Demonstratives are good examples of indexicals, both for temporal and spatial locutions, for example:

(111) *zhexie nian vs. naxie nian*
 these year those year

(112) *zhe ge ren vs. na ge ren*
 this CL person that CL person

In general, *zhe(xie)* refers to nearer temporal or spatial locations, and *na(xie)* to farther ones.

Based on such insights, Giorgi proposes that “[t]here is a syntactic position in the left-most periphery of the clause, and precisely in the Complementizer-layer, that encodes the temporal — and presumably spatial as well — coordinates of the speaker” (Giorgi 2010:7). She mostly discusses the temporal interpretation of clauses and does not mention spatial coordinates. Due to lack of space, I cannot give a detailed application of Giorgi’s Indexicality Hypothesis on spatial

30. A reviewer wonders whether all phrases without an overt demonstrative have the [*i*Deictic] feature in a proper context if it is assumed that *zuotian de huo* has the very feature. This is in fact not the case, because (110) does not depend on a proper context to be interpreted correctly. Similarly, Shi’s six types of Chinese-style topics are all acceptable (though not necessarily acceptable as Chinese-style topics) and grammatical without reference to proper contexts. The effect of a proper context was also discussed in Shi (2000).

interpretation. I only assume that Chinese-style topics should finally sit at the specifier of the syntactic position in the left-most periphery of the clause, say C-SpeakerP *pace* Giorgi's proposal, after the first external merge at [Spec, TopP]. The derivation can be represented as follows:

$$(113) \quad [_{\text{C-SpeakerP}} [\text{Chinese-style topic}] \text{C-Speaker} \dots [_{\text{TopP}} \overset{t_{\text{Chinese-style topic}}}{\text{Top}} \dots]]$$

The Chinese-style topic phrase has [*i*Topic] and [*i*Deictic]. The TopP and the C-SpeakerP have the uninterpretable [*u*Topic] feature and [*u*Deictic] feature respectively, which need to be checked for the derivation to converge. As probes, they search and target the Chinese-style topic phrase with the [*i*Topic] and [*i*Deictic] features. The first external merge is triggered by the [*u*Topic] feature in the TopP and allows the Chinese-style topic phrase to check and delete it because of its [*i*Topic] feature. The later internal merge is triggered by the uninterpretable [*u*Deictic] in the C-SpeakerP and allows the Chinese-style topic phrase to check and delete it because of its [*i*Deictic] feature. After these operations, the C-SpeakerP is no more active with regard to the [Deictic] feature and can no longer trigger the merge of other potential Chinese-style topics, hence the uniqueness of the Chinese-style topic per clause (also see below). Chinese-style topics are different from English-style topics in having the [*i*Deictic] feature. Without the [*i*Deictic] feature the Chinese-style topic phrase could not raise to [Spec, C-SpeakerP], and furthermore, it would not have to depend on the context in order to be interpreted and licensed properly. The [*i*Deictic] feature guarantees the syntactic derivation and the semantic/pragmatic interpretation/licensing of the Chinese-style topic phrase.

The derivation proposed above can explain at least two properties of Chinese-style topics, unnoticed in previous studies.

First, Chinese-style topics necessarily or preferably stand before other topics.

Type 3

- (114) *Na chang huo, xingkui xiaofangdui lai de kuai.*
 DEM CL fire fortunately fire brigade come DE fast
 i. 'As for that fire, fortunately the fire brigade came quickly, (otherwise) ...'
 ii. 'At the time of that fire, fortunately the fire brigade came quickly, (otherwise) ...'
- (115) *Na chang huo, xiaofangdui xingkui lai de kuai.*
 'As for that fire, the fire brigade, fortunately they came quickly.'
- (116) */?*Xiangfangdui na chang huo xingkui lai de kuai.*

Type 4

(117) *Zhe jian shiqing ni bu neng guang mafan yi ge ren.*
 DEM CL matter PRO.2.SG NEG can only bother one CL person
 ‘As for this matter, you cannot just bother one person.’

(118) *Zhe jian shiqing, Lisi, ta zongshi mafan wo yi ge ren.*
 PRO.3.SG always PRO.1.SG
 ‘As for this matter, Lisi, he always bothers me only’

(119) */? *Lisi, zhe jian shiqing, ta zongshi mafan wo yi ge ren.*

(114) and (117) have only one topic, i.e., the sentence-initial Chinese-style topic. (115) and (118) have two topics, i.e., the sentence-initial Chinese-style topics and the second-position English-style topics. All the sentences are perfectly acceptable. On the contrary, (116) and (119), where the English-style topic precedes the Chinese-style topic, are far less acceptable or utterly ungrammatical. Following my analysis that is based on Giorgi’s C-SpeakerP, Chinese-style topics sit at [Spec, C-SpeakerP], higher than other topics, which always sit at [Spec, TopP], thus Chinese-style topics precede the other types of topics in terms of linearization. Besides, I assume that the C-SpeakerP is not recursive and that there cannot be more than one Chinese-style topic per clause. This is probably because the C-SpeakerP is at the very interface between the real world and discourse, a situation which distinguishes it from the other phrases inside the discourse layer.

However, some adverbial expressions, such as *xingkui* ‘fortunately’, *haihao* ‘fortunately’, *qishi* ‘actually’, *tanbaideshuo* ‘frankly speaking’, *laoshishuo* ‘honestly speaking’ etc, can indeed appear before the Chinese-style topic, though not all are equally acceptable:³¹

(120) ?*Xingkui/haihao na chang huo xiaofangdui lai de kuai.*
 fortunately DEM CL fire fire brigade come DE fast
 ‘Fortunately, as for that fire, the fire brigade came quickly.’

(121) *Qishi/tanbaideshuo/laoshishuo, zhe jian shiqing ni*
 actually/frankly speaking/honestly speaking DEM CL matter PRO.2.SG
bu neng guang mafan yi ge ren.
 NEG can only bother one CL person
 ‘Actually/Frankly speaking/Honestly speaking, as for this matter, you cannot just bother one person.’

31. Due to the lack of space, I cannot give a detailed analysis as to the degree of acceptability of these adverbials. This question seems rather complicated: for example, even synonymous adverbials, i.e., *xingkui* vs. *haihao* ‘fortunately’, are not equally acceptable.

These are all the so-called sentential adverbials,³² i.e., adverbial expressions “whose semantic relation is to a whole sentence or clause, not just to a verb or verb phrase within it” (Matthews 2007:364). More precisely, Jackendoff (1972) labels them as speaker-oriented sentential adverbials. They are “interpreted as functions taking propositions into propositions” (Bellert 1977:342). They may express the speaker’s evaluation of the fact, event or state of affairs denoted by the rest of the sentence (*xingkuai* “fortunately”, *haihao* “fortunately”, *qishi* “actually”) or characterize the speaker’s attitude towards what he is saying (*tanbaideshuo* “frankly speaking”, *laoshishuo* “honestly speaking”) (Bellert 1977). In other words, they are at the interface between the syntax and the context, just like indexicals analyzed by Giorgi (2010). Given this, I assume that such sentential adverbs can also sit at [Spec, C-SpeakerP], either before or after the Chinese-style topic (compare (114) and (120)). Multiple specifiers of the bare phrase structure allow this double-specifier configuration. The positional freedom implies that sentential adverbials and Chinese-style topics are triggered for internal merge by different features. I assume that sentential adverbials have an interpretable feature semantically related to the speaker’s evaluation or attitude, thus different from the [Deictic] feature.³³ This very feature, with the opposite value (i.e., uninterpretable), is part of the C-SpeakerP’s feature matrix. The C-SpeakerP as a probe targets the sentential adverbials in the Numeration and triggers external merge. The sentential adverbial’s interpretable feature checks and deletes the corresponding uninterpretable feature at C-SpeakerP. The sentential adverbial’s external merge can be temporally before or after the Chinese-style topic’s internal merge, whereby the positional freedom between the Chinese-style topic and the sentential adverbial.³⁴

Second, Chinese-style topics do not show Weak Crossover (122) and Relativized Minimality effects (123):

- (122) *Zhangsan*_i *na jian shi*,³⁵ *ta*_{i/j} *muqin bu neng guang*
 DEM CL matter PRO.3.SG mother NEG can only

32. In the literature one can also find ‘sentential adverbs’, ‘sentence adverbials’ and ‘sentence adverbs’, used more or less with the same meaning as ‘sentential adverbials’. Given that the expressions under discussion here are not adverbs in the strict sense, I have chosen ‘sentential adverbials’.

33. This means that these two features target different phrases with different features.

34. I thank one reviewer for having raised the question.

35. A reviewer wonders whether *Zhangsan na jian shi* “that matter about Zhangsan” is a constituent, and if not, why not assume that *Zhangsan* is externally merged to the left periphery and *na jian shi* “that matter” undergoes movement later before landing at a position lower than *Zhangsan* so that the surface linear order is *Zhangsan na jian shi*. This leads to conclude that

mafan yi ge ren.

bother one CL person

‘As for that matter about Zhangsan_p, his_{ij} mother cannot just bother one person.’

- (123) *Zhangsan_i na jian shi, Lisi_j ne,³⁶ wo juede ta_i*
 DEM CL matter PTCL PRO.1.SG find PRO.3.SG
haishi bu xiang guang mafan ta_j yi ge ren.
 nonetheless NEG want only bother PRO.3.SG one CL person
 ‘As for that matter about Zhangsan_p, Lisi_j, I find that he_i still does not want to bother him_j only.’

Weak Crossover and Relativized Minimality effects are traditionally considered diagnostics for movement. De Cat (2007) argues that French clitic left dislocation does not involve movement, because it does not yield Weak Crossover or Minimality (De Cat 2007: 118, 121)

- (124) *Abélard_p sa_i mère l’_i aimait trop.*
 Abélard 3.SG.POSS mother ACC.3.SG love.PAST too much
 ‘Abélard’s mother loved him too much.’

- (125) *La pluie_p ta salade_p elle_i lui_j fera du bien.*
 ART rain 2.SG.POSS lettuce NOM.3.SG DAT.3.SG do.FUT some good
 ‘The rain will do your lettuce some good.’

Following my analysis, the Chinese-style topic phrase is first externally merged at [Spec, TopP], involving no movement from inside the comment clause, thus yielding neither Weak Crossover nor Relativized Minimality effects. That the topic

(122) has nothing to do with Weak Crossover since what is being tested is *Zhangsan* instead of *Zhangsan na jian shi*.

Constituency tests show that *Zhangsan na jian shi* is indeed a constituent (Carnie 2008:§2.3): it can stand alone, for example, as an answer to the question ‘For what matter his mother cannot just bother one person?’; it can be deleted or omitted as a whole; it can be coordinated with another NP, for example, *Zhe jian shi he Zhangsan na jian shi, ...* ‘This matter and that matter about Zhangsan, ...’. However, it cannot be substituted for by a single word, only because Chinese does not have a suitable pro-form capable of doing so, like *it* or *that* in English.

More concretely, I tentatively assume that in *Zhangsan na jian shi*, *Zhangsan* is the modifier modifying the head noun *shi*, similar to:

- (1) *zhuozi shang na ben shu*
 table upside, on DEM CL book
 ‘the book on the table’

36. In this example, *ne* does not mark the leftmost (or highest) topic. As said earlier, *ne* often, though not always, marks the leftmost/highest topic. (123) confirms this viewpoint. I thank a reviewer for having noticed the point.

phrase later raises from [Spec, TopP] to [Spec, C-SpeakerP] always does not produce Weak Crossover and Relativized Minimality effects.

Moreover, the derivation and the representation proposed above allow a better understanding of the famous dichotomy between topic-prominent languages vs. subject-prominent languages (Li & Thompson 1976). To put it in simplistic terms, topic-prominent languages organize their syntax more around the topic-comment structure while subject-prominent languages are based on the grammatical relation of the subject. In Li and Thompson (1976)'s view, topic-prominent languages have morphology or syntax that highlights the distinction between the topic and the comment. For example, they may have grammaticalized topicalizers; they usually do not have expletives or dummy subjects like English *it* in *It's raining*; they tend to downplay the role of the passive voice, etc. Like many other dichotomies in linguistics, it seems better to consider languages more or less topic/subject-prominent, but not absolutely so.³⁷ In any case, the dichotomy is well established and broadly recognized. I propose that topic-prominent languages and subject-prominent languages differ in the C-Speaker layer. It seems that the C-Speaker layer is indubitable in Chinese and other topic-prominent languages. The strong position may argue that the C-SpeakerP exists in all languages. The weak position would consider the C-SpeakerP language-specific. It exists only in topic-prominent languages and hosts Chinese-style topics only. Even if subject-prominent languages can have Chinese-style topics, their Chinese-style topics never sit as high as in the C-Speaker layer. For the time being, I must acknowledge that both the strong position and the weak position are potentially tenable.³⁸ If there were indeed languages which have grammaticalized topicalizers, which do not have dummy subjects and which tend to downplay the role of the passive voice (i.e., typical topic-prominent languages), but without allowing Chinese-style topics, then the existence of the

37. Even if Chinese is often quoted as a typical topic-prominent language, Wu (2011) shows that syntactic behaviors revealed by subjects are not in-existent in Chinese, so the subject as a grammatical relation is valid in Chinese, though probably often less clear than the topic.

38. This is analogous to the projection of the DP in languages with no article, like Chinese. Some (Tang 1990; Li 1998) maintain that all languages project the DP while others (Cheng & Sybesma 1999; Sio 2006) make syntactic structures reflect morphology more closely, namely if a language does not require a determiner to make an argument, the DP is not projected and an argument is still represented as an NP. In fact, this is an example of a rather hot debate in the framework of Cartography, as Cinque & Rizzi (2008: 45) note:

[T]he strongest position ...implies that if some language provides evidence for the existence of a particular functional head (and projection), then that head (and projection) must be present in every other language, whether the language offers overt evidence for it or not ... A weaker position would consist in assuming that languages may differ in the type or number of functional projections they select from a universal inventory, or in their order.

C-Speaker layer would have to be questioned. However, no such language seems to have been ever discovered. On the other hand, the existence of the C-Speaker layer in subject-prominent language is less easy to detect.

Let's take the strong position and assume that the C-Speaker layer is projected in all languages. Topic-prominent languages and subject-prominent languages may still differ in the featuring of their respective C-Speaker layers. One may imagine a scenario similar to the *wh*-movement. The head of the C-SpeakerP of topic-prominent languages has the unvalued uninterpretable [*u*Deictic] and the edge feature. It seeks a goal and targets the topicalizable constituent with the interpretable [*i*Deictic]. Once the probe locates the target, the unvalued uninterpretable feature is checked, valued and deleted. The edge feature requires the specifier to be filled and results in the displacement of the topicalizable constituent. The process is similar to the *wh*-movement described in Chomsky (2008). As for subject-prominent languages, the C-SpeakerP cannot trigger movement, due to the lack of the edge feature. Even if Chinese-style topics can exist in subject-prominent languages, they cannot raise as high as to [Spec, C-SpeakerP], but only to [Spec, TopP], at least overtly so. They may covertly raise to [Spec, C-SpeakerP]. Again, this is similar to the covert *wh*-movement. Thus, the strong position assumes that all languages have the internal merge of the Chinese-style topic to [Spec, C-SpeakerP], either overtly or covertly, just like the distinction between overt *wh*-movement (i.e., in *wh ex-situ* languages) and covert *wh*-movement (i.e., in *wh in-situ* languages), as proposed by Huang (1982).

5. Conclusion

This study was concerned with Chinese-style topics. My starting point was that 'topic', as a notion in information structure, should be defined in cognitive/semantic terms. Given that general semantic properties which topics in general must satisfy should also be satisfied by Chinese-style topics, Chinese-style topics should thus be defined in morphosyntactic terms. Furthermore, morphosyntactic properties of Chinese-style topics should be pertinent to Chinese-style topics only and cannot be due to general morphosyntactic properties of the language in question. Previous studies on Chinese-style topics had not paid enough attention to this, hence they have wrongly insisted that Chinese-style topics in Chinese should be zero-marked. I then proposed four new tests leading us to recognize two types of Chinese-style topics among the six types given by Shi (2000):

Type 3

- (126) *Na chang huo, xingkuai xiaofangdui lai de kuai.*
 DEM CL fire fortunately fire brigade come DE fast
 i. 'As for that fire, fortunately the fire brigade came quickly, (otherwise)...'
 ii. 'At the time of that fire, fortunately the fire brigade came quickly, (otherwise)...'

Type 4

- (127) *Zhe jian shiqing ni bu neng guang mafan yi ge ren.*
 DEM CL matter PRO.2.SG NEG can only bother one CL person
 'As for this matter, you cannot just bother one person.'

I adopted Giorgi (2010)'s Indexicality Hypothesis, proposing that Chinese-style topics sit at the specifier of the C-SpeakerP at the leftmost layer of the CP. Chinese-style topics are first externally merged at [Spec, TopP] (where other topics also sit), but later are internally merged at [Spec, C-SpeakerP], respectively triggered by the uninterpretable [*u*Topic] feature in the TopP and the uninterpretable [*u*Deictic] in the C-SpeakerP. The Chinese-style topic phrase has the corresponding [*i*Topic] and [*i*Deictic]. Chinese-style topics have greater semantic/pragmatic scope than other topics. They are C-SpeakerP constituents that occupy the leftmost periphery of an utterance, given that they have deictic features that anchor them not only in discourse but also in the real world. This analysis allowed us to better understand the famous dichotomy between topic-prominent languages and subject-prominent languages. These two types of languages probably differ in the C-Speaker layer, and, more precisely, in the featuring of this layer.

In addition to this I also showed that Chinese-style topics exist in (Indo-) European languages. I personally believe that Chinese-style topics can and will be found in more (Indo-)European languages, especially those labeled as discourse configurational languages (É. Kiss 1995). More attention need be paid to the so-called colloquial/informal variety of these languages. Taking these languages and varieties into consideration will undoubtedly shed new light on this 'Chinese-style' question.

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References

- Aoun, J., & Li, Y.-h. A. (2003). *Essays on the representational and derivational nature of grammar: The diversity of wh-constructions*. Cambridge, Massachusetts: The MIT Press.
- Baker, A. E., & Hengeveld, K. (Eds.). (2012). *Linguistics*. Oxford: Wiley-Blackwell.
- Bellert, I. (1977). On semantic and distributional properties of sentential adverbs. *Linguistic Inquiry*, 8(2), 337–351.
- Brown, K., & Miller, J. (2013). *The Cambridge dictionary of linguistics*. Cambridge: Cambridge University Press. doi: 10.1017/CBO9781139049412
- Brugè, L. (2002). The positions of demonstratives in the extended nominal projection. In G. Cinque (Ed.), *The cartography of syntactic structures, vol. I: Functional structure in DP and IP* (pp. 15–53). Oxford: Oxford University Press.
- Carnie, A. (2008). *Constituent structure*. Oxford: Oxford University Press.
- Chafe, W. L. (1976). Givenness, contrastiveness, definiteness, subjects, topics and point of view. In C. N. Li (Ed.), *Subject and topic* (pp. 27–55). New York: Academic Press.
- Chen, C. -Y. D. (1995). Topics in Chinese: A or A'? *Studies in English Literature and Linguistics*, 21, 79–106.
- Cheng, L. L. -S., & Sybesma, R. (1999). Bare and not-so-bare nouns and the structure of NP. *Linguistic Inquiry*, 30(4), 509–542. doi: 10.1162/002438999554192
- Chomsky, N. (1980/2005). *Rules and representations*. New York: Columbia University Press.
- Chomsky, N. (2008). On phases. In R. Freidin, C. P. Otero, & M. L. Zubizarreta (Eds.), *Foundational issues in linguistic theory: Essays in honor of Jean-Roger Vergnaud* (pp. 133–166). Cambridge, Massachusetts: The MIT Press.
- Cinque, G., & Rizzi, L. (2008). The cartography of syntactic structures. In V. Moscati (Ed.), *CISCL Working papers on language and cognition: STiL studies in linguistics* (pp. 42–58). Siena: Università degli Studi di Siena.
- Creissels, D. (2006). *Syntaxe générale: une introduction typologique*. Paris: Hermès.
- Creissels, D. (2009). *Le malinké de Kita*. Cologne: Rüdiger Köppe.
- Crystal, D. (2003). *Dictionary of linguistics and phonetics*. Oxford: Blackwell Publishing.
- De Cat, C. (2007). *French dislocation: Interpretation, syntax, acquisition*. Oxford: Oxford University Press.
- de Groot, C. (2012). Compounds and idiomatic expressions. In A. E. Baker & K. Hengeveld (Eds.), *Linguistics* (pp. 265–281). Oxford: Wiley-Blackwell.
- Deal, R. (2013). Possessor raising. *Linguistic Inquiry*, 44, 391–432. doi: 10.1162/LING_a_00133
- Diessel, H. (1999). *Demonstratives: Form, function and grammaticalization*. Amsterdam: John Benjamins. doi: 10.1075/tsl.42
- Dik, S. C. (1978). *Functional grammar*. Amsterdam: North-Holland.
- É. Kiss, K. (1995). Introduction. In K. É. Kiss (Ed.), *Discourse configurational languages* (pp. 3–28). Oxford: Oxford University Press.
- Frei, H. (1929). *La grammaire des fautes*. Paris: Geuthner.
- Gadet, F. (1997). *Le français ordinaire* (2nd ed.). Paris: Armand Colin.
- Giorgi, A. (2010). *About the speaker: Towards a syntax of indexicality*. Oxford: Oxford University Press.
- Giusti, G. (2001). The birth of a functional category: From Latin ILLE to the Romance article and personal pronoun. In G. Cinque & G. Salvi (Eds.), *Current studies in Italian syntax: Essays offered to Lorenzo Renzi* (pp. 157–171). Amsterdam: North Holland.

- Gundel, J. K. (1974). *The role of topic and comment in linguistic theory*. PhD dissertation. The University of Texas at Austin.
- Gundel, J. K. (1985). 'Shared knowledge' and topicality. *Journal of Pragmatics*, 9(1), 83–107. doi: 10.1016/0378-2166(85)90049-9
- Gundel, J. K. (1988). Universals of topic-comment structure. In M. Hammond, E. A. Moravcsik, & J. Wirth (Eds.), *Studies in syntactic typology* (pp. 209–239). Amsterdam: John Benjamins. doi: 10.1075/tsl.17.16gun
- Gundel, J. K. (1999). Topic, focus and the grammar-pragmatics interface. *Penn Working Papers in Linguistics*, 6, 185–200.
- Gundel, J. K., & Fretheim, T. (2006). Topic and Focus. In L. R. Horn & G. Ward (Eds.), *The handbook of pragmatics* (pp. 175–196). Oxford: Blackwell. doi: 10.1002/9780470756959.ch8
- Haegeman, L. (1994). *Government and binding theory*. Oxford: Blackwell.
- Haiman, J. (1978). Conditionals are topics. *Language*, 54(3), 564–589. doi: 10.1353/lan.1978.0009
- Hu, J.-H., & Pan, H.-H. (2009). Decomposing the aboutness condition for Chinese topic constructions. *The Linguistic Review*, 26, 371–384. doi: 10.1515/tlir.2009.014
- Huang, C.-T. (1982). *Logical relations in Chinese and the theory of grammar*. PhD dissertation. MIT.
- Huang, C.-T. J., Li, Y. -H. A., & Li, Y.-F. (2009). *The syntax of Chinese*. Cambridge: Cambridge University Press. doi: 10.1017/CBO9781139166935
- Huang, R. R.-J., & Ting, J. (2006). Are there dangling topics in Mandarin Chinese? *Concentric: Studies in Linguistics*, 32, 119–146.
- Jackendoff, R. S. (1972). *Semantic interpretation in generative grammar*. Cambridge, Massachusetts: The MIT Press.
- Jakobson, R. (1957). *Shifters, verbal categories, and the Russian verb*. Harvard: Harvard University Press.
- Koch, P., & Oesterreicher, W. (1990). *Gesprochene Sprache in der Romania: Französisch, Italienisch, Spanisch*. Tübingen: Niemeyer. doi: 10.1515/9783111372914
- Krifka, M. (2007). Basic notions of information structure. In C. Féry, G. Fanselow, & M. Krifka (Eds.), *The notions of information structure* (pp. 13–56). Potsdam: Universitätsverlag Potsdam.
- Krifka, M., & Musan, R. (2012). Information structure: Overview and linguistic issues. In M. Krifka & R. Musan (Eds.), *The expression of information structure* (pp. 1–44). Berlin/Boston: De Gruyter Mouton. doi: 10.1515/9783110261608.1
- Kuno, S. (1972) Functional sentence perspective: A case study from Japanese and English. *Linguistic Inquiry*, 3, 269–320.
- Lambrecht, K. (1994). *Information structure and sentence form: A theory of topic, focus and the mental representation of discourse referents*. Cambridge: Cambridge University Press. doi: 10.1017/CBO9780511620607
- Landau, I. (1999). Possessor raising and the structure of VP. *Lingua*, 107(1), 1–37. doi: 10.1016/S0024-3841(98)00025-4
- Li, C. N., & Thompson, S. A. (1976). Subject and topic: A new typology of language. In C. N. Li (Ed.), *Subject and topic* (pp. 475–490). New York: Academic Press.
- Li, C. N., & Thompson, S. A. (1981). *Mandarin Chinese: A functional reference grammar*. Berkeley, Los Angeles, London: University of California Press.
- Li, Y.-H. A. (1998). Argument determiner phrases and number phrases. *Linguistic Inquiry*, 29(4), 693–702. doi: 10.1162/ling.1998.29.4.693
- Lin, W. C. J. (1984). What does the Mandarin particle *ne* communicate? *Cahiers de linguistique – Asie orientale*, 13(2), 217–240. doi: 10.3406/clao.1984.1157

- Lyons, C. (1999). *Definiteness*. Cambridge: Cambridge University Press.
doi: 10.1017/CBO9780511605789
- Matthews, P. H. (2007). *Oxford concise dictionary of linguistics*. Oxford: Oxford University Press.
- Mereu, L. (2009). Universals of information structure. In L. Mereu. (Ed.), *Information structure and its interfaces* (pp. 75–101). Berlin/New York: Mouton de Gruyter.
doi: 10.1515/9783110213973.1.75
- Pan, H.-H., & Hu, J.-H. (2002). Representing topic-comment structures in Chinese. In I. -H. Lee, Y. -B. Kim, K. -S. Choi, & M. Lee (Eds.), *Proceedings of the 16th Pacific Asia conference on language, information and computation* (pp. 382–390). Seoul: The Korean Society for Language and Information.
- Pan, H. -H., & Hu, J. -H. (2008). A semantic/pragmatic interface account of (dangling) topics in Mandarin Chinese. *Journal of Pragmatics*, 40(11), 1966–1981.
doi: 10.1016/j.pragma.2008.03.005
- Prince, E. F. (1998). On the limits of syntax, with reference to left-dislocation and topicalization. In P. Culicover & L. McNally (Eds.), *Syntax and semantics 29: the limits of syntax* (pp. 261–302). New York: Academic Press.
- Reinhart, T. (1981). Pragmatics and linguistics. An analysis of sentence topics. *Philosophica*, 27(1), 53–94.
- Rizzi, L. (1997). The fine structure of the left periphery. In L. Haegeman (Ed.), *Elements of grammar: Handbook of generative syntax* (pp. 281–337). Dordrecht/Boston/London: Kluwer Academic Publishers.
- Rowlett, P. (2007). *The syntax of French*. Cambridge: Cambridge University Press.
doi: 10.1017/CBO9780511618642
- Shi, D.-X. (2000). Topic and topic-comment constructions in Mandarin Chinese. *Language*, 76(2), 383–408. doi: 10.1353/lan.2000.0070
- Sio, J. U.-S. (2006). *Modification and reference in the Chinese nominal*. PhD dissertation. Universiteit Leiden.
- Smyth, D. (2002). *Thai: An essential grammar*. London: Routledge.
- Sportiche, D. (1988). A theory of floating quantifiers and its corollaries for constituent structure. *Linguistic Inquiry*, 19(3), 425–449.
- Takita, K. (2014). Pseudo-right dislocation, the bare-topic construction, and hanging topic constructions. *Lingua*, 140, 137–157. doi: 10.1016/j.lingua.2013.12.010
- Tang, C. -C. J. (1990). A note on the DP analysis of the Chinese noun phrase. *Linguistics*, 28(3), 337–354. doi: 10.1515/ling.1990.28.2.337
- Tellier, C., & Valois, D. (2006). *Constructions méconnues du français*. Montréal: Les presses de l'université de Montréal.
- Titov, E. (2013). Do contrastive topics exist? *Journal of Linguistics*, 49(2), 413–454.
doi: 10.1017/S0022226712000370
- Wu, T. (2011). 'Subject' in Mandarin. Paper presented at the XXIVème Journées de Linguistique d'Asie Orientale/24th Paris Meeting on East Asian Linguistics, 30th June–1st July 2011, EHESS, Paris.
- Xu, L. -J., & Langendoen, T. (1985). Topic structure in Chinese. *Language*, 61, 1–27.
doi: 10.2307/413419
- Zribi-Hertz, A. (1994). The syntax of nominative clitics in standard and advanced French. In G. Cinque, J. Koster, J. -Y. Pollock, L. Rizzi, & R. Zanuttini (Eds.), *Paths towards universal grammar: Studies in honor of Richard S. Kayne* (pp. 453–472). Washington DC: Georgetown University Press.

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