Topics, Foci and Sentence Structure in Mandarin Chinese[*]

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Abstract

An area which has increasingly attracted attention in more recent linguistic studies is how universal principles of the information structuring of sentences are reflected in syntactic structures. Based on Chinese data, this paper is an attempt to submit evidence that principles of that kind are reflected in the form of functional topic phrases and focus phrases. It is argued that the specifier positions of these functional phrases are occupied by different sentence constituents, which, depending on existing or lacking contrastiveness and prominence features suggested by Liu & Xu (1997), have the status of base-generated topics, contrastive topics or contrastive foci. Base-generated topics are subdivided into two basic types appearing in different specifier positions.

Great value is attached to the verification of the assumption that in Chinese there is an "inner" (IP-internal) functional focus phrase whose specifier position can serve as an intermediate landing site, where the contrastiveness feature of left-dislocated verbal arguments is checked. In addition, endeavours are made to explain why direct objects and subjects, but not indirect objects, are permitted to be left-dislocated.

Moreover, the present paper aims at providing a model of Chinese sentence structure that differentiates between "pragmatically driven" and "basic" constituents, the latter considered as obligatory.

The paper accounts in a new way for the internal structure of the verbal constituent V'. Elements like *ba, gei, bei,* and verbal copies are uniformly treated as dummy verbs occurring in the head position of a higher V'-shell, where they function as syntactic licensers.

The theoretical framework of this paper is not based on Chomsky's Minimalist Program but rather on the more classical Government and Binding theory developed by Chomsky (1981; 1986a; 1986b).

1. Introduction

The paper is organized as follows:

Outlined in section 2, Rizzi's (1995) C-System serves as a springboard to the discussion of the location of Chinese sentence type particles such as *ma* and *ba* in section 3. It is postulated in this section, in contrast with Kayne (1994), that Chinese sentence type particles are located in a functional phrase that is head-final.

Section 4 initially gives an overview of various "Chinese-style" topics. This section establishes the specific background on which I will base subsequent claims about the possible sentence positions of different kinds of base-generated and derived topics. In particular, section 4 contains a discussion of the relative position occupied by "Chinese style" topics with regard to sentence type particles. It is argued that "Chinese style" topics are located outside the scope of LF operators but within the scope of sentence type particles.

Section 5 turns its attention towards the possibilities of the left-dislocation of direct objects. In doing this, a relationship is established between a contrastive Focus Phrase, which is claimed to exist within IP, and Weak Crossover effects, which do not appear at the level of S-structure. It is shown in this section that only contrastively used direct objects are able to be left-dislocated. Based on the parameters of Contrastiveness and Prominence, the distinctions between contrastive focus phrases, contrastive topics, and a second type of base-generated topics (which differs from "Chinese style" topics) are explored.

Based on the results of section 5, the mechanism of the left-dislocation of contrastive subjects is investigated in section 6. Due to the fact that this mechanism is largely "invisible", examples of "visible" left-dislocation of subjects are examined. Furthermore, in analogy to those cases in which focus-sensible particles do, by necessity, trigger the left-dislocation of direct objects, the hypothesis that subjects marked by the same particles are obligatorily left-dislocated will be defended as well.

Section 7 deals with the nearly total syntactic immobility of indirect objects. In order to show the effects of the Empty Category Principle on indirect objects, the internal structure of the verbal constituent V' is considered in great detail. It shall be argued that V' is inherently head final, though it should be noted that V^0 may consist of a Verbal Complex in which the verbal stem occupies the leftmost position. Furthermore, the mechanism of syntactic licensing by the raised full verb or by the element *gei*, considered as dummy verb, is explored. Finally, some real and some apparent counterexamples to our claim that indirect objects cannot be left-dislocated are discussed. In this connection, cases of passivization are particularly examined.

In section 8, the general mechanism of topicalization and focusing developed in this paper is applied to pseudo-cleft sentences which, in contrast to the prevailing trend, are treated as essentially monoclausal structures.

2. The C-System of Rizzi (1995)

In recent generative studies, CP acted as a catch-all for very heterogeneous elements that were to be moved to the left periphery of the sentence by S-structure or at the level of Logical Form. Thus, the Spec position of CP served as final landing site for wh-phrases, relative pronouns, affective operators that trigger subject-auxiliary inversion in English[1], QPs in a narrower sense, narrowly focused phrases, and even topics. It is evident that this procedure is scarcely consistent with Rizzi's notion of dynamic agreement and with the principle of feature checking.

Rizzi (1995) draws the logical conclusions from this situation in that he dissolves the well-established category of CP into a number of different functional phrases.

Adopting this idea, I will posit that there exist two functional topic phrases and one functional focus phrase[2] on the left periphery of Chinese sentences, all of them lying in the scope of the head of a functional phrase Sentence Type' (ST'):[3]

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[1] *With no job would Bill be happy.*, for example.

[2] A functional focus phrase different from CP and placed between CP and IP has also been suggested by Brody (1990), Laka (1990), Cullicover (1991), Piñon (1992), Drubig (1994) among others. As for a functional topic phrase, cf. Gasde (1993) and Gasde & Paul (1996).

[3] As for the systematic relationship between sentence types and sentence moods, cf. Gasde (1993). In Rizzi's terminology, the information imparted by the category of sentence mood is called the specification of *Force*, whereas Cheng (1991) considers this type of information as information on the *Clausal Type* of a sentence.

(1) ST' > Top1P > Foc1P > Top2P > IP

3. Sentence Types in Chinese

The head position of ST' can be characterized by features such as [+/- wh] and [+/-imp].

Given this, ST^0 in yes/no questions contains the feature combination [+wh, -imp], which generally triggers the appearance of the sentence mood particle *ma*.

Contrastively, in the case of commands containing the features [-wh, +imp], ST° may be occupied by *ba*.

In statements which represent the default case of sentence types, ST° bears the features [-wh, - imp]. This feature combination remains abstract, i.e., it is not represented by a specific sentence type particle.

Based on his syntactic antisymmetry hypothesis, Kayne (1994) presupposes a left-headed clause structure across languages. Based on this assumption, he claims that "final complementizers reflect the leftward movement of IP into Spec, CP"[4].

Applied to a language like Chinese, this claim results in the following procedure underlying the superficial structure of any sentence:

(2) a.

```
          STP
         /    \
    Spec        ST'
      ↑        /    \
      |     ST⁰      XP
      |_____|
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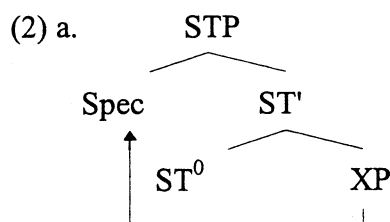
The problem is how to motivate the raising step of XP to [Spec, STP], because the underlying structure taken for granted by Kayne completely meets his requirements.

Ilse Zimmermann suggests considering the leftward movement of XP (i. e. the remainder of the sentence) into [Spec, STP], along the lines of Kayne, to be a movement step that takes place at the level of Phonetic Form, since such kind of raising does not have any semantic involvement (p. c.).

An alternative approach permitting right-headed structures functions without any XP movement. Zhang (1997: 92ff.) quotes Whitman (1997), who proposes a solution within the framework of the Minimalist Program. Claiming that Spec-head agreement requires adjacency between the head element and its Specifier, Whitman (1997: 4) reasons that right-headed X'-structures necessarily lack a Spec-position. In terms of the Minimalist program this means: "Right-headed structure can be built only by Merge, not Attract." (ibid.). According to this approach, Chinese sentences would have a basic underlying structure like (2) b., instead of (2) a.[5]:

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[4] Kayne (1994), p. 53.
[5] In principle, such an alternative to Kayne's proposal was already aspired to in Gasde & Paul (1996).

(2) b.   ST'
       XP   ST^0
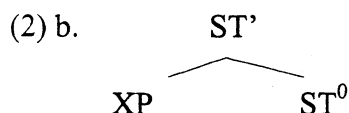
4. "Chinese style" topics

There is a kind of topic often described in the relevant literature, which is characteristic of Topic Prominent languages such as Chinese, Japanese, Korean, Lisu, and Lahu[6]. These so-called "Chinese style" topics consist of a bare DP base-generated outside IP in the leftmost position of the sentence.
"Chinese style" topics will have to be sharply distinguished from topics anaphorically binding an argument position within IP, which shall be treated in the sections 5 and 6. More precisely, I will contend in this paper that the two kinds of topics are located in different functional topic phrases.

4.1. Different kinds of "Chinese-style" topics

Semantically, in prototypical cases, "Chinese style" topics have some loose relation to the rest of the sentence as a whole. In other cases, "Chinese style" topics bear a possessive relation to the subject of the comment clause, yielding the so-called "double subject" construction. A third kind of "Chinese style" topic-comment structures signalizes that the topic concerned is a constitutive element of a part-whole relation.

4.1.1. Prototypical "Chinese style" topics

(3) Zanmen   caidi,   shui di-yi yaojin.
     Our   vegetable plot water   first important
     lit. 'Our vegetable plot (Topic), [pouring] water is most important.'

(4) Dianzi jisuanji, wo shi waihang.
        computer   I be layman
     lit. 'Computers (Topic), I am a layman.'

(5) Zhe jian shi, Zhongguo renmin de   jingyan tai duo le.
     This Cl matter,   Chinese   people SUFF experience too much ASP
     lit. 'This matter (Topic), the Chinese people have too much experience.'

(6) Kuaiji   women yijing you ren   le.
     bookkeeper we   already have people ASP
     lit. ' Bookkeeper (Topic), we've already got someone.'

(7) Zheme hao de   qiu, bu kan   caidian   bu   xing.
     so   good SUFF   ball, not watch colour television not all right
     'Such a good match, not watching colour television is out of the question.'

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[6] Li & Thompson (1976), p. 480. Cf. also ibd., p. 469.

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Prototypical "Chinese style" topic-comment constructions like those in (3) to (7)[7] are signalized by a bare DP in a sentence initial position outside IP. This DP neither anaphorically binds a lexical or empty element within IP nor establishes another specific relation to any constituent within IP. Rather, the topic has a loose relationship to the comment clause as a whole. Semantically speaking, topic-comment structures of this type reflect a loose relationship between an entity and a complete proposition[8].

4.1.2. Challenged topics

There is a subtype of "Chinese style" topics that is not "prototypical", in that topics of this type bear a possessive relation to the subject of the comment clause. This kind of topic-comment structures has been called the "double subject" construction:

(8) Xiang bizi da.
   elephant nose long
   'Elephant noses are long.'
   Tan Fu (1991:172); Hashimoto (1966)

(9) Nei ke shu yezi da.
   that Cl tree, leaf big
   lit. 'That tree (Topic) the leaves are big.'
   Teng Shou-hsin (1974)

Whereas the the possession represented by the second DP (*bizi ('nose')* and *yezi ('leaf')* respectively) is inalienable, it is alienable in the following two examples:

(10) Zhe ji   ge shengchandui de tudi, haohuai chabuduo.
   this several Cl production team SUFF soil, quality about the same
   lit. 'The soil of those production teams (Topic), [its] quality is about the same.'
   Lü Shuxiang (1986)

(11) Xiao Chen xiezi hen zang.
   Xiao Chen shoes very dirty
   lit. 'Xiao Chen (Topic), [her] shoes are very dirty.'

Although the pervasiveness of this construction is a significant feature of topic-prominent languages, the topichood of its sentence-initial DP has been challenged. This was recently done by Tan Fu (1991), who claims that in (8) NP1, *xiang ('elephant')* has the status of a possessive specifier of NP2, *bizi ('nose')*. In other words, Tan posits that, in (8), NP1 and NP2 form a common constituent.

   In doing so, Tan ignores important arguments put forth for discussion as early as the nineteen-seventies by Teng Shou-hsin (1974) and Li & Thompson (1976). Li & Thompson (1976: 480f.) provided evidence for the topichood of the constituent *nei-ke shu ('that tree')* in (9) by showing that co-referential noun phrase deletion is differently controlled in (12) and (13):

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[7] These examples are taken from a sample of examples given by Lü Shuxiang (1986).
[8] Cf. Lambrecht (1994: 118).

(12) Nei ke shu   de   yezi tai da, souyi wo bu xihuan ___.
    that Cl tree SUFF leaf too big so   I not like
    That tree's leaves are too big, so I don't like them.

(13) Nei ke shu yezi tai da, souyi wo bu xihuan ___.
    that Cl tree leaf too big so   I not like
    lit. 'That tree (topic), the leaves are too big, so I don't like it.

Note that (12) contains the possessive marker *de* between NP_1 and NP_2, while (13) does not.

The deleted constituent in sentence (12) is the subject, *na-ke shu de yezi ('that tree's leaves')*, whereas in (13) the controller of the deleted constituent is the topic, *nei-ke shu ('that tree')*.

Ergo, regardless of the possessive relationship between DP_1 and DP_2 in (9), this sentence cannot be derived from (14) by "re-interpretation"[9]:

(14) Nei ke shu   de   yezi da.
    that Cl tree SUFF leaf big
    'The leaves of that tree are big.'

Instead, (9) and (14) have different underlying structures.

The topichood of DP_1 in (8) to (10) is indirectly underpinned by other examples containing a possessive relationship between DP_1 and DP_2 , which are characterized by the fact that the possessive marker *de* is unable to intervene between DP_1 and DP_2, as in the follwowing example:

(15) Erhua zhe jiahuo,   ren   bu cuo.
    Erhua this guy,   personality not bad
    lit. 'Erhua this guy (TOPIC), [his] character is not bad.
    Lü Shuxiang (1986)

4.1.3. Part-whole relations in topic-comment structures

For the sake of completeness, a further subtype of "Chinese style" topics based on the part-whole relation must be mentioned:

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[9] In contrast to (9), a sentence like
(i) Ta tou   teng.
    he head painful
    'He has a headache.'
does NOT consist of a topic-comment construction. Rather, *ta ('he')* is a subject, whereas *tou-teng ('head painful')* is a complex predicate. This analysis is advocated by Teng (1974), who pointed out that adverbial elements like *you (again)*, which can never appear between a real topic and a subject, are able to occur between *ta ('he')* and *tou ('head')* in (i):
(ii) Ta you tou-teng   le.
    he again head-painful ASP
    'He has a headache again.'
Cf. also Tan (1991:179) who points out that complex adjectives like *duzi-e (tummy hungry = 'hungry'), shou-jin (hand tight = 'stingy'), zui-zang (mouth filthy = 'obcene in speech')* etc. are abundant in Chinese.

(16) Shi-ge li, wu-ge lan le.
    ten-CL pear five-Cl rot ASP
    lit. 'The ten pears (TOPIC), five have rotted.' / 'Of the ten pears, five have spoiled.'
    Xu & Langendoen (1985)

(17) Hai, taipingyang zui da.
    oceans, the Pacific most big
    lit. 'Of all the oceans (TOPIC), the Pacific is the biggest.'
    Tan Fu (1991)

(18) Zhongguo, da chengshi, Beijing zui luan.
    China   big   city   Beijing most chaotic
    lit. 'China (TOPIC), the big cities (TOPIC), Beijing is the most chaotic one.' / 'In China, among the big cities, Beijing is the most chaotic one."
    Tang (1990)

(19) Bu hui chouyan de ren, wo jiu   conglai mei-you jian-guo yi-ge shi
    not able smoke SUFF people I at any rate always   not-have seen-ASP one-CL be
    xiangyang de zhuangjiaren.
    respectabe SUFF   farmer
    lit. 'People that don't smoke (TOPIC), I never saw anyone who was a respectable farmer.'
    Lü Shuxiang (1986)

4.2. The function of "Chinese style" topics

As elaborated in the relevant literature, "Chinese style" topics are "scene-setting" expressions providing a "frame" within which the main predication represented by the rest of the sentence holds[10]. It is exactly this scene-setting function that makes "Chinese style" topics, although syntactically occupying the most prominent position within the sentence structure, NOT PROMINENT in a pragmatic sense. That is to say, it is not the topic but the action or the state described in the comment which the speaker wants to bring to the hearers' attention.

    Within the framework of Liu & Xu (1997), "Chinese style" topics would have to be assigned a feature like [-prominent, -contrastive][11].

4.3. The sentence position of Chinese style topics

It is a typological feature of Chinese, emphasizing its topic-prominent character, that "Chinese style" topics are positioned outside the scope of LF-operators[12].

    This applies to wh-phrases like those in (20) and (21), for example, whose LF-representations are outlined under (20') and (21'), in a first approach, leaving open the question of the exact position of the topics involved. As far as the wh-phrases in (20) and (21) are concerned, I argue that they, as indicated in (21') and (22'), must be moved into [Spec, FoclP] at LF:

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[10] Cf. Li/Thompson (1974; 1976; 1981), Barry (1975), Chafe (1976), Xu/Langendoen (1985), Lambrecht (1994), etc.

[11] For a more detailed description of the pragmatic features of DPs appearing outside IP in a sentence-initial position, cf. section 5.

[12] Cf. Tang (1990) who was the first to mention this fact, which has far-reaching implications for Chinese syntax.

(20) Nimen liang-ge   ren,   shei   zhang de   gao?
     you   two-CL   people, who   grow   SUFF tall
     lit. 'You two (TOPIC), which of you is taller?'

(20') [[$_{DP}$ nimen liang-ge   ren], [$_{FoclP}$ [shei]$_i$ [$_{IP}$ e$_i$ zhang de   gao]]]? (LF)
        you   two-CL   people,   who   grow SUFF tall

(21)   Zhongwen xi,   ni xihuan   naxie   jiaoshou?
     Department of Chinese language you like   which ones professor
     lit.'Department of Chinese Language (TOPIC), which professors do you like?

(21') [[$_{DP}$ zhongwen xi],   [$_{FoclP}$ [naxie   jiaoshou]$_i$ [$_{IP}$ ni xihuan e$_i$]]]? (LF)
     Department of Chinese language   which ones professor   you   like

In a like manner, "Chinese style" topics lie outside the scope of negative operator phrases and
narrowly focused phrases:

(22) Zhe ge danwei,   mei-you ren nenggou danren zhe ge renwu.
     this CL institution   nobody   can   perform this CL task
     lit. 'This institution (TOPIC), nobody is able to perform the task.'

(22') [[$_{DP}$ zhe ge danwei], [$_{FoclP}$ [mei-you ren]$_i$ [$_{IP}$ e$_i$ nenggou danren zhe ge renwu]]] (LF)
     this CL institution   nobody   can   perform this CL task

(22") As for this institution, nobody x [x is able to perform the task]

(23) Dianzi jisuanji, WO shi waihang.
     computer   I be   layman
     lit. 'Computers (TOPIC), it is me who is a layman.'

(23')[[$_{DP}$ dianzi jisuanji], [$_{FoclP}$ [WO]$_i$ [$_{IP}$ e$_i$ shi waihang]]] (LF)
       computer   I   be layman

(23") As for computers, for x = I, [x is a layman]

For all intents, the matter in contention is not so much the question of the relative position of
"Chinese style" topics and LF-operators with respect to each other at LF. It is rather the pro-
blem of whether overt ST^0-elements like *ma* and *ba* and the covert ST^0-element appearing in
statements (see above, section 3) take scope over "Chinese-style" topics or not.
     Semantically, there is no reason why, instead of making a comment, the speaker can-
not ask a question about the topic, or make a comment containing an indirect question about
the topic, as Huang (1981/82: 397) points out. To put it differently, from a semantic
viewpoint, "Chinese style" topics may remain outside the scope of *ma* and *ba*.
     Likewise, considered from a syntactic viewpoint, it cannot be taken for granted a priori
that "Chinese style" topics lie within the scope of ST^0. This is due to the fact that the relative
position of "Chinese style" topics and ST^0 elements to each other is obscured by the fact that
"Chinese style" topics occur on the leftmost periphery of the sentence, while sentence type
particles appear on its rightmost periphery. If they lie outside the scope of sentence type par-

ticles, "Chinese style" topics have to be joined to ST'[13]. However, they are accommodated in the Spec-position of a Topic Phrase if they are in the scope of *ma* and *ba*.

What is there to be said for the two possibilities from a syntactic viewpoint? It might be considered as an argument in favour of the former solution that, "Chinese style" topics are syntactically independent from the rest of the sentence, as far as they are not involved in processes like reflexivation, passivization, etc., as elaborated by Li & Thompson (1976). Yet, on the other hand, the complex question operator *shi-bu-shi* (lit. 'is or is not'; 'is it the case that... or not?') is able to appear sentence-initially before "Chinese style" topics, taking scope over them:[14]

(24) Shi-bu-shi dianzi jisuanji, ta shi waihang?
             computer   he be layman
     'Is it or is it not the case that [as for] computers (TOPIC), he is a layman.'

(25) Shi-bu-shi zhe   ji-ge   shengchandui de tudi, haohuai   chabuduo?
                this several-CL production team SUFF soil,   quality   be about the same
     'Is it or is it not the case that [as for] the soil of those production teams (TOPIC), [its] quality is about the same.'

(26) Shi-bu-shi da chengshi, Beijing zui   luan.
               big   city   Beijing most chaotic
     'Is it or is it not the case that [among] the big Cities (TOPIC) Beijing is the most chaotic one?"

Drawing an analogy between *shi-bu-shi* and *ma*, we reach the conclusion that yes/no question operators in general are able to take scope over "Chinese style" topics. Accordingly, I will claim that "Chinese style" topics should be positioned in the Spec-position of a sentence-initial functional Topic1 Phrase (Top1P) located outside the scope of LF-operators.

Notice that the complex question operator *shi-bu-shi*, appearing in a sentence-initial position like in (24) to (26), can not occupy the head position of ST', even if the pre-condition of Kayne's, mentioned in section 3, holds true. For, if generated in ST^0, *shi-bu-shi* inevitably ends up in a   sentence-final surface position, after the rest of the sentence is raised into [Spec, STP]. As a result, we get tag questions such as (24') to (26'):

(24') Dianzi jisuanji, ta shi waihang, shi-bu-shi?
computer   he be   layman,   is-not-is
     '[As for] computers (TOPIC), he is a layman, isn't he?'

(25') Zhe   ji-ge shengchandui de tudi, haohuai   chabuduo,   shi-bu-shi?
      this several-CL production team SUFF soil,   quality   be about the same is-not- is
     '[As for] the soil of those production teams (TOPIC), (its) quality is about the same, isn't it?'

(26') Da chengshi, Beijing zui   luan, shi-bu-shi?.
      big   city   Beijing most chaotic   is-not- is
     '[Among] the big Cities (TOPIC) Beijing is the most chaotic one, isn't it?"

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[13] A solution aimed in this direction has been suggested by Ilse Zimmermann (p. c.).

[14] The question operator *shi-bu-shi* is able to occupy different sentence positions in accordance with its scope. The problems connected with this claim cannot be pursued in this paper.

In fact, (24) to (26) on the one hand and (24') to (26') on the other have different underlying structures.

The choice of positioning "Chinese style" topics "inside the sentence", instead of adjoining them to ST', is consistent with the assessment that structures containing such topics "must count as basic forms of Chinese sentences".[15]

In the next sections, 5. to 7., we will move on to structures comprising a sentence-initial DP that anaphorically binds an argument position within IP. As we will learn, such structures are not necessarily derived by left-dislocation.

5. Left-dislocation of direct objects and Weak Crossover effects in Chinese

In section 4 above, we stated that "pure" topic phrases, such as "Chinese style" topics, are neither prominent nor contrastive, i. e. they have a feature like [-prominent, -contrastive]. In this section, we will predominantly consider left-dislocated object DPs being used contrastively. Although sharing the feature of contrastiveness, these objects differ with regard to their prominence feature. Besides this, there are sentence-initial DPs anaphorically binding the object position within IP, which, just like "Chinese style" topics, are neither prominent nor contrastive.

5.1. Topic phrases and focus phrases

Based on the two parameters, [±prominent] and [±contrastive], Liu & Xu (1997) distinguish three kinds of focus:
- natural focus, which is characterized by the features [+prominent, -contrastive],
- contrastive focus, which is [+prominent, +contrastive], and
- topic focus, a notion denoting topics with a contrastive function: [-prominent, +contrastive].
    The basic idea contained in the category "topic focus" is that a DP can simultaneously contain both topic and focus features. In a similar manner, Jäger (1996: 129) posits: "Topic is a focus-sensitive operator".

Given this approach, let us first have a look at several sentence-initial DPs that are different from "Chinese style" topics in that they anaphorically bind an empty position within IP. By utilizing Liu & Xu's parameters, we gain three kinds of DPs which can bind an empty object position:

Firstly, the DP in question is neither prominent in a pragmatic sense nor is it used contrastively, as in the following example:

(27) [$_{DP}$ Zhe ge xiaohair]$_i$ wo XIHUAN e$_i$.
　　　　this CL child　　　I　　like
　　　lit. 'This child, I LIKE [it].'

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[15] Huang (1984), p. 550.

Based on the framework of Liu & Xu (1997), the sentence-initial DP in (27) must be characterized by [-prominent, -contrastive]. In fact, (27) contains a "predicate focus", in the terms of Lambrecht (1994), or a "natural focus", as claimed by Liu & Xu (1997).

Furthermore, (27) represents the unmarked case in Chinese as far as an anaphoric relationship between a topic and an empty position in IP is concerned. English, however, lacks such an unmarked structure, as described by Chafe (1976).

At first glance, the structure of (27) could be interpreted as derived, as an instance of "Topic Topicalization" ("TT") in the terms of Gundel (1988). As we will later see, under the aspect of Weak Crossover effects, this interpretation does not serve.

<u>Secondly</u>, the DP concerned carries a contrastive focus feature, whereas the rest of the sentence is background. Consider the following utterance, which could be a reply to the question: *'Which of these children do you like?'*:

(28) [$_{DP}$ ZHE ge xiaohair]$_i$ wo xihuan e$_i$.
        this CL child   I   like
    lit. 'THIS child (CONTRASTIVE FOCUS), I like.'

Structures like (28) are engendered by Focus left-dislocation, or by "Focus Topicalization" ("FT") in terms of Gundel (1988). In accordance with Liu & Xu (1997), I will call this type of fronted DPs "contrastive focus phrases". Such phrases are marked by [+prominent, +contrastive].

<u>Thirdly</u>, the sentence-initial DP is, in the terms of Lambrecht (1994), a "contrastive topic", or, in the terms of Liu & Xu (1997), a "topic focus". See (29):

(29) [$_{DP}$ ZHE ge xiaohair]$_i$ wo XIHUAN e$_i$, (er   NA ge xiaohair wo TAOYAN).
       this CL child   I   like   but that CL   child   I   dislike
    lit. 'THIS child (CONTRASTIVE TOPIC), I LIKE, (but THAT child (CONTRASTIVE TOPIC) I DISLIKE).'

Liu & Xu (1997) point out that topic foci are emphasized in that they are contrasted with contextual elements outside their own sentence, or with knowledge elements shared by the interlocutors. Yet, although being contrastive in that way, topic foci are not prominent, since the focus of the message lies on the predicate of the sentence. Therefore, in sentences containing a contrastive topic, the structure as a whole must have two pitches. It should, however, be noted that the main stress lies on the predicate. In short, topic foci are [-prominent, +contrastive].[16]

To summarize: Among the three kinds of DPs considered above, only "contrastive topics", such as in (29), contain a focus feature ([+contrastive]) AND a topic feature ([-prominent]). Contrary to the contrastive topic in (29), the DP in question in (27) is a "pure" topic, while the DP concerned in (28) is a "pure" focus phrase.

Keeping this in mind, let us move on to a more detailed discussion of the problems connected with the subject of left-dislocation.

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[16] The case of topic foci is akin to the so-called "I-Topicalization" discussed in relevant German Studies.

5.2. Left-dislocation with and without WCO-effects

In the following, I will refer to the Weak Crossover Constraint in order to diagnose the nature of left-dislocation.

5.2.1. Weak crossover at LF

Postal (1971) discovered the so-called Crossover Constraint, by which no NP can cross a co-referential NP during the derivation of a sentence.

We will deal with WEAK Crossover here, which is characterized by the fact that the crossed co-indexed Noun Phrase is represented by a pronoun that serves as a possessive specifier within a DP.

In Chinese, as (30) to (32) prove, such kind of crossover is forbidden in all cases of operator movement at LF:

(30) *Ta_i de muqin kandao $shei_i$? (SS)
     he SUFF mother see   who
     *'Who_i did his_i mother see?'

(30') *[$_{Foc1P}$ $shei_i$ [$_{IP}$ [$_{DP}$ ta_i de muqin] kandao e_i]] (LF)
      who   he SUFF mother   see

(31) *Ta_i de muqin xihuan renhe $haizi_i$. (SS)
     he SUFF mother like any child
     *'His_i mother likes any $child_i$.'

(31') *[$_{Foc1P}$ [renhe haizi]$_i$ [$_{IP}$ [$_{DP}$ ta_i de muqin] xihuan e_i]] (LF)
      any   child   he SUFF mother   like

(32) *Ta_i de muqin xihuan ZHANG SAN_i . (SS)
     he SUFF mother like   Zhang San
     *'His_i mother likes ZHANG SAN_i .'

(32') *[$_{Foc1P}$ ZHANG SAN_i [$_{IP}$ [$_{DP}$ ta_i de muqin] xihuan e_i]] (LF)
      Zhang San   he SUFF mother   like

Note that, in (30) to (32), wh-movement, quantifier raising, and focus raising wind up in the Spec-position of the Focus1 Phrase, the existence of which I claimed at the outset of this paper.

Needless to say, (30) to (32) would be well-formed, if *ta* (*'his'*) referred to someone else who was understood from the discourse. But in the given form, (30) to (32) are ill-formed - being that the "bound construal" of the pronoun is unavailable in such cases.

It is generally assumed that weak crossover structures are ruled out by the following principles, which were elaborated by Koopman & Sportiche (1982/83: 145f.):

(33) A variable is locally bound by one and only one element in a non-A-position.
(34) Or, inversely: An element in a non-A-position locally binds one and only one variable.

(35) The Bijection Principle:
   There is a bijective correspondence between variables and non-A-positions.

These principles are violated in (30) to (32) in that an operator in the Spec position of the Focus1 Phrase simultaneously binds both a pronoun that is construed as a variable[17] and a variable-trace in the object position.

5.2.2. Left-dislocation by S-structure and the status of the WCO-Constraint

Whereas operator raising at LF ends up in ill-formed structures, weak crossover configurations at the level of S-structure are not ill-formed. Thus the following structures are well-formed without exception, although Koopman & Sportiche's principles (33) to (35) seem to be violated:

(36) Zhe tiao ke'ai de gou_i, ta_i de   zhuren hui   XIHUAN e_i .
   this CL lovely SUFF dog,   it SUFF master surely   like
   lit. 'This lovely dog_i (TOPIC), surely his_i master must LIKE $[it_i]$.'

(37) ZHE tiao ke'ai de gou_i, ta_i de   zhuren hui   xihuan e_i .
   this CL lovely SUFF dog,   it SUFF master surely   like
   lit. 'THIS lovely dog_i (FOCUS), surely his_i master must like $[it_i]$.'

(38) ZHE tiao ke'ai de gou_i, ta_i de   zhuren hui   XIHUAN e_i .
   this CL lovely SUFF dog,   it SUFF master surely   like
   lit. 'THIS lovely dog_i (TOPIC), surely his_i master must LIKE $[it_i]$.'

Again, (36) contains a "pure" topic and (37) a contrastive focus phrase. However, the sentence-initial DP in (38) is a contrastive topic. All three structures do not display weak crossover effects.

A nearly identical picture, regarding the presence and absence of weak crossover effects, arises in English. This means that, for example, left-dislocated contrastive focus phrases and contrastive topics[18], but not WH-phrases, are allowed to violate Koopman & Sportiche's principles:

(39) *Who_i does his_i boss dislike e_i?

(40) THIS $book_i$, I expect its_i author to buy e_i .

(41) THIS $book_i$, I expect its_i author to BUY e_i .

In light of the Chinese examples (36) to (38) and the English examples (40) to (41) the question arises of whether the Bijection Principle really holds true in any cases of left-dislocation.

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[17] Cf. Koopman & Sportiche (1982/83: 147): If a pronoun is locally non-A-bound, it is no longer a pronoun since by definition (cf. Chomsky, (1981), pl. 330), pronominals are either free or locally A-bound to an NP with an independent θ-role. Variables need not be empty categories, they may assume the shape of a pronoun that is locally non-A-bound.

[18] According to Chafe (1976: 49f.), there are no "pure" topics in English. See above.

Alternatively, we could ask whether our sentences in question violate the Bijection Principle at all.

The fact of the matter here is that whether the Bijection Principle is violated or not, depends on the status of the Empty Category appearing in Chinese (36) to (38) and English (40) to (41). More precisely, only if the Empty Category in these sentences is interpreted as a variable, is the Bijection Principle violated. Proceeding from Chomsky's GB-theory, which claims that a variable is " the trace of movement from an A-position to a non-A-position"[19], this conclusion appears to be inevitable. Therefore, in terms of Chomsky's theory, our sentences in question are to be ill-formed by virtue of the Bijection Principle.

Given the contrast between English sentences like (39) on the one hand and (40) and (41) on the other, Lasnik & Stowell (1991) and Rizzi (1995) conclude that weak crossover is a distinctive characteristic of non-A-relations involving "genuine quantification". That is to say: "Weak crossover effects arise only in contexts where a co-indexed pronoun is locally non-A-bound at LF by a true quantifier ranging over a possibly non-singleton set."[20] Since, only at this juncture, has the trace left behind the status of a variable. In contradistinction to this, the empty category in "topicalization cases" is defined as a "null epithet" by Lasnik & Stowell (1991), whereas Rizzi (1995) calls it a "null constant".

In other words, the three authors infer that the nature of empty elements in non-A-dependencies does not exclusively follow from the structural configuration in which they appear. Instead, "the logical status of the operator in the non-A-position must be taken into account"[21] .

In Rizzi's system, the null constant left behind by a topicalized argument as in:

(42) John$_i$, his$_i$ mother really likes e$_i$.

must be licensed by an "anaphoric operator" such as in (43):

(43) John$_i$, [OP$_i$ [his$_i$ mother really likes t$_i$]

Rizzi's anophoric operator does not assign a range to its bindee. In point of fact, his role is to connect the null constant to an antecedent[22].

Nevertheless, I see a problem with Rizzi's configuration (43):

Although the element called OP in (43) is an operator which, according to Rizzi, is "different from quantificational operators"[23], it still REMAINS AN OPERATOR.

Furthermore, Rizzi's claim that this operator has the peculiarity of being "not sensitive" to weak crossover[24] is, for all intents, the tacit acknowledgement of the fact that the structure of (43) involves, in the final analysis, a weak crossover configuration. Indeed, there is an operator in (43) simultaneously binding a pronoun (that serves as a variable) and an empty category, which would, in the framework of Chomsky (1981), be a variable.

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[19] Cf. Chomsky (1981: 185).
[20] IbLasnik & Stowell (1991) , p. 707.
[21] Ibid.
22 Cf. Lasnik & Stowell (1991: 704): This operator contains no Q with any semantic content, and its range R is equivalent to the denotation of its antecedent, the referring DP. In this sense, it is a logically inert operator.
[23] Rizzi (1995), p. 11
[24] Cf. Rizzi (1995), p. 10.

In an alternative analysis that I propose, topicalization in Chinese is conceived of as a process producing a structure that excludes weak crossover effects SYNTACTICALLY, i. e. without reference to the logical status of the operator.

The starting point of my analysis is the simple idea that Rizzi's anaphoric operator should be placed hierarchically lower than the co-indexed possessive pronoun.

Let us assume that there is a second functional Focus Phrase in Chinese, Foc2P, which is required inside IP for independent reasons. Given this, the Spec-position of this functional phrase could serve as medial landing site in left-dislocation processes. That would mean that the fronting of object-DPs would leave two traces successively, one in their base position and the other one in [Spec, Foc2P].

Applying this to our weak crossover cases (37) and (38), we could first claim that $Foc2^0$ contains a focus feature that is designed to check the [+ contrastive] feature of left-dislocated DPs, with the result of Spec-head agreement. Consequently, left-dislocated objects have to move to [Spec, Foc2P] as a first step.

Second, we could contend, that fronted "pure" focus phrases like that in (37) have been moved on from [Spec, Foc2P] to [Spec, Foc1P] for their [+prominent] feature to be checked under Spec-head agreement:

(37') $[_{Foc1P} [_{DP}$ ZHE tiao ke'ai de gou $]_i$, $[_{IP} [_{DP}$ ta$_i$ de zhuren] $[_{Foc2P}$ t'$_i$ [hui xihuan e$_i$]]]]
       this CL lovely SUFF dog,   it SUFF master   surely like

Unlike contrastive focus phrases like that in (37) above, contrastive topics would move on to [Spec, Top2P] in order to check their [-prominent]-feature:

(38') $[_{Top2P} [_{DP}$ ZHE tiao ke'ai de gou $]_i$, $[_{IP} [_{DP}$ ta$_i$ de zhuren] $[_{Foc2P}$ t'$_i$ [hui XIHUAN e$_i$]]]]
       this CL lovely SUFF dog,   it SUFF master   surely like

By replacing the configurations (37) and (38) by the more appropriate structures (37') and (38'), we have derived structures in which an intermediate trace binds a null constant in the sense of Rizzi (1995). Technically speaking, the intermediate trace in [Spec, Foc2P] is analogous to Rizzi's anaphoric operator, which licenses the null constant in the base position of the topicalized object. [25]

In opposition to (37) and (38), in the case of (36) reiterated here as:

(44) Zhe tiao ke'ai de gou$_i$, ta$_i$ de zhuren hui XIHUAN e$_i$.
     this CL lovely SUFF dog, it SUFF master surely like
     lit. 'This lovely dog$_i$ (TOPIC), surely his$_i$ master must LIKE [it$_i$].',

---

[25] Harking back to von Stechow (1991), Cresti (1995: 92f.) uses the independently available mechanism of λ-conversion to account for movement processes inasmuch as he assumes that the index of a moved phrase is the actual binder of the trace of such movement. That means that in the case of multiple movement steps every step of movement introduces a new index. Given this, any trace (the bottom member of the chain excepted) carries an outer index that functions as a binder, and an inner index that encodes what that element is bound by:
(i) XP$_2$ ... [t$_2$]$_1$ ... t$_1$
Thus, medial trace in [Spec, Foc2P] corresponds to [t$_2$]$_1$ in (i).

a medial landing of the sentence-initial DP in [Spec, Foc2P] would end up in a feature clash. Phrased differently, this DP is not marked with a [+contrastive] feature designed to be checked in [Spec, Foc2P] under Spec-head agreement.

On the other hand, the sentence-initial DP in (44) cannot have been raised directly to [Spec, Top2P] without a "stopover" in [Spec, Foc2P]. Such an operation would engender a WCO configuration like that in (44), where a DP in a non-A position binds two variables, violating the Bijection Principle (35).

Therefore, the best way to handle cases like (44) that I can see is to assume that sentence-initial DPs lacking a [+contrastive] feature but being anaphorically related to an argument position within IP are BASE-GENERATED in [Spec, Top2P]. Assuming this, (44) can be replaced by the more appropriate structure (44'), in which the null constant is licensed by an anaphoric operator that is placed in a higher V'-shell[26]:

(44') [$_{\text{Top2P}}$ [$_{\text{DP}}$ zhe tiao ke'ai de gou]$_i$, [$_{\text{IP}}$ [$_{\text{DP}}$ ta$_i$ de zhuren] hui [$_{\text{V'}}$ OP$_1$ [$_{\text{V'}}$ e$_i$ XIHUAN]]]]
             this CL lovely SUFF dog ,   it SUFF master surely   like

In (44') the anaphoric operator connects the null constant to the base-generated topic in [Spec, Top2P], which serves as the antecedent of the null constant. At the same time, the topic binds the possessive pronoun in the subject DP that is used as a variable. Since the anaphoric operator is located in a hierarchically lower position than the possessive pronoun, none of the rules set up in (33) to (35) are violated.

To summarize, the decisive difference between Rizzi's structure (43) and our structures (37'), (38') and (44') is that the anaphoric operator in our structures does not take scope over the possessive pronoun in the subject DP.

In the cases (37) and (38), which involve a co-indexed possessive pronoun, the second leap of the object DP from [Spec, Foc2P] to the left periphery of the sentence is obligatory. The irony here is that what was forbidden in cases of operator movement at LF, such as in (30) to (32) above, is actually REQUIRED in (37) and (38): The possessive pronoun MUST be crossed by the co-indexed DP in order to be C-COMMANDED by the DP that serves as its binder.[27]

As a result, sentences like (37") and (38") are ill-formed, since the possessive pronoun lacks such a c-commanding antecedent. Consequently, the possessive pronoun cannot be interpreted as a bound variable:

(37") *[$_{\text{IP}}$ [$_{\text{DP}}$ Ta$_i$ de zhuren] [$_{\text{Foc2P}}$ [$_{\text{DP}}$ ZHE tiao ke'ai de gou]$_i$ hui xihuan e$_i$]]
            it SUFF master   this CL lovely SUFF dog , surely like

(38") *[$_{\text{IP}}$ [$_{\text{DP}}$ Ta$_i$ de zhuren] [$_{\text{Foc2P}}$ [$_{\text{DP}}$ ZHE tiao ke'ai de gou]$_i$ hui XIHUAN e$_i$]]
            it SUFF master   this CL lovely SUFF dog , surely   like

Comparing (30) - (32) with (37') and (38'), a preliminary conclusion that can be drawn is that the intermediate landing site [Spec, Foc2P] is only accessible at S-structure, not at LF.

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[26] As we will claim in section 7, the sentence constituent V' is head-final at the level of D-structure. Therefore, the null constant in (44') is placed on the left of the verb.

[27] The requirement that a possessive pronoun used as a variable must be c-commanded by its binder is also valid in the case of (36)/(44), where the possessive pronoun is bound by a base-generated topic.

5.2.3. More evidence for the existence of Foc2P

That the existence of a functional category Focus2 Phrase in Chinese is not pure conjecture can be concluded from the fact that the position [Spec, Foc2P] is necessary independent of weak crossover cases. This is, for example, the case in sentences like (45) and (46), which are altogether well-formed:

(45) Wo ZHE ben shu bu yao.
     I this CL book not want
     'It is this book that I don't want.'

(45') $[_{IP}$ wo $[_{Foc2P}[_{DP}$ ZHE ben shu $]_i$ bu yao e_i]] (SS)
     I   this CL book   not want

(46) Wo ZHE ben shu bu YAO.
     I this CL book not want
     'As for THIS book, I don't WANT [it].'

(46') $[_{IP}$ wo $[_{Foc2P}[_{DP}$ ZHE ben shu $]_i$ bu YAO e_i]] (SS)
     I   this CL book   not want

What both these examples have in common is that an object DP bearing a [+contrastive] feature has moved in a single leap from its base position into the Spec position of Foc2P, which, in (45) and (46), serves as a final landing site.

     The important thing here is that, since the object is not compelled to bind (and c-command) a co-indexed possessive pronoun, its second movement step out of [Spec, Foc2P] to a sentence-initial position appears to be "optional". Indeed, outside of some possible contexts, sentences like (47) and (48), in which the second movement step has been carried out, come extremely close to (45) and (46):

(47) ZHE ben shu wo bu yao.
     this CL book I not want
     lit. 'THIS book (FOCUS) I don't want to have.'

(47') $[_{Foc1P}$ $[_{DP}$ ZHE ben shu$]_i$ $[_{IP}$ wo $[_{Foc2P}$ t'$_i$ [bu yao e_i]]]]
                this CL book   I   not want

(48) ZHE ben shu wo bu YAO.
     this CL book I not want
     'THIS book (TOPIC) I don't WANT to have.'

(48') $[_{Top2P}$ $[_{DP}$ ZHE ben shu$]_i$ $[_{IP}$ wo $[_{Foc2P}$ t'$_i$ [bu YAO e_i]]]]
               this CL book   I   not want

We might imagine that, considered from the viewpoint of discourse, the contrastiveness feature of the objects concerned is dominant in (45) and (46). However, in cases like (47) and (48), their prominence features, i. e. [+prominent] in (47) and [-prominent] in (48), are more dominant than their contrastiveness features.

An alternative explanation more conclusively meeting our feature approach might be to say that the object in (45) has no [+prominent] feature at all, while the object in (46) does not carry a [-prominent] feature.

Our claim that the Spec position of the Focus2 Phrase is a contrastive focus position within IP can be verified by the fact that objects lacking the feature [+contrastive] are not allowed to appear in this position, as (49) shows:

(49) *Wo zhe ben shu bu YAO.
     I   this CL book not want

(49') *[IP wo [Foc2P [DP zhe ben shu]i [bu YAO ei]]]
     I   this CL book   not want

In other words, the direct object in (49) is only permitted to occur in its base-position:

(50) Wo bu YAO zhe ben shu.
     I not want this CL book
    'I don't WANT to have this book.'

(50') [IP wo bu [V' YAO [DP zhe ben shu]]]]
     I not   want   this CL book

5.2.4. Focus phrases, topic phrases and resumptive pronouns

Whether a sentence-initial DP is a topic occupying the Spec-position of Top2P or, rather, whether it is a focus phrase in Spec of Foc1P, carrying the feature [+prominent], can be verified with the help of resumptive pronouns.

Both contrastive and non-contrastive topics in [Spec, Top2P], having the feature [-prominent] in common, allow a resumptive pronoun to appear in the argument position, anaphorically bound by them, such as in (51) and (52):

(51) [Top2P [DP ZHEME taoyan de xiaohai]i , [IP ni ye XIXUAN tai]] ma?
          such repugnant SUFF child   you also like it ST°
    lit. 'Such a repugnant child (CONTRASTIVE TOPIC), do you also LIKE it?'

(52) [Top2P [DP Zhe ge ren]i , [IP wo hen xiang RENSHI tai]]
           this Cl man   I very want get to know ta
    lit. 'This man (NON-CONTRASTIVE TOPIC), I really want to get to know him.'

In opposition to (51) and (52), contrastive foci in [Spec, Foc1P] do not allow resumptive pronouns. This is illustrated by sentence (53), used as an infelicitous reply to the question: *'Which of those children do you like?'*:

(53) *ZHE ge xiaohairi wo xihuan tai .
      this CL   child   I like   it
    lit. 'THIS child (FOCUS), I like it.'

It appears sensible to assume that optional resumptive pronouns like those in (51) and (52) are inserted at the level of Phonetic Form.

6. Left-dislocated Subjects

In this section it is claimed that only those subjects which are characterized by a [+contrastive] feature can be extracted out of IP.

Subjects are base-generated in the highest V'-shell. If not used contrastively, they obligatorily move to [Spec, IP] by S-structure to be licensed, such as in (54):

(54) [$_{IP}$ [$_{IP}$ Li Xiao'er]$_i$ yijing [$_{V'}$ t$_i$ [$_{V'}$ HUIQU le]]]]
      Li Xiao'er   already   return ASP
   'Li Xiao'er (SUBJECT) has already RETURNED.'

This is the default case. As the subject in (54) is not contrastively used, no Focus2 Phrase is generated within IP.[28]

According to Koopman & Sportiche (1991: 212), there are two classes of languages: One class of them, represented by English, French and other languages, is characterized by the obligatory movement of the subject to [Spec, IP]. The sentence subject of the other class of languages must also be raised obligatorily, although not necessarily to [Spec, IP].
As we will show in the following, Chinese belongs to this second class of languages.

6.1. "Invisible" subject left-dislocation

If a subject, in contrast to (54), bears the feature [+contrastive], the whole mechanism of feature checking that we have applied to objects in section 5, goes into effect. That means that the subject obligatorily moves directly to [Spec, Foc2P] in order to check its [+contrastive] feature.

If the contrastive subject is [+contrastive] and [-prominent], such as in the following cases, it will move on in a second movement step to [Spec, Top2P]:

(55) [$_{Top2P}$ [$_{DP}$ LI XIAO'ER]$_i$ [$_{Foc2P}$ t$_i$ yijing [$_{V'}$ e$_i$ [$_{V'}$ HUIQU le]]]]
         Li Xiao'er   already   return ASP
   lit. 'LI XIAO'ER (CONTRASTIVE TOPIC), I was told [he] had already RETURNED.'

(56) Qianmian lai le yi-qun   xiaohair. ...
        ahead   come ASP one-group child
   'There came a group of children at the head.'

[$_{Top2P}$[(Qizhong) LIANG-ge haizi]$_i$ [$_{Foc2P}$ t$_i$ [$_{V'}$ e$_i$ [$_{V'}$ chuan   de   POPO-LANLAN de]]]]
         among them   two-Cl   child   be dressed SUFF very ragged SUFF
   'TWO children (among them) were dressed very RAGGEDLY.'

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[28] The head position of IP is the place where the finiteness features of a sentence are located. Finiteness manifests itself in Chinese in that the Spec position of IP may be filled lexically. That is impossible in control structures lacking finiteness features (cf. Gasde (1991; 1993)).

The interesting point here is that the contrastive topic in the second sentence of (56), *(qizhong) LIANG-ge haizi ('two children (among them)')*, is GIVEN OR KNOWN INFORMATION, as required by Gundel (1988). It is, however, neither a DEFINITE nor a GENERIC TOPIC. Evidently, the topic is an INDEFINITE topic with a WEAK QUANTIFIER and a necessarily PARTITIVE interpretation.[29] Cases like (56) have previously been overlooked by Li & Thompson (1981) and others.

If the subject, however, is [+contrastive] and [+prominent], it undergoes "Foc-to-Foc" movement, yielding an S-structure similar to (57):

(57) [$_{Foc1P}$ [$_{DP}$ LI XIAO'ER]$_i$ [$_{Foc2P}$ t'$_i$ yijing [$_{V'}$ e$_i$ [$_{V'}$ huiqu le]]]]]
    Li Xiao'er   already   return ASP
  'LI XIAO'ER (FOCUS) has already returned.'

There might seem to be a flaw in our analysis in that the different sentence positions of the subject suggested here, namely [Spec, IP] in (54), [Spec, Top2P] in (55) and (56), and [Spec, Foc1P] in (57), are "invisible", in so far as they are seen from the viewpoint of Surface Structure. The subject appears simply SENTENCE-INITIALLY in all those examples. As a result, one might question, for example, if the subjects in (55) - (57) are actually extracted out of IP.

6.2. "Visible" subject left-dislocation

The extraction of the subject out of IP becomes, metaphorically speaking, "visible", if a contrastively used subject emerges in an embedded clause, from which it is raised to the leftmost position of the matrix clause, as in the following examples:

(58) [$_{Foc1P}$ [$_{DP}$ LI XIAO'ER]$_i$ [$_{IP}$ wo tingshuo [$_{IP}$ [$_{Foc2P}$ t$_i$ [$_{V'}$ yijing [$_{V'}$ e$_i$ [$_{V'}$ huiqu le]]]]]]]]
    Li Xiao'er   I   be told   already   return ASP
  lit. 'LI XIAO'ER (FOCUS) I was told [he] had already returned.'

(59) [$_{Top2P}$ [$_{DP}$ LI XIAO'ER]$_i$ [$_{IP}$ wo tingshuo [$_{IP}$ [$_{Foc2P}$ t$_i$ yijing [$_{V'}$ e$_i$ [$_{V'}$ HUIQU le]]]]]]]
    Li Xiao'er   I   be told   already   return ASP
  lit. 'LI XIAO'ER (Contrastive TOPIC), I was told [he] had already RETURNED.'

In contradiction to (58) and (59), sentence (60) is no case of left-dislocation, although the topichood of the sentence -initial DP is beyond question:

(60) [$_{Top2P}$ [$_{DP}$ Li Xiao'er]$_i$ [$_{IP}$ wo tingshuo [$_{IP}$ yijing [$_{V'}$ OP$_i$ [$_{V'}$ e$_i$ [$_{V'}$ HUIQU le]]]]]]]
    Li Xiao'er   I   be told   already   return ASP
  lit. 'Li Xiao'er (TOPIC), I was told [he] had already returned.'
  Lü Shuxiang (1986)

Sentence-initial non-contrastive topics that are aphorically related to the subject of an embedded clause are base-generated in [Spec, Top2P] of the matrix clause. This is because non-contrastive subjects are not allowed to "stop over" in [Spec, Foc2P] for the reasons discussed in section 5.

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[29] Cf. Jäger (1996: 127ff.) who gives a similar English example.

In a similar manner, the topic is base-generated in a simplex sentence like (61), where the leftmost DP is separated from the rest of the sentence by an overt topic marker, namely *'me'*, and a pause at the level of PF:

(61) Li xiansheng me, RENSHi wo!
    Li mister PART know I
    lit. 'Mr. Li (TOPIC), [he] knows me!'

(61') $[_{Top2P}$ $[_{DP}$ Li xiansheng$]_i$ $[_{Top2'}$ $[_{Top2°}$ me] $[_{IP}$ $[_{V'}$ OP$_i$ $[_{V'}$ e$_i$ $[_{V'}$ RENSHi wo]]]]]]
    Li mister   PART   know I

In cases distinguished by the subject crossing a co-indexed possessive pronoun located in the subject-DP of the matrix clause, the Bijection Principle is not violated, as shown in (62):

(62) $[_{Top2P}$ $[_{DP}$ LI XIAO'ER$]_i$ $[_{IP}$ $[_{DP}$ ta$_i$ baba] shuo $[_{IP}$ $[_{V'}$ OP$_i$ $[_{V'}$ e$_i$ yijing HUIQU le]]]]]
    Li Xiao'er   he dad say   already return ASP
    'LI XIAO'ER (Contrastive Topic), his dad says [he] has already returned.'

The c-commanding subject in (62) binds the pronoun used as variable, while the operator connects the null constant that it licenses with its antecedent.

6.3. Subject left-dislocation through arguing by analogy

Based on the obligatory object raising that is triggered by focus-sensitive particles, it shall be concluded in this section that the same focus-sensitive particles trigger subject raising in the same manner.

We have not yet discussed contrastive topics and contrastive foci that are lexically marked by a focus-sensitive particle.

Nevertheless, all the contrastive topics and contrastive foci treated in section 5 had a systematic phonological manifestation in the form of accent. It should, however, be noted that sentences with a contrastive topic contain a second prosodic peak that falls on the predicate of the sentence, whereas sentences with a contrasive focus do not contain a second prosodic peak. Both this accent and the placement of the object in a pre-verbal or pre-subject position allow us to identify those constituents as contrastive foci or contrastive topics.

Although direct objects, if accented, are accessible to overt movement into appropriate functional Spec-positions, as demonstrated by the examples (28) - (29) and (45) - (48) above, such raising procedures are not obligatory, as the following examples show:

(63) A: Tamen dangzhong ni xihuan na ge xiaohair?
        they among you like which CL child
        'Which child do you like among them?'

    B: Wo xihuan ZHE ge xiaohair .
        I like this CL child
        'I like THIS child.'

(64) Wo XIHUAN ZHE ge xiaohair, er TAOYAN NA ge xiaohair.
    I like this CL child but dislike that CL child
    'I LIKE THIS child, but [I]DISLIKE THAT child.'

Seen in the light of (63) and (64), features like [+contrastive] and [+/-prominent] cannot be "strong" features in the sense of Chomsky (1995). For, "if a strong feature remains after Spell-Out, the derivation crashes"[30]. Yet, if the features in question were "weak", structures like (28) to (29) and (45) to (48) should be excluded, since weak features block overt movement.[31] Obviously, (28) - (29) and (45) - (48) represent unforced violations of the Procrastinate Principle. Chomsky suggests two options for cases like these:

a. The feature concerned may be strong or not

b. The feature concerned may or may not tolerate an unforced violation of Procrastinate.[32]

Both options allow us to assume that object raising in (63) and (64) is "procrastinated" in such a way that it will be "caught up on" at the level of Logical Form.

6.3.1. Direct objects lexically marked by focus-sensitive particles

In contradistinction to examples like (28) to (29), which have undergone an OPTIONAL left-detachment of the object, as proved by the correctness of (63) and (64), an accented object must be OBLIGATORILY detached from its base-position in other cases. This occurs if there is an adjacent focus-sensitive particle that is designed to mark it as a contrastive topic or a contrastive focus. As we will see, contrastive topics and contrastive foci have different lexical markers.

6.3.1.1. Contrastive objects marked by *shenzhi* or *lian*

The raising of an accented object is obligatory if it is lexically marked by *shenzhi* or *lian*. If such an object fails to be raised, the resulting structure will be totally ill-formed, as (65) a. shows:

(65) a. *Ta (ye / dou) renshi [$_{DP}$ shenzhi / lian [$_{DP}$ LI SI]].
     he   also   know   even   Li Si

In (65) b., however, the object goes, as is required, to [Spec, Foc2P]. There it triggers the appearance of *ye* or *dou* in Foc2^0, the two head elements being allowed to freely replace each other:

(65) b. Ta [$_{Foc2P}$ [$_{DP}$ shenzhi / lian [$_{DP}$ LI SI]]$_i$ [$_{Foc2'}$ ye / dou [$_{V'}$ RENSHI e$_i$]]]
     he   even   Li Si   also   know
     'He even knows Li Si.'

According to Lai (1994: 518), the *lian* constituent indicates "the biggest sum individual including the focus", the latter being denoted as "the extreme value". The elements *ye* and *dou* respectively signal that there are some other alternatives to the focus which also satisfy the property of the predication.

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[30] Chomsky (1995), p. 198.

[31] Chomsky (1995: 198) argues that there is a natural economy condition: LF movement is "cheaper" than overt movement. The system tries to reach PF "as fast as possible", mimimizing overt syntax.

[32] Cf. ibid, 374.

Whereas in (65b) the contrastive object lexically marked by *shenzhi / lian* selects [Spec, Foc2P] as its final landing site, it moves on to [Spec, Top2P] in (65) c.:

(65) c. [Top2P [DP Shenzhi / lian [DP LI SI]]i [IP ta [Foc2P ti [Foc2' ye / dou [V' RENSHI ei]]]]]
               even   Li Si   he   also   know
       lit. 'Even Li Si (CONTRASTIVE TOPIC) he also knows.'

Along the lines of Fang (1995: 283), Shyu (1995: 87), Zhang & Fang (1986: 80), and Liu & Xu (1997), I consider *lian*-phrases to be in pre-subject positions as contrastive topics or, in the terms of Liu & Xu (1997), as "topic foci" (huati jiaodian). This means that *lian*-phrases check their [+contrastive] feature in [Spec, Foc2P] before moving to [Spec, Top2P] in order to check its [-prominent] feature, if it has such a second feature.[33]

6.3.1.2. Contrastive foci marked by *shi*

Just as *shenzhi* and *lian*, the focus-sensitive particle *shi* obligatorily triggers object left-detachment:

(66) a. *Ta zui   ai   kan [DP shi [DP ZHE zhong shu]].
        he most love read PART   this kind of book

In contrast to *shenzhi* and *lian*, the focus-sensitive particle *shi* is a "pure" focus marker. In (66) b. it yields a structure with a sentence-initial focus phrase, which is located in [Spec, Foc1P]:

(66) b. [Foc1P [DP Shi [DP ZHE zhong shu]]i [IP ta [Foc2P ti [V' zui ai kan ei]]].
         FM   this kind of book   he   most love read
       'It is this kind of books that he loves most.'

Sentences involving a phrase that is marked by the focus marker *shi*, such as (66) b., are often called "*it*-cleft" structures, a term that is misleading to some extent.[34]

To summarize, the aim of section 6.3.1. was to demonstrate that lexical marking by a focus-sensitive particle adjoined to a direct object automatically triggers its left-detachment from V'.

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[33] Phrased differently, *lian*-phrases are a MIXED category sharing features of the categories of topic AND focus. Granted this is true, the long-lasting vivid dispute whether *lian*-phrases are topics OR foci can be resolved. The same applies to *shenzhi*-phrases, provided they occur in structures like those that *lian*-phrases appear in. Respecting the nature of *lian*-phrases, cf. Tsao (1990: 264ff.) who argues for treating the *lian* constituent as a topic. Disagreeing with Tsao, Paris (1995: 149) shows convincingly that *lian*-phrases do not function as pure topics. Thus, she underlines: "The constituent over which *lian...ye/dou* has scope... does not bear the informational role of a topic; rather, it carries new information and behaves like a focus."

[34] Though being akin as far as their function is concerned, sentences containing a "*shi*-phrase" differ from "*it*-clefts" in languages such as English or German in two respects: First, the lack of an expletive pronoun such as *it*, and second, the position of the focused element is not limited to the left periphery of the sentence. Finally, no "clefting" takes place in Chinese (cf. Huang (1981/1982: 396)).

6.3.2. Subjects lexically marked by focus-sensitive particles

Given that focus-sensitive particles obligatorily trigger the raising of the direct objects they are adjoined to, we can infer that the same particles trigger a similar form of left-dislocation in the case of subjects.

6.3.2.1. Subjects marked by *shenzhi* or *lian*

Left-dislocation of subjects marked by *shenzhi* or *lian* comprises two cases:
First, the Spec-position of Top2P is not otherwise occupied. Therefore, the *lian*-subject can end up in that position, as exemplified by the following structure:

(67) [$_{Top2P}$ [$_{DP}$ shenzhi / lian [$_{DP}$ san-sui de HAIZI]]$_i$ [$_{Foc2P}$ t$_i$ [$_{Foc2P}$ [$_{Foc2'}$ ye / dou [$_{V'}$ ZHIDAO
                     even   three-year SUFF child   also   know
      zheyang qianjin de daoli.]]]]]
        such   simple SUFF truth
      'Even a three-year-old child knows such a simple truth.'

Second, if [Spec, Top2P] is occupied by another constituent such as a base-generated topic, the *lian*-subject will "get stuck" in [Spec, Foc2P]:

(68) [$_{Top2P}$ [$_{DP}$ Zhe kuai shitou]$_1$, [$_{IP}$ [$_{Foc2P}$ [$_{DP}$ lian [$_{DP}$ si-ge   nanren]]$_2$ [$_{Foc2'}$ dou
          this CL boulder   even   four-CL man   ye
      [$_{V'}$ t$_2$ [$_{V'}$ Op$_1$ [$_{V'}$ e$_1$ ban-bu-dong]]]]]]]]
                      cannot remove
      'This boulder (TOPIC), four men cannot even remove it.'

6.3.2.2. Subjects marked by *shi*

If no topic appears in [Spec, Top2P], subjects marked by the "pure" focus marker *shi* will undergo "Foc-to-Foc" movement:

'69) [$_{Foc1P}$ [$_{DP}$ shi [$_{DP}$ ЛЕЛЕ]]$_i$ [$_{Foc2P}$ t$_i$ [$_{V'}$ e$_i$ [$_{V'}$ rang wo jin de wu]]]]
        FM   elder sister   let   I enter SUFF room
      'It was my elder sister who let me enter the room.'
      Liu & Pan & Gu (1983)

If [Spec, Top2P] is, however, occupied, the subject ends up in [Spec, Foc2P]:

(70) [$_{Top2P}$ [$_{DP}$ Zhe ge zhuyi]$_1$, [$_{IP}$ [$_{Foc2P}$ [$_{DP}$ shi [$_{DP}$ TA]]$_2$ [$_{V'}$ t$_2$ [$_{V'}$ Op$_1$ [$_{V'}$ e$_1$ chu de]]]]]]
        this CL advice   FM   he   offer SUFF
      lit. this advice (TOPIC), it was HIM who offered it.'

Comparing structures like that of Chinese (70) with corresponding English structures, Huang (1981/82: 392f., 396) examined the reasons why the latter is ill-formed:

(71) *That dog$_1$, it was John$_2$ that t$_2$ bought t$_1$ from me.

(72) Neizhi gou, shi Zhang San xiang wo mai-de.
      that   dog FM   from me bought
    'That dog, it was Zhang San that bought [it] from me.'

Huang's hypothesis is: "Since clefting applies before topicalization in English, the island formed by the former has the effect of blocking the application of the latter. But in Chinese, no island is formed before topicalization applies in Syntax, and when FOCUS applies in LF it need not cross any island"[35].

Phrased differently, "Foc-to-Foc" movement of the subject is "procrastinated" in (70) and (72). Unlike Huang, we assume that the topic in (70) and (72) are base-generated.

6.4. Conclusions about left-dislocation of subjects

In section 6.2. above, we adduced evidence that there is a type of "visible" subject left-dislocation in Chinese. This type was represented by the examples (58), (59) and (62), which were distinguished by a contrastive subject of an embedded clause being raised to the leftmost periphery of the matrix clause.

In section 6.3., we drew an analogy between the obligatory left-dislocation of objects that are lexically marked by focus-sensitive particles and subjects marked by the same particles. We reached the conclusion that focus-sensitive particles trigger obligatory left-dislocation of the subjects they are adjoined to just as they trigger left-dislocation of direct objects.

Granting that this is true, we infer that subject left-dislocation takes place in exactly the same way, if it is "invisible", as in (55) to (57), treated in section 6.1.

Sentence-initial DPs anaphorically related to an empty subject position but lacking the feature [+contrastive], are base-generated topics in [Spec, Top2P].

"Foc-to-Foc" movement of subjects carrying a [+contrastive] and a [+prominent] feature is blocked at the level of S-structure (but not at LF), if there is an intervening topic in [Spec, Top2P].

Taken as a whole, subjects containing the feature [+contrastive] are left-dislocated without exception. The procedure of left-dislocation that they are subject to is, in principle, the same that applies to contrastive direct objects.

7. The syntactic immobility of indirect objects

Contrary to direct objects and subjects, indirect objects are not accessible to the procedures of left-dislocation depicted in sections 5 and 6 above. In this section, the reasons for this phenomenon shall be investigated.

7.1. The internal structure of V' in Chinese

Before showing the effects of the Empty Category Principle (ECP), established by Chomsky (1981), on indirect objects, it is evident that we must take a look at the make-up of the V' con-

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[35] Ibid, p. 396.

stituent[36] of Chinese sentences. Contrary to Huang (1982), I will argue that V' is underlyingly head-final in Chinese.

7.1.1. The head-final vs. head-initial parameter in Huang (1982)

Huang (1982) claims that the head-final vs. head-initial parameter need not have its value fixed, in a given language, for all lexical categories and for all levels of phrase structure.
Taking this for granted, Huang points out that Chinese exhibits a full range of head-final constructions, but allows only a limited range of head-initial constructions. Verbal phrases, for example, are head-initial, but only at the lowest level of phrasal expansion:[37]

(73) a. $[_{X^n} X^{n-1} YP^*]$ iff n=1 and X ≠ N
　　 b. $[_{X^n} YP^* X^{n-1}]$ otherwise

There is no flaw in Huang's rule, except for the fact that it exclusively takes surface orders of constituents into account.

7.1.2. V' as head-final construction

In contrast to Huang (1982) but in accordance with Koopman (1984), Travis (1984), and Li (1990), I will assume, in this paper, that the sentence constituent V' is a head-final construction at the level of D-structure:

(74) [SU $[_{V'}$ IO $[_{V'}$ DO V^0]]]

This assumption is based on the idea that
- θ-role assignment by the verb to its arguments and
- Syntactic Licensing of verbal arguments[38]
are two independent procedures.

Given this, it is further supposed that
- these procedures can take place at different levels of the derivation of sentences, and that
- they can be opposed respecting their direction.

More specifically, I will hold that multi-place verbal heads like that in (74) reach their S-structural position by being raised into head positions of higher V'-shells[39]:

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[36] In accordance with Fukui & Spies (1986) I will operate on the premise that there is a fundamental asymmetry between lexical categories and functional categories in that the latter project to X" and are limited to a single specifier position and a single complement position, "while all projections of lexical categories are X', which is indefinitely iterable..., limited only by the Projection Principle and other independent principles of licensing" (ibid., p. 128). See also Fukui (1986).

[37] Cf. Huang (1982), pp. 14f. and 41.

[38] In inflectional and agglutinating languages, Syntactic Licensing corresponds to the operation of Case assignment. Our conviction, that only in languages that have a case morphology Syntactic Licensing taking place by Case assignment, is supported by (Kiparsky (1991: 1): "Abstract Case and AGR (syntactic elements assumed to be present in all languages independently of morphology) do not exist.".

[39] Cf. Larson (1988; 1990). In sharp contrast to the approach outlined in (75), Koopman (1984), Travis (1984) and Li (1990) achieve their S-structural order by NP movement within X'. As for that approach, cf. Goodall (1990: 246), who points out that such argument movement from one side of the head to the other leads to theory-internal and conceptual difficulties, besides the fact that there is very little empirical support for such kinds of movement.

(75) $[_{XP}$ SU$_1$ $[_{v'}$ t$_1$ $[_{v'}$ $[_{v^o}$ V$^0_2$] $[_{v'}$ IO $[_{v'}$ $[_{v^o}$ t'$_2$] $[_{v'}$ DO t$_2$]]]]]]

This means that Chinese has an SOV order at the level of D-structure but an SVO order at S-structure.

7. 2. Syntactic licensing in V'

On the lines of the basic model of V' given in (75), the verb is enabled to assign θ-roles from the right to the left at the level of D-structure.

In contradistinction to this, Syntactic Licensing goes from the left to the right[40]. This means that for the DO to be licensed, the verbal element V^0 has to move to the V'-shell head position marked with t'$_2$ in (75). Having licensed the DO from this position, the verb moves on to the lowest V'-shell head position, which c-commands the IO. From there, it licenses the IO.

As for the subject, no syntactic licenser is required, just as the subject in nominative-accusative languages does not need any authority assigning it the nominative.

According to Falk (1991: 199f.), in languages like English or German, nominative case is not actually a case, for nouns (or NPs) used in isolation (in the 'citation form') are nominative, and there is, naturally, no source for case to be assigned to a form in isolation.[41]

In the following, we will see that licensing of the indirect object by the verbal head V°, such as illustrated in (75), merely represents the simplest case. It will be shown that there are verbs whose indirect object is not licensed by V^0 but by the element *gei*, which I will treat as a DUMMY VERB generated in the head position of a higher V'-shell. Furthermore, in certain circumstances, the DO can be licensed by the element *ba*, which I will also treat as a dummy verb occurring within the sentence constituent V'.

Finally, it will become evident that licensing of DOs and IOs by the dummy verbs *ba* and *gei,* respectively, may be accompanied by two possible inversions of constituent order that I will label as "NP-shift".

7.2.1. Indirect objects licensed by a regular verb

The following example exemplifies the abstract structure (75):

(76) Wo $[_{v'}$ gaosu$_i$ $[_{v'}$ ni $[_{v'}$ t'$_i$ $[_{v'}$ yi-ge   hao xiaoxi $[_{v^o}$ t$_i$]]]
     I   tell   you   one-CL good news
     'I (want to) tell you some good news.'

[40] Cf. Koopman (1984: 124), who claims that in Chinese "Case" is assigned to the right.

[41] "If nominative forms are really Caseless, then, of course, nothing 'assigns' nominative Case." (Falk (1991), p. 200). Brandt & Reis & Rosengren & Zimmermann (1992: 18) emphasize that it cannot be taken for granted that nominative in German is actually connected with finiteness or agreement features. For, the nominative occurs in infinite constructions as well, and, inversely, the agreement features in question may appear in constructions lacking a nominative:
(i) Man schlug ihnen vor, einer nach dem anderen zurückzutreten.
(ii) Keiner aufstehen.
(iii) Ihm liegt sehr viel an dir.
Cf. also Mayerthaler & Fliedel (1990: 29), who consider the nominative as "Non-Case".

(76')

$$\begin{array}{c}\text{V'}\\ \overset{\displaystyle\text{SU}\quad\quad\text{V'}}{\quad\quad}\\ t_2\end{array}$$
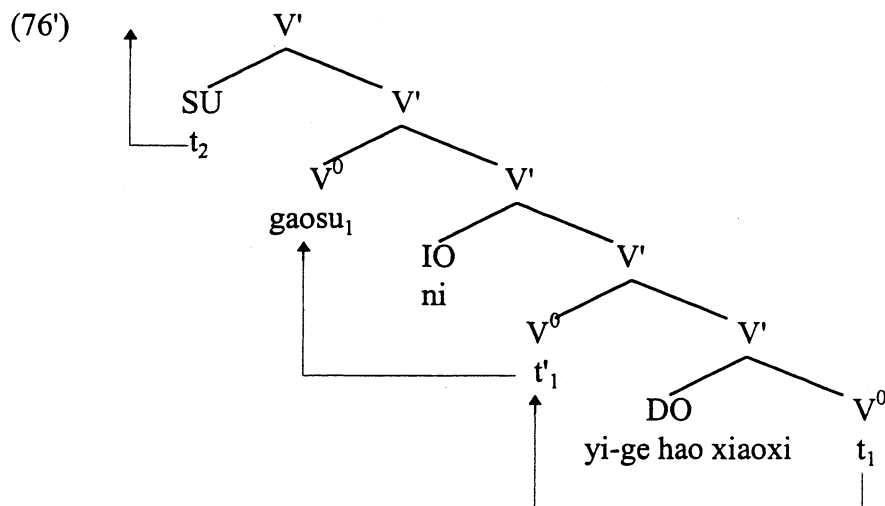
This example is simple in that the constituent V^0 is represented by a single verbal stem.

Yet the stems of Chinese verbs can be followed by certain (semi-)suffixes and other elements such as non-referential objects or postverbal manner adverbials, all of them being constitutive components of the head constituent V^0. That is to say, the head constituent V^0 can consist of a Verbal Complex (VC) with the stem of the verb in the leftmost positionf of V^0.

Aspectual suffixes such as the 'perfective' morpheme *le*-1 and the 'experiential' morpheme *guo* are obligatorily raised together with the verbal stem, as (77) and (78) demonstrate[42]:

(77) Wo yijing [$_{V'}$ huan-le$_i$ [$_{V'}$ ta [$_{V'}$ t'$_i$ [$_{V'}$ zhe ben shu   t$_i$]]]]
    I   already   returned-ASP   he   this Cl   book
    'I have already returned this book.'

(78) Liu Gang [$_{V'}$ song-guo$_i$ [$_{V'}$ wo [$_{V'}$ t'$_i$ [$_{V'}$ xiangce   t$_i$]]]]
    Liu Gang   give-ASP   I   photo album
    'Liu Gang once gave me a photo album.'

Whereas the θ-role Goal carried by the indirect object in (77) and (78) above is determined to serve as "Receiver", it functions as "Source" in the following example:

(79) Ta [$_{V'}$ tou-le$_i$ [$_{V'}$ wo [$_{V'}$ t'$_i$ [$_{V'}$ shi kuai qian   t$_i$]]]]
    he   steal-ASP   I   ten Yuan money
    'He has stolen ten Yuan from me.'

Contrary to *le*-1, the element *le*-2, which expresses inchoativity or perfectivity, is obligatorily left behind by the verbal stem:

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[42] In (79) and (80), the verbal stem consists of a base morpheme: *huan* ('return') and *song* ('give') respectively. In addition, there are compound verbal stems such as *huangei* (return+give) and *songgei* (make a gift + give), which are able to replace the base morpheme in (79) and (80) without any change in meaning. Note that the morpheme *gei*, which serves as a compositional element in the process of word formation in *huangei* and *songgei*, is not identical with the dummy verb *gei* which we will talk about below.

(80) Liu Gang   zai   ye bu hui [$_{V'}$ songgei$_i$ [$_{V'}$ wo [$_{V'}$ t'$_i$ [$_{V'}$ shenme dongxi t$_i$ le]]]]
    Liu   Gang once more also not will   give   I   any   thing   LE-2.
    'Liu Gang will not give you anything any longer.'

(81) Liu Gang [$_{V'}$ song-le$_i$ [$_{V'}$ wo [$_{V'}$ t'$_i$ [$_{V'}$ xiangce   t$_i$ le]]]]
    Liu Gang   give-LE-1   I   photo album   LE-2
    'Liu Gang once gave me a photo album.'

7.2.2. Indirect objects licensed by the dummy verb *gei*

If the verbal system is obligatorily tied to the Verbal Complex, with the result that it cannot be raised into higher V'-shells, the indirect object must be licensed by the dummy verb *gei*, which at this juncture occurs in the lowest V^0-position c-commanding the indirect object.

In the following examples the verb is followed by a non-referential object, forming a Verbal Complex with an idiomatic meaning:

(82) Wang daifu hai mei-you [$_{V'}$ [$_{V}$∘gei] [$_{V'}$ wo [$_{V'}$ kan-guo   bing]]]
    Wang doctor yet not-have   DV   I   look-ASP at disease
    'Doctor Wang was not yet examining me.'

(83) Wo yijing [$_{V'}$ [$_{V}$∘gei] [$_{V'}$ ta [$_{V'}$ dao   xi   le]]]
    I   already   DV   he   say happy event LE-2
    'I have already congratulated him.'

(84) Yisheng [$_{V'}$ [$_{V}$∘gei] [$_{V'}$ ta [$_{V'}$ da-le   zhen le]]]
    doctor   DV   he   jab-ASP needle LE-2
    'The doctor gave him an injection.'

7.3. V'-internal NP-Shift in Chinese

If an ordinary verb syntactically licenses one of its arguments, this argument will automatically get into the range of the focus projection of that verb. This side-effect is undesired in cases of an argument which is in some context background information, since such an argument is unable to serve as focus.

Yet there are certain possibilities of thwarting the undesired side-effect by generating the argument concerned in a V'-shell outside the range of the verb. Such an argument must be licensed by a dummy verb. As we will immediately see, such procedures result in a reorganization within V' that is comparable to NP-Shift in English.

There are two possibilities of shifting the relative order of the direct and the indirect object in respect to each other in Chinese.

The first of them, which is generated with the help of the dummy verb *ba,* represents the archetypal manner of NP-Shift in Chinese, while the second one is a highly marked construction that is supported by the dummy verb *gei*.[43]

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[43] In the history of Chinese Linguistics, elements like *gei* and *ba* were called Co-Verbs at be beginning, later they were analysed as prepositions or functional heads (cf. Zou (1993) for *ba*). Considering *gei* and *ba* as dummy verbs, basically, is equal to harking back to the pioneers of Chinese grammatical research. That does not mean that there are no prepositions in Chinese. Thus, there is, for example, a preposition *gei* which introduces benefactive PPs.

Both constructions have in common that the direct object is not base-generated in the lowest V'-shell as the left sister of V^0. Instead, it is generated in a position that is located hierarchically higher than that of the indirect object. According to this approach, NP-shift in Chinese is not engendered by any movement of an internal argument of V^0.

7.3.1. NP-Shift with the help of the dummy verb *ba*

As mentioned above, there is a dummy verb serving as licenser of direct objects representing background information, namely the element *ba:*

(85) Jiujiu ba shoubiao song wo le.
    uncle DV wrist watch give I LE-2
    '[My] uncle GAVE the watch to ME.

(85') $[_{IP}$ jiujiu$_1$ $[_{V'}$ t$_1$ $[_{V'}$ $[_{V^0}$ ba] $[_{V'}$ shoubiao $[_{V'}$ song$_2$ $[_{V'}$ wo $[_{V'}$ t$_2$ le]]]]]]]
    uncle   DV   wrist watch   give   I   LE-2

Note that the DO in (85) cannot be generated as a left sister of the verb:

(85") *$[_{IP}$ jiujiu$_1$ $[_{V'}$ t$_1$ $[_{V'}$ $[_{V^0}$ ba] $[_{V'}$ shoubiao$_3$ $[_{V'}$ song$_2$ $[_{V'}$ wo $[_{V'}$ t'$_2$ $[_{V'}$ t$_3$ t$_2$ le]]]]]]]]
    uncle   DV   wrist watch   give   I   LE-2

The structure (85") is wrong, because the DO, as a result of being generated as left sister of the verb, is licensed twice, namely by the full verb *song* (from the position marked with t'$_2$) and the dummy verb *ba*.

The position occupied by the DO in (85) may be characterized as a preverbal but V'-internal TOPIC POSITION. [44]

Goodall (1990: 248) provides an example determined to prove that the analysis of Koopman (1984), which treats the element *ba* as a dummy Case marker, cannot be held up:
(i) Neige nühaizi ba Zhangsan ku-de hen shangxin.
    that girl BA   cry-DE very sad
    'That girl cried so much that Zhangsan was very sad.'
Goodall is right in emphasizing that *Zangsan* in (i) cannot be an object of the intransitive verb *ku ('cry')* but must be the subject of the embedded clause. Yet (i) does not falsify the analysis of *ba* in other cases as syntactic licenser (or Case marker in the lines of Koopman's system). For, *ba* in (i) is a full verb like the causative full verb *shi*, both meaning 'cause'. As a result, the verb *ba* in (i) can be replaced by the full verb *shi ('cause')*. This is not possible in cases in that *ba* functions as dummy verb. Other examples containing the causative full verb *ba* are given in Li & Thompson (1981: 480). Cf. also Xue (1994).
[44] In cases of sentences containing a two-place verb, the occurrence of *ba* may be structurally coerced, if the verbal stem is tied to its complement as in
(i) $[_{IP}$ Zhang San $[_{V'}$ ba $[_{V'}$ chuanghu ma-de   gangan-jingjing]]]
    Zhang San   DV   window polish-SUFF sparkling clean
    'Zhang San polished the window [so that it was] sparkling clean.'
It is a notable peculiarity of Chinese that, in cases like (i), the dummy verb *ba* can be replaced by a copy of the verb stem, which functions as a dummy verb in this case, just like *ba* in (i):
(i') $[_{IP}$ Zhang San $[_{V'}$ ma $[_{V'}$ chuanghu ma-de   gangan-jingjing]]]
    Zhang San   DV   window polish-SUFF sparkling clean

7.3.2. "Heavy NP-shift" with the help of the dummy verb *gei*

There is a highly marked construction treated by Zhu Dexi (1980; 1983), Paul (1988a; 1988b). and others. This construction is characterized by the fact that an IO functioning as "Receiver" (cf. (77), (78) and (80) above), and licensed by *gei*, appears in the rightmost position of the sentence:

(86) Wo xiang song yi-jian yifu   gei ta.
    I   want   give one-CL garment DV she
    'I'd like to give her a garment.'

In opposition to the prevailing trend, I will not analyse the element *gei* in (86) as a preposition but, in accordance with our approach, as a dummy verb. The tentative analysis I will give for (86) is the following:

(86') Wo xiang $[_{V'}$ $[_{V°}$ song $]_i$ $[_{V'}$ yi-jian yifu $[_{V'}$ gei $[_{V'}$ ta $[_{V'}$ t_i $]]]]]$
    I   want   give   one-CL garment DV   she

The difference between (85) and (86) is that the DO is licensed by a dummy verb in (85) but by the full verb in (86). As for the IO, it is licensed by the full verb in (85), whereas it is licensed by a dummy verb in (86).

In (85), the IO but not the DO is in the range of the focus projection of the verb. In (86), quite the opposite is the case: Only the DO licensed by the full verb, but not the IO licensed by a dummy verb, lies within range of the focus projection of the verb.

"Heavy NP-shift" like that in (86) is NOT allowed in cases in which the IO is the Addressee, as in (76), or the Source, as in (79). It is also not permitted in cases like (82) - (84) above.

For the sake of completeness, it must be mentioned that there is group of two-place verbs like *mai ('buy')*, *da ('knit')*, *qi ('brew up', 'make')* etc., building verb-object phrases like *buy yi-ben shu ('buy a book')*, *da maoyi (' knit a sweater')*, *qi cha ('make tea')*, and others which can be completed by a benefactive adjunct introduced by the preposition *gei ('for')*. Benefactive adjunct-PPs of this kind can be adjoined to the left of V' and, in analogy to the syntactic pattern of (86), to the right of V':[45]

(87) Zhang San $[_{V'}$ $[_{PP}$ gei ta$]$ $[_{V'}$ mai-le$_1$ $[_{V'}$ yi-ben shu t_1 $]]]$
    Zhang San   for she   buy-ASP   one-CL book
    'Zhang San bought her a book.'

---

[45] Cf. Speas (1990), who denies the hypothesis of Lebeaux (1988) that D-structure includes heads and arguments and nothing else, i. e. the allegation that all adjuncts are added to the phrase marker after D-structure. Speas (1990) shows by means of English examples, which hold good for Chinese as well, that benefactive, locative and instrumental PPs "do not show anti-reconstruction effects", what means, that "these phrases must be present at D-structure" (ibid., p. 52). As for Chinese benefactive PPs, see a strong crossover case like (i) b. which is analogous to example (i) a given by Speas:
(i) a. *For Mary$_1$'s brother, she$_1$ was given some old clothes.
    b. *Weile Zhang San$_1$ de anquan, ta$_1$ duobi-zai cheng-li.
       for Zhang San SUFF safty he hide-in   town-inside
    *'For Zhang San$_1$'s safty, he$_1$ was hiding in the town.'
Concerning the relative position of different adjuncts to each other, see Zhang & Fang (1996).

(88) Zhang San [$_{V'}$ [$_{V'}$ mai-le$_1$ [$_{V'}$ yi-ben shu t$_1$]]] gei ta]
    Zhang San   buy-ASP   one-CL book   for she
    'Zhang San bought a book for her.'

7.4. Why indirect objects cannot be left-dislocated

Chomsky's (1981: 250) Empty Category Principle reads as follows:

(89) [$_\alpha$ e] must be properly governed.

If the nearly total syntactic immobility of indirect objects is regulated by this principle, then all ECP effects are the result of the internal structure of the V' constituent, which we have worked out in relative detail in this section. Let us revert to our V'-model (74)/(75) introduced in section 7.1:

(74) [SU [$_{V'}$ IO [$_{V'}$ DO V^0]]]

(75) [$_{XP}$ SU$_1$ [$_{V'}$ t$_1$ [$_{V'}$ [$_{V°}$ V$^0_2$] [$_{V'}$ IO [$_{V'}$ [$_{V°}$ t'$_2$] [$_{V'}$ DO t$_2$]]]]]]

This model implies that government of an internal argument by its lexical head is regressive at the level of D-structure but progressive at S-structure. This implication is consistent with the parameter of directionality, which is valid for government.

It is evident from (74)/(75) that D-structural regressive government is θ-government along the lines of Chomsky (1986b: 15):

(90) α θ-governs β iff α is a zero-level category that θ-marks β, and α, β are sisters.

Note that θ-government only requires SISTERHOOD of a verbal head and the complement that it θ-marks. The relative position of the head and its complement to each other, however, is irrelevant in Chomsky's definition.
    Based on (74)/(75), referential DOs as left sisters of V^0 are θ-governed.

The possibilities of applying the rule Move α to constituents like DO, IO, and SU are subject to the Empty Category Principle (89), which determines that the a trace left behind by any movement operation must be "properly governed".
    Chomsky's (1986b: 17) definition of Proper Government is primarily based on two notions: the notion of θ-Governmment depicted in (90), and the notion of Antecedent-Government[46]:

(91) α properly governs β iff α θ-governs or antecedent-governs β.

Granting (90) and (91) are valid, the verbal head V^0 in (74)/(75) properly governs the DO at the level of D-structure. The IO is, however, "improperly" governed at the level of S-structure merely by being c-commanded by the raised V^0.

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[46] The concept of Antecedent-government goes back to the *[that-t] filter discussed by Chomsky & Lasnik (1977). Chomsky needs Antecedent-government to explain certain subject-object asymmetries with respect to wh-movement out of sentences introduced by the complementizer *that*.

Whereas the DO and the IO are governed by the verbal head V^0, the subject constituent SU in the highest V'-shell is not governed at all. This forces the subject to move to [Spec, IP] in the unmarked case[47]. The trace t_1 it leaves behind is antecedent-governed and therefore properly governed by virtue of Chomsky's tenet (91).

To put it briefly: The framework outlined here implies that the traces left behind by direct objects and subjects, but not those of indirect objects, are properly governed.

Based on these principles, it goes without saying that any movement of an indirect object violates the ECP.

Therefore, the ECP predicts that indirect objects in Chinese should not be permitted to be topicalized, passivized, focused in "pseudo-cleft" constructions, or relativized. These predictions are supported by the Chinese data, independent of whether the IO is licensed by a full verb or by the dummy verb *gei*, as illustrated by the following examples:

(92) *Li Si, women yinggai gaosu zhe ge hao xiaoxi. (Topicalization)
     Li Si   we   should   tell   this CL good   news
     lit. 'Li Si (TOPIC), we should tell [him] this good news.'

(93) *Li Si yijing bei wo huan-le zhe ben shu. (Passivization)
     Li Si   already   by I   returned-ASP   this   CL   book
     'Li Si has already been given back this book by me.'

(94) *Liu Gang song-guo xiangce de shi wo. (Pseudo-Clefting)
     Liu Gang   give-ASP   photo album   SUFF   FM   I
     lit. 'Who Liu Gang once gave a photo album to was me.'

(95) *Zhang San tou-le shi-kuai qian de Li Si. (Relativization)
     Zhang San   steal-ASP   ten-Yuan money   SUFF   Li Si
     'Li Si whom Zhang San has stolen ten Yuan from'

(96) *Li Si, Wang daifu hai mei-you (gei) kan-guo bing. (Topicalization)
     Li Si   Wang   doctor yet   not-have   DV   look-ASP at disease
     lit. 'Li Si (TOPIC), doctor Wang was not examining [him].'

(97) *Yisheng (gei) da-le zhen de shi Li Si. (Pseudo-Clefting)
     doctor   DV give-ASP injection SUFF FM   Li Si
     'Whom the doctor gave an injection was Li Si.'

In all NP-Shift cases such as (85) and (86) above neither the indirect object nor the direct object can be extracted.

7.5. Counter-examples

Nevertheless, there are two types of apparent counter-examples which we will briefly dwell on in this section.

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[47] If contrastive, the subject ends up in [Spec, Foc2P], [Spec, Top2P], or [Spec, Foc1P], as described in chapter 6.

7.5.1. Can indirect objects be passivized?

The first type of counter-examples, which I owe to Marie-Claude Paris (p. c.), concern the role of the IO in certain passive sentences. The possibility of some IOs being able to be passivized is inexplicable without looking at some peculiarities of the passive construction in Chinese.

7.5.1.1. Some peculiarities of the passive construction in Chinese

Just as in Japanese, Vietnamese, Thai and other Asian languages, in Chinese the passive is used essentially to express an adverse situation, i. e. in so-called "*bei*-sentences" the happening is unfortunate to the patient[48]:

(98) Zhang San bei Li Si shahai-le.
     Zhang San DV Li Si kill-ASP
     'Zhang San was killed by Li Si.'

(99) Zhang San bei Li Si kanjian-le.
     Zhang San DV Li Si see-ASP
     '[Unfortunately], Zhang San was seen by Li Si.'

Recently, under the influence of Western languages, especially English, the use of the passive construction has been widening so that the great majority of native speakers of Chinese are accepting passive sentences without adverse implications such as the following:

(100) Ni de   laixin   yijing bei wo shoudao-le.
     you SUFF incoming letter   already DV I   receive-ASP
     lit. 'Your letter has already been received by me.'

In our framework, passive sentences like (98) - (100) should have the following abstract S-structure:

(101) $[_{IP}$ DO$_1$ $[_{V'}$ *bèi* $[_{V'}$ SU $[$ V$_2$ $[_{V'}$ t$_1$ t$_2$ $]]]]]$

More specifically, a sentence like (98) would have the following S-structure:

(98') $[_{IP}$ Zhang San$_1$ $[_{V'}$ *bèi* $[_{V'}$ Li Si $[$ shahai-le$_2$ $[_{V'}$ t$_1$ t$_2$ $]]]]]$
     Zhang San   DV   Li Si   kill-ASP

As indicated in (98'), after having been syntactically licensed by the verb, the direct object *Zhang San* moves to [Spec, IP]. The D-structural subject argument *Li Si*, however, must be licensed by a dummy verb, prototypically by the dummy verb *bèi*. This element, which came into use at the time of the Han dynasty (206BC - 220 AD)[49], originally had a meaning similar to *'suffer'*, *'sustain'*, or *'endure'*. This meaning, which has been shimmering through until now,

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[48] Cf. Wang Li (1958), Chao Yuen Ren (1968), Li & Thompson (1981), Chu Chauncey Cheng-hsi (1983), Lü Shuxiang (1984), Ohta, Tatsuo (1987), Tsao Feng-Fu (1990), Li, Yen-hui A. (1990), Ren Xiaobo (1991), Liu Shuxin (1993), Chen, Lilly Lee (1994), Xue Fengsheng (Hsueh, Frank S.) (1994), Tsai, Wei-Tien Dylan (1995), Cheng, Lisas Lai-shen (1995), Paris (1996), Shi Dingxu (1997) etc.

[49] Cf. Wang Li (1958: 424).

makes clear why the use of the passive construction was limited to unfortunate happenings for such a long time.

There are several reasons causing me to treat the element *bei* as a dummy verb located within V':

- the verbal origin of *bei* mentioned just now

   There are attempts to treat the element *bei* even in Modern Chinese as a two-place predicate, which takes a Patient as its external argument and a proposition as its complement. [50]

- the position of negations

   Negations, I believe, appear before *bei* and *ba* - outside V', in a functional Position Phrase. [51]

(102) a. Ta [$_{PosP}$ mei [$_{V'}$ ba [$_{V'}$ yifu   nongzang]]].
         he   not   DV   clothes get dirty
         'He hasn't got his clothes dirty.'

   b. *Ta ba   yifu mei nongzang. [52]
        he DV clothes not get dirty

(103) a. Nianqing ren   wangwang [$_{Posp}$ bu [$_{V'}$ bei [$_{V'}$ bieren   zhongshi]]].
         young people commonly   not   DV   other people take seriously
         'Youngsters are commonly not taken seriously by other people.'

   b. *Nianqing ren   wangwang bei bieren   bu zhongshi.
         young people commonly DV other people not take seriously

- striking similarities between *bei* and *ba* observed in the relevant literature

   Cf. Chu (1983: 219): Just like for the *ba*-sentence, there are three major syntactic requirements for the *bei*-sentence:
   (i) The Patient must be either definite or specific.
   (ii) The verb must be an action verb, and
   (iii) In many cases, there must be a verbal complement of some form. [53]

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[50] Cf. the discussions regarding this in Cheng (1995) and Tsai (1995). Tsai (1995: 296) argues that in a sentence like
(i) *Li Si bei [Akiu   da-le   san-zhi quanleida]*
    Li Si by Akiu hit-Perf three-CL home run
   'Li Si suffered from Akiu's hitting three home runs'.
there is no gap which suggests that the Patient *Li Si* might originate from within the complement of *bei*. That claim is at odds with our analysis based on the assumption that *Li Si* in (i) is base-generated as left sister of the verbal complex, i. e. the verb form *da-le ('hit'-ASP)* + its complement *san-zhi quanleida ('three-CL home run')*.
      As for the bi-clausal analysis proposed here, cf. Li (1990: 158ff.) who tries to prove that a biclausal analysis of *bei*-sentences (a hypothesis advocated as early as by M. Hashimoto (1969), A. Hashimoto (1971) and Chu (1973)) does not hold water.
[51] The same applies to the question operator shi-bu-shi, which may appear direct before *bei* and *ba*.
[52] Merely in some idiomatic phrases is there a possibility that the negation alternatively appears direct before the verb. Cf. Lü Shuxiang (ed.) (1981), p. 51f.
[53] If an object is affected by some happening or effect, then a mere action does not necessarily produce the effect.

(iv) Furthermore, both in *ba*-sentences and in *bei*-sentences, the full verb can be optionally accompanied by an instance of the morpheme *gei*, which I will treat as a semi-prefix of the verb. Compare the following examples:

(104) Ta [$_{V'}$ ba [$_{V'}$ shu gei-nazou-le].
    he   DV   book PREF-take-away-ASP
    'He has taken away the book.'

(105) Shu$_2$ [$_{V'}$ bei [$_{V'}$ ta [$_{V'}$ gei-nazou-le$_1$ [$_{V'}$ t$_2$ t$_1$]]]]
    book   DV   he   PREF-take-away-ASP
    'The book has been taken away by him.'

In some sense, the syntactic relationship between *ba*-sentences and *bei*-sentences is closer than the analogy between Chinese *bei*-sentences and English passive sentences containing the preposition *by*.[54]

• the status of the Agent-DP following *bei*
    In contradistinction to the *by*-phrase in English passive sentences, the *bei*-phrase in Chinese sentences does not function as an adjunct, as observed by Li (1990: 162). Quoting the generalization proposed by Zubizarreta (1985: 256), that "If X is an argument of Z and Y is an adjunct of Z, then X cannot be referentially dependent on Y.", Li compares the following examples:

(106) *His$_i$ mother is loved by John$_i$.

(107) Wode shu bei Zhangsan$_i$ song gei tade$_i$ erzi le.
    my book by Zhangsan give to his son LE-2
    'My book was given to his son by Zhangsan.'

If the Agent phrase *Zhang San* in (107) were an adjunct like *John* in (106), coreference between *Zhang San* and *tade ('his')* would not be allowed in (107). I infer from this, that the Agent phrase in (107), *Zhang San*, occupies an argument position, namely its base position; in that it is syntactically licensed by the dummy verb *bei*.[55]

• the possibility of replacing *bei* by a verb copy in certain special cases
    Xue (1994) notes that in Chinese passive sentences, the *bei*-phrase is not necessarily the Agent, as in (108), and the S-structural subject is not necessarily the Patient, as in (109):

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[54] Li & Thompson (1981: 498ff.) show that English passive sentences often correspond to a Topic-Comment sentence in Chinese or to an "*it*-cleft" sentence, if the focus is on the agent of the transitive action verb.

[55] This analysis is consistent with Rosenbaum's (1970) Minimal Distance Principle (MDP), applied to sentences like the following by Huang (1992):

(i) Lisi bei Zhangsan ku-de [[e] hen shangxin].
    Lisi by Zhangsan cry-DE   very sad
    'Lisi was made very sad as a result of Zhangsan's crying.'

Within our framework, the Pro-element in the complement of the verb *ku ('cry')* is controlled by the D-structural direct object via its trace left in its base position:

(i') [$_{IP}$ Li Si$_i$ [$_{V'}$ bei [$_{V'}$ Zhang San [$_{V'}$ t$_i$ [$_{V^o}$ ku -de [Pro$_i$ hen shangxin]]]]]]
    Li Si   DV   Zhang San   cry-DE   very sad

(108) Tamen bei lan mi chi bing le.
      they BEI bad rice eat ill PART
      'They spoilt their stomach by eating rice having gone bad.'

(109) Lao Zhang bei dasuan chi-de man zui chou qi.
      Lao Zhang BEI garlic eat-SUFF whole mouth stinking breath
      'Lao Zhang is stinking terribly from his mouth by having eaten garlic.'

In truth, both in (108) and in (109) the DP marked by *bei* is not the Agent but rather the Patient of the verb *chi ('eat')*. Yet, since the result of eating, i. e. *bing ('being ill')* and *man zui chou qi ('stinking terribly from one's mouth')* respectively, is related to the subject but not to the "*bei*-phrase", the element *bei* cannot be replaced by the element *ba*.[56] There is, however, a possibility of replacing the element *bei* by a copy of the verb, as (108') and (109') illustrate:

(108') Tamen chi lan mi chi bing le.
      they DV bad rice eat disease PART

(109') Lao Zhang chi dasuan chi-de man zui chou qi.
      Lao Zhang DV garlic eat-suff whole mouth stinking breath

(108') and (109') prove that the DPs licensed by the verb copy are nothing but a direct object placed in situ. The same holds true for the Patient-DPs in (108) and (109) licensed by *bei*:

(108") [$_{IP}$ Tamen [$_{V'}$ bei/chi [$_{V'}$ lan mi [$_{VC}$ chi bing le]]]]
      they DV bad rice eat disease PART

(109") [$_{IP}$ Lao Zhang [$_{V'}$ bei/chi [$_{V'}$ dasuan [$_{VC}$ chi-de man zui chou qi]]]]
      Lao Zhang DV garlic eat-suff whole mouth stinking breath

The conclusion we can draw once more is that the element *bei* in modern Chinese is a dummy verb.[57]

7.5.1.2. Passivized indirect objects

Based on the ECP and on our assumptions regarding the passive construction in Chinese, it should not be in question that direct objects but by no means indirect objects are permitted to be passivized. For, just as in active sentences, indirect objects are never properly governed. And indeed, the example (93) given above, was ill-formed:

(93) *Li Si yijing bei wo huan-le zhe ben shu.
      Li Si already by I returned-ASP this CL book
      'Li Si has already been given back this book by me.'

---

[56] The result of an action depicted in sentences containing the element *ba* is related to the element licensed by *ba* (see above) but not to the subject of the sentence, as in (104) and (105).
The event depicted by the *ba*-construction must apply to an attained orp result respecting the Patient - see above.
[57] Not only in (108) and (109) but also in (108') and (109') the superficial subject is identical with the D-structural one. Both (108) and (109) are pseudo-passive constructions.

However, in contrast to the ungrammaticality of examples like (93), passivization of indirect objects becomes more or less acceptable if the sentence represents a typical Chinese adversity passive construction, as in the following examples:

(110) ?Wo bei tamen ti-le   hen duo wenti.
        I DV they ask-ASP very many question
        'I was asked a lot of [embarrassing] questions by them.'

(111) ?Ta bei yisheng da-le   yi zhen
        he DV doctor give-ASP one injection
        'He was given an injection by the doctor.'

Clearly, it is the original meaning of the dummy verb *bei* mentioned above that, in (110) and (111), enables the indirect object to violate the ECP. That is to say, what are shimmering through in (110) and (111) are meanings like *'I suffered from the embarrassing questions they asked me.'* in the case of the former and *'I got a painful injection by the doctor.'* in the case of the latter. To put it another way, in that in (110) and (111) the indirect objects are SUFFERING from an event, their thematic roles are re-interpreted pragmatically. This re-interpretation qualifies them for behaving grammatically like a Patient object. It seems that some pragmatic procedures, like the reinterpretation of a θ-role, are able to partially disregard certain grammatical rules.

7.5. 2. Can indirect objects be topicalized?

Tsao (1977: 104: (4); (1990: 56: (75)) provides an example in which an indirect object appears to be topicalized:

(112) Li Si (a),   wo yijing   song-le   yi-fen li.
        Li Si PART, I already give-ASP a-CL   gift
        'Li Si (TOPIC), I have already given [im]a present.'

In fact, this example, which is questioned by some native speakers, does not falsify our claim that indirect topics cannot be topicalized. According to the framework elaborated in section 5, the topic in (112) must base-generated. For, lacking the feature [+contrastive], the topic in (112) cannot come from IP, because a "stop over" in [Spec, Foc2P] would lead to a crash of the derivation. Consequently, (112) has the following S-structure:

(112') $[_{Top2P}[_{DP}$ Li Si $]_1$ $[_{Top2'}[_{Top2°}$ (a)], $[_{IP}$ wo$_2$ yijing $[_{V'}$ t$_2$ $[_{V'}$ Op$_1$ $[_{V'}$ e$_1$ $[_{V'}$ song-le$_3$
        Li Si   PART   I   already   give-ASP
$[_{V'}[_{DP}$ yi-fen li $]$ t$_3$ $]]]]]]]]$
        one-CL gift

A sentence like (112) becomes acceptable, because, in corresponding contexts, the indirect object of "Give verbs" like *song ('give')* may be lexically unspecified, as (113) shows:

(113) Zhang San song dongxi, Li Si song qian.
        Zhang San give things Li Si give money
        'Zhang San gives things, [whereas] Li Si gives money.'

If, however, the indirect object is required to appear obligatorily, as in the case of "Verbs of Communication" as *gaosu ('tell')*, then base-generated topics are not allowed:

(114) a. *Zhang San gaosu zui zhongyao de xiaoxi, Li Si gaosu bu zhongyao de xiaoxi.
        Zhang San tell most important SUFF news Li Si tell not important SUFF news

    b. * Li Si , Zhan San yijing gaosu-le zhe ge xiaoxi.
        Li Si Zhang San already tell-ASP respectabe respectabe this CL news

Whereas in (114) a. the IO is incorrectly omitted, (114) b. contains a base-generated topic anaphorically related to the empty IO position.

In short, (112) is no counter-example falsifying our assumption that indirect objects cannot be topicalized.

8. Pseudo-Cleft sentences

8.1. The problem

Beginning in the late sixties, the problem of how to syntactically analyse pseudo-clefts in Western languages has been discussed. Peters and Bach (1968), Akmajian (1970), and others derived English pseudo-clefts from simplex sentences:

(115) What John read was a book about himself. ← John read a book about himself.

Contrary to these pioneers, Higgins (1979) put forward his "null hypothesis". According to this hypothesis there is no transformational derivation of pseudo-clefts. No simple unclefted sentence underlies the pseudo-cleft sentence; rather, the surface structure form of a specificational pseudo-cleft sentence[58] is essentially identical to its deep structure form. In plain English, Higgins regards the pre-copular constituent (the WH-clause) as the subject of pseudo-cleft sentences and the post-copular constituent (the focused phrase) as a predicate nominal.

      Superficially considered, this assumption seems plausible. Nevertheless, in contrast with Higgins, Williams (1983: 428) proved, with the help of various structural tests, that quite the opposite is the case. Thus, he showed, for example, that a raising verb like *seem*, which contains a pseudo-cleft construction as its complement, allows the post-copular but not the pre-copular constituent to move into the subject position of the matrix sentence:

(116) a. It seems that what John is is important to himself.
    b. Important to himself seems to be what John is.
    c. *What John is seems to be important to himself.

---

[58] Pseudo-clefts in Higgin's sense are required to have a specificational reading. That is to say, the free relative clause is not acting like a deitic, i. e. it does not refer to any object. Rather, the relative clause contains a semantic variable, and this variable is specified by the postcopular item. Thus, a sentence like
(i) What we must avoid is the draft.
receives a semantic interpretation as
(ii) [we must avoid x], [x = the draft].
Cf. Higgins (1979: 17), who gleans this example from Akmajian (1970).

On the basis of such facts, Williams concluded that it must be the post-copular constituent that is the D-structural subject in pseudo-cleft sentences. This means that pseudo-clefts on the lines of Williams have the following abstract underlying structure:

(117) $[_{IP}$ [Focused phrase] $[_{VP}$ be [WH-phrase]]]

Williams' assumptions imply that both the copula and the underlyingly post-copular constituent must be raised by S-structure. Whereas the copula moves to a higher head position, the WH-phrase has to be topicalized:

(118) [[WH-phrase$_1$] [be$_2$ $[_{IP}$ [Focused phrase] $[_{VP}$ t$_2$ t$_1$]]]]

Williams' analysis is apparently underpinned by a Japanese example given by Drubig (1991: 118, (249)), in which the sentence-initial "WH-phrase" carries the overt topic marker *wa*:

(249) [Mado a watta no] wa Taro da.
      window   broke NO WA Taro was
      'Who broke the window was Taro.'

Heggie (1988) provides a variant of Williams' proposal by treating the copula *be* as a raising verb selecting a Small Clause. Yet, in accordance with the analysis of Williams, it is the focused phrase that serves as the subject within this SC.

Despite of their differences, the approaches proposed by Higgins, Williams, and Heggie have a biclausal analysis of pseudo-cleft sentences in common. That is, pseudo-clefts are analysed as consisting of a matrix clause (containing the copula) and a WH-clause (which is embedded in the matrix clause).

As for Chinese, such a biclausal analysis is advocated by Hashimoto (1966), Paris (1979), James Huang (1982), and Lu Jianming & Ma Zhen (1985), among others.

Nonetheless, there is a dilemma shared by all biclausal approaches. This is the fact that lexical anaphors and other elements simply ignore the presupposed biclausal structure of pseudo-cleft sentences. Thus, the question arises of how the reflexive pronoun *himself* is "connected" to its antecedent *John* in a pseudo-cleft sentence like (115):

(115') [What John$_1$ read] was [a book about himself$_1$]

In (115"), but not in (115'), the reflexive pronoun *himself* is properly bound in its governing domain by an antecedent that c-commands it:

(115") John$_1$ read a book about himself$_1$.

Thus, in (115'), but not in (115"), Chomsky's Binding Principle A seems to be violated.

Barss (1986) tried to solve the "connectedness problem" in sentences like (115') with the help of the notion of "chain":

(119) [what John saw <u>e</u>] was [NP a picture of himself]
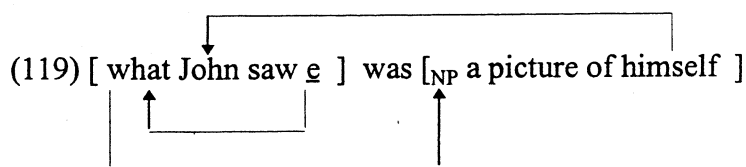
In Barss' (1986: 155) theory, the anaphor *himself* in (119) is indeed not c-commanded by its understood antecedent at SS, but the antecedent does c-command a trace which is anaphorically related to a constituent containing the anaphor. The phrase [a picture of himself] heads an A' chain containing the EC, the chain being [a picture of himself, what, e]. *John* c-commands <u>e</u> , and thus is chain-accessible to the anaphor *himself,* and may therefore antecede it, satisfying the Binding theory.

Chinese pseudo-cleft sentences corresponding to English (115) are easy to form:

(120) [Zhang San suo kan de] shi [NP guanyu ta   ziji   de   shu]
     Zhang San PART read SUFF   be   about   he   himself SUFF   book
   'What Zhang San reads are books about himself.'

8.2. A monoclausal proposal for Chinese pseudo-cleft sentences

The complexity of describing binding relations within such simple pseudo-cleft sentences as English (115) or Chinese (120) on the lines of a biclausal approach was a strong motive for me to follow Meinunger (1996; 1997), who proposes looking back to the pioneers of pseudo-cleft sentence research, analysing pseudo-clefts as underlyingly monoclausal structures.

Besides the fact that all attempts to solve the connectedness problem in pseudo-cleft sentences have been unsatisfactory up to now, there are still other reasons for preferring a mono-clausal analysis of Chinese pseudo-clefts. Thus, it can be shown, for example, that a biclausal approach to pseudoclefts runs into insurmountable difficulties, if a contrastive negative element appears on the scene, as in (121):

(121) Wo zai shudian   li   maidao de bu shi   ZHE ben shu, er   shi   NA ben shu.
    I   in   bookshop inside   buy   Part not <u>COP</u>   this CL   book   but <u>COP</u> that CL   book
   'What I bought in the bookshop was not THIS book but THAT book.'

Starting from an biclausal approach, we have to assume that the element *shi* in (121) is a copula carrying the finitesness features of the sentence. Granted this is true, the sentence constituent *wo zai shudian li maidao de* (*'what I bought in the bookshop'*) would be something like a topicalized free relative clause that is generated in the complement position of the copula. In fact, there are at least three serious objections to the resulting representation, which would be similar to (121'):

(121')   *Top1P

```
[RC wo zai...de ]3        Top1'
what I bought in...        /\
                     bu        Top1'
                   NEGATION      /\
                           Top1°     Foc1P
                            shi2      /\
                                 DP1              Foc1'
                                 /\                 |
                          zhe ben shu    BoolP      IP
                          this CL book    /\        /\
                                   er  ?shi  na ben shu   Subj.  VP
                                   but  SHI  that CL book   t1   /\
                                                          Copula  RC
                                                            t2    t3
```
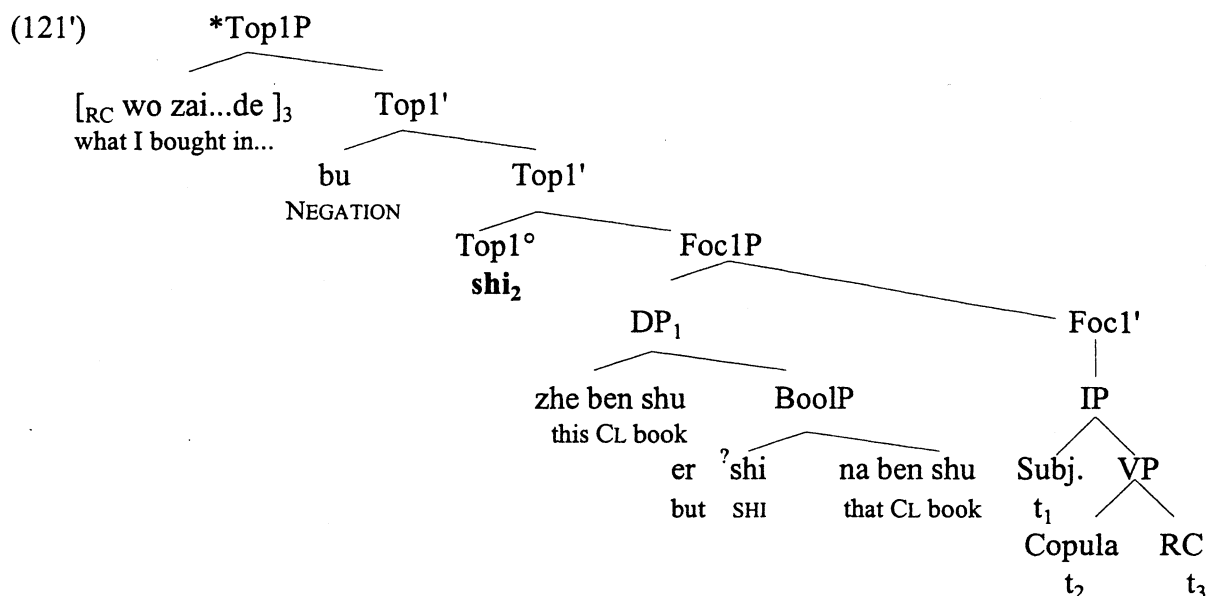
The main objection to (121') is that the contrastive negative element *bu ('not')* takes a wide scope not only over the corrigendum, i. e. the first conjunct of the coordinated DP *zhe ben shu ('this book')*, but also over the corrigens, the conjunct *na ben shu ('that book')* that is to be replaced for the one rejected as wrong. This scope violates the principle that focus operators must have "the most narrow possible scope"[59].

Secondly, there is no appropriate landing site for the copula *shi*, which should be raised by reasons of the superficial constituent order in Chinese pseudo-clefts. The only available head position for *shi* is Top1^0. But this landing site does not make sense in terms of specifier-head agreement. The finiteness features carried by the copula are incompatible with topic features such as [-prominent].

Thirdly, the appearance of the second *shi*, the one in the Boolean Phrase, cannot be explained, unless you assume that two complete sentences are conjoined by the connecting element *er ('but')*, with the background constituent of the second conjunct deleted:

(121") Wo zai shudian li maidao de bu shi ZHE ben shu,
   I in bookshop inside buy Part not COP this CL book
   er ~~wo zai shudian li maidao de~~ shi NA ben shu.
   but I in bookshop inside buy SUFF COP that CL book

But this option does not solve the problem either. Just like the copula *shi* in the first conjunct, the copula *shi* in the second adjunct would occupy the wrong head position.

The situation is totally different, if we use a monoclausal analysis as a basis, supposing that *bu-shi* in (121) is a complex replacive negation. In this case, (120) is derived from a D-structure like (122):

(122) [IP Wo [V' zai shudian li [V' [DP bu-shi zhe ben shu er shi na ben shu]
   I in bookshop inside REPL NEG this CL book but FM that CL book
  maidao de]]]]
  buy SUFF

---

[59] Cf. Krifka (1992), p. 39.

In (122), the object DP, which consists of two DPs conjoined by the connective element *er* *('but')* that serves as the head of a Boolean Phrase, would have the following internal structure:

(123) [$_{DP}$ [$_{DP}$ bu-shi [$_{DP}$ zhe ben shu]] [$_{BP}$ er [$_{DP}$ shi [$_{DP}$ na ben shu]]]]
      REPL NEG   this CL book   but   FM   that CL book

Given (122) and (123), a slightly simplified S-structure of (121) that I suggest is (124):

(124)
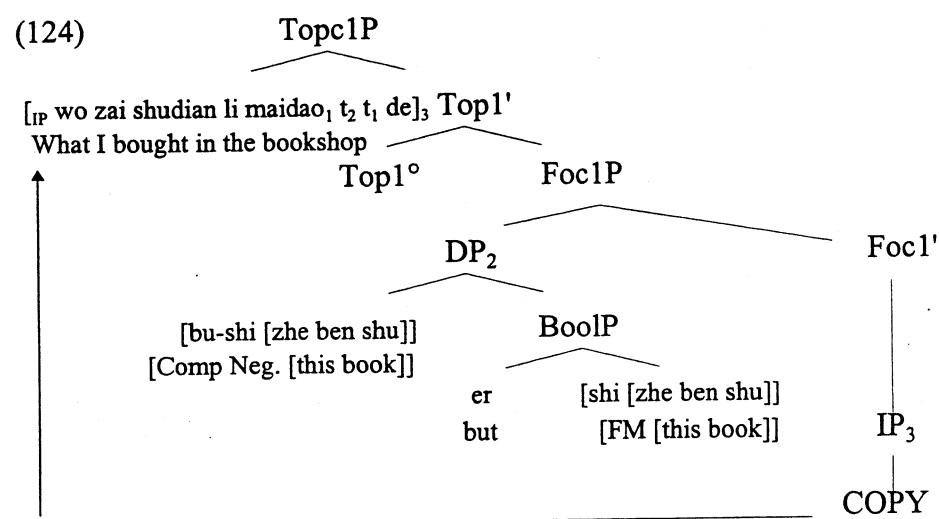
A more detailed structure of IP in (124) is (125):

(125) [$_{IP}$ wo$_4$ [$_{V'}$ zai shudian   li [$_{V'}$ t$_4$ [$_{V'}$ maidao$_1$ [$_{V'}$ t$_2$ t$_1$ de]]]]^{60}
      I   in bookshop inside   buy   SUFF

That is to say that, in our analysis of Chinese pseudo-clefts, the focused constituent moves in [Spec, Foc1P] first. After that, the remaining IP is raised into [Spec, Top1P], leaving a copy (or a trace) in its base position. As a result, Chinese pseudo-cleft sentences consist of a topic and a focus phrase:

---

[60] Note that the element *de* in this structure is not a head introducing a free relative clause but a particle within the verbal complex V^0 - cf. above, section 7.

(126)   ST'

Top1P   ST^0

Spec   Top1'

Top1^0 Foc1P

Spec   Foc1'

Foc1^0 IP

[shi [DP]]
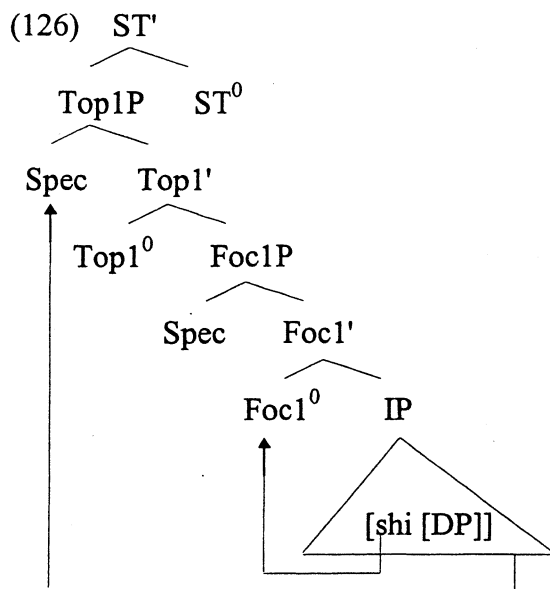
Regarding (121), a monoclausal representation along the lines of (122) through (126) has the following advantages:

First, *bu-shi* as a compound negation has the most narrow possible scope and is restricted to the corrigendum, i. e. the first conjunct of the coordinated DP, *zhe ben shu ('this book')*.

Second, the occurrence of *shi* the in the Boolean Phrase can, in a natural way, be explained as a focus-sensitive particle marking the conjunct *na ben shu ('that book')* which is to be replaced for the one rejected as wrong.

Third, the connectedness problem, described by Higgins (1979)and Barss (1986), disappears because the lexical anaphors are duly bound in their governing category at D-structure.

A general advantage of our approach is that it enables the morpheme *shi* to be uniformly described as a focus marker in "*it*-clefts"[61] and "pseudo-clefts". As the examples (70) and (72) above[62] illustrate, Chinese "*it*-Clefts" differ from English *it*-Clefts in that the focused constituent is not restricted to appearing as the leftmost sentence constituent.

In sum, no clefting takes place in Chinese "cleft" sentences, neither in "*it*-clefts" nor in "pseudo-clefts". To all intents, BOTH sentence types are PSEUDO-clefts in a literal sense.

In (121) above, the direct object was narrowly focused. In the same way, subjects can be focused, as the following example shows:

127) Kan-guo zhe ben shu   de   shi Zhang San.
     read-ASP this CL book SUFF FM Zhang San
     'Who has read this book once, is Zhang San.'

Cf. (66) b., (69), (70) and (72) above. In contrast, the morpheme *shi* is a copula in (19) and (23) above.
Cf. section 6.3.2.2. above.

(127') [Top1P [IP [Foc2P t'2 [v' t2 [v' kan-guo1 [v' zhe ben shu t1 de]]]]]3 [Foc1P [DP shi [DP Zhang
                                    read-ASP   this CL book SUFF   FM   Zhang
San]]2 [IP t3]]]
San

The focused direct object phrase can carry the semantic role of Locative and even that of Instrumental:

(128) Ta zhu de shi Beijing Fandian.
      he stay SUFF FM Beijing hotel
      'Where he has been staying is the Beijing Hotel.'

(129) Women xi   de shi liang shui.
       we   wash SUFF FM cold water
       'What we wash with is cold water.'

Yet, contrary to direct objects and subjects, indirect objects, like that in example (78) in section 7, are not allowed to appear as narrowly focused element in pseudo-clefts, as example (94) in section 7 also illustrates.

9. Summary

1. In this paper, we have developed a model of Chinese Sentence Structure containing obligatory and optional constituents.
    According to this model, the minimal structure of a Chinese sentence, illustrated in (i) below, contains a Sentence Type constituent of the complexity level ST', an Inflection Phrase carrying finiteness features, a Position Phrase in which affirmative and negative elements are located, and a Verb Phrase of the complexity level V':

(i) ST' > IP > PosP > V'

This structure can be enriched by two pragmatically driven topic phrases and two focus phrases:

(ii) ST' > Top1P > Foc1P > Top2P > IP > Foc2P > PosP > V'

That is to say, topic phrases and focus phrases are generated only if "needed".

2. Furthermore, we have developed criteria for a refined differentiation of base-generated and derived topics in a topic-prominent language.
    Base-generated topics are subdivided into scene-setting "Chinese style" topics related to a complete proposition on one hand, and topics anaphorically related to an argument position within IP on the other. The former are located in [Spec, Top1P], i. e. outside the scope of diverse operators which occupy the sentence position [Spec, Foc1P] at S-structure, or at the level of Logical Form. The latter, since they lie inside the scope of those operators, are located in [Spec, Top2P]. Both types of base-generated topics share the features [-prominent, -contrastive].

It has been shown in this paper that there is only one type of derived topics, namely contrastively used topics, which, consequently, are characterized by the features [-prominent, +contrastive].

Base-generated and derived topics share the feature of being " not prominent" in that the focus of the message (phonologically represented by the main stress) does not lie on them. That is to say, [-prominent] is a topic feature.

Only base-generated topics carrying the features [-prominent, -contrastive] are "genuine" topics. Contrastive topics carry mixed features, i. e. the topic feature [-prominent] and the focus feature [+contrastive]. That is the reason why they have been called "topic foci" in the relevant literature. Evidently, the topic feature [-prominent] and the focus feature [+contrastive] do not exclude each other.

Verbal arguments with the features [+prominent, +contrastive] are "genuine" foci.

3. The focus feature [+contrastive] carried by a verbal argument must be checked at S-structure or at LF. Focus-sensitive particles like *shenzhi / lian* and *shi*, if marking a direct object.or a subject, obligatorily trigger overt left-dislocation of the marked constituent.

There are three potential final landing sites for contrastively used direct objects and subjects that are to be left-dislocated: [Spec, Foc2P], [Spec, Top2P], and [Spec, Foc1P]. The actual choice in a given sentence is dependent on the information structuring of the whole sentence.

4. Among the potential landing sites of contrastively used direct objects and subjects, the position [Spec, Foc2P] is the location where the feature [+contrastive] must be checked.

In Weak Crossover cases, this position is obliged to be an intermediate landing site for the left-dislocated verbal argument involved in the configuration. The fact that topics never give rise to WCO effects, is accounted for in this paper as a result of the existence of a Foc2P within IP.

The existence an IP-internal focus phrase Foc2P is further confirmed by its Spec position being able to serve as final landing site in cases in that no weak crossover takes place.

5. Indirect objects are syntactically immovable at S-structure, the IO in certain adversity passive constructions excepted. This phenomenon is attributable to the internal structure of the V' constituent of Chinese sentences: Indirect objects are never θ-governed by V^0 at the level of D-structure. Instead, they are "improperly" governed at S-structure by the full verb·or the dummy verb *gei*. Thus any left-dislocation of an indirect object violates the ECP.

In order to become able to be left-dislocated, the direct object must not only be θ-governed but must also be syntactically licensed by the full verb itself. In other words, direct objects licensed by the dummy verb *ba* are not allowed to be left-dislocated. For this reason, in both of the cases of NP-Shift treated in this paper, neither the indirect object nor the direct object is permitted to be extracted from V'.

6. Within our framework, just as *ba* and *gei*, the element *bei* is treated as a dummy verb syntactically licensing the agent phrase in passive sentences.

This means that all of these elements are neither considered as prepositions nor as functional heads. The treatment of *ba*, *gei* and *bei* as dummy verbs seems justified from a diachronic point of view in that it allows for the verbal source of these elements.

In cases in which the occurrence of a dummy verb licensing the direct object is structurally forced, a copy of the full verb can serve as a dummy verb instead of *ba*.

7. The grammatical approach presented in this paper lays the foundation for syntactically deriving Chinese Pseudo-Clefts from a simplex D-structural source.

As a result, the morpheme *shi* uniformly serves as a focus marker in both "*it*-cleft" and "pseudo-cleft" sentences.

The element *de* in cleft sentences is a (semi-)suffix of the verb, which can be raised together with the stem in "*it*-clefts", as (69), but is always left behind in "pseudo-clefts", as (126). Contrary to *de*, so-called "sentence-*le*" (i. e. *le*-2) is always left behind by the verbal stem (cf. (80), (81)).

Selected abbreviations

ASP, aspect
BoolP, Boolean Phrase
BP, Boolean Phrase
CL, classifier
COP, copula
DV, dummy verb
FM, focus marker
LF, Logical Form
PART, particle
POSP, position phrase
PREF, prefix
REPL NEG, replacive negation
ST, Sentence Type
STP, Sentence Type Phrase
SUFF, suffix

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