The Even-Construction and the Low Periphery in Mandarin Chinese

LINDA BADAN AND FRANCESCA DEL GOBBO

1. INTRODUCTION

Our goal in this paper is to analyze the even-construction in Mandarin Chinese and Italian and the preposed object in the low periphery of Mandarin Chinese. In the first part of the paper, we shall see that the even-construction can play two roles: focus and topic. Although in both cases their semantics stay fundamentally the same, their syntax is crucially different. We shall see that when an even-phrase occurs in sentence-initial position, it is a topic construction; while when it occurs sentence-internally, it is a focus construction.

In the second part of the paper, we study the nature of the preposed object in the low periphery of Mandarin. Contrary to the traditional analysis that considers it as a focus item (Ernst and Wang 1995; Shyu 1995, 2001, Zhang 1996, among others), we argue that the preposed object is a Contrastive Topic (i.e., a syntactic topic that gets contrastive stress). We also discuss the fact that the even-construction and the preposed object within the low periphery differ from the elements in the high periphery because they are dislocated via A-movement.

Our investigation points to notions of the rules of topic and focus that are more fine-grained than what was traditionally thought. Specifically, we maintain that while the domain of topic has specific syntactic features, its semantics doesn’t always have to pertain to old information.

We shall also identify interesting differences between the projections in the high periphery versus those in the low periphery.
In what follows we first present the syntactic details of the even-construction by focusing on the two languages under investigation, and we lay out our proposal for the syntax of the constructions (section 2). In section 3, we show that the even-construction in the high periphery is syntactically different from the even-construction in the low periphery in both Chinese and Italian. Section 4 is dedicated to the analysis of the low periphery in Chinese. We concentrate on the preposed object construction and the difference in the type of movement that distinguishes the elements dislocated to the low periphery as compare to those dislocated to the high periphery. Section 5 concludes the paper.

2. “EVEN” IN CHINESE: A COMPARISON WITH ITALIAN

2.1. Lian . . . dou Construction: Grammatical Outline

The even-construction in Mandarin Chinese has received a fair amount of attention within Chinese linguistics (Paris 1979, 1998, 1999; Shyu 1995, 2004; Hole 2004; Tsai 1994; Badan 2007), but its analysis is still controversial. Here we will provide a summary of the generalizations on the lian . . . dou construction upon which most linguists generally agree (see Cheung, this volume, for an analysis of even-construction in Cantonese).

The even-construction is formed by two elements: lian and dou. Lian is traditionally translated in English with ‘even’ and it appears on the left of different kinds of phrases. Dou literally means ‘all’ and it precedes the verb. Lian+XP can be in sentence-internal position (i.e. between the subject and the verb) (1), or in the sentence-external position, preceding the subject (2). The lian+XP needs to be to the left of dou, otherwise the sentence is ungrammatical (3) (cf. the example of the Cantonese particle hai in Cheung, this volume). Dou is always and obligatorily present immediately to the left of the verb, and it can be replaced by ye (‘also’). Thus lian and the item following it have to precede the verb in Chinese, unlike even in English, which can appear in several positions in a clause:

**Sentence-internal position**

(1) Zhangsan lian zhe ben shu dou mai le.  
Zhangsan even this CL book all buy FP  
‘Zhangsan bought even this book.’

(2) Lian zhe ben shu, Zhangsan dou mai le.  
Even this CL book Zhangsan all buy FP  
‘Zhangsan bought even this book.’

**Sentence-initial position**

(3) *Zhangsan dou mai lian zhe ben shu le.  
Zhangsan all buy even this CL book FP  

---

[34] Cartography of Chinese Syntax
The constituent immediately to the right of lian is the most prominent element in the clause. When lian is present, such a constituent does not necessarily bear stress, but when lian is not overtly expressed, the focalized item requires focus stress (Sybesma 1996; Badan 2007):

\[(4) \text{Zhangsan lian zhe xie shu dou kanwan le.} \]
\[\text{Zhangsan lian this CL-pl. book DOU read.complete FP} \]
\[\text{‘Zhangsan read even these books.’} \]

\[(5) \text{Zhangsan ZHE XIE SHU dou kanwan le.} \]
\[\text{Zhangsan this CL-pl. book all read.complete FP} \]
\[\text{‘Zhangsan read even these books.’} \]

The constituent immediately following lian can be NPs, VPs, CPs, PPs, including duration, frequency, and temporal phrases (Paris 1979; Shyu 1995) (see section 2.3). Given the fact that the lian-XP can be sentence-initial, it is relevant to investigate how it interacts with other elements that can occur in the left periphery. Badan and Del Gobbo's (2010) work is an attempt to do just that. They propose an articulate hierarchy of different types of Topics in the Chinese CP area and they show that when lian-XP appears in sentence-initial position, it occupies the lowest projection in the left periphery (see also Paul 2005; for a fine structure of the left periphery in Cantonese see Cheung, this volume):

\[(6) \text{a. Aboutness Topic > HT > LD > lian-Focus > IP} \]
\[\text{(Badan and Del Gobbo 2010)} \]

\[\text{b. CP(force)>TopicP> even Focus>IP> . . .} \]
\[\text{(Paul 2005)} \]

\[\text{c. AT>CT>PPT>IdentF> dak-F> lin-F>IP} \]
\[\text{(Cheung, this volume )} \]

The following sentences show different types of topic preceding the lian+XP in sentence-initial position. In (7) a topic is followed by a topic particle; (9) is an example of aboutness topic, in (11) a PP is left-dislocated, and (13) shows an instance of Hanging Topic. The reverse word-order yields ungrammaticality, respectively, in (8), (10), (12), and (14) (all the following examples are from Badan and Del Gobbo 2010):

\[(7) \text{Zhangsan a, lian Xiaoyu, ti dou piping le ti.} \]
\[\text{Zhangsan TOP even Xiaoyu all criticize FP} \]
\[\text{‘As for Zhangsan, even Xiaoyu, he criticized.’} \]
(8) ??Lian Xiaoyu, Zhangsan, a, t_i dou piping le t_i.
even Xiaoyu Zhangsan TOP all criticize FP
'Even Xiaoyu, as for Zhangsan, he didn’t criticize.'

(9) Hua, lian meiguihua, t_i dou hen pianyi.
Flowers even roses all very cheap
'As for flowers, even roses are cheap.'

(10) *Lian meiguihua, hua, t_i dou hen pianyi.
Even roses flowers all very cheap

(11) Gei Xiaoyu, lian na ben hen gui de shu.,
To Xiaoyu even that CL very expensive DE book,
Lisi dou mai le t_i.
Lisi all buy FP
'For Xiaoyu, even that expensive book, Lisi bought.'

(12) *Lian na ben hen gui de shu., gei Xiaoyu, Lisi
even that CL very expensive DE book to Xiaoyu Lisi
dou mai le t_i.
all buy FP

(13) Zhangsan, wo gei [na ge shazi], ji le
Zhangsan I to that CL imbecile send ASP
yi feng xin!
one CL letter
'Zhangsan, I sent a letter to that imbecile!'

(14) *Wo gei [na ge shazi], Zhangsan, ji le yi
I to that CL imbecile Zhangsan send ASP one
feng xin!
CL letter

When different kinds of topics co-occur, their relative order is fixed. The highest position is occupied by the Aboutness Topic, followed by the Hanging Topic and the Left Dislocation is in the lowest part in the "Topic Field" (Badan and Del Gobbo 2010). The lien-XP in sentence initial position occupies always the lowest position of the whole CP, that is it has to be always to the right of all the topics.

2.2. Perfino: Grammatical Outline

As lian, perfino can introduce various types of phrases: DP, PP, VP, CP, and time adverbs (see section 2.3). However, it should be noticed that perfino is more frequently found as a DP modifier, differently from the other Focus
The scalar additive particle *addirittura* (‘even’), which is found more often as a VP-modifier (Visconti, et al. 2005). Moreover in Old Italian *perfino* selects only either a PP or a clausal complement CP (Visconti, et al. 2005), not a simple VP. In this paper, we concentrate our attention on *lian* and *perfino* followed by a DP.3

As with *lian* in Chinese, *perfino*+DP can appear within the IP. In (15) *perfino*+XP is in sentence-internal position:

(15) Ieri ho incontrato *perfino* Maria.
    Yesterday have met *even* Maria
    ‘Yesterday I met even Maria.’

It is possible also to have the object preceded by *perfino* between the subject and the verb:

(16) Gianni *perfino* Maria ha invitato.
    Gianni *even* Maria has invited
    ‘Gianni has invited *even* Maria.’

Notice that in English the word order in (16) above is not possible:

(17) *John even Mary he invited.

Like *lian* in Chinese, *perfino*+XP can also be found in sentence-initial position, as illustrated in (18).4 In example (18), the semantic focus is on the object nominal *Maria*, which can also receive focus stress.

(18) *Perfino* MARIA ho incontrato!
    *Even* Maria have met
    ‘Even MARIA I met!’

2.3 The syntax of *lian* and *perfino*.

We propose that *lian* and *perfino* belong to the same natural class of focus particles.

The syntactic status of *lian* is not still clearly defined in literature. At a certain point of its development (Tang Dynasty, 7th–9th century), it has a meaning extremely close to that of a pure conjunction (‘and, with’) and it is interpreted like the pure additive particle ‘including’ (Xing 2004). In traditional Chinese grammar it is labeled as a ‘preposition’ (Shi 1956; Guo 1957;
Chao 1968), but in more recent works (Tsai 1994, 2004) lian is defined as a ‘focusing adverb.’ Shyu (2004) points out that lian behaves in a very different way from other genuine focalizing adverbs like shenzhi, which is also translated with *even* in English.

Italian *perfino* (‘even’) is composed of two prepositions *per* + *fino*. *Per*, from Latin *per* (‘through, towards, etc.’), assumes aspectual values of accomplishment, completion, etc.; *fino* is an adverbial form of the Latin noun *finis* (‘end, boundary, endpoint’). *Fino* alone, though less common, can have the same meaning. Visconti (2005: 245) in her diachronic study on *perfino* points out that its lexical semantics, denoting a spatial or temporal succession of a series of points to the very last one, explains why *perfino* is recruited to mark an endpoint in emphatic contexts. Rohlfs (1969) and Cortellazzo and Zolli (1988) put it in the class of the quantificational adverbs. But exactly like lian, we cannot consider *perfino* a genuine adverb (see section 2.4).

Differently from regular adverbs, lian, and *perfino* do not have fixed positions within the clause, but, as we saw in the previous section, they can appear in several positions in the sentence. As for *perfino*, it can immediately precede the verb (19a) and can be inserted in pre-participial position (19b):

(19) a. Gianni *perfino* cucina!  
    Gianni even cook
    ‘Gianni even cooks!’

    b. Gianni ha *perfino* letto questo libro.  
    Gianni has even read this book
    ‘Gianni has even read this book.’

$Lian$ cannot directly precede the main verb (20a). $Lian$ has to precede the focused element and has to move to a position on the left of $dou$. As illustrated in section (2.1), $dou$ is required to be adjacent to the main verb to its left and the focused item has to move, preceded by $lian$:

(20) a. *Zhangsan zhe ben shu dou lian kanwan le.*  
    Zhangsan this CL book all even read FP

    b. *Zhangsan lian kanwan zhe ben shu.*  
    Zhangsan even read this CL book

    c. *Zhangsan dou kanwan zhe ben shu.*  
    Zhangsan all read this CL book

$Lian$ and *perfino* can introduce various types of phrases, which are considered to be the different domains of the particles DP (as in (21)), PP (22), VP (23), and adverbs (24):

[38] *Cartography of Chinese Syntax*
(21) a. Gianni ha letto perfino QUESTO LIBRO.
   ‘Gianni read even this book.’

   b. Zhangsan lian zhe ben shu dou kanwan le.
   ‘Zhangsan even this CL book all read FP
   ‘Zhangsan read even this book’

(22) a. Gianni ha parlato perfino CON ANNA.
   ‘Gianni has spoken even with Anna
   ‘Gianni spoke even with Anna.’

   b. Zhangsan lian zai fanguan dou chang ge le.
   ‘Zhangsan even in restaurant all sing song FP
   ‘Zhangsan sang even at the restaurant.’

(23) a. Gianni ha parlato perfino con Anna.
   ‘Gianni has even spoken with Anna
   ‘Gianni has even spoken with Anna.’

   b. Ta lian mai yí ben shu dou bu neng.
   ‘He even buy one CL book all not can
   ‘He can’t even buy a book.’ (He is too poor)

(24) a. Perfino domenica è venuto a disturbarmi.
   ‘Even Sunday is come at bother.me
   ‘Even on Sunday he came to bother me.’

   b. Zhangsan lian xingqitian dou qu gongzuo a!
   ‘Zhangsan even Sunday all go work FP
   ‘He came to bother me even on Sunday.’

Lian is different from perfino because it forms a constituent with the follow-
ing XP (no elements can be placed in between): in (25a) Zhangsan cannot
be focused, only the XP following lian (i.e., zuotian, or ‘yesterday,’ can be):

   ‘Lian even yesterday Zhangsan all go work FP
   ‘He invited even Anna’

   b. Ha perfino invitato ANNA!
   ‘Has even invited Anna
   ‘He invited even Anna’

In (26) the focalized element can only be the subject, but not the PP, because
it is not adjacent to lian:

(26) *Lian Zhangsan ZAI FANGUAN dou bu chi le.
   ‘Lian Zhangsan in restaurant all not eat FP

THE EVEN-CONSTRUCTION AND LOW PERIPHERY IN MANDARIN CHINESE  [39]
The elements associated with lian (together with dou) and perfino must be associated with the Focus stress. This means that these particles are ‘focus sensitive’ (König 1991; Bayer 1996). In other words they are ‘focus bound’ (see Jacobs 1984). If an element bears the focus stress, focus particles must be connected with it. In Italian, adjacency between perfino and the focus element is not necessary. For instance, perfino can be moved to the left, having scope on a sentence-internal constituent (see example 27 below), while this is not possible for Chinese lian (as shown in 25a and 26):

(27) Perfino, Mario mi ha portato IL GATTO. 
    Even Mario to.me has brought the cat
    ‘Even Mario brought me the cat.’

The only restriction on the position of the focus particles even and perfino seems to be that they must c-command a focused constituent in order to have scope over it. Consider the following:

(28) a. Gianni ha perfino invitato ANNA alla festa.
    Gianni has even invited Anna to.the party
    ‘Gianni has even invited ANNA to the party.’

b. *GIANNI ha perfino invitato Anna alla festa.
    GIANNI has even invited Anna to.the party

(29) a. Lian ZHANGSAN dou kanwan le zhe zhong shu.
    even ZHANGSAN all read ASP this CL book
    ‘Even ZHANGSAN read this book.’

b. *ZHANGSAN lian zhe ben shu dou kanwan le.
    ZHANGSAN even this CL book all read FP

Notice that even if the location of perfino is the same as in English, the scope of perfino is variable if no element in particular is contrastively stressed. In the unmarked clause in (30a) below the scope of perfino can be on any example of the subset. The scope of focalization acts over either the entire phrase or over only a single part of it (Andorno 1999). Also in English the stress is not mandatory, but, if present, it reduces the ambiguity in the interpretation (see ex. (30b–e) for English):

(30) a. Gianni ha perfino [invitato] [Anna] [alla festa].
    Gianni has even invited Anna to.the party
    ‘Gianni has even invited Anna to the party.’

b. Mary even ADMURES Bill.

c. Bill even DRINKS BEER.

d. Even INFERIOR coffee is expensive.

e. Even IF SHE DOESN’T COME, there will be too many people.

[40] Cartography of Chinese Syntax
The semantic contribution of *perfino* to the meaning of the sentence varies with its position in the sentence and with the location of focus stress (König 1991). For instance if in (30a) the focus stress is on *Anna*, the interpretation will be:

(31) Existential implicature: Gianni invited people (other than Anna) to the party.  
Scalar implicature: Anna is the least likely person for Gianni to invite.

However if in (30a) the focus stress is on the verb *invitato* (‘invited’) the meaning will be:

(32) Existential implicature: Gianni did a lot of strange things (other than inviting Anna to the party)  
Scalar implicature: ‘invite Anna to the party’ is the least likely thing for Gianni to do.

### 2.4. Lian and perfino as Focus Particles

We assume here Bayer’s (1996) proposal (see also Belletti 1990) and treat *lian* and *perfino* as ‘focus particle’ or ‘focusing adverbs.’ As such, we take them to be ‘minor heads’ taking their modifiees as complements:

(33)

This sets them aside from other adverbs, and is in line with what proposed by Cinque (1999), who treats ‘focusing adverbs’ as a separate class from regular adverbs. We claim that, given their similarities, the focus particles *lian* and *perfino* all belong to this special subclass of focus particles.

We also follow Rothstein’s (1991) proposal and consider focus particles to be ‘minor functional heads.’ They do not themselves project category features like the lexical heads and the functional heads. They subcategorize, but do not have theta-grids, do not bind theta-positions, and do not project category features. *Perfino* and *lian* are then ‘minor functional heads,’ which subcategorize for a maximal projection. They do not project and modify their syntactic domain in the sense that their features percolate up to the XP for which they subcategorize. XPs inherit this information in the sense of a semantic feature *q*, without modifying any categorical syntactic information. These ‘minor functional heads’ must attach to an XP category that is able to bear stress (Bayer 1996), and they take their modifiees as complements (Bayer 1996; Cinque 1999).
For *lian . . . dou*, we propose that the focus particle *lian* merges with its focused phrase in the base-generated position of the phrase to be focused and then the entire *lian*-phrase moves up to the focus or topic position. We propose that the Italian *perfino* merges with the focalized XP, but then moves alone to a higher position, from where it can c-command the XP it focused on.

3. **LIAN AND PERFINO IN HIGH AND LOW PERIPHERY: TOPIC AND FOCUS**

3.1 External and Internal *lian*

As we mentioned in section 2.1, *lian*-XP can occur in two different positions in the sentence; it can be at the very beginning of the sentence, as in (33a), or sentence-internally, as in (33b):

(33) a. *Lian zhe ben shu, Zhangsan dou mai le.*
    "Zhangsan bought even this book."

b. *Zhangsan lian zhe ben shu dou mai le.*
    "Zhangsan even this cl book all buy fp.
    "Zhangsan bought even this book."

We know that in both cases the *lian*-XP is generated through movement, because we see island effects:

(34) ?*Lian zhe ben shu, Lisi xiangzhidao shei dou yijing mai le.
    'Lisi wonders who even bought this book.'

(Shyu 1995: 9)

When in sentence-initial position, *lian*-XP shows several different syntactic properties if compared with *lian+XP* within the IP (Paris 1998, 1999; Shyu 1995). Badan (2007) proposes that sentence-initial *lian+XP* is in the lowest position of the CP and this position is topic-like. On the other hand (following Belletti 2004 for Italian and Paul 2005 for internal bare object in Mandarin), she argues that sentence-internal *lian*-XP is in a position within the low periphery. In other words, it occurs inside the IP.

Following Badan (2007), and in the spirit of Shyu (1995 and 2001), we show that *lian*-XP is moved to different syntactic positions, making use of
different movement strategies. When sentence-internal, *lian-XP can only
move within the clause it is generated in:

(35) a. *Zhangsan lian Mali renwei [cp Lisi dou bu xihuan e].
    Zhangsan even Mali think Lisi all not like
    (Shyu 2001: 3–5)

    b. *Zhangsan lian Mali dou renwei [Lisi hen xihuan].
    Zhangsan even Mali all think Lisi very like
    (Shyu 2001: 80)

(35) shows that an embedded object cannot be preposed with *lian+XP across
a tensed clause boundary to the position between the subject and the verb
within the matrix clause, thereby showing that this movement cannot go
long distance. Notice that this is the case regardless of the position of the
adverb *dou, which can be either in the matrix clause (35b) or in the embedded
clause (35a).

With sentence-internal *lian-XP, we see no reconstruction effects. The
example in (36) shows that in the case of sentence-internal *lian, there are no
reconstruction effects for principle C of the Binding Theory. The co-reference
between the pronoun *ta and its antecedent *Zhangsan is not possible:

(36) *Wo lian [Zhangsan de shu], dou bei *ta, qiangzou
    1 even Zhangsan DE book all by him rob.away
    le *ta.
    FP
    ‘I was robbed of even Zhangsan’s book by him.’
    (Shyu 1995: 83, 105)

Finally, no resumptive pronoun is allowed with the internal *lian-XP construc-
tion (Shyu 1995: 90; Ting 1995: 295):

(37) a. *Lisi [lian Mali], dou hen xihuan *ta.
    Lisi even Mali all very like her
    Lit: ‘Lisi even Mali likes very much her.’

    b. Zhe zhi gou [lian ziji de zhuren], dou yao
    This CL dog even self DE master all bite
    le (*ta), bieren que bu yao.
    ASP him others but not bite
    ‘This dog bit even its master, but not others.’
    (Shyu 2001: 50)

    c. *Zhangsan lian Mali dou renwei [cp Lisi hen xihuan (ta)].
    Zhangsan even Mali all think Lisi very like  (her)
    ‘Zhangsan thinks that Lisi likes even Mali.’
    (Shyu 1995:35)
As pointed out by Shyu (1995), the properties mentioned above are evidence that in sentence-internal position, \textit{lian}-XP has undergone A-movement.

Sentence-initial \textit{lian}+XP instead displays a completely different set of properties. As illustrated in (38), this construction displays long-distance dependency, typical of Abar-chains:

(38) a. Lian Mali, Zhangsan renwei [\textit{CT} Lisi dou bu xihuan ti].
\hspace{1cm} even Mali Zhangsan think Lisi all not like
\hspace{1cm} ‘Zhangsan thinks that Lisi doesn’t like even Mali.’
\hspace{1cm} (Shyu 2001: 3–5)

b. Lian Mali, Zhangsan dou renwei Lisi bu xihuan ti.
\hspace{1cm} even Mali Zhangsan all think Lisi not like
\hspace{1cm} ‘It is even Mali that Zhangsan thinks that Lisi doesn’t like.’

Moreover, in sentence-initial position, \textit{lian}+XP can corefer with a resumptive pronoun in the ‘original’ object position (39) (Shyu 1995: 139):

(39) Lian Mali, Lisi dou hen xihuan ta.
\hspace{1cm} Even Mali Lisi all very like her
\hspace{1cm} ‘Lisi like even Mary.’

Sentence initial \textit{lian}+XPs can also be followed by topic markers, something that is not allowed for sentence-internal \textit{lian}-XP (Paris 1999):

(40) a. Lian zhe ben shu (a), [Zhangsan dou yijing mai le].
\hspace{1cm} Even this CL book \textit{TOP} Zhangsan all already buy FP
\hspace{1cm} ‘Zhangsan has already bought even this book.’

b. *Zhangsan \textit{lian} zhe ben shu a, dou yijing mai le.
\hspace{1cm} Zhangsan even this \textit{CL} book top all already buy FP

The facts just outlined allow us to claim that the movement of the sentence-initial \textit{lian}+XP is an Abar-movement. The different syntactic behavior of the \textit{lian}-XP construction (i.e., sentence-initial vs. sentence-internal) can be nicely accounted for by proposing that in the case of sentence-initial \textit{lian} \ldots \textit{dou} we have an instance of topicalization; while in the case of sentence-internal \textit{lian} \ldots \textit{dou}, focalization has occurred (Shyu 1995). The sentence-internal \textit{lian}+XP moves to the left of \textit{dou} via A-movement.

Another two pieces of evidence in support of the view that sentence-initial \textit{lian} is located in a topic position are provided by Gu and Constant (2010). They notice that when an indefinite DP is focused by ‘even’ it can only appear after the subject:
This is consistent with the observation that topics in Mandarin cannot be indefinite (Chao 1968; Li and Thompson 1981). Gu and Constant (2010) also notice that there is an obligatory pause between the lian-phrase and the subject in sentence-initial position, which it is not observed in sentence-internal position. Gu and Constant (2010) take this pause to indicate the topic status of the lian-phrase in sentence-initial position, similarly to the intonational phrase boundary that sets off topicalized material in English.

We observe that in the lian . . . dou construction, the XP in focus may be preceded by lian (42a), or may be prosodically focused (42b), or both (42c):

(42) a. Zhangsan lian zhe zhong shu dou mai le.
    Zhangsan even this book all buy

b. Zhangsan ZHE ZHONG SHU dou mai le.
    Zhangsan this book all buy

c. Zhangsan lian ZHE ZHONG SHU dou mai le.
    Zhangsan even this book all buy

‘Zhangsan bought even this book.’

As mentioned above, both in the case of lian-initial and in the case of lian-internal, the focused XP moves to a higher position. In the case of sentence-internal lian . . . dou, we propose that the focused phrase is moved from its base-generated position to the specifier position of the maximality operator dou (Cheng and Giannakidou 2006; Xiang 2008; Badan 2007; Gu and Constant 2010). We propose that the maximality operator dou heads its own functional projection.6 The lian-XP moves to the spec of dou, in order to check its maximality feature:

(43) Zhangsan lian Lisi dou bu xihuan tᵣ.
    Zhangsan even Lisi all not like

‘Even Lisi doesn’t like Zhangsan.’
This proposal accounts for the properties of sentence-internal lian-XP discussed above. It is an instance of A-movement, as it is clause-bound. No topic marker or pause can intervene between the lianXP and dou, as no functional category can intervene between the two (they are in a spec-head relation). As an instance of A-movement, no resumptive pronouns are allowed. When the lian-phrase occurs sentence-initially, it first moves to the specifier of dou, and subsequently reaches a topic position in the left periphery of the sentence:

\[(45) \text{Lian Lisi, Zhangsan dou bu xihuan } t_1.\]

\[
\text{Even Lisi Zhangsan all not like 'Zhangsan doesn't like even Lisi.'}
\]

We know that in this case we have an instance of Abar-movement, because the lian-XP can move long distance (as indicated in example (35), here repeated as (47)):

\[(47) \text{a. Lian Mali, Zhangsan renwei [CP Lisi dou bu xihuan e].}\]

\[
\text{even Mali Zhangsan think Lisi all not like 'Zhangsan thinks that Lisi doesn't like even Mali.'}
\]
b. Lian Mali, Zhangsan dou renwei Lisi bu xihuan tā.
   even Mali Zhangsan all think Lisi not like
   'It is even Mali that Zhangsan thinks that Lisi doesn't like.'
   (Shyu 2001: 3,5)

This is further corroborated by the fact that we can have a pause and/or a topic marker immediately following the lian-XP, and a resumptive pronoun instead of a gap. Where the resumptive pronoun is present, we propose that the Spec of dou is filled by a base-generated operator, coindexed with the lian-XP in Spec of TopicP (see Aoun and Li 2003, for a similar analysis of relative clauses with resumptive pronouns in Mandarin Chinese). Semantically, there is no difference between the following two sentences:

(48) a. Lian Mali, wo dou hen xihuan tā.
   even Mali I all very like
   b. Lian Mali, wo dou hen xihuan tāi.
   even Mali I all very like him

Syntactically, the first sentence is derived by movement, and the second one is base-generated. As such, it doesn’t show island and reconstruction effects:

(49) Lian Mali, Zhangsan dou taoyan [NP [CP tā kuaijiang tā de] ren].
   even Mary Zhangsan all dislike praise she de person
   ‘Zhangsan even dislikes the person who praises MALI.’
   (Modified from Shyu 2001: 144)

(50) Lian taziji, Zhangsan dou chang piping (*tāi).
   even himself, Zhangsan all often criticize him
   ‘Even himself, Zhangsan also often criticizes.’

3.2. External and Internal perfino

As we propose for sentence-initial lian, perfino + XP in sentence-initial position occupies the lowest projection of the left periphery. (51) shows that if perfino+XP co-occurs in the CP area with a topic, perfino+XP is always in the lowest position:

(51) a. Del libro perfino Gianni ne ha parlato, mentre del film
Of the book even Gianni cl has spoken while of the movie
non ne ha parlato nessuno.
not cl has spoken nobody
   Lit: ‘About the book, even Gianni spoke (about it), while about
   the film, nobody spoke (it).’
b. *Perfino Gianni del libro ne ha parlato, mentre del
   Even Gianni of the book CL has spoken while of the
   film non ne ha parlato nessuno.
   movie not CL has spoken nobody
   Lit: 'Even Gianni, about this book, spoke (about it), while about
   the film, nobody spoke (about it).'

As for sentence-initial position, notice that there is a difference between
*perfino*+XP pronounced with and without the focus stress. It seems that with-out
the focus stress, *perfino*+XP behaves more like a topic. Indeed the presence
of a resumptive pronoun within the IP makes the sentence much better than
without any resumption:

(52) a. Perfino quel libro Gianni l' ha letto.
    Even that book Gianni it CL has read
    'Even that book Gianni read it.'

b. ? Perfino quel libro Gianni ha letto.
    Even that book Gianni has read
    'Even that book Gianni has read.'

c. Perfino quel libro Gianni si chiede chi l' abbia letto.
    Even that book Gianni wonder who CL has read
    'Even that book Gianni wonders who read it.'

d. ??Perfino quel libro Gianni si chiede chi abbia letto.
    Even that book Gianni wonder who has read
    'Even that book Gianni wonders who has read.'

On the other hand, if the sentence initial *perfino* receives focus stress, the
presence of a clitic is not acceptable:

(53) a. Perfino QUEL LIBRO Gianni ha letto!
    Even that book Gianni has read
    'Even THAT BOOK Gianni has read!'

b. ??Perfino QUEL LIBRO Gianni l' ha letto!
    Even that book Gianni it CL has read
    'Even THAT BOOK Gianni has read it!'

Consider also (54). The quantifier *nessuno* (‘nobody’) bears focus stress and
has to be moved to the focus position in CP. If we assume the cartographic
structure of the CP in Italian, as in Rizzi 1997 and Benincà and Poletto 2004
among others, focus can move to a position to the left periphery. This focus
position seems to be unique in Italian and it is in the lowest projection within
the left periphery. In (54) then, the focus position is already occupied by
nessuno (‘nobody’) and perfino Gianni (‘even Gianni’) has to be located in topic position, without focus stress. In this case, the clitic lo (‘it’) referring to perfino Gianni (‘even Gianni’) is obligatory:

(54) a. Perfino Gianni NESSUNO l’ ha più invitato.  
    Even Gianni nobody cl. has no more invited  
    ‘Even Gianni, nobody has no more invited him.’

b. *Perfino Gianni NESSUNO ha più invitato!  
    Even Gianni nobody has no more invited  
    ‘Even Gianni nobody has no more invited!’

Giannakidou (2007) shows that also in Greek, akomi (‘even’) + XP can be moved to a focus or to a topic position, showing a different syntactic behavior. When the Greek akomi (‘even’) + XP moves through a focus movement, it never requires a clitic in the base position (Tsimpli 1995), but when akomi (‘even’) + XP appears as a topic, it requires the presence of a clitic in the canonical object position:

(55) a. ? Akomike tis Sindaktikes Dhomes dhen dhiavase  
    even the Syntactic Structures not read  
    o Janis.  
    the John.  
    ‘?Even Syntactic Structure John didn’t read.’

b. Akomike tis Sindaktikes Dhomes o Janis dhen tis  
    Even the Syntactic Structures the John not them  
    diavase.  
    read  
    ‘?Even Syntactic Structures, John didn’t read it.’  
    (Giannakidou 2007: 21, 22)

Rizzi (1997) uses the WCO test to show a difference between Focus and Topic. He claims that Focus is a quantificational element, thus it is affected by WCO. On the contrary, Topic does not show WCO. When sentence-initial perfino is pronounced with a focus stress, without requiring a resumptive clitic, it does show WCO effect, like a focus. When sentence-initial perfino does not receive focus stress and the resumption appears within the clause, it is not affected by the WCO, like a topic element:

(56) a. *Perfino GIANNI, sua madre ha amato.  
    Even Gianni his mother has loved  
    ‘Even Gianni, his mother loved.’

b. Perfino Gianni, sua madre l’ ha amato.  
    Even Gianni his mother cl. has loved  
    ‘Perfino Gianni, his mother loved him.’
The movement of the sentence initial *perfino*+XP is a long-distance movement to the LP. It is an Abar movement, typical of topics. On the contrary, following Belletti (2004), we propose that sentence-internal *perfino*+XP is moved to a focus position within the IP. Notice that in Italian it is possible to have the object preceded by *perfino* between the subject and the verb (see also ex. 16):

(57) Gianni *perfino* quel libro ha letto.
    Gianni even that book has read
    Lit. ‘Gianni even that book has read.’

We know that we are dealing with A-movement and not Abar-movement, because movement is restricted to a simple clause (does not go long distance), and the clitic is not allowed:

(58) *Gianni *perfino* quel libro si chiede chi abbia letto.*
    Gianni even that book wonders who has read

(59) ??Gianni *perfino* quel libro *lo* ha letto
    Gianni even that book *it* has read

Belletti (2001, 2004) shows that Italian has a FocusP in the low periphery (other than focus in CP). With ‘low periphery’ she means the area immediately above VP, which is parallel, to some extent, to the left periphery (clause external) of the clause. This low-focus position is reached through an A-type movement, which as we have already noticed above, can be a focus-related movement.

These facts reveal the possibility of *perfino*+XP to appear in two different projections: topic and focus. We observe that when *perfino*+XP without focus stress moves to the high position, it displays topic-like properties. We propose that sentence-initial *perfino* behaves as sentence-initial *lian* (i.e., it is located in a topic projection). When it appears in sentence-internal position, independently from its stress, it is in a focus projection within the low periphery. Differently from Chinese, *perfino*+XP can also be localized in a focus projection in the CP area and it can occur in situ. In fact when it is in sentence-initial position and it is pronounced with a focus stress, its syntactic behavior is more focus-like (see section 3.1.2); it has to follow topics elements, cannot co-occur with a clitic, and it shows WCO effects. This idea is perfectly compatible with the fact that in Italian an element can be focalized in situ (82a), and it can be also moved to the left periphery (82b) (Rizzi 1997; Zubizarreta 1998; Belletti 2001; Benincà and Poletto 2004):

(60) a. Ieri ho visto GIANNI (non Mario).
    Yesterday have seen Gianni not Mario
    ‘Yesterday I saw GIANNI (not Mario).’

[50]   Cartography of Chinese Syntax
b. GIANNI ho visto ieri (non Mario).
   Gianni have seen yesterday not Mario
   ‘GIANNI I saw yesterday (not Mario).’

Conversely, it is not possible to focalize an element at the left periphery in Chinese (61a). The bare focus can appear only in situ (61b):

(61) a. "ZHANGSAN zuotian wo kan le.
   Zhangsan yesterday I see FP
   ‘ZHANGSAN yesterday I saw.’

b. Zuotian wo kan le ZHANGSAN.
   Yesterday I see ASP Zhangsan
   ‘Yesterday I saw ZHANGSAN.’

4. THE LOW PERIPHERY IN CHINESE

Chinese displays the possibility to have the “bare” direct object (without any additional marking) not in its canonical post-verbal position (SVO word order), but raised to the left of the verb and below the subject, yielding an SOV order:

Canonical SVO order  
(62) a. Lisi mei kanguo [zhe ben shu].
   Lisi not read this cl book
   ‘Lisi did not read this book.’

Bare preposed object (SOV order)  
b. Lisi [zhe ben shu] mei kanguo e.
   Lisi this cl book not read
   ‘Lisi did not read this book.’

Paul (2005) applies Belletti’s (2001, 2004) proposal about the low periphery to Mandarin Chinese and shows that the preposed object in Chinese is located above VP and below IP, in a low periphery position (Paul 2005 and Tsai (this volume)).

Belletti examines the position between IP and VP occupied by the preposed object (SOV order) and she argues that it is a clause-internal position. Paul confirms the parallelism between CP and the low IP area. Her final hierarchy for the low periphery in Chinese is the following:

(63) IP > inner TopicP > even-Focus > vP

(63) corresponds only partially to the low hierarchy proposed by Belletti (2004); Paul shows that in Chinese no additional TopicP is allowed below even-Focus. Such a hierarchy corresponds to the more restricted structure
adopted for the external periphery by Benincà (2001) and Benincà & Poletto (2004), which crucially excludes the possibility of TopicP occurring below FocusP.

4.1. Preposed Object (SOV) and Sentence-Internal lian+XP

Shyu (1995, 2001) proposes a uniform object movement approach for both bare preposed objects and sentence-internal lian+XP. She analyzes them as derived by a substitution mechanism, triggered by the [+focus] feature, which is either phonologically null or lexically realized in dou-sentences or lian . . . dou structures. Remember that she considers dou the head of the FocusP that can be overtly expressed (in the case of lian+XP) or covert (in the case of the preposed object). As we mentioned earlier, we do not consider dou as head of FocusP and following Paul (2002, 2005), we analyze the preposed object and lian+XP as two different items that have moved up into two different landing sites, as they have two different semantic/pragmatic interpretations.

4.1.2. Two Different Positions

Paul (2002) suggests that the bare preposed object is higher than the lian+XP in the low periphery. With the following tests we show that the preposed object and the sentence-internal lian+XP cannot be analyzed in a unification account: they occupy two distinct positions in the low periphery, corresponding to two different functional projections, and the former is higher than the latter.

1. The preposed object must precede the Aspectual (repetitive) adverbs\(^6\) like you (‘again’), while lian+XP must follow it:

(64) a. Ta (*you) [nei ben shu] you kan le yibian.
   ‘He again that CL book again read ASP once
   ‘He has read that book one more time.’

b. Wo you [lian yi fen qian ye] mei you le.
   I again even one CL money also not have PP
   ‘Once again I don’t have a cent.’
   (Paul 2002: 22 a and b)

2. SOV order and sentence-internal lian+XP can co-occur; the resumptive pronoun in subject position shows that we are dealing with the Low Periphery and two different internal projections.
Zhangsan, ta, [zhe ge tang] lian wo de xiaoahaizi
Zhangsan he this CL sweet even I DE children
dou song le!
all give FP
‘As for Zhangsan, he gave the sweets even to my children!’

(66) [lp Lisi, [ta, [int,TopP yingyu [focP lian liushi fen [sp dou mei nadao]]]]
Lisi he English even 60 point all not obtain
‘Lisi didn’t even obtain sixty points in English.’
(Paul 2006: 60)

If sentence-internal lian+XP is in a higher position with respect to the bare preposed object, the clause is ungrammatical (see also Paul 2002, 2005):

(67) *Zhangsan, ta, lian wo de xiaoahaizi dou [zhe tang]
Zhangsan he even I DE children all this sweet
gei le!
Give FP

(68) *[lp Lisi, [ta, [focP lian liushi fen [intTopP yingyu [sp dou mei nadao]]]]
Lisi he even 60 point English all not obtain

3. Another piece of evidence in support of the idea that the bare preposed object occupies a different position from sentence-internal lian+XP is the fact that the SOV can be followed by a Topic marker (69)a, while lian+XP cannot (69)b. Notice that in order for (69)a to be acceptable, the preposed object must be stressed:

(69)

a. Zhangsan, ta, [zhe ben shu] a yijing kanwan le.
Zhangsan he this CL book TOP already read FP
‘As for Zhangsan, he already read this book.’

b. *Zhangsan, ta, [lian zhe ben shu] a dou yijing
Zhangsan he even this CL book top all already
kanwan le.
read finish FP

4. The bare preposed object displays a characteristic proper of a topic-like item in Chinese: it cannot be indefinite, while the element following sentence-internal lian may be:

(70)

He some old envelope kept FP
‘He has kept some old envelopes.’
b. Ta [lian yixie jiu xinfeng] dou baocun zhe.  
He even some old envelope all kept  
‘He has kept even some old envelopes.’  
(Zhang 1996: 15–16)

5. A bare pronoun can be preposed within lian … dou construction, while without any marking it cannot (Paul 2002):

Zhangsan even I also criticize  
‘Zhangsan criticized even me.’  

Zhangsan I criticize  
Lit: ‘Zhangsan criticized me.’

6. A bare preposed object cannot be in a cleft configuration by means of shi … de (see Paul & Whitman 2001), which is different from lian+XP constituent:

(72) a *Zhangsan shi [zhe ben shu] kanwan de.  
Zhangsan be this CL book read  
Lit: ‘Zhangsan, it’s this book (that) he read.’  

Zhangsan be even this CL book all read  
‘It’s even this book that Zhangsan read.’

Through the tests above we provide evidence for the following facts: the bare preposed object above VP and the preposed lian+XP are not the same kind of element. They occupy two different functional projections (i.e., they display distinct behaviors with respect to some adverbs, the presence of the topic marker, and the possibility to be in a cleft sentence). Moreover, they can co-occur and the bare preposed object has to be placed in a position higher than the one occupied by lian+XP.

4.2. Bare Preposed Object (SOV) is a Contrastive Topic

In this section we concentrate on the syntactic properties of the preposed object in the Low Periphery. The preposed object shows clear topic-like properties: presence of topic markers, impossibility to be cleft by means of shi … de “be … DE”, co-occurrence with a focus in situ, definiteness requirement. From a pragmatic/semantic point of view, a preposed object requires a contrastive reading (i.e., it is always an emphasized element in the sentence).

[54] Cartography of Chinese Syntax
As mentioned earlier, the contrastive stress does not indicate by itself that an item is focalized—thus we argue that the Chinese bare preposed object moves up to the Low Periphery in order to occupy the Spec of a contrastive topic projection.

At first sight the preposed object seems to be a focused item, since, as I will illustrate below, it generally needs a context in which it gets emphasis. Indeed in the literature it is generally assumed to involve focalization (Ernst & Wang 1995; Shyu 1995, 2001; Tsai 1994; Zhang 1996), even if the role of such an emphasis is not always clear. Actually, from a syntactic point of view it displays only two focus properties, while most of its characteristics are typical of topic-like elements.

**Focus Properties:**

1. The resumptive pronoun is not allowed. This fact indicates that the bare preposed object is derived by A-movement and not by Abar-movement, which is typical of topicalization.

(75) *Zhangsan Mali hen xihuan ta.*
   Zhangsan Mali very like her

2. There can be only one bare preposed object; multiple ones are not allowed. The impossibility to be multiple can be derived from the fact that the Low Periphery seems to be “more restricted” than the CP area, thus it does not admit more than one Topic.

   Note that the bare preposed object can co-occur with sentence-internal lian+XP. Since multiple foci are not allowed, and lian-XP is a type of Focus, we infer that the bare preposed object cannot be a type of Focus as well. Notice also that when lian-XP and the bare preposed object co-occur, the main stress is on lian+XP and not on the bare preposed object, further corroborating the hypothesis that lian-XP is the only focus of the sentence.

(76) Zhangsan zhe zhong tang lian wo de xiaoHAIZI dou xihuan
give fp

Zhangsan this cl sweet even I de child all
song le...

‘Zhangsan gave this sweet even to my child.’

Most of the properties of the bare preposed object are topic-like. In what follows, we illustrate why this is case. First, the bare preposed object is compatible with a wh-element:

(77) Zhangsan [zhe hen shu] huan gei le shei?
give back to who

Zhangsan this cl book give back to asp who
Lit. ‘Zhangsan gave back this book to whom?’
On the contrary the focalized item lian+XP is not compatible with a wh:

(78) *Zhangsan lian zhe ben shu dou huan gei le who
Zhangsan even this CL book all give back to ASP she? Lit. ‘Zhangsan gave back this book even to whom?’

Second, preposed object can be followed by topic markers.

(79) Zhangsan [zhe ben shu] (a) yijing mai fp.
Zhangsan this CL book TOP already buy FP
Lit: ‘Zhangsan this book already bought.’

On the contrary, the focused item lian+XP cannot be followed by a topic marker a:

(80) *Zhangsan lian zhe ben shu a yijing dou mai le.
Zhangsan even this CL book TOP already al buy FP

Third, the bare preposed object cannot be cleft by means of shi . . . de pattern, which would be unexpected if it weren’t really a focus (Paul and Whitman 2001).

(81) a. Women gugong] qu guo le.
We imperial-palace go SP FP
‘We have been to the imperial palace.’

We be imperial-palace go ASP DE
(Paul 2002: 21)

(82) *Zhangsan shi [zhe ben shu] kanwan de.
Zhangsan be this CL book read DE
‘It’s this book that Zhangsan read.’

Fourth, the bare preposed object can co-occur with a focus in situ. Given the impossibility of having multiple foci within the same sentence, we infer that the object in a SOV sentence is not a focus.

Mali this CL book give back to Lisi not to Zhangsan
Lit: ‘Mali, this book, gave back to Lisi (not to Zhangsan!).’
5. Like the topicalized elements in the CP area (OSV), a bare preposed object generally cannot be an indefinite nonspecific expression.¹¹

Topic: OSV
(84) a. Shu, wo hui kan.
   book I can read
   ‘THE books, I will read.’

Preposed Object: SOV
b. Wo shu hui kan.
   I book can read
   ‘I THE books will read.’

Canonical word order: SVO
c. Wo hui kan shu.
   I can read book
   ‘I will read (some) BOOKS.’
   (Huang, A. Li & Y. Li 2009:16)

Shyu (2001: 16) claims that, different from a Topic in the CP area, a bare preposed object in the IP can be indefinite. In order to indicate indefiniteness, she uses the numeral yi (‘one’, followed by the classifier). Yet notice that an element introduced by the numeral yi in topic position and in sentence-internal position (the preposed object position) is acceptable only if it is contrasted with another numeral item (85b). This means that in topic position its interpretation is always definite:

Topic: OSV
(85) a. *Yi pian lunwen, wo hen xihuan.
   one CL paper I very like
   ‘A paper I like very much.’

b. [Yi pian lunwen], wo hai keyi yingfu, [liang pian
   One CL paper I still can handle two CL
   na] jiu tai duo le.
   that then too much fp
   ‘One paper, I can handle, but two papers, that’s too much.’
   (Tsai 1994:31)

With the preposed object, the contrastive construal of the sentence is obligatory (i.e., the clause with a preposed object requires a conjunct with which to put it in contrast):

(86) Wo yi pian lunwen keyi yingfu *(lian pian jiu bu xing le).
   I one CL article can handle two CL then not possible fp
   ‘A paper, I can handle (but two papers, I can’t).’
   (Tsai 1994: 32)
As mentioned earlier, Chinese object pre-posing (SOV) is commonly assumed to involve focalization (Ernst & Wang 1995; Shyu 1995, 2001; Tsai 1994; Zhang 1996). It normally has an emphatic function, but such an emphatic effect is not always clear. Some linguists have doubts about its Focus function and propose to treat it as a kind of Topic endowed with some Focus properties. For instance, Ernst & Wang (1995) show the pragmatic differences between the Topic in initial position (OSV), which they call “discourse Topic”, and the preposed object (SOV), called “Focus-Topic”. Ting (1995), borrowing the term introduced by Tsao (1977) for the ba-NP\(^{12}\), defines the bare preposed object as a “secondary Topic”, in opposition to the “primary Topic” OSV, i.e. a Topic in the CP area, and Paul (2002, 2005) analyzes it as a sentence-internal Topic preceding the Focus position occupied by lian+XP. Following the authors cited above, we adopt the proposal that Chinese bare preposed object occupies the spec of a Topic position, more precisely of a Contrastive Topic position.

First of all, there is a different pragmatic (and syntactic) requirement connecting sentence-initial Topic and the preposed object in the IP (Ernst & Wang 1995; Tsai 1994; Huang, A. Li & Y. Li 2009, among others). The object in SOV clause must display some sort of contrastive reading, while the object in OSV clause does not need to, though it may be contrastive:\(^{13}\)

(87) a. [Zoumingqu], Zhangsan hen xihuan tan, dajia ye hen
Sonata  Zhangsan very like  play all also very
like  listen
‘As for sonatas, Zhangsan likes to play it and everyone also likes to listen to it very much.’

b. (Wo dui lanqiu hen shou, danshi) [zuqiu], wo yi
I  to basketball very familiar but soccer I one
qiao  bu  tong.
intelligence not understand
‘I’m familiar with basketball, but soccer, I have no idea at all.’
(Ting 1995:3)

The following diagnostic tests show that the bare preposed object is neither a Contrastive Focus nor an Informational Focus.

1. The bare preposed object in the IP area is not an Informational Focus. The reply to a wh- question implies new information, i.e. Informational Focus, and the bare preposed object cannot be used as an answer to a wh-question:

(88) Q: Zhangsan mai le  shenme?
Zhangsan buy ASP what
‘What did Zhangsan buy?’

\[\text{[58] Cartography of Chinese Syntax}\]
(SVO)
A1: Zhangsan mai le [zhe ben shu].
    Zhangsan buy PERF this CL book

('OSV)
A2: *[Zhe ben shu], Zhangsan mai le.
    This CL book Zhangsan buy FP

('SOV)
    Zhangsan this CL book buy FP
    ‘Zhangsan bought this book.’

Only the answer (88A1) is acceptable; its word order is unmarked and—as we have already seen before—Informational Focus in Chinese is realized in situ. In contrast, neither (88A2) nor (88A3) is a proper answer. The former displays an element in sentence-initial position that cannot function as an Informational Focus, the latter is a case of object pre-posing, which cannot be used as an Informational Focus either.

Notice that the OSV structure, generally being a Topic without a special stress, is a possible answer to a question in which the referent of the Topic has been previously mentioned. In this context, the bare preposed object is instead infelicitous:

(89) Q: Shei mai le zhe ben shu?
    Who buy ASP this CL book
    ‘Who bought this book?’

    A1: [Zhe ben shu], Zhangsan mai le.
        This CL book Zhangsan buy FP

        Zhangsan this CL book buy FP
        ‘As for this book, Zhangsan bought.’

In (A1) zhe ben shu (“this book”) is in an external Topic position and the sentence stress has to be on the subject Zhangsan, since it is the Informational Focus of the clause. In (A2) the preposed Object needs a contrastive reading that in this case is infelicitous.

2. The bare preposed object in the IP area is not a Contrastive Focus. Considering that the bare preposed object is pragmatically/semantically defined as a Focus-Topic, i.e. a Topic with a Contrastive reading, the next test aims to check if it can be used as a Contrastive Focus. By Contrastive Focus we mean a stressed item that makes a correction to an information/assertion:14

(89) Q: Zhangsan mai le zhe zhang chuang ma?
    Zhangsan buy ASP this CL bed FP
    ‘Zhangsan bought this bed? (For his new room?)’
(Focus in situ)
A1: Bu shi, Zhangsan mai le ZHE ZHANG ZHUOZI.
Not be Zhangsan buy ASP this CL table
‘No, Zhangsan bought this table!’
(*OSV)
A2: *Bu shi, ZHE ZHANG ZHUOZI Zhangsan mai le.
Not be this CL table Zhangsan buy FP
(*SOV)
A3: *Bu shi, Zhangsan ZHE ZHANG ZHUOZI mai le.
Not be Zhangsan this CL table buy FP

Compare the example in (89) with the following Italian sentences:

(90) Q: Per la sua nuova camera, Gianni ha comprato il letto?
For the his new room Gianni has bought the bed
‘For his new room, did Gianni buy the bed?’

(Focus in situ)
A: No, Gianni ha comprato IL TAVOLO!
No Gianni has bought the table
‘No, Gianni bought THE TABLE!’

(OSV)
A1: No, IL TAVOLO Gianni ha comprato.
No the table Gianni has bought
‘No, THE TABLE Gianni bought.’

The bare preposed object in Chinese is not a Contrastive Focus, since it cannot be used as a correction, even if it bears a “Focus” prosodic stress. In summary, we claim that the bare preposed object is neither an Informational Focus nor a Contrastive Focus.

We notice that in every proposal about the contrastive stress given to the preposed object, it is implied that the sentences in which such preposed object appears always require a contrasted context of some sort. It seems that the preposed object must be in comparison with two or more items of a set, a contrasted element in a list. This kind of Topic, appearing in analogous contexts in Italian, is called List Interpretation Topic by Benincà & Poletto (2004), and more traditionally, Contrastive Topic. When the preposed object appears in a simple sentence, this is interpreted as an “open sentence” (i.e., a sentence that implies a conjunction or a contrast, either overtly expressed or not):

(91) Ta yingwen bao kan de dong, danshi dewen
He English newspaper read be able understand but German
bao kan bu dong.
newspaper read not understand
‘He can read English newspapers, not the German ones.’
(Slightly modified from Abbiati 1998: 164)

[60] Cartography of Chinese Syntax
Wo zhe pian lunwen xihuan *(na pian lunwen bu xihuan).
m this CL paper like that CL paper not like
‘This paper, I like (but that paper I don’t).’
(Tsai 1994: 32)

Compare OSV structure with SOV structure: (93a) with the external object is felicitous by its own, while the simple sentence (93b) containing a preposed object cannot be pronounced out of the blue, but it requires a contrastive context or a conjunction (for instance the one in brackets):

(OSV)
(93) a. Yu a, Zhangsan gan chi.
    fish TOP Zhangsan dare eat
    ‘As for fish, Zhangsan dares to eat.’

(SOV)
    Zhangsan fish dare eat beef not dare eat
    ‘Zhangsan dares to eat fish, but wouldn’t dare to eat beef.’
(Shyu 2001:43–44)

Ernst & Wang (1995: 22) point out that (94a) requires a strong stress on the SOV or the use of the parenthesized clause. On the contrary, (94b) does not need any special stress on the SOV or any kind of contrast in order to be grammatical.

(94) a. Wo [jiu] he (kele bu he).
    I liquor drink Coke not drink
    ‘Liquor I drink (but Coke I don’t drink).’
    (Ernst and Wang 1995: 22)

b. [Jiu], wo he.
    Liquor I drink
    ‘(As for) liquor, I drink.’

Other examples are from Shyu (2001): (95a) with an intonationally unmarked external topic is perfectly grammatical; on the contrary, (95b) is infelicitous if uttered out of the blue, but it is improved when uttered in a contrastive context (when yidaliwen “Italian” is compared with ladinwen ‘Latin’):

(95) a. [Yidaliwen], geju yanyuan zhidao.
    Italian opera performer know
    ‘Italian, opera performers know.’

b. #Geju yanyuan [yidaliwen] zhidao
    opera performer Italian know
    ‘Opera performers Italian, know.’
c. Geju yanyuan yidaliwen zhidao, (danshi) [ladinwen] jiu
   bu dong le.
   'Opera performers know Italian, but they don’t understand Latin.'
   (Shyu 2001: 40)

It is possible for a preposed object to appear in a sentence without any strong prosodic stress, but in that case an emphatic element is obligatorily required—for instance the negation bu (‘not’) or the adverb ye (‘also’) (Ernst and Wang 1995):

(96) Wo [jiu] bu he le.
    I liquor not drink FP
    'I won’t drink liquor any more.'
    (Ernst and Wang 1995:1)

(97) Wo wenti hai mei xiangqing chu lai, bu neng wen ni.
    I question still not think go out come not can
    ask you
    'I haven’t come up with questions, so I cannot ask you.'
    (Shyu 2001: 30)

In addition, Ting (1995) points out that Focus interpretation of the preposed object is not the only interpretation available. If there is a “real focus present in the sentence”, then the bare preposed object carries the old information meaning:

(98) Q: Zhangsan zui xihuan zai nali chi pingguo?
    Zhangsan most like at where eat apple
    ‘Where does Zhangsan like to eat apples most?’

A: Zhangsan [pingguo] zui xihuan ZAI CHUANG
    Zhangsan apple most like at bed
    SHANG chi.
    on eat
    ‘Zhangsan as for apples likes to eat AT BED most.’
    (Ting 1995: 5)

In this case the Focus in the clause is zai chuanshang (‘at bed’), which constitutes the Informational Focus (the answer to the wh-question), while the preposed object is simply a piece of old information, already mentioned in the question.

The last case in which preposed object seems to lose its strong stress is when it co-occurs with the lian+XP:

[62] Cartography of Chinese Syntax
In this sentence, the Chinese informants we have consulted point out that the main stress is always on the XP following "lian" and not on the preposed object.  

Many linguists (Tsao 1977; Qu 1994; Shyu 1995) noted that two [+animate] NPs can switch their theta-roles, in the sense that in a structure like [NP1 NP2 V], either NP1 is interpreted as the subject and NP2 is interpreted as the internal object in bare preposed object position, or NP1 is interpreted as the internal object in Topic position, while NP2 is interpreted as the subject. In the example (100) it is natural to interpret NP2 as the subject and NP1 as the Topic. But if NP2 is uttered with a contrastive stress, NP1 functions as the subject and NP2 as the object:

(100)  
Ta  [Zhang xiaojie], bu  xihuan  t.  
he  Zhang  miss  not  like  
"Miss Zhang does not like him."  
??He does not like Miss Zhang.  
(Huang, A. Li and Y. Li 2009)

The reading is clearer with a clause highlighting the contrastive usage of the preposed object:

(101)  
Q:  Ta  hui  zhui  Zhang  xiaojie  ma?  
He  will  court  Zhang  Miss  Q  
"Will he court Miss Zhang?"  
  
A:  Ta  [Zhang xiaojie], bu  xiang zhui  e,  [Li xiaojie],  
He  Zhang  Miss  not  want  court  Li  Miss  
cai  hui zhui  e,  
only  will  court  
"He does not want to court Miss Zhang; (he) only will court Miss Li."  
(Huang, A. Li and Y. Li 2009:19)

Furthermore, consider a typical “Aboutness Topic” in the CP area like the following:

(102)  
a.  [Zoumingqu],  Zhangsan  xihuan  tan,  dajia  ye  xihuan  
   Sonata  Zhangsan  like  play  everyone  also  like  
   ting  
   'As for sonatas, Zhangsan likes to play them and everyone also likes to listen to them.'
b. #Zhangsan [zoumingqu] xihuan tan, (dajia ye xihuan
ting).
Lit.: #Zhangsan, sonatas, likes to play them and everyone also likes to listen
to them.’
(Ting 1995: 3)

A similar interpretation (i.e., as an “Aboutness Topic”) for a preposed object is
not possible. This is a further issue showing that a preposed object is a Topic
with a contrastive reading. Taking into consideration the evidence presented
above, we propose that the preposed object occupies a Contrastive Topic posi-
tion. We also claim that the Low Periphery in Chinese disposes of only one
Topic position, dedicated to a contrastive interpretation. Differently from the
CP area, where any kind of Topic may be contrastively stressed, within the
IP there is a dedicated position yielding the contrastive interpretation (see
Badan 2007). Therefore we support the idea that the bare pre-posed object
moves to the specifier of a Contrastive Topic projection within the IP to check
the Contrastive Topic features in a Spec-head configuration.

4.3 A-Movement

As extensively shown above, the sentence-external and internal lian+XP
undergo different kind of movements: the sentence-external lian+XP is
derived by Abar movement, while the sentence-internal one is derived by
A movement. In this section, we will show that the preposed object, that is
the Contrastive Topic in the low periphery, also undergoes movement of the
type A.

First, like sentence internal lian+XP (see example (37)), the bare preposed
object cannot co-refer with a resumptive pronoun:

(103) a. Zhe zhi gou [ziji de zhuren], yao le (*ta),
this CL dog self DE master bite ASP him
bieren que bu yao.
others but not bite
‘This dog bit its own master, but not others.’
(Shyu 2001: 50)

It seems that the empty element on the right of the verb is A-bound, since the
movement displays several A-properties (see Fu 1994; Qu 1994; Ting 1995;
Shyu 1995, 2001; Zhang 1996). In this section we show the A-properties of the
preposed object: clause-boundness, absence of Reconstruction for Principle C,
absence of resumption.
1. Clause-Boundness.

The embedded object cannot be preposed across a tensed clause boundary to a matrix post-subject/preverbal position (Focus is subject only to local movement17):

(104) *Zhangsan pingguo zhidao [cp Lisi chidiao le e]

Zhangsan apple know Lisi ate FP

‘Zhangsan knows that Lisi ate the apples.’

(Ting 1995: 7)

(105) a. Zhangsan renwei [cp Lisi hen xihuan Mali]

Zhangsan think Lisi very like Mali

‘Zhangsan thinks that Lisi likes Mali.’

b. *Zhangsan Mali renwei [cp Lisi hen xihuan t].

Zhangsan Mali think Lisi very like

‘Zhangsan thinks that Lisi likes Mali.’

(Shyu 2001: 3–4)

We can refer to this phenomenon as adjacency requirement, following Belletti and Shlonsky (1995:501) who show that in Italian (and in Hebrew) the post-verbal subject (in Spec, FocusP) is more acceptable when it is adjacent to the verb.18 Notice, on the contrary, that OSV word order displays long-distance dependency:

(106) Pingguo, Zhangsan zhidao [cp Lisi chidiao le e].

apple Zhangsan know Lisi ate FP

(Ting 1995: 6)

(107) Mali, Zhangsan renwei [cp Lisi hen xihuan e].

Mali Zhangsan think Lisi very like


Though coreference between the pronoun ta and its antecedent Zhangsan in sentence (108) impossible, it becomes possible when the indirect object containing Zhangsan has undergone bare object movement (in (109a)) and focalization (in (109b)) (Shyu 2001).

(108) *Wo bei ta {qiang-zou le yi ben Zhangsan de shu}.

I by him rob-away ASP one CL Zhangsan DEbook

Lit. ‘I was robbed by him of a book of Zhangsan.’

(Shyu 2001: 4)

(109) a. Wo {Zhangsan de shu} jiao ta {na-zou le e}.

I Zhangsan DE book let him take-away FP

‘I asked him to take away Zhangsan’s books.’
3. No Resumption.

"It is generally assumed that the gap left by A-movement cannot be filled with an overt pronoun" (Ting 1995: 2, 95):

Preposed object:

(110) *Lisi [n66eige ren] ji bu de ta le.
Lisi that CL person remember not be-able him FP
Lit: 'Lisi that person cannot remember her/him.'
(Slightly modified from Ting 1995: 17)

Could the impossibility of the presence of the resumptive pronoun be derived from the violation of Principle B? Consider the following examples:

(111) *Wo [nei ge ren] renwei Lisi genben ji bu de ta le.
I that CL person think Lisi totally remember not be-able him FP
Lit: 'I that person think Lisi totally can't remember him.'
(Ting 1995: 17)

The ungrammaticality of (111) indicates that preposed object is clause-bound, which is considered a property of A-movement.19 As Ting (1995) states: “the ungrammaticality of (111) can no longer be attributed to the binding condition B, since the binding domain for the pronominal ta ('he') is free in the embedded clause, satisfying the binding condition B, so there must be some other reasons for the ill-formedness of (111). Given the A-movement analysis, the ungrammaticality of (111) naturally follows, since it is generally assumed that the gap left by the A-movement can not be filled with an overt pronoun.” As Ernst and Wang (1995) point out, the only case in which a bare preposed object merged in the embedded clause has the position between the subject and the matrix verb as its landing site is when the object is preposed from a non-finite embedded object position: “...it is well known that nonfinite complements are subject to clause union phenomena, in which matrix and embedded complement together display some properties of a single clause” (Ernst

[66]  Cartography of Chinese Syntax
and Wang 1995: 245). Shyu (2001: fn27) shows that also with the infinitive the resumption is still not allowed:

Base sentence

(112) a. Lisi bi [IP Zhangsan ma Mali]  
Lisi force Zhangsan scold Mali  
‘Lisi forces Zhangsan to scold Mali.’  
(Shyu 2001:fn27)

Bare preposed object

b. Lisi Mali, bi [IP Zhangsan ma (*ta)]  
Lisi Mali force Zhangsan scold her  
Lit: ‘Lisi Mali forces Zhangsan to scold her.’

Sentence-internal lian+XP

c. Lisi lian Mali, dou bi [IP Zhangsan ma (*ta)].  
Lisi even Mali all force Zhangsan scold her

On the basis of the syntactic behaviour of the preposed object, we have shown that its movement can be characterized as an A-movement. However, note that one of the properties that differentiates A-movement from Abar movement is that an XP dislocated via A-movement moves to a position to get the Case, while if dislocated via A-bar movement, the landing site of the XP is a position where no Case and no θ-role are assigned. In this respect, the preposed object seems to display an Abar property: if we assume that object Case is checked by verb government (Ernst 1998), the preposed object does not move to a position to get Case. According to Shyu (2001), we do not consider the bare-preposed object-movement as instances of scrambling. Such movement is not optional, but must have a sort of trigger rather than Case assignment. The bare preposed object is attracted by “selected” properties, following the Spec-Head checking relation within the maximal projection of an FP. We do not need to stipulate the optional Case checking for Chinese.

5. CONCLUSIONS

Our paper focuses on the even-construction in Mandarin Chinese and Italian and on the preposed object in the low periphery of Mandarin Chinese. First, our investigation had led us to the conclusion that even in Mandarin and Italian does not always strictly encode focus. More specifically, we have found evidence that when an even phrase occurs in sentence-initial position, the construction has all of the syntactic features of a topic construction, while maintaining the focus properties when it is in sentence-internal position.
One consequence of our findings is that the distinction between topic and foci may be not as clear-cut as originally thought. Certain constructions may qualify syntactically as topics, while being semantically foci. It remains to be seen whether the opposite can also be true (i.e., whether we can have, in Mandarin Chinese and in other languages, instances of constructions that qualify syntactically as foci, but semantically as topic). The closest candidate for this type of construction is the bare preposed object. In the second part of our paper, following Paul (2005) and Tsai (this volume), we have shown that Chinese has a low periphery consisting of two kinds of functional projections occupied by the bare preposed object and the lian+XP. Contrary to traditional analyses, we demonstrated that preposed object is not a focus, but a topic-like element that gets focus stress. We argued that it is a Contrastive Topic.

It seems to us that our investigation highlights the fact that the notions of Topic and Focus are more fine-grained than what originally thought. A canonical topic will have all typical features of the topic, both syntactically and semantically. The same can be said for a canonical focus. But we have seen that there can be intermediate cases: the sentence-initial lian-XP and perfino-XP being one of those. We therefore conclude that notion of Topic, mainly a syntactic one, is wider than the simple notion of old information: a topic has specific syntactic characteristics, but it can also carry a semantics that is diametrically opposite to the one of old information (see the case of Contrastive Topic).

We conclude observing that the low periphery in Mandarin is articulated in projections that differ from those of the high periphery in different ways. First, we showed that the projections in the low periphery undergo A-movement, while those on the high periphery undergo A-bar movement. Second, the low periphery seems more “restricted” as compared to the high periphery, since in the low periphery multiple topics are not allowed. What the two peripheries have in common is the fact that none of them has a position for a ‘bare focus’. All the bare objects in the high periphery are topics, and we showed that the preposed object in the low periphery is a topic interpreted as contrasted. The notion of ‘contrast’ in fact is a separate notion with respect to focus.

Finally, we observe that Mandarin Chinese gives us the possibility to study the distinction of the positions in the low and high periphery, due to the fact that it is an analytic language. In an analytic language such as Chinese, in fact, the positions of the different projections seem to be more ‘fixed’. The less variation in word order allows to clearly distinguish the different projections and their properties.

NOTES

1. Hole (2004) provides evidence for the quasi-fully interchangeability between these two elements; however in this paper we concentrate only on dou.
2. Benincà and Poletto (2004) propose a collection of Topic and Focus projections for the left periphery that can be partitioned in the "Topic field" and the "Focus field" (also Cheung, this volume, follows this proposal in the analysis of the Left Periphery in Cantonese).


4. In Italian an element can be focalized in situ or can be moved to the Left Periphery (Rizzi 1997; Zubizarreta 1998; Belletti 2001: Benincà and Poletto 2004):

(i) *Ho comprato UN LIBRO!*
   *I bought A BOOK!*

(ii) *UN LIBRO ho comprato!*
    *A book have bought*
    *'A BOOK I bought!*

Moreover Belletti (2001) proposes that the informational focus in Italian is projected in a focus projection within a Low Periphery, that is within the IP. On the contrary in Chinese the movement of the focalized element to the beginning of the sentence is not possible. The focalization (without any particle) is only in situ (Gao 1994; Paris 1998, 1999):

(iii) *Wo kan le YI BEN SHU.*
    *I read asp one cl book*
    *'I read A BOOK.'*

(iv) *YI BEN SHU wo kan le.*
    *One cl book I read fp*

5. Cheung (this volume) proposes an analysis for the *even*-construction in Cantonese (*lin*-construction) in parallel with what we propose for Mandarin in this paper. Cheung suggests that Cantonese *lin*-focus crucially differs from Mandarin because sentence-initial *lin*-focus in Cantonese is a type of focus and not topic.

6. Shyu (1995) proposes that *dou* is itself the head of FocusP.

7. Focalizing indefinite quantifiers like ‘nessuno’ require contrastive stress in Italian (Belletti 1990:35,43).

8. These kinds of adverbs are in low positions in Cinque’s (1999) hierarchy. Traditionally they are called "VP adverbs."

9. We owe this example to Lisa Cheng.

10. This sentence is acceptable only with a comma or a pause after the topic marker *a*, in which case we have an instance of a topic *lian*-XP.

11. The notion of object fronting employed in our paper should be distinguished from the object pre-posing cases discussed by Tsai (this volume). We deal with the preposed object interpreted as (contrastive) topic and located in an internal topic position, while Tsai (this volume) analyzes a different type of
preposed object that appears in contexts in which it is interpreted as a focus. Tsai proposes that there are two types of landing sites for Chinese focus object fronting: the outer Focus position in the left periphery and the inner focus position located in the peripheral area around vP (a clause internal focus in Belletti’s 2004 terms). It would be interesting to investigate how ‘low’ the internal Contrastive Topic position is in the internal periphery, whether it can co-occur with the inner Focus projection in the same sentence, and, if they can, what their positions are with respect to each other.

12. In Chinese the direct object moved to a preverbal position can be preceded, obligatorily or optionally, by the morpheme *ba*. The exact function of *ba* is a widely discussed topic among linguists: it is treated either as a verb (Hashimoto 1971), a preposition (Travis 1984; Li 2001), a Case marker (Huang 1982; Goodall 1987) or as a higher verbal head by Paul and Whitman (2001). For an analysis of functions and optionality/obligatoriness of *ba* see also Li (2006) and van Bergen (2006).

13. Shyu (1995) makes a structural distinction between “focused” OSV and unmarked OSV. The former is in IP-adjoined position, while the latter occupies the spec, TopicP. Within the cartography framework, we instead propose that every kind of Topic in the CP area can optionally have a contrastive reading.

14. In Chinese the Contrastive Focus cannot (overtly) move up to the Left Periphery, and it is always in situ (see Gao 1994; Badan 2007; Badan and Del Gobbo 2010).

15. Shyu (2001), following Kratzer’s (1989) distinction between “stage level” predicate, which expresses a specific situation or event, from “individual level” predicate (generic sentences), claims that the bare preposed object order can appear in “individual level” clauses only when the sentence has contrasting function.

16. *Lian* functions like a Focus stress for the XP that it selects. For this reason, when it co-occurs with another item, it always gets the Focus accent (see Badan 2007).


18. The examples analyzed by Belletti & Shlonsky (1995) for Italian are the followings:

(i) a. *Ha dato un libro a Maria, Gianni.
   Has given a book to Maria, Gianni.

   b. *(?)Ha dato a Maria un libro Gianni.
   Has given to Maria a book Gianni.

   c. *Ha messo il libro sul tavolo Maria.
   Has put the book on.the table Maria.

   d. *(?)Ha messo sul tavolo il libro Maria.
   Has put on.the table the book Maria.

   e. *(?)Ha dato a Maria Gianni un libro.
   Has given to Maria Gianni a book.

19. Notice that both of them can stay in embedded position, for instance in relative clauses:

(i) Qing zai [[ta nei ben shu kanwan] de shihou] please at he that cl book read of time
   ‘Please come see him when that book, he finishes reading.’
   (Ernst and Wang 1995: 29)

[70] Cartography of Chinese Syntax
20. Qu (1994) has proposed Functional AgrPs to derive Subject and Object Case agreement in Chinese. Shyu (2001) argues that the preposed/preposed object is not triggered by Case assignment nor is Case related. She assumes that a Subject is base-generated in the Spec, VP position, following the Internal Subject Hypothesis (Kuroda 1988; Koopman and Sportiche 1990). She assumes that Subject raising to [Spec, IP] is obligatory, even though INFL is defective in Chinese. This subject-raising is for assigning abstract nominative Case. As I mentioned earlier, object abstract Case is checked by verb government.

REFERENCES


THE EVEN-CONSTRUCTION AND LOW PERIPHERY IN MANDARIN CHINESE [71]


[72] Cartography of Chinese Syntax

