Remarks on Object Movement in Mandarin SOV Order[*]

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This paper proposes a uniform movement approach to bare O-M (object movement) and *lian*-focalization (e.g. Shyu 1995), and articulates a [+Focus] feature motivated substitution mechanism. The movement is well-motivated under Chomsky's (1993) Economy Principle and Poole's (1996) execution of Form Chain, instead of being triggered by Case-related agreement. This paper further demonstrates how considering different types of predicates helps clarify the nature of the discourse topic, emphatic topic, and focus. Moreover, the comparison of the O-M in Chinese with that in other languages shows that Chinese O-M is not identical to the VP-peripheral scrambling in Japanese, and it also is different from the O-M found in languages that are motivated by overt Case-checking/overt verb movement, e.g. the Icelandic language. The proposed A-chain focalization lends further support to the existence of A-chain focalization. Ultimately, the result of this study lends further support to the non-unitary focusing devices both within a single language and among languages.

Key words: Object Movement, SOV, Mandarin, case, focus

1. Introduction

This paper concerns SOV word order in Mandarin Chinese. With the assumption of basic SVO word order (1a), several previous studies have proposed movement account for deriving SOV word order (1b); see the substitution approach in Gao (1994), Qu (1994), and Shyu (1995), and adjunction approach in Ernst and Wang (1995), and Li (1996).

(1) a. Zhangsan chi-le yu le
        Zhangsan eat Asp fish Part
        'Zhangsan ate fish.'
    b. Zhangsan yu chi-le
        Zhangsan fish eat Asp
        'Zhangsan ate FISH.'

Qu (1994) has proposed functional AgrPs to derive subject and object Case agreement in Chinese. This paper, however, argues that Chinese object movement (O-M) to the post-subject/pre-verb position is not triggered by Case assignment nor Case-related (cf. Zhang 1998). Rather, the focus movement is well-motivated under Chomsky's Economy Principle and Poole's (1996) execution of Form Chain in a movement type applicable to Chinese O-M.

In addition to the bare object preposing, Shyu (1995) has made a strong claim that *lian*-focalization in *lian…dou* 'including...all' construction, as in (2), is syntactically on a par with the bare O-M in (1b).[1]

(2) Zhangsan lian yu dou chi-le
     Zhangsan LIAN fish DOU eat-Asp
     'Zhangsan ate even FISH.'

In defense of a uniform movement approach to bare O-M and *lian*-focalization, this paper further articulates that this movement (O-M), being a substitution mechanism, is triggered by the [+Focus] focus feature, which is either phonologically null or lexically realized in *dou* sentences or *lian…dou* structure. In claiming so, I also demonstrate that the so-called "secondary topic" approach for the post-subject object cannot explain the complete facts. Rather, by proposing multiple positions for pre-subject objects, I show that the consideration of different types of predicates helps clarify the nature of discourse topic, emphatic topic, and focus.

Another goal of this study is to demonstrate how the proposed unified approach can empirically and theoretically account for the facts. It is shown in this paper that Chinese O-M should not be grouped under the umbrella of scrambling. Moreover, Chinese O-M is different from the O-M found in languages that are motivated by overt Case-checking and overt verb movement, such as the Icelandic language discussed in Thráinsson (1993) and Deprez (1994). Seeing that Chinese O-M is [+Focus] motivated, this paper further addresses the existence of A-chain focalization (e.g. A-focalization in Italian and Hebrew discussed by Belletti and Shlonsky 1995, in contrast to A' focalization found in Hungarian, the Focus designated language (e.g. Horvath 1986, 1995, among others), and Korean (Choe 1995), and references cited there). Furthermore, Focus Criterion (Gao's 1994, and Ernst and Wang's 1995) is modified in this paper in order to restrict its application to the syntactic focus constructions in discussion. Moreover, the proposed structural [+Focus] should be distinguished from the phonologically stressed, in situ focus, and the lexical focus feature--focus being

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[1] "Bare O-M" here means objects not involving *lian...dou* reading.

generated to fulfill focus association with focus particles or adverbs. Ultimately, the result of this study lends further support to the non-unitary focusing devices both within a single language and cross-linguistically.

The paper is organized as follows. In Section 2, I briefly summarize the A-movement properties of bare O-M and *lian*-focalization, and modify Shyu's (1995) analysis for this movement. Then I show how Case-assignment or Case-related approaches to O-M are inadequate both empirically and theoretically. Moreover, previous arguments against this uniform and substitution approach of bare O-M and *lian*-focalization are not sound; thus, the current proposal is preferable. In Section 2.5, I consider the predicate types related to the moved object (both in pre-subject and post-subject positions). The discussion certainly brings new light to our understanding of logical topic, emphatic topic and simple focus, and their corresponding structures. In Section 3 I show that Chinese O-M is not on a par with the Japanese object shift scrambling, Icelandic O-M, and Hungarian A'-chain focalization. In Section 4, I will discuss how Focus Criterion proposed by Gao (1994), and Ernst and Wang (1995) can be modified to better account for the restricted focalization in Chinese. Then I close with a summary in Section 5.

2. Object movement and *lian*-focalization

2.1 A-movement properties

The A-movement properties of bare O-M have been observed and discussed in detail in Qu (1994) and Shyu (1995). Shyu (ibid.) further claims a uniform A-movement for bare O-M and *lian*-focalization. The following summarizes her A-movement properties. First, it is clause-bound: the embedded object *Mali* in (3) cannot be preposed across a tensed clause boundary to the matrix pre-verb/post-subject position, as repeated in (4), and (5) from Shyu (1995).

(3) Zhangsan renwei [$_{CP}$ Lisi hen xihuan Mali]
    Zhangsan think Lisi very like Mali
    'Zhangsan thinks that Lisi likes Mali.'

(4) *Zhangsan Mali$_1$ renwei [$_{CP}$ Lisi hen xihuan t_1].
    Zhangsan Mali think Lisi very like
    'Zhangsan thinks that Lisi likes Mali.'

(5) *Zhangsan lian Mali$_1$ renwei [$_{CP}$ Lisi dou bu xihuan t_1].
    Zhangsan LIAN Mali think Lisi DOU not like
    'Zhangsan thinks that Lisi doesn't like even Mali.'

Second, both types of movement do not seem to display Binding Principle type LF undoing effects. While the short-distance reflexive *taziji* can refer to the antecedent *Zhangsan* in (6), the anaphoric relation becomes less accessible when the objects containing the reflexive are preposed, as the bare O-M in (7a), and *lian*-focalization in (7b), respectively.[2]

(6) Wo bei Zhangsan$_1$ qiang-zou le [$_{DO}$ yiben guanyu taziji$_1$ de shu]
     I by Zhangsan rob-away Perf one-CL about him self's book
     '(lit.) I was robbed by Zhangsan of a book about himself.'

(7) a. **??** Wo [naxie taziji$_1$ de shu]$_2$ yijing jiao Zhangsan$_1$ xian na-zou le t_2
        I those him self's book already ask Zhangsan first take-away Asp
        'I have asked Zhangsan to take away his own books.'
     b. **??** Wo lian [yiben guanyu taziji$_1$ de shu]$_2$ dou bei Zhangsan$_1$ qiang-zou le t_2
        I LIAN one-CL about him self's book DOU by Zhangsan rob-away Perf
        '(lit.) I was robbed of [even a book about himself] by Zhangsan.'
                                                                    Shyu (1995:104, 82)

Furthermore, though coreference between the pronoun *ta* and its antecedent *Zhangsan* in sentence (8) impossible, it becomes possible when the indirect object containing *Zhangsan* has undergone bare O-M in (9a) and focalization in (9b).

(8) *Wo bei ta$_1$ qiang-zou le [yiben Zhangsan$_1$ de shu]
     I by him rob-away Perf one-CL Zhangsan's book
     '(lit.) I was robbed by him$_1$ of a book of Zhangsan$_1$.'

(9) a. Wo [Zhangsan$_1$ de shu]$_2$ jiao ta$_1$ na-zou le t_2
        I Zhangsan's book let him take-away Perf
        'I asked *him* to take away *Zhangsan*'s books.'
     b. **?** Wo lian [Zhangsan$_1$ de shu]$_2$ dou bei ta$_1$ qiang-zou le t_2
        I LIAN Zhangsan's book DOU by him rob-away Perf
        'I was robbed of [even Zhangsan's$_1$ book] by him$_1$.'
                                                                    Shyu (1995:105, 83)

Qu (1994) and Shyu (1995) both have noted that Chinese O-M remedies (syntactic) weak crossover effects.[3] In sentence (10), the pronoun *ta* does not refer to its backward

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[2] See Qu's (1994:89) examples with slightly different patterns.
[3] Shyu (1995) uses singular pronoun *ta*, instead of plural *tamen* as used in Qu (1994), in deriving bound reading cases.

antecedent *meigehaizi* 'every child'. But when *meigehaizi* 'every child' undergoes O-M in (11a) or *meimei* 'sister' is *lian*-focalized in (11b), coreference between these antecedents with the pronoun *ta* inside the *bei*-NPs becomes possible.

(10) *Wo bei [youguai ta_1 de ren] pian-zou le $meigehaizi_1$
       I by abduct him DE person kidnap-away Asp every-CL child
       '(lit.) I was affected by $every_1$ child being kidnapped by the person who abducted him_1.'

(11) a. Wo meigehaizi dou bei [youguai ta_1 de ren] pian-zou le t_1
          I every-CL child DOU by abduct him DE person kidnap-away Asp
          '(lit.) I was affected by $every_1$ child being kidnapped by the person who abducted him_1.'
      b. Wo lian $meimei_1$ dou bei [xihuan ta_1 de ren] qiang-zou le t_1
          I LIAN sister DOU by [like her DE man] rob-away Asp
          '(lit.) I was robbed of even my $sister_1$ by the person that likes her_1.'
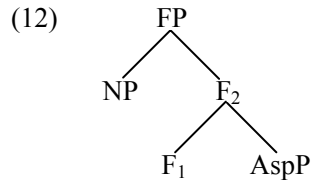
Shyu (1995:105, 84)

2.2 The proposed analysis

The above similar properties between bare O-M and *lian*-focalization naturally lead us to propose a uniform analysis for both types of movement. Assume the [+F] feature is considered to be functional, distinct from lexical (semantic) or phonological focus features (cf. Culicover 1993).[4] Adopting Generalized Transformation (GT),[5] I propose that this [+Focus] F, including a structural [+F] feature and lexicalized *dou*, (labeled F_1), is selected and merges with AspP. F_1 in (12) projects when the focus is intended, and becomes the head of the newly merged node F_2. When the object is adjoined by *lian*, or when a null [+F] is selected, the object undergoes Move (target a category of) α. The focalized NP moves and merges with F_2. F_2 further projects and forms the category labeled as FP. This NP-movement targets F_2 and creates a branching

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[4] As noted by Shyu (1995, p.123), this [+Focus] does not contain [+definite] feature, since the preposed objects in Chinese can be both definite and indefinite. See (25).
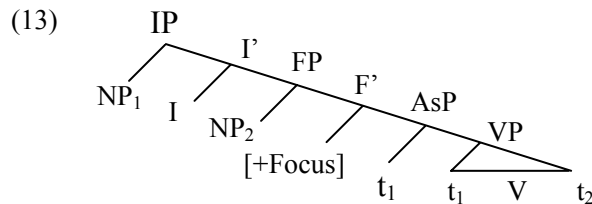
[5] In Chomsky's (1994, 1995) Bare Phrase Structure framework, the X-bar template is not assumed and phrase structures are formed by Generalized Transformation (GT). He prohibits non-branching projections. Being relational properties of categories, not inherent to them, projections (maximal or minimal) are determined from the structure in which they appear without any specific marking (See Chomsky 1994:9).

category FP (F^{max}) immediately dominating both NP and F_2.[6]

(12)

FP
NP F_2
      F_1 AspP

This is the substitution[7] mechanism that the focalized constituent finally becomes in the so-called [Spec FP], to check the strong [+F] feature via Spec Head agreement. This focus movement is triggered/attracted by the selected [+F] feature in the sense of 'attract α' in Chomsky (1995).[8] Hence, this Focus feature has to be checked prior to Spell-Out to avoid PF crash. The whole NP is pied-piped, which conforms to the overt movement mechanism outlined in Chomsky (ibid.).[9]

Note that there is no AgrP (AgrS and AgrO) projected in Chinese. Rather, IP is assumed here, and Spec of IP is for abstract nominative Case checking (cf. English structure in Pollock 1989, Chomsky 1993, 1994, Huang 1993, and no subject raising in Aoun and Li 1993).

(13)

IP
NP$_1$ I'
      I   FP
         NP$_2$ F'
         [+Focus]   AsP
                 t_1 VP
                    t_1 V t_2

In (13) the selected structural [+Focus] merges with an AspP. When an Asp is projected with the perfective marker *le*, the verb inside the VP raises to and adjoins the head of Asp^0. I assume that Chinese lacks syntactic V-to-I movement (e.g. Huang 1993, Tsai

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[6] Having assumed the Spec position of the FP as a derived, not assumed, position, Shyu (1995 Ch.4, 1998a) tries to accommodate the (base-generated) clause-initial objects and *lian*-objects.

[7] According to Chomsky (1994:16), substitution forms a new category, whereas adjunction forms a two-segment category.

[8] Here I diverge from Chomsky's (1995) idea of parameterizing strong vs. weak features. If the [+Focus] feature here is not selected, it needs not to be projected. The structural [+Focus], on a par with functional Neg, is projected only when it is needed. My point is also in contrast to Zhang's (1998) default focus feature, which is analogous to a default [+Comp] feature.

[9] Chomsky (1995) states that subject and object raising are raised overtly as full categories or covertly as features, in accord with the minimalist program.

1994).[10] A subject is base-generated in the Spec of VP position, following the Internal Subject Hypothesis (Kuroda 1988, Koopman and Sportiche 1990, among others). The subject raises from Spec of VP to target Asp'; then it further raises to IP Spec. The subject finally moves to Spec of IP for subject abstract Case-marking. Subject raising to [Spec IP] in Chinese is obligatory, even though Infl is defective in Chinese. I assume this subject raising is for assigning abstract nominative Case. Object abstract Case is checked by verb government in Chinese (e.g. Ernst 1998).

2.3 Case-assignment related?

One of the differences between this current analysis and previous analyses is that it does not assume projections of AgrP (AgrS and AgrO). The movement of the object is not triggered by fulfilling abstract Case agreement checking. Rather, it is attracted by the "selected" [+Focus]. This analysis has several advantages. First, it follows naturally the Spec Head checking relation within the maximal projection of FP (F^{max}). It further avoids the problem of optionality in syntactic O-M, since the movement is not related to [Accusative Case] checking. Namely, as long as the structural [+Focus] feature is not selected, no syntactic O-M is derived.

Let us first consider Qu's (1994) analysis. By utilizing both covert and overt movement of the subject and the object, and postulating AgrS and AgrO (cf. Pollock 1989, Chomsky 1994, 1995), Qu aims to derive different word orders in Mandarin Chinese: SVO, SOV, OSV. An object raises either overtly or covertly to [Spec AgrOP] for feature and Case checking (so does the subject). However, there exist both theoretical and empirical problems for postulating ArgPs in Chinese. Suppose Procrastinate Principle and Last Resort of Economy considerations as proposed by Chomsky (1993, 1995).[11] Covert movement is preferable to overt movement if no derivation crashes prior to Spell-Out. If the NP raising to [Spec AgrP] is for checking ø-features (as well as Case), one needs to provide further constraints to explain why the raising to [Spec AgrP] can freely occur either at syntax or at LF within one single language. Chomsky's (1993, 1994) parameterization of feature strength aims to account for different word orders among languages--applying raising to [Spec AgrP] covertly or overtly, rather than free application of overt and covert movements within a language. Moreover, if one considers the Procrastinate Principle, it is not clear why overt raising has to take place at all, since covert raising is always obligatory in Qu's (ibid.) analysis.

Zhang (1998) tries to circumvent the optionality problem by proposing her

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[10] Tsai (1994:197) assumes no V-to-I movement both in overt syntax and LF.
[11] This is also what Qu's (1994) analysis assumes.

Triggering Hyothesis.[12] Her idea is that the strength of a feature, being default, is not determined in the numeration. A strong feature is triggered in the computation system, such as movement. Hence, she explains that Chinese object movement occurs when the object is adjoined by a focus marker. This adjunction then "triggers a strong feature in a functional head, and the object moves to the checking domain of the functional head to check the strong feature." Zhang (p.30) implies that the feature $\underline{v}$, being default, is universally present, analogous to C(omp) in languages like Iraqi Arabic. Without having intrinsic strong/weak C features, the strong feature of C can be triggered by a certain feature in the complement domain of the functional head. Wh-movement is then to fulfill strong feature checking.

Some questions arise with respect to Zhang's (ibid.) analysis. First, she needs to account for in-situ focused object, as well as the focus association between the focused object and a preverbal focus adverb. In sentence (14), the object is stressed, which should be considered to be a process triggering her $\underline{v}$ feature. However, no movement is involved. Moreover, it is not clear why the focus marker *zhi* and *shenzhi,* being considered by her as focus adverbs like other focus markers *lian, dou, ye*, do not necessarily trigger object movement. [13] Sentences (15) and (16) illustrate that the objects, not being moved, are associated with the preverbal focus adverbs, *zhi* and *shenzhi*, respectively.

  (14) Ha! Mali zuotian mai le HUAHUA GONGZI
          what! Mali yesterday buy Asp Playboy
          'What! Mali bought a Playboy yesterday.'

  (15) Ta *zhi* kan XIBUPIAN
          he only see Western movie
          'He only sees Western movies.'

  (16) Zhang jiao-shou *shenzhi* kan A PIAN
          Zhang professor even see pornography movie
          'Professor Zhang even sees pornographic movies.'

Since the current analysis does not assume that the [+Focus] feature has to be selected

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[12] Zhang's (1998) Triggering Hypothesis is repeated below:
    (i) a. The default strength of a feature varies across languages.
        b. The default state can be changed under certain conditions. For instance, the presence of
            a certain feature in the complement domain of x can trigger a weak feature of x to be strong.
    She argues for adjunction analysis, a $\underline{v}$, being adjoined to VP, triggers movement.
[13] Zhang's (1998) focus markers include markers like *lian, dou, ye, shenzhi*, and *zhi, zhiyou, cai*.

across the board; see footnote 8, the optionality problem can be avoided. If no structural focus is involved, this structural [+Focus] is not selected. Furthermore, this syntactic [+Focus] feature should be distinct from phonological focus feature as in (14), as well as focus association, as in (15) and (16). Hence, my analysis, which focuses on structural focus, can naturally account for the above examples. The current approach is empirically sound, because languages utilizes different focusing strategies: phonological focus (e.g. Selkirk 1984, Rochemont 1986), in-situ focus (English in Chomsky), focus movement (Hungarian in Horvath 1986). Even one single language may employ different focus devices; see Kenesei (1993) and Culicover (1993). Culicover (ibid.) even concludes that different focus devices should not be treated identically.

Having seen that the optionality of the O-M can be naturally accounted for in my analysis, we now look at the nature of the moved objects. Since the O-M is motivated by the selected [+Focus] feature, the fronted object is (contrastively) or emphatically focused. Consequently, the fronting is not conditioned or motivated by Accusative Case assignment. Zhang (ibid., p.34) argues that Chinese object shift is an Accusative Case related move; elements which do not bear structural [Accusative Case] feature cannot move. In other words, according to her, if an object is preposed, it must bear structural [Acc Case] feature. However, the following examples show that this is not always the case. The *yiyan* 'one-sight' in (17) is not the object bearing an Accusative Case. However, it can be fronted, as in (18).

    (17)   Ta bukan Zhangsan yiyan.
           he not-look Zhangsan one-sight
           'He didn't look at Zhangsan.'

    (18)   Ta lian yiyan dou bukan Zhangsan.
           he LIAN one-sight DOU not-look Zhangsan
           'He didn't even look at Zhangsan (for one sight).'

Moreover, she ascribes the impossibility of fronting an indirect object to its lack of bearing [Accusative Case].[14] However, Shyu (1995:75) notes that the unacceptability of

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[14] Zhang's (1998) example is repeated in (i).
   (i) * Ta lian Laoli dou song-le yiben shu
       he LIAN Laoli DOU send Asp one-CL book
       'He even sent a book to LAOLI.'
  Although indirect objects generally do not prepose, we still see cases like (iib) and (iic), in which indirect objects are preposed. I have no account for the examples.
   (ii) a. Ta bu jiao wo yi-sheng saozi.
           he not call one-sound sister-in-law
           'He didn't call me sister-in-law once.'

moving indirect object is related to movement phenomenon in general, which is attested in other types of movement in Chinese as well, such as in relativization and topicalization discussed in Li (1990).

In summary. I have shown how the proposed analysis can naturally account for several facts without proposing AgrPs in Mandarin Chinese. The [+Focus] feature is not uniformly selected. Hence, it will not give rise to the problems of optional movement in the consideration of the Economy of Derivation.

2.4 Adjunction?

I have proposed substitution mechanism for bare O-M and *lian*-focalization.[15] Besides, a unified account for these two derivations is favored (cf. Gao's 1994 and Zhang's 1998 analyses along the same line.) In claiming so, one cannot neglect an alternative approach, which distinguishes *lian*-focalization (a substitution movement)

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     b. Ta SAOZI bu jiao (wo) yi-sheng.
       he sister-in-law not call (me) one-sound
       'He didn't call me once sister-in-law.'
     c. Ta lian saozi dou bu jiao (wo) yi-sheng.
       he LIAN sister-in-law DOU not call (me) one-sound
       'He didn't even call me once sister-in-law.'

[15] It seems that preverbal objects occurring in *zhiyou, guang,* and *shi* sentences should be distinguished from the bare O-M and *lian*-focalization cases in discussion, in contrast to Zhang's (1998) assumption of uniformly grouping all pre-verb objects as focused O-M. As shown in (i)-(iii), focused objects in (a) sentences associated with *zhi, guang* 'only,' and *shi* 'be' respectively, are not obligatorily preposed.

(i) a. Zhangsan *zhi(you)* bu chi neizang.
       Zhangsan only not eat internal organ
    b. Zhangsan *zhiyou* neizang bu chi.
       Zhangsan only internal organ not eat
       'It is only internal organs that Zhangsan does not eat.'
(ii) a. Zhangsan *guang* chi neizang.
       Zhangsan only eat internal organ
       'Zhangsan just eats internal organs.'
    b. Zhangsan *guang(shi)* neizang bu chi.
       Zhangsan only (be) internal organ not eat
       'It is only internal organs that Zhangsan does not eat.'
(iii) a. Zhangsan *shi* bu chi neizang.
       Zhangsan be not eat internal organ
    b. Zhangsan *shi* neizang bu chi.
       Zhangsan be internal organ not eat
       'It is not the case that Zhangsan eats internal organs.'

from bare O-M (VP-adjunction movement). In this section I examine Ernst and Wang's (1995) (E&W hereafter) arguments against the uniform analysis, and show how their points can still be accommodated by the current analysis.

In arguing against a uniform movement mechanism, E&W (ibid.) automatically assume that a uniform analysis would consider the negative marker *bu* competes the same head position with *dou* in *lian...dou* construction. According to them, the ungrammaticality of (19) is because of *bu* heading the focus position. However, this is not the case. The problem of (19) is due to the lexical head *dou* or *ye* missing in the *lian...dou* construction, which obligatorily requires *dou* or *ye*. By adopting the proposal that *bu* adjoins to a verbal or inflectional head (see Huang 1988), I show that object preposing in a negative sentence like (19) follows the pattern of that in an affirmative sentence in (20), either in bare O-M or *lian*-focalization contexts.

(19) *Guorong lian xiaohaizi bu taoyan.
Guorong LIAN children not dislike
'Guorong doesn't even dislike children.'

(20) Lisi [$_{FP}$ (lian) xiaohaizi$_i$ (dou)] [$_{VP}$ (**bu**) taoyan t_i]
Lisi (LIAN) children (DOU) not dislike
'Lisi doesn't dislike (even) children.'

Second, E&W (ibid.) distinguish *dou/ye* from the null counterpart (F^0) in satisfying Spec Head focus checking, for the reason that *dou/ye* may co-occur with both *lian*-phrases and non-*lian* phrases. Their reasoning is that if *dou/ye* in both *lian*-focalization and non-*lian* sentences occupy the same position, and *lian* may be optional, then the different semantics of the constructions in (21), *all* and *also* reading, and their *even*-counterparts in (22) cannot be captured.

(21) a. Xiaoming gongke dou xie-wan le.
Xiaoming homework all write-finish Asp
'Xiaoming finished all his homework.'
b. Xiaoming gangqin ye hui tan.
Xiaoming piano also can play
'Xiaoming can play the piano too.'

(22) a. Xiaoming *lian* gongke dou xie-wan le.
Xiaoming LIAN homework DOU write-finish Asp
'Xiaoming finished even his homework.'

     b. Xiaoming *lian* gangqin ye hui tan.
        Xiaoming LIAN piano also can play
        'Xiaoming can play even the piano.'

Nevertheless, the following examples demonstrate that the absence of *lian* is not as random as normally assumed. The occurrence of *lian* does disambiguate sentences. Hence, E&W's (1995) point does not affect the current proposal. For the ease of illustration, possible structures related to bare O-M and *lian...dou/ye* are summarized in (23), whereas (24) contains regular non-*lian* phrases involving *dou* or *ye*.[16]

(23) a. S - O - V
       b. S - lian O dou - V
       c. S - (lian) O dou -V
       d. *S - lian O - V

(24) a. S - O dou -V
       b. S - O ye - V

Shyu (1995) takes a strong position by proposing an identical position for regular *dou* and the *dou/ye* in *lian...dou/ye* construction, by assuming their semantic difference is decided in the semantics of *all*-quantification/distributivity and *even* respectively. Besides, Shyu (1997) shows that the optionality of *lian* is not that as random as usually thought. Only in very limited cases can *lian* be omitted and the sentences still denote *even*. The first case is when its immediately following element is an (indefinite) singular NP or a minimizer (e.g. in Bolinger's term noted by Horn 1989), as *yiwan fan* 'a bowl of rice' or *yidianr fan* 'a little rice' in (25). This type of NPs denotes a minimal quantity, and these items can occur in positive or negative contexts. When they "occur

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[16] There is a complication in *ye* sentences, since O-M may not be obligatory in some *ye* sentences. Compare (i) with (ii) and (iii).
(i) Zhangsan *fan* ye bu chi, *jiao* ye bu shui.
    Zhangsan rice also not eat, sleep also not take
    'Zhangsan didn't eat rice, and didn't sleep.'
(ii) Zhangsan bu chi fan, ye bu shui jiao.
    Zhangsan not eat rice, also not sleep
    'Zhangsan didn't eat rice, and didn't sleep.'
(iii) Zhangsan ye mei lai.
    Zhangsan also not come (implying 'Other people didn't come, either.')
I think the lack of O-M in *ye* sentences happens when *ye* functions as an additive conjunctor, conjoining VP conjuncts explicitly (ii) or implicitly (iii). Hence, these cases will be excluded in our current discussion.

in positive contexts, they denote a minimal quantity; when they occur in negative contexts, the negation denotes the absence of a minimal quantity, and hence the presence of no quantity at all. (Horn 1989:400)"

(25) Xiaoming (lian) *yiwan fan/yidianr fan* dou meichi.
        Xiaoming LIAN one bowl of rice/a little rice DOU not eat
        'Xiaoming didn't eat even one bowl of rice/a little rice.'

Furthermore, an indefinite (singular) count NP following *lian* unambiguously gives rise to *even* reading, shown in (26), even when *lian* is omitted.

(26) Xiaoming (lian) *yiben shu* dou mei kan.
        Xiaoming LIAN one-CL book DOU not read
        'Xiaoming didn't even read one book.'

However, if the NPs after *lian* are plural or bare NPs, deleting *lian* only renders regular *all* meaning, lacking *even*-interpretation, illustrated in (27).[17]

(27)   Zhangsan *hua/zhexie shu* dou mai le.
          Zhangsan flower/these book DOU buy Asp
    a.   '*Zhangsan bought even flowers/these books.'
    b.   'Zhangsan bought all the flowers/books.'

In short, the occurrence of *lian* does disambiguate sentences. It can be optional and the sentence still means *even* under the condition that the immediately following focused NP is singular or an (indefinite) minimizer, denoting a minimal amount. If this is correct, E&W's (1995) point does not hinder my effort of collapsing both types of

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[17] Sentence (i) is ambiguous between *all* and *even* reading. It is because that *all* can distribute the sub-parts of the books to the reading event (or measurable event in Zhang 1998). However, sentence (ii) is unambiguous. Only *even* reading is obtained, since buying a single book cannot be subdivided into plural events. This further supports my point that *even*-reading is conditioned by the presence of *lian*, and the optionality of *lian* is limited to certain cases only.

(i)   Zhangsan (*lian*) zheben shu *dou* mei kan-wan.
          Zhangsan LIAN this-CL book DOU not read-finish
    a.   'Zhangsan didn't read even this book.'
    b.   'Zhangsan didn't read all this book.'
(ii)   Zhangsan (*lian*) zheben shu *dou* mei mai.
          Zhangsan LIAN this-CL book DOU not buy
          'Zhangsan didn't buy even/*all this book.'

object movement into the same mechanism.

Moreover, E&W (1995) correlate object preposing in Chinese with scrambling in Japanese/Korean. In doing so, one has to consider why multiple scrambling (to the sentence-initial position) in Japanese/Korean is possible,[18] while multiple application of object fronting (either topicalization, in (28b), or O-M, in (29b)) is prohibited in Chinese. Also see the problems of correlating Chinese O-M with Japanese/Korean scrambling to a VP-peripheral position to be discussed in Section 3.1.

(28) a. Zhangsan cong Meiguo ji le yiben shu gei Lisi.
         Zhangsan from USA send Asp one-CL book to Lisi
         'Zhangsan sent a book to Lisi from the USA.'
     b. *Gei Lisi$_2$, Cong Meiguo$_1$, Zhangsan t_1 ji le yiben shu t_2.[19]
         to Lisi from USA Zhangsan send Asp one-CL book
         'To Lisi, from the USA, Zhangsan sent a book.'

(29) a. Zhangsan huangei Mali zheben shu
         Zhangsan return Mali this-CL book
         'Zhangsan returned this book to Mali.'
     b. *Zhangsan Mali zheben shu huangei (ta) le
         Zhangsan Mali this-CL book return (she) Asp
         'Lit: *Zhangsan, to Mali, this book, returned.'

If preposed objects were VP-adjoined, it is not clear how E&W (ibid.) would rule out multiple adjunction, as in (28b) and (29b). On the contrary, the present substitution movement mechanism avoids this problem, since this focus checking is strictly Spec Head relation.

2.5 The nature of the moved object

Sentences with preposed objects normally have a focus (emphatic) function, but the focusing effect is not always that clear. There are cases which may not have clear focus reading, particularly in cases of rendering contrastive focus reading, such as in

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[18] See Saito (1985) , Hoji (1985) for relevant Japanese data.

[19] In contrast to (28b), sentences (i) indicate that topicalizing one PP is allowed.
   (i) a. *Cong Meiguo*$_1$, Zhangsan t_1 ji le yiben shu gei Lisi.
         from USA Zhangsan send Asp one-CL book to Lisi
      b. *Gei Lisi*$_2$, Zhangsan cong Meiguo ji le yiben shu t_2.
         to Lisi, Zhangsan from USA send Asp one-CL book
         'Zhangsan sent Lisi one book from the USA.'

(30). One may even doubt their focus function, such as Lin (1998) and Mei (p.c.). Their suspicion might allude to treating this object as a kind of topic; also see E&W's (1995) parameterization of Topic feature and Ting's (1998) secondary topic proposal.[20] In addition, Tsao (1994) considers both post-subject (bare) objects and *lian*-objects as "secondary topics," like the second NPs in (31a) and (31b), respectively.

(30) Wo wenti hai mei xiang-qingchulai, buneng wen ni.
       I question yet not think-out, not-can ask you
       'I haven't come up with questions, so I cannot ask you.'

                                                            (from Tsu-Lin Mei, p.c.)

(31) a. Ta qiu da-po le
          he ball play-break Asp
          'He broke the ball.'
      b. Ta *lian* qiu *dou* da-po le
          he LIAN ball DOU play-break Asp
          'He broke even the ball.'

So, shall we just go ahead to name it some sort of "topic," or "secondary topic"? Those who adopt the notion of the "secondary topic" sense its murky and ambiguous status. It is so coined because the fine line to clear things up has not been discussed before. However, I think this conjecture contains several problems. It is blind to a possible focused position for pre-subject object other than the topic position, and different predicates involved in discussion. In addition, it fails to account for the possible differences between pre- and post-subject objects. Consequently, adopting Shyu's (1998a) method of distinguishing the pre-subject focus from the topic, I argue that the post-subject object is used for emphasis, though it may not always be for contrastive focusing. The pre-subject object becomes ambiguous between the topic and the focus only when the predicate expresses a specific situation or event (in the sense of Kratzer's 1989 stage-level predicate). Generic sentences (Kuroda 1992, similar to Kratzer's (ibid.) individual-level predicates) with no contrasting implication, necessarily require the pre-subject NP to be perceived as a topic ("substance" in Kuroda's (ibid.) term),

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[20] E&W (1995) suggest that languages like Korean and Chinese are classified as permitting a [+TopC] feature which licenses a preposed object and "triggers its interpretation as a sort of topic."
(i) a. Languages are parameterized as [±TopC].
     b. [+TopC] potentially occurs in both IP and VP;
     c. If [+TopC] is allowed in a given projection, then so is [+Foc].
English does not permit [+TopC] in VP; thus, no overt object preposing is allowed.

and this type of predicates does not allow the object to be preposed to the post-subject position. Moreover, the post-subject object can appear in a generic sentence only when the sentence has a contrasting function, which exactly supports my argument for the object's contrastive focusing function.

Before getting into the details, let us first look at some syntactic differences between a topic and a post-subject object. It has been noted that the preverbal NP (hereafter including *lian*-NP) is focused, or emphatic; whereas, topic normally does not have to be emphatic. In contrast to the pre-subject object, the post-subject one cannot have a long-distance dependency, as discussed in section 2.1, examples (4) and (5). Furthermore, unlike topics which need to be referentially definite, the preverbal NP can be either non-specific (32a) or indefinite (32b).[21]

(32) a. Ta shu du-wan le.
         he book read-finish Asp
         'He finished reading books.'
     b. Ta (*lian*) yizhi zhanglang dou bugan da.
         he one-CL cockroach DOU not dare hit
         'He didn't dare to hit (even) a cockroach.'

Supporters of secondary topic analysis equate post-subject objects to pre-subject ones because object NPs like that in (32) can also occur in a pre-subject position, shown in (33).

(33) a. Shu ta du-wan le.
         book he read-finish Asp
     b. (*Lian*) yizhi zhanglang ta dou bugan da.
         one-CL cockroach he DOU not dare hit

The usual assumption lying behind this conjecture is that there exists a unique position for hosting the pre-subject object, which is altogether called the "topic". Even though some studies (such as Tsai 1994, E&W 1995, Ting 1995, among others) have noticed the focus function of some pre-subject objects, the need of a structural distinction had for long not been addressed. Therefore, Shyu (1998) argues for distinguishing the focused pre-subject object (an IP-adjoined position) from the topic (in Spec of the

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[21] Shuanfan Huang (p.c.) points out that definite NPs occur more frequently in the preverbal position than the indefinite NPs do. There may be some other functional reason which I have no account for at this moment. Besides, non-specific indefinite *lian*-NPs are not so restricted, comparing to bare objects.

TopicP), in the spirit of Rizzi's (1997) split-Comp hypothesis. The topic is either directly moved from its argument position or locally raised from the IP-adjoined focused related position. Moving to the Topic position has to follow the general constraints on topics; namely, the NP has to be referentially definite, and can also function as a "substance" (in the sense of Kuroda 1992), an entity for the following predicate to judge or comment on it. The so-called "focused" or emphatic topic interpretation can be derived if the NP has once occupied the focused related position in its journey to Topic position. In short, a pre-subject object might function as a topic, a focus, or an emphatic topic, depending on the positions it is situated in the history of its derivation and the possibility of functioning as a topic. For example, the bare NP object *shu* 'book' in (33a) can be interpreted as either an emphatic element (focus), a topic, or a focused topic, possibly involving three derivations. However, the indefinite NP (*lian*) *yizhizhanglang* '(even) a cockroach' in (33b) is unlikely to be referential here; hence, the only possible position is the focus position. This then amounts to saying that the ambiguity exists when the pre-subject object is a referential or generic NP. Since it can either be a topic or focus, both pre- and post-subject positions are possible for them, and it may give rise to triple functions when occurring initially in a sentence.

Another reason not to equate the object in SOV to the topic is that while the topic serves "substance" for the purpose of predication (e.g. Kuroda 1972), the post-subject NP does not. This distinction (between regular topic and focus) becomes clear when the predicate expresses generic statement. Let us first consider the argument of equating post-subject NP to topic. Ting (1995) argues that since *fan* 'rice' occurs in either positions, it should have identical function, namely as (discourse) topic.

(34) a. Fan, Zhangsan, chi-guo le
      rice Zhangsan eat-Asp-Asp
      'Zhangsan has eaten (rice).'
   b. Zhangsan, fan, chi-guo le
      Zhangsan rice eat-Asp-Asp

To dispel such a myth, one has to further consider the predicate that a topic is predicated on. According to Kuroda (1992), a topicalized sentence expresses categorical judgment, which "necessarily involves substance, an entity whose existence is cognitively apprehended as transcending any particular perception, and of which an attribute is Predicated," whereas thetic judgment, a non-topicalized sentence, does not require the speaker to perceive an entity as substance. Take (35) for an example, which can be either thetic or categorical judgments.

(35) Tama is sleeping there.

When it expresses just a specific fact, thetic judgment, "we would not be able to attribute the Predicate 'sleeping at a particular place at a particular time' to Tama." However, the Predicate may also be an attribute of an individual entity, like *Tama* here. Then, categorical judgment is expressed. The point here is that for predicates denoting specific situations/events (e.g. in the sense of Kratzer's 1989 stage-level predicate) they may include either categorical judgment (topicalized sentence) or only thetic judgment (non-topicalized sentence). In the latter form of judgment, it does not have *Tama* to express substance. However, the former judgment necessarily requires *Tama* apprehended as substance. In other words, a non-indefinite NP in an event denoting predicate may be ambiguous in terms of expressing either as substance (topic) or not. Now let's return to the sentences in (34). Sentence (34a) expresses either thetic or categorical judgments. For the thetic judgment, the speaker does not attribute any particular property to rice that Zhangsan has eaten. For the categorical judgment, *fan* is perceived as substance, a certain referential entity, and the following predicate is an attribute of the NP. In contrast to (34a), (34b) does not seem to be perceived as expressing categorical judgment. Rather, only thetic judgment is read. It is summarized in (36).

(36) Stage-level predicates:

	OSV	SOV
discourse (including emphatic) topic	**OK** (categorical judgment)	*
focus	**OK** (thetic judgment)	**OK**

The picture becomes even clearer if we look at generic judgment (roughly equivalent to Kratzer's individual-level predicate). According to Kuroda (1992), a generic judgment must involve substance. Generic judgments include universal substance, like the generic NP in (37), or individual substance in (38).

(37) Neko wa nezumi o oikakeru.
      Cat mice-Acc. chase
      'Cats chase mice.'

(38) Tama wa nezumi o oikakeru.
      Tama mice-Acc. chase
      'Tama chase mice.'

If my observation is correct, I predict that the object in SOV is not able to function as substance in a sentence expressing generic judgment. This is indeed borne out. Consider the contrast between (39a)-(40a) and (39b)-(40b).

(39) a. *Zoumingqu*, Zhangsan xihuan tan, dajia ye xihuan ting.
      sonata Zhangsan like play, everyone also like listen
      'As for sonatas, Zhangsan likes to play them and everyone also likes to
       listen to them.'   (from Ting 1995)

    b.#Zhangsan *zoumingqu* xihuan tan, (dajia ye xihuan ting).
      Zhangsan sonata like play (everyone also like listen)
      'Lit: #Zhangsan, sonatas, likes to play them and everyone also likes to
       listen to them.'

(40) 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.'

This contrast is sharp. Sentences (39) and (40) express generic judgment which requires the predicated NP to be perceived as substance. However, the post-subject *zoumingqu* is not structurally licensed to do so. Hence, the infelicity of (39b) and (40b) is predicted. Table in (41) summarizes this point.

(41) Individual-level predicates (generic sentences):

	OSV	SOV
discourse (including emphatic) topic	**OK** (categorical judgment)	*
focus	* (thetic judgment)	**OK**

One might further argue for the possibility of allowing post-subject objects in generic sentences, as in (42).

(42) Zhangsan zoumingqu *bu* xihuan tan.
    Zhangsan sonatas not like play
    'Zhangsan does not like play sonatas.'

However, note that a post-subject object can occur in a generic sentence only when the predicate has certain contrastive functions, such as to negate or emphasize. Then, it is exactly the function of the post-subject object in this position, as well as its motivation for movement. Moreover, although sentence (40b) is infelicitous out of the blue, it is greatly improved when it is uttered in a contrastive situation, as shown in (40'), in which *Italian* is compared with *Latin*.

(40') Geju yanyuan *yidaliwen* zhidao, (danshi) *ladinwen* jiu bu dongle
      opera performer Italian know, but Latin then not understand
      'Opera performers know Italian, but they don't understand Latin.'

Similarly, while pre-subject *yu* in (43) is perceived as substance, the post-subject object in a modal predicate in (44) is not perceived as substance. *Yu* 'fish' in sentence (44) is the asserted alternative (e.g. Chafe 1976) among other things, with contrastive focus being expressed.

(43) Yu a, Zhangsan gan chi.
      fish particle Zhangsan dare eat
      'As for fish, Zhangsan dares to eat.'

(44) Zhangsan *yu* gan chi, (*niurou* bu gan chi).
      Zhangsan fish dare eat beef not dare eat
      'Zhangsan dares to eat fish, but wouldn't dare to eat beef.'

The above observation further conforms with Kuroda's insight that non-topicalized sentences with generic judgment give rise to "focused" reading.

I have given syntactic and semantic-functional evidence to show how the post-subject object, particularly the bare object, pertains to contrastive focusing or emphatic interpretation. Objects in the post-subject position are not perceived as substance, i.e. topics. This interpretation becomes transparent in generic sentences (individual-level predicates), or predicates for contrasting purpose. A generic sentence, requiring a logical topic, does not license the topic status of the post-subject object; thus, the post-subject position is not structurally granted to be a topic. On the other hand, things become less transparent in predicates expressing specific situations (stage-level predicates), since these types of predicates may involve either plain thetic judgment or categorical judgment. Hence, the pre-subject object is ambiguous in this regard, either a topic or not. When the object is not perceived as an entity (topic) in stage-level predicates (non-topicalized sentences), both OSV and SOV positions are allowed. The above discussion not only explains the nature of preposed objects in either position, but

also arouses attention to the relation between the preposed objects and their predicates.

3. Comparisons

Chinese O-M shares similar A-movement properties with languages allowing object shift scrambling (as in Japanese) and O-M (see the references in Deprez 1994), including the creation of new-binding possibilities by the moved object, and the absence of WCO effects. Despite these similar A-movement properties between Chinese and other languages, this section aims to show that further distinctions should be made. Chinese O-M is focus motivated, unlike semantically vacuous scrambling in Japanese. Moreover, it is not motivated by Case assignment like Icelandic. The VO and OV word orders in Chinese are not due to optional movement as in Icelandic. Section 3.3 argues for the existence of A-chain of focalization, in contrast to A'- Focus movement as in Hungarian.

3.1 Chinese O-M vs. Japanese scrambling to a VP-peripheral position

Having seen the A-movement properties of Chinese O-M in section 2.1, one may wonder whether Chinese O-M is a manifestation of scrambling phenomenon as attested in languages like Japanese and Korean, etc. Particularly, Tada and Saito (1991), and Nemoto (1993) have argued for A-movement of Japanese shortest (S-) scrambling (VP-external for them, but VP-internal for Takano 1995). This conjecture may come from some seemingly similar A-movement properties observed between Chinese and Japanese. First, Saito (1994) notes the clause-boundedness of S-scrambling; namely S-scrambling out of a finite embedded clause to a matrix post-subject position is not permitted, as repeated in (45).[22]

(45) a. John-ga Bill-ni [$_{CP}$ Mary-ga sono hon-o motteiru to] itta (koto)
John-Nom B.-Dat M.-Nom that book-Acc have that said fact
'John said to Bill that Mary has that book.'

b. **??** John-ga sono hon-o$_1$ Bill-ni [$_{CP}$ Mary-ga t_1 motteiru to] itta (koto)
book-Acc John-Nom B.-Dat M.-Nom that have that said fact
'John said to Bill that Mary has that book.'

Other A-movement evidence (for Tada and Saito (ibid.), and Nemoto (ibid.)) comes from the remedy of WCO effects, repeated in (46), and lack of LF reconstruction

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[22] It is possible to S-scramble out of an infinitival clause in Japanese, noted by Saito (1994).

effects, repeated in (47), (Principle A), and (48), (Principle C).

(46) **?**John-ga $dare_1$-o [[$soitu_1$-ni aitagatteiru] hito]-ni t_1 syookaisita no
  John-Nom who-Acc he-Dat want-to-meet person-Dat introduced Q
  'Who did John introduce to the person who wanted to see him?' (Tada 1990)

(47) a. Michael-ga [Kate-to Joe]$_1$-ni $otagai_1$-o syookaisita
    Michael-nom Kate-and Joe dat each other-acc introduce
    'Michael introduced Kate and Joe to each other.'
  b. *Michael-ga $otagai_1$-o [Kate-to Joe]$_1$-ni t_1 syookaisita
    M.-Nom each other-Acc K-and-J.-Dat introduced
    'Michael introduced Kate and Joe to each other.'

(48) a. *Joe-ga $kare_1$-ni [$Michael_1$-no fan-o] syookaisita (koto)
    Joe-Nom he-Dat Michael-Gen fan-Acc introduced (fact)
    'Lit: Joe introduced, to him, Michael's fan.'
  b. Joe-ga [$Michael_1$-no fan]$_2$-o $kare_1$-ni t_2 syookaisita (koto)
    Joe-Nom Michael-Gen fan-Acc he-Dat introduced (fact)
    'Joe introduced Michael's fan to him.'

Despite the above similar properties between these two languages, the motivations for movement are not identical. Further scrutinizing their different operations and semantic motivations shows that they should not be grouped as the same type of movement.

It is widely accepted that Chinese O-M gives rise to the focused object interpretation. Unlike Chinese *lian*-focalization and structurally focused O-M, [23] Japanese S-scrambling, being optional, has been claimed to be not driven by feature-checking (vs. Collins 1995). It has been noted that scrambled elements are not necessarily focused or not every preposed element is focused, (e.g. Choe 1994 in Korean). Besides, it is not necessary the case that scrambled elements are focused, though they may.[24] Saito (1992) even states that some instances of Japanese scrambling similarly represent optional and semantically vacuous movement.

In his attempt to account for the question raised by Greed and Economy Principle (Chomsky 1993) with respect to optional movement, Poole (1996) proposes that only applications of Form Chain are constrained by Economy of Derivation.[25]Any operation

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[23] Note that I exclude phonologically focused in-situ objects in this O-M context.

[24] Ueyama (1994) notes that long-distance scrambled elements may be more easily to be focused.

[25] Instead of using "Greed" in Chomsky (1993), I adopt the idea of "attract α" from Chomsky (1995).

that consists of Move α, without Form Chain, is cost-free. Adopting Poole's proposal, this paper suggests that since Chinese O-M is constrained by the Economy of Derivation (Chomsky 1993), it is driven by a covert [+Focus] feature or a lexical head *dou* or *ye* in *lian...dou/ye*. Hence, Chinese O-M and *lian*-focalization are transformational operation of Form Chain: "an operation in which chains of arbitrary length with intermediate traces included are created in 'a single step' (Chomsky 1993:22)." This point can be supported by the inability of resumptive strategy in this type of movement. A trace in the Chain cannot be filled by a pronominal copy.[26] [27]

(49) Zhezhi gou yao le zijide zhuren.
       this-CL dog bite Asp self's master
       'This dog bit its own master.'

(50) a. Zhezhi gou *zijide zhuren*$_1$ yao le (*ta$_1$), bieren que bu yao.
          this dog self's master bite Asp (him), others but not bite
          'This dog bit its own master, but not others.'
      b. Zhezhi gou *lian zijide zhuren*$_1$ *dou* yao le (*ta$_1$), bieren que bu yao.
          this dog LIAN self's master DOU bite Asp (him) others but not bite
          'This dog bit even its master, but not others.'

The badness of filling in a pronominal copy in (50) indicates that the gap of the moved object is a genuine trace position.

According to Poole (1996), Japanese scrambling, being optional, is not driven nor constrained by either feature-checking or the Economy of Derivation. Rather, it is constrained by Move α without Form Chain. One of his predicted properties of Move α

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[26] Note that if *ta* in (50) refers to the first NP--topic, the sentences become well-formed.

[27] For non-movement supporters who might treat the pronominal *ta* as a regular pronoun, the ungrammaticality of (50) might be attributed to the Binding Principle B violation; namely, *ta* is "too close" to its antecedent. However, this argument can be rejected. Since an object in an infinitival complement can be preposed to the matrix preverbal position, even if we further embed the gap, filling *ta* in the gap, sentences in (ii) are still unacceptable. Hence, it concludes that the gap of the moved O-M cannot be filled.

(i)   Lisi bi [$_{IP}$ Zhangsan ma <u>Mali</u>]
         Lisi force Zhangsan scold Mali
         'Lisi forces Zhangsan to scold Mali.'

(ii) a. Lisi <u>Mali</u>$_1$ bi [$_{IP}$ Zhangsan ma (*ta$_1$)]
         Lisi Mali force Zhangsan scold her
         'Lit: *Lisi Mali forces Zhangsan to scold her.'
     b. Lisi lian <u>Mali</u>$_1$ dou bi [$_{IP}$ Zhangsan ma (*ta$_1$)]
         Lisi LIAN Mali DOU force Zhangsan scold her

without Form Chain is the strong LF undoing effects--"the element which undergoes optional movement is obligatorily deleted in the LF component, leaving the copy in the base-position to be interpreted. This has the result of making optional movements semantically vacuous." (p.204) An immediate question arises with respect to the lack of LF undoing effects in Japanese S-scrambling mentioned by Tada and Saito (1991), and Nemoto (1993). However, Takano (1995), by further embedding the reflexive as in (51), still notes the connectivity (LF undoing) effects observed in this type of scrambling (VP-internal object shift for him).[28]

(51) a. Mary-ga John-to Bill-ni$_1$ [otagai$_1$-no sensei]-o syookaisita
    Mary-Nom John-and Bill-Dat each-other-Gen teacher-Acc introduced
    'Mary introduced John and Bill each other's teacher.'
  b. ? Mary-ga [otagai$_1$-no sensei]-o$_2$ John-to Bill-ni$_1$ t_2 syookaisita
    Mary-Nom each-other-Gen teacher-Acc John-and Bill-Dat introduced
    '?Mary introduced each other's teacher to John and Bill.'

Consequently, there are questions need further investigation: is the LF undoing effect really impossible in Japanese S-scrambling; and is the so-called S-scrambling a type of movement different from clause-initial (long- and short-distance) scrambling? To answer these questions is beyond the scope of this paper, and I will leave them for future research.

3.2 Chinese O-M vs. Icelandic O-M

It is known that the optional overt object raising within a single language is attested in Icelandic (e.g. Thráinsson 1993). Having seen that both SVO and SOV word orders occur in Chinese, one might wonder if Chinese O-M might be likened to Icelandic optional overt O-M. Besides, the optional overt movement might challenge Chomsky's (1993, 1994) parameterizing feature strength to account for different word orders among languages. Seeing that the overt O-M in Icelandic is constrained by overt verb movement, as noted by Holmberg (1986) and Deprez (1994) and repeated in (52) and (53), in which O-M is blocked when the main verb has remained in its D-structure

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[28] Takano (1995) also shows that the connectivity is observed in bound reading.
  (i) a. Mary-ga subete-no gakusei$_1$-ni [soitu$_1$-no sensei]-o syookaisita
      Mary-Nom all-Gen student-Dat he-Gen teacher-Acc introduced
      '?Mary introduced his$_1$ teacher to every student$_1$.'
    b. Mary-ga [soitu$_1$-no sensei]$_2$-o subete-no gakusei$_1$-ni t_2 syookaisita
      Mary-Nom he-Gen teacher-Acc all-Gen student-Dat introduced

position as in auxiliaries constructions (53b).

(52) Simple verbs
   a. Studentanir stungu smjorinu allir/aldrei i vasann
      The student put the butter all/never in the pocket
   b. Studentanir stungu allir/aldrei smjorinu i vasann
      The student put all/never the butter in the pocket

(53) Auxiliaries constructions
   a. Studentanir hafa allir/aldre stugid smjorinu i vasann
      The student have all/never put the butter in their pocket
   b.* Studentanir hafa smjorinu allir/aldre stugid i vasann
      The student have the butter all/never put in their pocket

Kitahara (1995) offers a formal account for this optionality. He proposes that Icelandic optional overt object raising crucially relies on the claim that an extra derivation of the verb is raised overtly to AgrO in this language, in contrast to covert verb raising in English. This extra derivation (overt V-to-AgrO) makes Icelandic LF and overt object raising have equal cost. Hence, this language allows optional raising either overtly or covertly. Furthermore, according to Deprez (ibid.), Icelandic O-M is Case-related. The optional object positions can receive Case, since Case can be assigned to an object either under Government Case (in-situ object) or under Functional Case (moved object).

Remember that Chinese O-M is motivated by emphatic focusing rather than Case-assignment. Therefore, strictly speaking Chinese O-M is not "optional." In addition, since Chinese does not exhibit overt verb movement, as noted in Section 2.2, the analogy between these two types O-M can hardly be made. By assuming that Chinese object abstract Case is checked by verb government in Ernst (1998), we do not need to stipulate the optional Case checking for Chinese.

3.3 A- vs. Hungarian A'-focalization

In this section I highlight some differences between Chinese focalization and Hungarian focus movement. Hungarian requires a constituent to be interpreted as a focus in a designated focus position, and there is no 'purely phonological' FOCUS assignment, according to Horvath (1986, p.98). Although the focalization discussed in this paper has similar fashion, it is not the only way to achieve focus, since Chinese allows both phonological and syntactic focusing. Moreover, Chinese focalization is

limited to *even* structure and emphatic or contrastively focused objects,[29] whereas Hungarian focalization is referred to cleft construction, having exhaustive identification reading (e.g. Kiss 1998). But Chinese focus discussed here generally does not give rise to exhaustive identification reading.

Another difference between Chinese focalization and Hungarian focus movement is that the latter forms A'-chain, on a par with Wh-movement; see Horvath (1986, 1993), among others (see the similar phenomenon in Korean in Choe 1995). Focused constituents can undergo long-distance movement to the matrix pre-V focus position following the matrix subject; see (54).

(54) [$_S$ János [$_{VP}$ <u>ATTILÁNAK</u>/<u>melyik fiúnak</u>$_1$ gondolta [$_{S'}$ hogy
       John ATTILA-TO$_1$/which boy-to$_1$ thought that Peter out-reported
       Péter [$_{VP}$ *ki*jelentette [$_{S'}$ hogy a házigazda már [$_{VP}$ *be*mutatta Marit t_1?]]]]]]
       that the host already in-showed Mary-acc t_1
       'It's ÁTTILA to whom John thought/To which boy did John think
       Peter declared that the host had already introduced Mary?'

<div align="right">Horvath (1986:223)</div>

As mentioned before, Chinese focalization in discussion involves A-chain, due to its clause-boundedness. Sentences in (4) with bare O-M and *lian*-object in (5), repeated below, indicate that Chinese O-M is not on a par with Hungarian A'-focalization in terms of clause-boundedness.

(55) Zhangsan renwei [$_{CP}$ Lisi hen xihuan Mali].
       Zhangsan think Lisi very like Mali
       'Zhangsan thinks Lisi likes Mali very much.'

(4) *Zhangsan *Mali*$_i$ renwei [$_{CP}$ Lisi hen xihuan (ta$_i$)].
       Zhangsan Mali think Lisi very like (her)

(5) *Zhangsan lian *Mali*$_1$ dou renwei [$_{CP}$ Lisi bu xihuan t_1].
       Zhangsan LIAN Mali DOU think Lisi not like (her)
       'Zhangsan thinks that Lisi doesn't like even Mali.'

A-chain of focalization is not just attested in Chinese focalization in discussion. It

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[29] Cleft construction in Chinese involves *shi...de* 'be...DE.' Studies in *shi...de* generally do not favor syntactic focused constituent movement; see Huang (1982) and Shi (1994), Chiu (1993), and Shyu (1998b), among others.

is also observed in Italian and Hebrew. Belletti and Shlonsky (1995) have noted that focalization is not a unitary phenomenon (A'-chain). A- focus movement is seen in the focalization of a postposed object or a postverbal subject to a postverbal Focus Spec/FocP in Italian, and PP fronting in Hebrew.

4. Focus Criterion revisited

The Spec Head focus checking has been formally formulated into the so-called Focus Criterion, (e.g. Brody 1990 for Hungarian, Gao 1994 and Ernst and Wang 1995[30] for Chinese) in analogous to Wh-criterion (May 1985). Appealing though it may sound, Horvath (1995), instead, has argued that the sole requirement for focus--Focus Criterion (e.g. Brody's)--is not adequate to account for a variety of focus phenomenon. Instead of parameterizing the Focus Criterion, she tries to parameterize the feature [+FOCUS] and its assignment motivated independently by the study of nominative Case, since the source or assignor of the [+FOCUS] feature in UG is not as one single X (=F) category. In addition to the mechanism of [+FOCUS] assignment by an X^0 category, in situ Focus constituents are generated with the (optional) feature [+FOCUS] at the level of D-structure.

While noticing the different assignments of focus, this paper, however, differs from Horvath's approach in limiting the [+Focus] feature to be purely syntactical, applicable only to the operation of focalization with strict O-M and *lian*-focalization (post-subject/preverbal position). Hence, I limit the Spec Head focus checking relation to be uniform for structural [+Focus] feature. This [+Focus] feature triggers syntactic focus movement. Other focus devices, such as focus association and phonologically stressed focus, are not constrained by this feature. Rather, they are related to lexical (focus association with focus adverbs) or phonological focus (in-situ) features. With this assumption, this paper suggests an alternative to distinguishing [+FOCUS] assignments by a functional head from other in situ foci or focus associates, (cf. Horvath's parameterization of [+FOCUS] feature in different assigning contexts). Consequently, the Focus Criterion can still be postulated in a limited sense.

> Focus Criterion (revised)
> (56) A: The *structurally* focused element must be checked with a head bearing "structural" [+Focus];

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[30] Ernst and Wang's Focus Criterion (1995, p.254), revised from Gao (1994) is repeated here.
  (i) A: The focused element must be checked with a head bearing [+Foc];
      B: A Focus head of FocusP must be in a Spec-head configuration with the focused element.

B: A Focus head of FocusP must be in a Spec-head configuration with the focused element.[31]

This revised Focus Criterion also follows Horvath's (1995) comment, since this Spec Head focus feature checking is needed anyway, although it is not the sole requirement. Another alternative may simply subsume the Spec Head focus feature checking under the more general Spec Head relation, such as that found in [+Neg] feature checking. Then, there is no need to postulate a particular criterion, which is only limited to a certain structural focus construction. I will leave these alternatives open here.

On the other hand, in situ foci or focus elements associated with lexical focus particles or adverbs, such as *shi* 'be,' *shenzhi* 'even,' *zhi* 'only,' are not constrained by Focus Criterion. Here I diverge from Horvath's (1995) point and claim the existence of lexical focus features which can be freely generated or associated with focus particles (under c-commanding relation), different from the structural [+Focus] feature. This is in the same spirit of Horvath's (1995) distinction between the focus feature assigned by a specific X^0 category and the focus that does not utilize the Spec Head focus checking mechanism. Horvath (1995:47) notes that "focus constructions do not involve any parameters of their own (parametrized Focus-Criterion); rather, they only manifest the effects of independently existing, general parameters of syntactic features and syntactic feature-assignment." Again, we see focus constructions' non-uniform characteristics.

5. Summary

I have limited my discussion to the O-M and *lian*-focalization in post-subject/pre-verbal position (SOV order). I have shown how the proposed analysis can naturally account for the structural focus constructions in Chinese. In addition to the syntactic mechanism, this paper has discussed the nature of the preposed objects in relation to their related predicates. Furthermore, the object in both SOV and OSV orders is compared to show their possible overlapping properties and differences. The current proposal also avoids the problems of previous proposals relating Chinese O-M to Case assignment. In addition, I have demonstrated the empirical problems caused by drawing an analogy between Chinese O-M and Japanese Small scrambling or languages allowing overt O-M. Consequently, the result of the study lends further support to the non-uniform focus phenomena: such as, A-chain vs. A'-chain, focus assignment under X^0 (functional) head vs. lexical or phonological foci.

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[31] If the criterion is respected at both syntax and LF levels, then it predicts that the position of the focus element at S-structure will be identical to its position at LF, namely the Spec of FocusP. I will leave this issue for future study.

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