NegP and the Particle *Suo* in Mandarin Chinese[*]

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The main purpose of this article is to argue against a NegP analysis of the negative particles *bu* and *mei* in Mandarin Chinese. We first present the cliticization test, which is widely used by Romance linguistics for the head status of negative particles. Then a similar argumentation based on the clitic *suo* is applied to negative particles in Mandarin Chinese. Under a UG approach, the result indicates that if negative particles in Romance are heads of NegP, those in Mandarin Chinese should not be. This, together with our close examination of the invalid arguments advanced in the literature, to the best of our knowledge, for a NegP approach to Mandarin Chinese, renders questionable the source of motivation for NegP in Mandarin Chinese. This article concludes by reiterating the main claim and by bringing forth some important relevant issues for future studies.

Key words: particle *suo*, NegP, clitic, negative particle

1. Introduction

Ever since the advent of the influential split-INFL hypothesis (Pollock 1989), numerous functional categories between TenseP and VP have been postulated (cf. Belletti 1990, Ouhalla 1991, and Chomsky 1991), one of which is NegP.[1] According to Ernst (1992), there are two versions of the NegP hypothesis. In the first, the negative marker heads its own NegP, taking a complement phrase. In the second, there is a NegP, but its head is empty and the negative marker is in the Spec. As pointed out by Ernst (1995) and Zanuttini (2001), while the NegP hypothesis has been pursued by many authors, existence of such a functional category requires empirical evidence in support. A more traditional view[2] that treats *not* in English as a preverbal adverb, for example, is defended by Baker (1991) and Ernst (1992).

In light of negative particles in Mandarin Chinese, the typical ones are *bu* and *mei*, as illustrated in (1). As has been commonly observed since Wang (1965), *mei*, but not *bu*, is related to aspect given its meaning and its complementary distribution with the perfective marker -*le*.

[1] For example, the clausal hierarchy suggested by Belletti (1990), followed by Haegeman (1995), is AgrP-NegP-TP-VP and that suggested by Pollock (1997) is MoodP-NegP-TP-AgrP-VP.

[2] McCawley (1988:631) mentions that *not* is commonly grouped with other canonical -*ly* type adverbs.

(1)   a. Ta   bu   chi   mugua.
         he   not eat   papaya
         'He does not eat papaya.'

     b. Ta   mei chi   mugua.
         he   not eat   papaya
         'He did not eat papaya.'

Given these negative particles, the issue thus arises as to how they should be analyzed. Both the adverb and the NegP analysis of Chinese negative particles have their proponents in the literature. The former is proposed by Chao (1968), Li and Thompson (1981), and Ernst (1995); the latter is proposed by Cheng and Li (1991), Chiu (1993), Xu (1997), Hsieh (2001), and Hsiao (2002), among others.[3] The main purpose of this article is to question the validity of postulating a Neg phrase in Mandarin Chinese, thus to highlight the importance of providing empirical evidence for such a functional category. The essential argumentation to be presented is that if the interaction between negative particles and pronominal clitics in Romance languages supports the positing of NegP, then the same reasoning leads to the conclusion that a NegP cannot be motivated in such a way in Mandarin Chinese.

This article is structured as follows. In section 2 we first present the cliticization test widely used by Romance linguistics for the head status of negative particles. Section 3 then applies a similar argumentation based on the clitic *suo* to negative particles in Mandarin Chinese. The result will indicate that if negative particles in Romance are heads of NegP, those in Mandarin Chinese should not be. In Section 4, we provide a close examination of the arguments advanced in the literature for a NegP approach to Mandarin Chinese and conclude that they are untenable. Section 5 concludes this article by reiterating the main claim of calling for further empirical evidence for NegP in Mandarin Chinese and by bringing forth some important relevant issues for future studies.

2.   The interaction between clitics and negative particles in Romance

In Romance languages, the preverbal negation element must precede a VP-related clitic in Romance. As shown in (2) and (3), the negative particle *ne* and *non* must precede the clitic *les* and *le* in French and in Italian respectively.

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[3] For example, the clausal hierarchy suggested by Chiu (1995) is NomP-SuoP-TP-NegP-AspP-VP, that suggested by Xu (1997) is TP-NegP-AspP-VP and that suggested by Hsiao (2002) is TP-NegP-AspP-*v*P-VP.

(2)　a.　Jean　ne　les　mange　pas.　(French)

　　　　　Jean　NEG　them　eats　　NEG

　　　　　'Jean does not eat them.'

　　b. *Jean　les　　ne　　mange　pas.

　　　　　Jean　them　NEG　eat　　　NEG

(3)　a.　Gianni　non　le　　mangia.　(Italian)

　　　　　Gianni　NEG　them　eats

　　　　　'Gianni doesn't eat them.'

　　b. *Gianni　le　　non　　mangia.

　　　　　Gianni　them　NEG　　eats

The strict ordering between the preverbal negative element and a pronominal clitic is often used as evidence for the head status of preverbal negative elements in Romance (see Kayne 1989, Ouhalla 1999:372, and Zanuttini 2001:525). Proponents of this approach adopt Kayne's (1989 and subsequent works) analysis of clitic placement as adjunction to INFL via successive cyclic head movement. The unacceptability of clitics preceding negative particles is thus attributed to the fact that head movement of clitics is blocked in its path by the negative element.

While this proposal is insightful, the whole picture is in fact much more complicated than depicted above. Therefore, we will review and adopt Belletti's (1994) analysis of simplex negative clauses in Romance as a starting point to illustrate a more comprehensive analysis of the strict ordering between clitics and negative elements in Romance.

Belletti (1994) proposes to deal with negative clauses in Italian and in French in the same terms. More specifically, the negative particle *non* in Italian and the French negative particle *ne* occupy the same position and the (optional) negative adverbs in Italian occupy the same position as the negative adverb *pas* in French. This proposal is suggested to be supported by the parallel distribution displayed by the two languages.

(4)　Gianni　non　parla　(piu/mai/ancora).　(Italian)

　　　Gianni　NEG　speak　　NEG

　　　'Gianni does not speak.'

(5)　Jean　n'aime　pas　Marie.　(French)

　　　Jean　NEG.like　NEG　Marie

　　　'Jean does not like Marie.'

According to Belletti, the major difference between the two languages is that the presence of the negative adverb is obligatory in French but optional in Italian.

Furthermore, the preverbal negative element and the postverbal negative adverb are suggested to occupy the head and the specifier of a functional projection NegP respectively.[4]

The NegP is proposed to be located between the two functional projections AGRP and TP as in (6).

(6) … AGR [$_{NegP}$ pas/piu [$_{Neg'}$ ne/non [$_{TP}$ [$_{T'}$ T VP]]]]

To derive the observed word order, namely negative *ne/non* preceding inflected verb, Belletti makes the following proposal. First, *ne/non* is a clitic element (cf. Kayne 1989, Pollock 1989), which undergoes a clitic placement operation and left adjoins to the AGR head. Furthermore, AGR in Romance is recursive with the negative clitic adjoining to the higher AGR head and the object clitic and the verb adjoining to the lower AGR head. The structure in (7) is suggested to underlie a simplex negative clause in Italian.
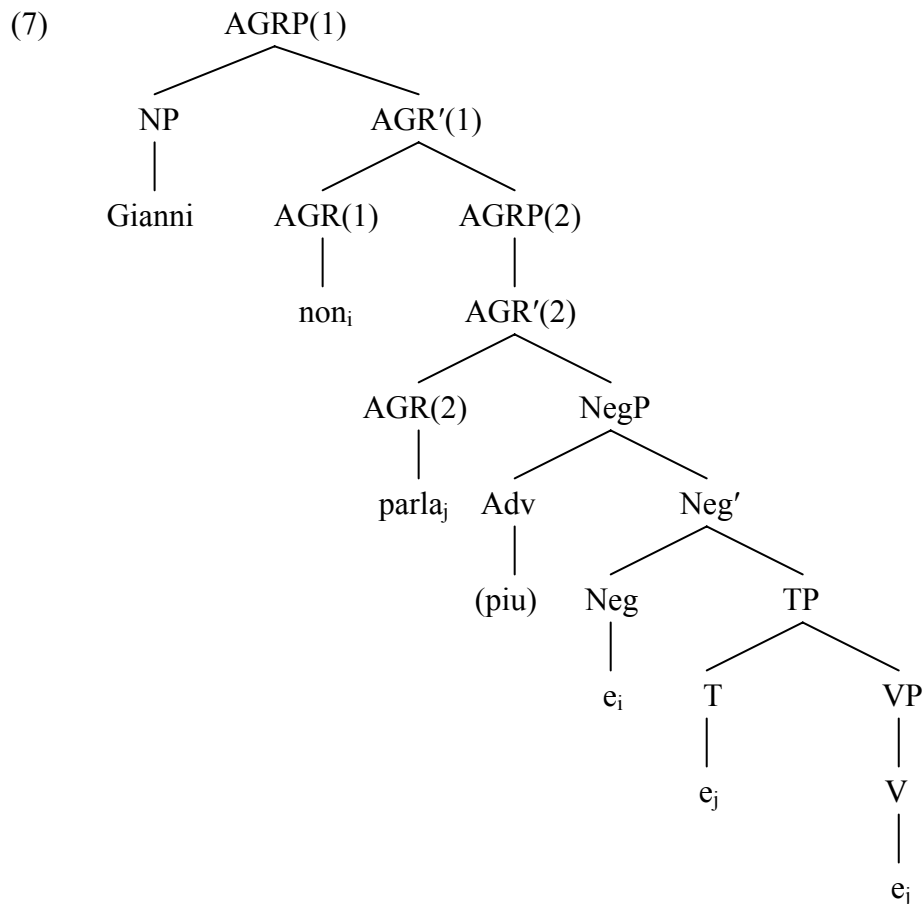
(7)

In this structure, the Neg head is crossed by the V movement to AGR. A question naturally arises as to how a violation of the Head Movement Constraint/Empty Category Principle (HMC/ECP, henceforth) can be avoided with this kind of derivation. Belletti argues that the structure in (7) does not violate HMC/ECP if this condition is one on representations rather than on derivations. This idea is technically implemented as follows: suppose that AGR (1) and AGR (2) bear the same set of features.[5] We may then take the two chains formed by the negation *non* and by the inflected verb to share the same head AGR. According to Belletti, "we can then claim that the antecedent government relation is preserved in the resulting representation under the assumption that it holds between any two members of a chain if they carry an index non-distinct from that of the head of the chain" (p.22).
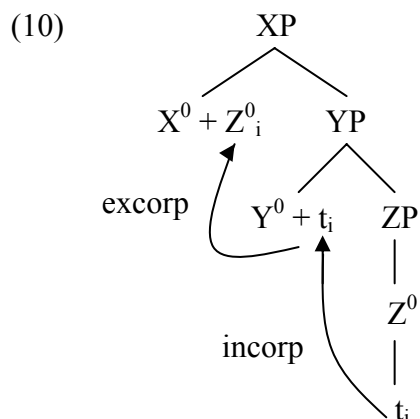
Now we are ready to consider the derivation where a clitic ends up between the negative element *ne/non* and the inflected verb. Since the seminal work of Kayne (1989), one approach to the analysis of pronominal clitics in Romance has viewed them as heads, undergoing head movement (see for example, Kayne 1989, 1991, Li 1990, Rosen 1990, Roberts 1991, 1994, Rooryck 1994, Uriagereka 1995, and Ouhalla 1999). The base position of pronominal clitics is taken to be D, as suggested by Roberts (1994:221) and Ouhalla (1999) (cf. Postal 1969). If pronouns are of the category D, it is natural to extend this conclusion to pronominal clitics. Their landing site is suggested by Kayne (1989) to be left-adjunction to INFL, possibly subsequent to verb raising to I. We shall follow Belletti (1994) (cf. Li 1990 and Roberts 1994) in assuming that object clitics adjoin to the lower AGR on a recursive AGR hypothesis.

Concerning cliticization on the head movement approach, it is necessary to mention two points. First, clitic movement obviously lacks what Li (1990) terms as snowball effect, exhibited by head movement like verb incorporation. That is, in the case of verb incorporation, whenever a head A adjoins to another head B, the next step of movement must necessarily apply to the compound A-B rather than to either one of them. Instead of moving with their adjoined hosts, clitics in Romance move alone (at least in the last step), as shown by their non-complex form in the clitic-climbing context (8) and (9).

(8) Jean la fait manger par/à Paul. (French)
     John it makes to.eat by/to Paul
     'John makes Paul eat it.'
(9) Gianni vuole non vederli. (Italian)
     John wants NEG to.see.them
     'John wants not to see them.'

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[5] There are other alternatives to make the two AGR heads non-distinct. See Belletti (1994:38).

We shall follow Roberts (1991) in terming this operation "excorporation", as illustrated in (10) (= Roberts' (3), (1991)).

(10)

$$
\begin{array}{c}
XP \\
\diagup \quad \diagdown \\
X^0 + Z^0_i \quad YP \\
\end{array}
$$

excorp — $Y^0 + t_i$ — ZP

incorp — Z^0 — t_i

According to Roberts, incorporation and excorporation differ in that the incorporation host morphologically subcategorizes for the incorporee in the former instance but not in the latter. Thus, only the incorporation host in the former instance counts as an intervening head to block further raising of the incorporee. Given that clitics are not morphologically selected by their incoporation host, they may successively and cyclically move via excorporation without any difficulty.

The other point on cliticization worth mentioning is one of the constraints on excorporation, namely, the condition in (11) postulated by Roberts (1994).
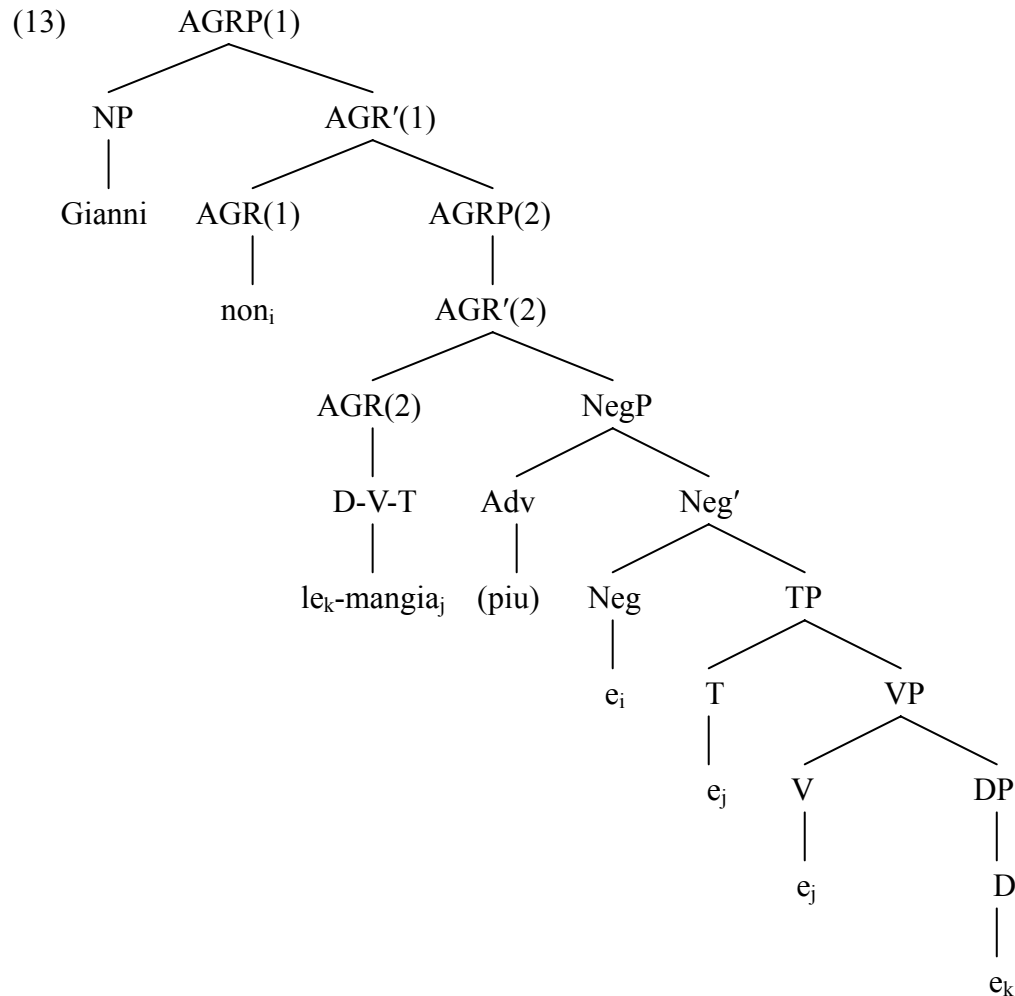
(11) Excorporation from non-L-related heads is impossible. (=Roberts' (28))

The notion of L-relatedness is defined by Chomsky and Lasnik (1993:532) as follows: "Given a lexical head L, we say that a position is L-related if it is the specifier or complement of a feature of L". The functional head I (or T and AGR under the split INFL system) is taken to be features of V, thus L-related; others, e.g. C and Neg, are non-L-related. This condition is supported by the fact that negation also apparently "blocks" the so-called Long Head Movement as reported by Lema and Rivero (1990) and Rivero (1991). Roberts shows that such long head movement is also not triggered by morphological properties of the hosting head and is thus of the same type as cliticization. The apparent "blocking" effect of negation exhibited in both types of non-morphologically selected chains suggests that a condition in line with (11) is at work.

After considering excorporation and one of the constraints on it, we now are able to examine a full account of how the object clitic must follow the negative element in Romance. Consider a structure in (13), which underlies the clause in (3a), repeated

here as (12).

(12) Gianni   non   le   mangia.   (Italian)
      Gianni   NEG   them   eats
      'Gianni doesn't eat them.'

(13)

```
                AGRP(1)
              /        \
            NP          AGR′(1)
            |          /       \
          Gianni    AGR(1)      AGRP(2)
                     |             |
                    nonᵢ         AGR′(2)
                              /         \
                          AGR(2)         NegP
                            |          /      \
                          D-V-T      Adv       Neg′
                            |         |       /     \
                      leₖ-mangiaⱼ   (piu)   Neg      TP
                                            |       /   \
                                           eᵢ      T     VP
                                                   |    /   \
                                                  eⱼ   V     DP
                                                       |      |
                                                      eⱼ      D
                                                              |
                                                             eₖ
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The question is how the object clitic ends up in a position between the negative particle and the inflected verb. First, after being incorporated into the T head, the clitic cannot excorporate out of T and move onto the Neg head since given the condition in (11), this move would make the clitic "trapped" and thus it is not able to move further. Alternatively, after being incorporated into the T head, the clitic may move along with the inflected verb and this complex adjoins to the lower AGR. Although this move crosses the Neg head, no violation of the HMC/ECP would arise if we adopt Belletti's (1994) system. As what we have seen in the earlier structure (7), the two chains formed by *non* and by the clitic-inflected verb complex would share the same head AGR. Thus, the resulting representation in (13) still conforms to the HMC/ECP

because the crossed Neg head would not constitute an intervening head.

Crucially, the reason why the negative particle in Romance precedes the object clitic is because the negative particle is the head of NegP and undergoes further raising to a higher functional category. This move yields a representation which conforms to HMC/ECP. Suppose the negative head is not required to raise up and remains in situ, then the head movement of the clitic across the Neg head to land in AGR (2) would be excluded because the resulting representation yields the classical HMC/ECP effects.

In the next section, we will see that on the UG approach, negative particles *bu* and *mei* in Mandarin Chinese should not be analyzed as the head of NegP if the line of reasoning we have taken for Romance is correct.

3. The interaction between clitics and negative particles in Mandarin Chinese

In this section, we argue that if we, following Ting (2003, 2005, to appear), take the particle *suo* in Modern Chinese as a pronominal clitic on a par with Romance clitics, the ordering of *suo* before negative particles *bu* and *mei* shows that they are not heads of NegP. We shall start with the clitic analysis of *suo*. This particle has been observed to occur before a transitive verb in relative clauses by many studies (Chao 1968 and Li 1947, among others), exemplified in (14).
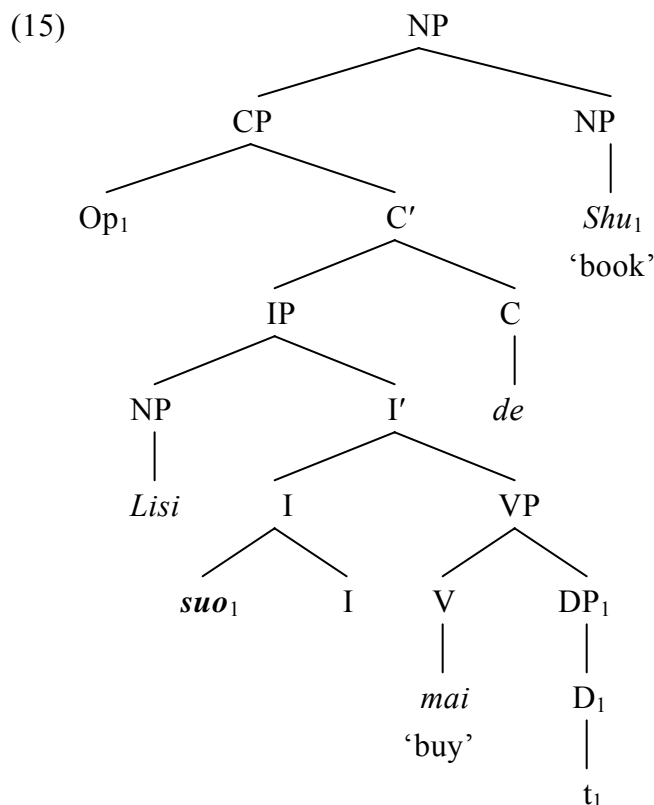
(14) a. Lisi **suo**   ai   de   ren
        Lisi SUO love DE   person
        'the person that Lisi loves'

     b. xiaotou **suo**   meiyou   tou   zou   de   naxie   shoushi
        thief   SUO   not.have   steal away DE   those   jewel
        'the jewelry that the thief didn't steal'

Beginning with several interesting distributional behaviors examined by Chiu (1993, 1995), Ting (2003, 2005, to appear) argues that *suo* in modern Chinese is an A′-bound pronominal clitic. It behaves like a Romance clitic in at least two respects. First, it occupies a fixed position in the clause, as observed by Chiu (1995). This fact follows naturally if the landing site of *suo*, like the Romance clitics, is also I^0.[6] Secondly, the licensing of *suo* respects the ECP, which subsumes the HMC. A licensing asymmetry reported by Chiu (1995) is that the modern *suo* may stand for grammatical object, locative, but not for reason, manner expressions, the

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[6] See Ting (2003) for arguments against analyzing *suo* as the head of a functional category licensing accusative Case proposed by Chiu (1995).

grammatical object of a preposition or a grammatical subject. As Ting (2003) argues, this pattern of distribution follows exactly from the ECP if *suo*, like Romance clitics, also undergoes head movement and leaves a trace behind, which is subject to the ECP.

More specifically, consider the structure in (15) which we suggest underlies a relative clause containing *suo*.

(15)

```
                              NP
                  _____
                 CP                       NP
         _____|_____                |
        Op₁              C'             Shu₁
                     ____|____          'book'
                    IP        C
               _____|_____    |
              NP         I'   de
              |      _____|_____
             Lisi   I          VP
                  __|__      ___|___
                suo₁   I    V      DP₁
                            |       |
                           mai     D₁
                          'buy'     |
                                    t₁
```

Suo is suggested to be base-generated as the head of the DP in the complement of verb position, and to be bound by a null operator base-generated in [Spec, CP]. Assuming that a head and its maximal projection share the same set of features, *suo* carries the same index as the null operator and is thus A′-bound. We also assume that Chinese clauses have an INFL node, where possibly tense or aspect may be generated. Due to a morphological requirement, *suo* can then be suggested to undergo movement out of the DP it heads and adjoins to I^0, just as Romance clitics do (Burzio 1986, Kayne 1989, and Pollock 1989).

We shall now go back to the question how the ordering between *suo* and negative particles *bu* and *mei* indicates that they are not heads of NegP. As observed by Chiu (1995), *suo* occurs before, but not after, *bu* and *mei*.

(16) a. Zhangsan suo   bu   xihuan de   ren
      Zhangsan SUO   not   like   DE   person
      'the person that Zhangsan does not like'
   b. *Zhangsan bu   suo   xihuan de   ren
      Zhangsan not   SUO   like   DE   person
(17) a. Zhangsan suo   mei touzou de   dongxi
      Zhangsan SUO   not   steal   DE   thing
      'the thing that Zhangsan did not steal'
   b. *Zhangsan mei suo   touzou de   dongxi
      Zhangsan not   SUO   steal   DE   thing

If negative particles project an independent functional category, the structure which underlies (16) would be like (18) on most accounts positing a NegP in Mandarin (cf. note 3).

(18)
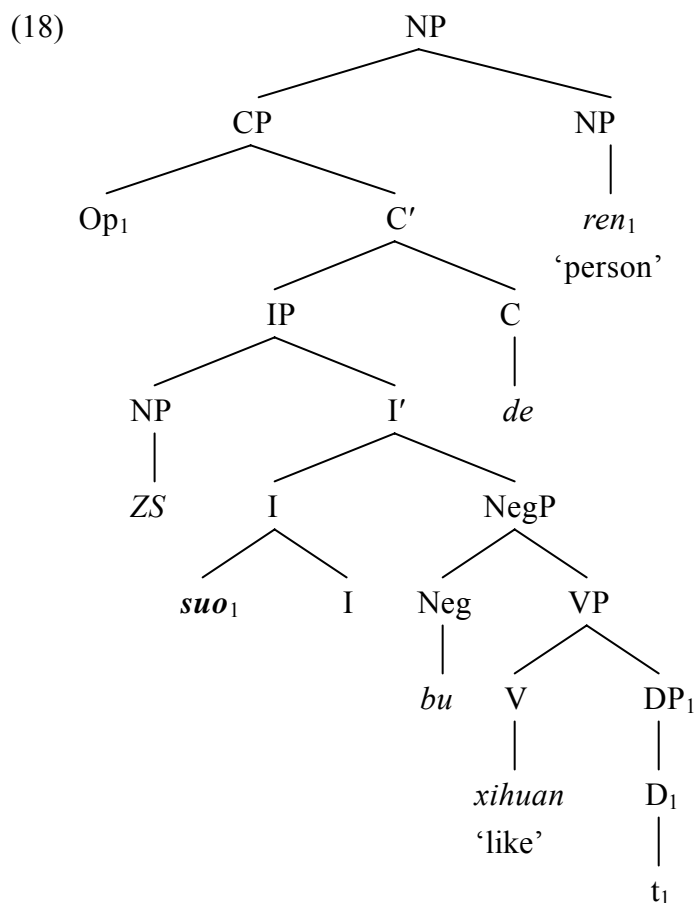
Given the theory of cliticization in Roberts (1994) and Belletti's (1994) account for the HMC/ECP effects in terms of representation rather than derivation, it is not clear how *suo* can end up in the position preceding the negative *bu*. First, the step of
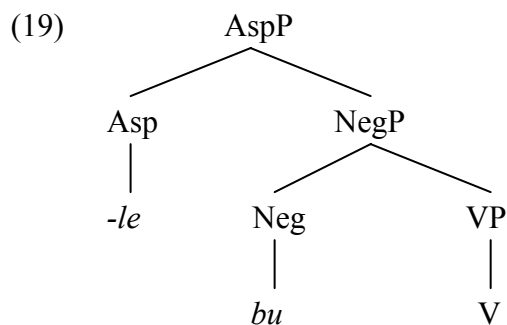
suo moving onto Neg and excorporating from it is banned because the non-L-related head does not allow excorporation to take place. This means that the Neg head must be crossed. This move gives rise to a standard HMC/ECP violation. Note that the negative elements, *bu* and *mei*, in Chinese, have never been reported in the literature to raise further to another functional head, behaving quite differently from Romance negatives in this respect. As a result, the potential HMC/ECP effects induced by the intervening Neg head cannot be nullified in the same way as in the case of Romance negatives, because the Neg head in Chinese does not form a chain sharing the same head as the chain formed by the clitic *suo*. Thus, if a negative particle projects its own category in Chinese, it is expected to block clitic movement, contrary to fact. Given the well-formed ordering with the clitic *suo* preceding negative particles *bu* and *mei*, we are led to the conclusion that if negative particles in Romance are heads of NegP, those in Mandarin Chinese should not be.

Before we end this discussion on the interaction between *suo* and negative particles in Chinese, it is necessary to note its theoretical implication on positing negative particles in the Spec of a NegP in general. Such an approach has negative particles occupying the Spec of NegP with an empty head. This is the approach taken by Belletti (1990) for English *not* and by Zanuttini (1997) for French post-verbal negative particle *pas* and for some negative particles in certain northern Italian dialects. Thus, it appears to be also a logically possible analysis for negative particles in Mandarin Chinese. However, for such an approach to hold to derive the occurrence of *suo* before negative particles, we have to allow an empty head (of a NegP) to be crossed. The resulting representation conforms to neither the classical HMC/ECP nor the reinterpreted version put forth in Belletti (1994). Ernst (1992, 1995) also provides arguments against allowing Neg to occupy Spec of an empty-headed NegP, mentioning the problems raised by the unconstrained use of such a configuration. Thus, in order to keep the merits of the HMC/ECP, we do not consider positing Neg in Spec of NegP to be a viable analysis.

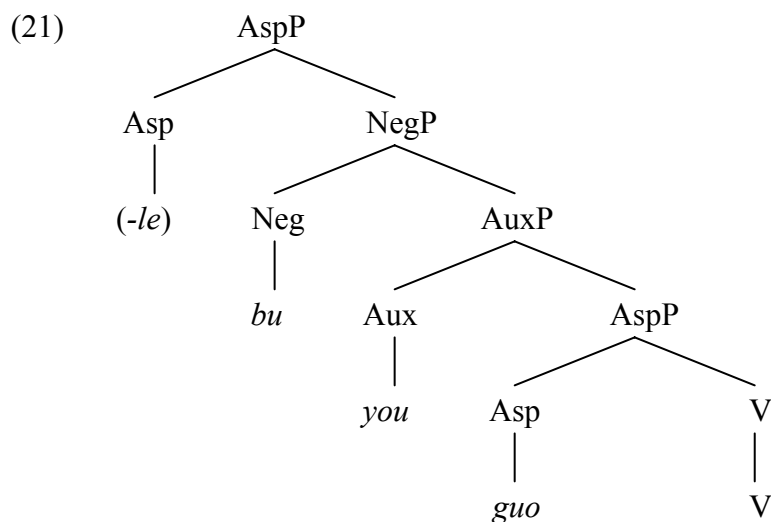## 4.   Against the previous proposals of a NegP in Mandarin Chinese

Having argued against the NegP approach to Mandarin Chinese on the grounds that it makes incorrect predictions about surface order between the negative particles and the clitic *suo*, in this section we will examine the previous proposals for a NegP in Mandarin Chinese and consider their validity.

As noted by Ernst (1995), proponents for *bu* heading the NegP often use the "blocking effect" of the Neg head on the lowering of *-le* onto V, shown in (19) as manifested by the ill-formedness of (20), in support of their claim.

(19)
```
            AspP
          /      \
        Asp      NegP
         |       /    \
        -le    Neg    VP
                |      |
                bu     V
```

(20) * Ta   bu   chi   le   mugua.
         he   not   eat   ASP   papaya
      'He did not eat papaya.'

Such an approach, for example in Cheng and Li (1991) and Chiu (1993),[7] requires the sequence shown in (21) to account for the full set of sentences.

(21)
```
              AspP
            /      \
          Asp      NegP
           |      /     \
        (-le)   Neg     AuxP
                 |      /     \
                bu    Aux     AspP
                       |     /     \
                      you  Asp      V
                            |       |
                           guo      V
```

As pointed out by Ernst, such a structure in (21) has to stipulate the non-co-occurrence of *le* and *you*. We can note that this is what Chiu (1993) does with the rule which realizes the *bu-le* sequence as *mei*. Besides the theoretic disadvantages, this argument based on the blocking effect is valid if it is the only way to account for the ill-formedness of (20). Ernst (1995) and Lin (2003),[8] for example, provide an alternative account by appealing to semantic incompatibility between *bu* and the complement it selects, which denotes an unbounded aspectual situation in Ernst (1995) or a stative situation in Lin (2003).

In addition to the commonly used blocking effect type evidence, there are

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[7] In Chiu (1993), the higher AspP in (21) is labeled as TP, AuxP as AsP.
[8] With thanks to one of the anonymous reviewers for pointing out this work to me.

interesting arguments for the NegP analysis given by Xu (1997) and by Hsiao (2002). First, Xu notes that *bu* can merge with some modals, forming words like *bie* 'not (imperative)' and *beng* 'not have to'. Xu argues that for this merging process to be possible, *bu* must be an X^0 element since only heads may incorporate onto another head. It is necessary to note that this reasoning only shows that *bu* is a head, but not that it projects its own category. An adverb analysis of *bu* such as Ernst (1995) also treats it as a head, which can be shown by the requirement for it to cliticize onto the following word. This case may also be treated as a fusion operation, which allows two heads to merge, in the framework of Distributed Morphology put forth in Halle and Marantz (1993).

Furthermore, Xu notes that quantifiers such as *shei* 'who', *sheme* 'what' and *nar* 'where' in (22a, b, c) respectively can move out of the VP and across the negative particle *bu*.

(22) a. Wo shei   dou   bu   xiang   jian.
      I   who   all   not   want   see
      'I want to see no one.'

   b. Zhangsan sheme   dou   bu   chi.
      Zhangsan want   all   not   eat
      'Zhangsan eats nothing.'

   c. Lisi   nare   dou   bu   qu.
      Lisi   where   all   not   go
      'Lisi goes nowhere.'

Xu then argues that given the XP status of these moved quantifiers, the fact in (22) shows that *bu* is not in the specifier position of NegP; otherwise, relativized minimality effects would arise. Thus, *bu* must be the head of NegP. This account, however, encounters difficulties. Given that such preposing involves A-movement in nature, evidenced by extraction asymmetry in finite and infinitive clauses in (23) (cf. Shyu 1995, 2001), the facts given by Xu in (22) only show that *bu* is not located in the Spec of a projection, which is an A position, and do not support the claim that *bu* is in the Spec of NegP.

(23) a. *Ta shei dou bu   shuo Zhangsan changchang piping.
       he   who   all   not   say   Zhangsan   often   criticize
       'He will say that Zhangsan often criticizes no one.'

b. Ta   shei dou bu   bi   Zhangsan changchang piping.
he   who all   not force Zhangsan often   criticize
'He will force Zhangsan to often criticize no one.'

Another argument for NegP in Mandarin is provided by Hsiao (2002), based on the so-called "negative island" effects. The negative island effects in English refer to the contrast between (24a) and (24b), originally observed by Ross (1984).

(24) a. *How$_i$ can't you photograph the house t$_i$?
b.   What house$_i$ can't you photograph t$_i$?

That is, negation interferes with the extraction of adverbial elements as in (24a), but not with the extraction of arguments as in (24b). Thus, negation is said to have created an "island" from which adjuncts cannot be extracted. Rizzi's (1990) account of this contrast is based on the distinction between referential and nonreferential expressions. Assuming that the negative morpheme *not* is an A′-specifier, occupying the specifier position of TP, it qualifies as a typical potential antecedent governor between a nonreferential trace and its antecedent in the relativized minimality theory of Rizzi (1990), thus the ill-formedness of (24a).

Similar negative island effects are proposed by Hsiao (2002) to also hold in Mandarin, as shown by the contrast between the two sets of examples in (25) and (26).

(25) a. Ta jintian zemeyang   qu xuexiao?
he today   how   go school
'How did he go to school today?'
b. Ta jintian da   gongche qu xuexiao.
he today   take bus   go school
'He took a bus to school today.'
c. Ta jintian gaogaoxingxingde   qu xuexiao.
he today   happily   go school
'He went to school happily today.'
(26) a. Ta jintian mei(you) zemeyang   qu xuexiao?
he today   not   how   go school
'How did he not go to school today?'
b. Ta jintian mei(you) da   gongche qu xuexiao.
he today   not   take bus   go school
'He didn't take a bus to school today.'

    c. Ta   jintian   mei(you)   gaogaoxingxingde   qu   xuexiao.

      he   today   not   happily   go   school

      'He didn't go to school happily today.'

Although *zemeyang* 'how' has either an instrument or a manner reading in (25a), it has only an instrument reading in a negative clause in (26a) as shown by the possible answers in (25b/c) and (26b/c) respectively. This interpretation contrast is suggested to be attributed to the fact that movement of the manner *zemeyang* 'how' (cf. Tsai 1994) is blocked by an A′-operator in the NegP given Rizzi's (1990) relativized minimality.

    We would like to discuss Hsiao's argument from two respects. First, as the reader may have noticed, Rizzi's original GB Theory-based account of the so-called negative island effects does not rely on positing a NegP. All it matters for his account is that a negative element is analyzed as an A′-specifier, not necessarily one related to NegP. Thus, even if Mandarin does exhibit such negative island effects, it cannot be used as evidence for the positing of NegP in Mandarin. Furthermore, whether there indeed exist negative islands remains questionable. Kuno and Takami (1997) point out that this extraction asymmetry in e.g. (24a) and (24b) has no direct relation with the distinctions between referential and nonreferential expressions. Rather, the phenomenon is controlled by a ban against extracting the focus of negation. Consider the examples in (27).

(27) a. *Who$_i$ didn't you borrow this bicycle from t$_i$?

     b. *And how slow$_i$ didn't he drive t$_i$?

     c. And how slow$_i$ shouldn't I be driving t$_i$ now?

According to them, the fronted *wh*-expression, though clearly referential, is the focus of negation and thus the sentence is unacceptable. Likewise, although the fronted *wh*-expression in both (27b) and (27c) is a non-referential adverbial *how slow*, yet it is the focus of negation in the former but not in the latter, thus yielding the contrast. For details of this condition, the reader is referred to their work. For our purposes here, what is important is that a similar ban on extraction also operates in Mandarin Chinese. Consider the examples in (28), where the negated modals have become the focus of negation.

(28) a. Ta   jintian bu   yinggai zemeyang   qu xuexiao?

        he   today   not   should   how   go   school

        'How should he not have gone to school today?'

b. Ta jintian bu yinggai da gongche qu xuexiao.

he today not should take bus go school

'He should not have taken a bus to school today.'

c. Ta jintian bu yinggai wujingdacaide qu xuexiao.

he today not should low.spirited go school

'He should not have gone to school in low spirit today.'

In contrast to (26c) but on a par with (27c), the possible answer in (28c) shows that when *zemeyang* 'how' in (28a) is not the focus of negation, it may undergo extraction, contrary to what one may expect from negative islands. We thus conclude that the so-called negative island effects may not exist in Mandarin Chinese.[9]

5. Concluding remarks

In this article, we have called into question the positing of NegP in Mandarin Chinese by comparing the difference in ordering between a negative particle and a clitic pronoun in Mandarin Chinese and in Romance languages. Assuming a head movement account for cliticization under a UG approach, it has been shown that if negative particles project an independent functional category in Romance, negative particles in Mandarin Chinese should not do so. It has also been found that the arguments advanced in the literature for positing NegP in Mandarin Chinese are not well-grounded. Based on these findings, we thus conclude that it will take further empirical evidence for motivating a NegP approach to Mandarin Chinese.

We would like to note that there are some important issues still left unaccounted for. First, the blocking effect of Romance clitics, in fact, not only arises in the local context but also in the non-local context termed clitic climbing. That is, like in the local context, clitics cannot move across embedded negative particles, as shown in (29) and (30) (examples taken from Zanuttini 2001:524) (cf. (8) and (9)).

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[9] One of the anonymous reviewers points out that the contrast between Hsiao's example in (26a) and my example in (28a) cannot be used as evidence for the lack of negative island effects in Chinese. According to the reviewer, this is because *mei (you)* in (26a), under Lin's (2003) analysis, selecting a dynamic and bounded event as complement, is incompatible with a state denoted by the manner adverb *zemeyang* and only the instrument reading of *zemeyang* is allowed. *Bu* in (28a), on the other hand, is compatible with a state denoted by *zemeyang*, which is either interpreted as a manner or as a habitual instrument. This reasoning, however, does not go through because it suggests that sentences like (i) are unacceptable given that *mei (you)* is incompatible with a manner adverb, which denotes a state. This prediction, as evidenced by the acceptability of (i), is contrary to fact.

(i) Ta jintian mei(you) gaogaoxingxingde qu xuexiao.
     he today not (have) happily go school
     'He did not go to school happily today.'

(29) a. Jean la fait   manger par/à Paul. (French)
       John it makes to.eat by/to Paul
       'John makes Paul eat it.'

    b. *Jean l'a   fait   ne pas manger à l'enfant.
       John it.has made NEG NEG to.eat   to the.child
       'John made the child not eat it.'

(30) a. Gianni vuole non vederli. (Italian)
       John   wants NEG to.see.them
       'John wants not to see them.'

    b. Gianni li vuole vedere.

    c. *Gianni li vuole non vedere.

Regarding Mandarin Chinese, if negative particles do not project their independent categories and do not undergo further raising as proposed, then they are predicted not to have any effect on clitic climbing of *suo*. This expectation is borne out as in (31).

(31) a. Zhangsan yaoqiu Lisi suo   bu   yao   mai de dongxi
      Zhangsan ask   Lisi SUO   not want buy DE thing
      'the thing that Zhangsan asked Lisi not to buy'

    b. Zhangsan suo   yaoqiu Lisi bu   yao   mai de dongxi
      Zhangsan SUO   ask   Lisi not want buy DE thing
      'the thing that Zhangsan asked Lisi not to buy'

The details of such ordering contrast between Romance and Chinese in the clitic climbing context, however, have not been spelled out in this article. This is because a full account will rest on an explicit mechanism of clitic climbing in Mandarin Chinese, which is to be explored in a separate paper.

Another important issue we have not touched on is the exact structural position of negative particles *mei* and *bu*. One traditional approach is to treat them as a type of adverb (see Chao 1968, Li and Thompson 1981, and Ernst 1995). Assuming Tang's (1990, 2000) theory of licensing adverbials, negative particles may be licensed in an adjoined position on a par with other types of adverb in Mandarin. This is by no means a novel idea; for example, Baker (1991) takes English *not* as generated in V′-adjoined position and Huang (2003) analyzes sentential negation marker as adjoined to I′ cross-linguistically. Between the two negative particles in Mandarin, the matter with *mei* is particularly complex. As mentioned in the introduction, *mei*, unlike *bu*, involves specification of aspect. In order to decide on the structural position of *mei* and its interaction with other inflectional categories like TP or AspectP, we have to be

clear about the hierarchy of the inflectional categories in Mandarin Chinese, which is beyond the scope of this article. Given these unsolved issues, we thus take the result of this study to be a starting point of further exploring the mechanism of clitic climbing and the hierarchy of functional categories in Mandarin Chinese.

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否定範疇與現代漢語「所」字結構

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　　本文主張現代漢語不存在否定範疇。主要證據來自比較弱代詞「所」與羅曼語系弱代詞在否定句中的分佈。若羅曼語系否定詞分析為否定範疇之核心語，現代漢語否定詞則無法如此分析。此外，文獻中支持否定範疇的分析也受到檢視與反駁。在結論中，本文重申主要論點，也指出未來可繼續研究之議題。

關鍵詞：「所」字結構，否定範疇，弱代詞，否定詞