

# *A microparametric analysis of apparent postverbal negation in Taiwanese Southern Min*

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## 1. INTRODUCTION

As noted in the literature, Taiwanese Southern Min (henceforth TSM) and Mandarin Chinese (henceforth MC) are two closely related languages that share many syntactic properties (Cheng 1992, Tsao 1995, Tsai 2002, among many others). It is usually the case that a given sentence in one language can have a word-by-word translation in the other. For instance, it is generally believed that Chinese languages, including MC and TSM, lack long-distance verb movement of the French sort (Emonds 1978, Pollock 1989). Since the seminal work of Pollock (1989), it has been shown that some relevant classes of adverbs and negation mark the left edge of the verb phrase (VP). As such, the fact that French finite verbs appear to the left of adverbs and negation, illustrated in (1), shows that they have moved out of the VP to the structurally higher Inflection component.<sup>1</sup>

(1) *French:*

- a. Jean (ne) voit pas Marie.  
Jean NEG see NEG Marie  
'Jean did not see Marie.'

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<sup>1</sup> Abbreviations used in this article:

ASP	aspect	NEG.EXIST	negated existential predicate
CLF	classifier	PROG	progressive
DET	determiner	SC	small clause
MOD	modal	1SG	first person singular
NEG	negation	3SG	third person singular
NEG.ASP	negated aspect		

- b. Jean voit souvent Marie.  
 Jean see often Marie  
 'Jean often sees Marie.'

On the other hand, as exemplified in (2) and (3), a verb in TSM and MC needs to linearly follow the negation and adverbs, indicating that the verb does not move to an inflectional head, and must stay within the verbal domain.

(2) *Taiwanese Southern Min*:

- a. Abing { bo / tiaNtiaN } khi hakhau.  
 Abing NEG / often go school  
 'Abing { didn't go / often goes } to school.'
- b. \*Abing khi { bo / tiaNtiaN } hakhau.  
 Abing go NEG / often school  
*Int.*: 'Abing { didn't go / often goes } to school.'

(3) *Mandarin Chinese*:

- a. Lisi { mei(you) / shichang } qu xuexiao.  
 Lisi NEG / often go school  
 'Lisi { didn't go / often goes } to school.'
- b. \*Lisi qu { mei(you) / shichang } xuexiao.  
 Lisi go NEG / often school  
*Int.*: 'Lisi { didn't go / often goes } to school.'

Crucially, however, TSM and MC exhibit a striking difference (see Huang 2003, among many others). It appears that, in certain cases, TSM allows negation to occur in a postverbal position, in contrast with MC, as shown in (4) and (5):

(4) *Taiwanese Southern Min*:

- Goa than *bo* chiN.  
 1SG earn NEG money  
*Lit.*: 'I earned no money.'  
 (≈ 'I didn't earn any money.')

(5) *Mandarin Chinese*:

- \*Wo zhuan *mei(you)* qian.  
 1SG earn NEG money  
*Int.*: 'I earned no money.'

At first, such a contrast might seem to indicate that the difference arises from the use of negative DPs, but this possibility can be easily excluded. Particularly, the nominal phrase that follows the negation *bo* in TSM can be modified by *chiah choe* 'that much', as in (6). The negation-NP sequence thus cannot be generated as one unit as a negative DP because such modification is never permitted in English genuine negative DPs, which is shown in (7):

(6) *Taiwanese Southern Min*:

- Goa than *bo chiah choe* chiN.  
 1SG earn NEG that much money  
*Lit.*: 'I earned no that much money.'

(7) I earned no (*\*that much*) money.

As also pointed out by Huang (2003), the post-negation nominal can be independently extracted, as in (8), further indicating that it does not form a constituent with the preceding negation. Moreover, as exemplified in (9), the sentence is degraded when the negation is extracted along with the nominal. This also shows the non-constituency of the sequence in question.<sup>2</sup>

(8) *Taiwanese Southern Min*:

*chiN* Goa than bo.  
money 1SG earn NEG  
*Lit.*: 'Money, I earned no.'

(9) *Taiwanese Southern Min*:

\*[*Bo chiN*] goa than.  
NEG money 1SG earn  
*Int.*: 'No money, I earned.'

In addition, as shown in (10) and (11), the cross-linguistic<sup>3</sup> contrast regarding the postverbal element is also observed with *u* 'have' in TSM and *you* 'have' in MC, which has long been thought of as the affirmative counterparts of *bo* and *mei(you)*, respectively (Tang 1994, 1999).<sup>4</sup> This fact suggests that the divergence is not merely about the relevant position with respect to negation. However, for ease of reference to the literature, I will still refer to both cases as the postverbal negation construction.

(10) *Taiwanese Southern Min*:

Goa than *u* *chiN*.  
1SG earn have money  
*Lit.*: 'I've earned (some) money.'

(11) *Mandarin Chinese*:

\**Wo zhuan you qian*.  
1SG earn have money  
*Int.*: 'I've earned (some) money.'

This article aims to offer an account for the derivation of the postverbal negation construction in TSM and to look for the underlying reason why there is such a contrast between TSM and MC. In particular, I argue that the construction under investigation involves an extended verbal complement that can host aspectual elements and, crucially, the reason why the construction is not attested in MC is that MC counterparts, *mei(you)* and the affirmative *you*, lack a particular aspectual use that TSM *bo* and *u* have.

<sup>2</sup>Thanks to a reviewer for providing the sentence.

<sup>3</sup>Linguistically speaking, MC and TSM are different languages since they are not mutually intelligible (see Norman 1988, 2003; among others), even though the latter is traditionally regarded as a Chinese dialect. In this article, I follow the linguistic definition and call them different languages.

<sup>4</sup>TSM *u* and MC *you* in the literal sense are verbs that can denote the concept of possession, just like English *have*. See sections 2.3 and 3.1 for more discussion.

The article is organized as follows. In section 2, I outline the proposal and provide several intra-linguistic arguments for it, including parallelism with resultatives, intervening elements and the covert secondary predicate. In section 3, the proposal is further shown to be supported by cross-linguistic correlations among TSM, MC, and Hakka, another Chinese language.<sup>5</sup> Section 4 reviews previous syntactic analyses and shows that they either suffer from empirical challenges or fail to explain the cross-linguistic contrast. Section 5 concludes the article.

## 2. THE POSTVERBAL NEGATION CONSTRUCTION

In this section, I provide an analysis of the postverbal negation construction in TSM. The main ideas of the proposal are summarized in (12):

(12) *The proposal:*

- a. The postverbal negation construction in TSM is derived in a way similar, if not identical, to the formation of resultative verb compounds, and the resultative complement is an extended verbal phrase.
- b. With the proposed structure, postverbal *bo* and *u* in TSM are aspectual elements merged in the extended verbal domain of the resultative complement.
- c. The lack of postverbal negation in MC results from the fact that MC *mei(you)* and *you* lack a particular aspectual usage that TSM *bo* and *u* have.<sup>6</sup>

### 2.1 Analysis and derivation

It is commonly agreed in the literature (e.g., Cheng 1979, 1997; Teng 1992; Li 1996; Tang 1994, 1999; Huang 2003; Wang 2008; among others), that the appearance of the postverbal negation *bo* and the affirmative *u* in TSM is just apparent since there is no other instance of verb movement to an inflectional head. Following some previous works (e.g., Cheng 1979, 1997; Huang 2003; Wang 2008), I suggest that the derivation of the postverbal negation construction is similar to the formation of resultative verb compounds (henceforth RVCs). In other words, postverbal *bo* and *u* participate in resultative formation.

However, unlike most previous studies, I assume here that RVCs are neither lexically derived (e.g., Li 1990, 1995, 1999, 2005; Cheng and Huang 1994; Cheng 1997; among others) nor head-movement driven (e.g., Huang 1992, 2006; Tang 1997; Zhang 2001; among others). In other words, I do not consider RVCs to be real compounds since there is neither lexical nor syntactic (i.e., incorporation; see Baker 1988, among others) compound formation involved. Instead, following Gu (1992), Sybesma (1992, 1999), Tang (1997), Gu and Pan (2001), Cheng (2007), and Wang (2010), among others, I suggest that the two predicates in RVCs<sup>7</sup> are separate heads

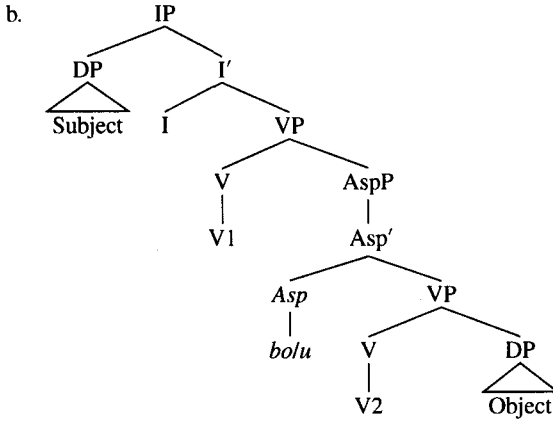
<sup>5</sup>Like TSM, Hakka is linguistically a separate language from MC (and from TSM) due to the mutual unintelligibility among them, even though Hakka is often considered a Chinese dialect.

<sup>6</sup>This point will be discussed in sections 2.3 and 3.

<sup>7</sup>Under the current analysis, the term RVC is actually a misnomer. For ease of comparison with the previous studies, I nevertheless use this term here, though it should be regarded with caution.

throughout the derivation and that the matrix verb embeds an extended VP domain as the resultative complement.<sup>8</sup> In addition, I contend that the postverbal negation construction further differs from typical RVCs in that the secondary predicate (V2) can be a null element that denotes general achievement meaning (Wang 2008). Under this view, the postverbal *bo* and *u* are merged as aspectual elements in the embedded complement.<sup>9</sup> A schematic structure is given in (13):

- (13) a. [<sub>IP</sub> Subject [<sub>VP1</sub> V1 [<sub>AspP</sub> Asp [<sub>VP2</sub> V2 Object] ] ] ]



In the following two sections, I will defend the proposal outlined in (12) and (13).

## 2.2 Parallels with Resultative Verb Compounds

In this section, I provide a few pieces of evidence to defend the current proposal. In particular, I show that the distribution of postverbal *bo* and *u* lends support to the analysis that the postverbal negation construction is indeed syntactically on a par with resultatives and that the postverbal *bo* and *u* are really embedded aspectual elements as proposed.

<sup>8</sup>One potential challenge to the proposed analysis is the thematic status of the object. That is, the object in the configuration is not the thematic object of the matrix predicate even though the interpretation seems to indicate it is. However, this is not really a concern, as there are legitimate resultative sentences (see Wang 2010) where the object is not thematically related to the matrix predicate. Note also that the same applies to the small clause analysis of resultatives (for English resultatives, see Kayne 1985, Hoekstra 1988, Den Dikken and Hoekstra 1994, Kratzer 2005; for MC resultatives, see Gu 1992; Sybesma 1992, 1999; Gu and Pan 2001; Cheng 2007) in which it has been shown why the thematic status should not be a problem for resultatives.

<sup>9</sup>Although I occasionally refer to TSM *bo* as negation, I assume that, in this particular construction, *bo* is the negative counterpart of *u*, which bears some aspectual denotation. The gloss used for *bo* from now on will therefore be NEG.ASP, indicating it is a fusion of a negation and an aspect. See sections 2.3 and 3.1 for more discussion.

First, as observed in Huang (2003), the postverbal negation construction exhibits a parallel selectional restriction to resultatives.<sup>10</sup> In particular, stative verbs cannot serve as the main/manner predicate (i.e., V1) in the postverbal negation construction, a restriction generally observed in resultatives, as shown in (14).<sup>11</sup> This demonstrates the parallel between resultatives and the construction under investigation.

(14) *Mandarin Chinese*:

\*I *liaukai* { *bo* / *u* } *goa*.  
 3SG understand NEG.ASP ASP 1SG  
*Int.*: 'He doesn't understand me.'

In addition, as previously suggested, the postverbal negation *bo* and the affirmative *u* are aspectual elements merged in the resultative complement and, following Wang (2008), the apparently missing secondary predicate is a null achievement verb. In fact, the postulated null predicate can, in some circumstances,<sup>12</sup> be overtly realized as *tiu* 'reach, arrive'. Crucially, given the occurrence of the predicate *tiu*, the possibility of analyzing *bo* and *u* as the secondary predicates (cf. Cheng 1979, 1997; Huang 2003; among others), is effectively ruled out.

(15) *Mandarin Chinese*:

Goa than *bo* (tiu) *chiN*.  
 1SG earn NEG.ASP arrive money  
*Lit.*: 'I earned no money.'  
 (≈ 'I didn't earn any money.')

(16) *Mandarin Chinese*:

Goa than *u* (tiu) *chiN*.  
 1SG earn ASP arrive money  
*Lit.*: 'I've earned (some) money.'

Similarly, with typical RVCs in TSM, *bo* and *u* can also occur between the two predicates, as exemplified in (17) and (18). The comparison again clearly points to the parallelism between the postverbal negation construction and typical RVCs.<sup>13</sup>

<sup>10</sup>Huang (2003) considers *bo* and *u* to be the secondary predicates of RVCs but it will soon be shown that it is not the case. However, the argument still holds for the proposed analysis since the selectional restriction is only sensitive to the verbal type of the main predicate (i.e., V1).

<sup>11</sup>A reviewer points out that tense may play a role in the ungrammaticality of (14), as also found in cases such as Spanish *saber* 'to know' that can be stative in the present tense or eventive in the past tense. In fact, it is still under debate whether Chinese languages have tense since there is no clear indication of tense that can be detected on the surface (see Sybesma 2007, Lin 2010). Tense is unlikely to be a factor in this particular case, however, since the sentence is still ungrammatical with time adverbials denoting the past time (e.g., *koekhi* 'in the past' and *ichiN* 'already').

<sup>12</sup>The covert predicate cannot always be overtly realized as *tiu* in the postverbal negation construction. For this, I suggest that the overt predicate *tiu* only realizes a sub-case of the meaning denoted by the null predicate and that is why *tiu* cannot occur in all instances of the postverbal negation construction.

<sup>13</sup>As pointed out by a reviewer, some TSM speakers can accept the sentences in (17) and (18) only when the objects are topicalized.

(17) *Taiwanese Southern Min:*

Goa phah *bo* phoa hit te pole.  
 1SG hit NEG.ASP break that CLF glass  
 'I didn't break that piece of glass.'

(18) *Taiwanese Southern Min:*

Goa phah *u* phoa hit te pole.  
 1SG hit ASP break that CLF glass  
 'I did break that piece of glass.'

Interestingly, the apparent MC counterparts of *bo* and *u*, i.e., *mei(ou)* and *you*, cannot occur between the two predicates in typical RVCs, as shown below.<sup>14</sup>

(19) *Mandarin Chinese:*

Wo da (\**meiyou*) po na kuai boli.  
 1SG hit NEG.ASP break that CLF glass  
*Int.*: 'I didn't break that piece of glass.'

(20) *Mandarin Chinese:*

Wo da (\**you*) po na kuai boli.  
 1SG hit ASP break that CLF glass  
*Int.*: 'I did break that piece of glass.'

Given that *mei(ou)* and *you* cannot occur in this position, the fact that the postverbal negation construction is not attested in MC, as repeated in (21) and (22) (from exx. 5 and 11), follows naturally. Specifically, since these elements are supposed to precede the secondary predicate, their non-occurrence thus correlates with the fact that the construction in question fails to surface in MC.

(21) *Mandarin Chinese:*

\*Wo zhuan *mei(ou)* qian.  
 1SG earn NEG.ASP money  
*Int.*: 'I earned no money.' (≈ I didn't earn any money.)

(22) *Mandarin Chinese:*

\*Wo zhuan *you* qian.  
 1SG earn ASP money  
*Int.*: 'I've earned (some) money.'

In the following, I argue that there is neither lexical nor syntactic compound formation in the postverbal negation construction. As in (23) and (24), some (rather complex) elements such as *long* 'all', *iau-beh* 'not yet', and *tih-beh* 'about to' can occur between the main predicate (i.e., V1) and the postverbal *bo* and *u* (see Cheng 1979, 1997).<sup>15</sup>

<sup>14</sup>For typical RVCs in MC, the so-called potential marker *de* and its negative counterpart *bu* can occur between the two predicates (see Wu 2004). The same is also observed in TSM and the counterparts are *e* and *be*, respectively.

<sup>15</sup>It is pointed out in Wang (2010) that typical RVCs in MC can be interrupted by *bu tai* 'not very' and *bu zenme* 'not so' so the formation of RVCs has to be syntactic, even though some previous studies (e.g., Chao 1968, among others) assume an infixation process instead.

(23) *Taiwanese Southern Min:*

I chhoa { *iau-beh* / *tih-beh* } u (tiu) bou.<sup>16</sup>  
 3SG marry not.yet about.to ASP reach wife  
 'He { hasn't married / is about to marry } a wife.'

(24) *Taiwanese Southern Min:*

I than *long* bo (tiu) chiN.  
 3SG earn all NEG.ASP reach money  
 'He always earns no money.'

Importantly, *tiu* 'reach, arrive' can felicitously show up here as the secondary predicate. The fact clearly suggests that the lexical compound analysis fails to work since there is simply no feasible way for the main predicate (i.e., *chhoa* 'marry' and *than* 'earn') to form a lexical compound with the secondary predicate *tiu* under this configuration.<sup>17</sup> The data also indicate that the head-movement analysis (see Tang 1997, Zhang 2001, among others) that argues for an incorporation approach to RVCs cannot work since head raising of the secondary predicate on its way to the main predicate should not be able to incorporate these complex intervening elements which are obviously not syntactic heads. Therefore, the proposal that there is no real compound formation in the postverbal negation construction is well supported.

To sum up, the postverbal negation construction is on a par with typical RVCs. In addition, *bo* and *u* in TSM are not the secondary predicates. Rather, they are likely to be preverbal aspectual elements as proposed. More importantly, the discussion also reveals that the cross-linguistic difference is correlated to the contrast between TSM *bo/u* and MC *mei(you)/you* with respect to the aspectual usage in the two languages. In the next section, I will further discuss the nature of the null secondary predicate and the aspects *bo* and *u* in TSM.

### 2.3 Null secondary predicate and aspect

I have argued that the postverbal *bo* and *u* in TSM are aspectual elements merged in the resultative complement and that the secondary predicate is null. This contrasts with Huang (2003) and a few other studies (e.g., Gillon and Yang 2009, Huang 2009)<sup>18</sup> which consider *bo* and *u* themselves to be the secondary predicates of the

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Similarly, some scholars (e.g., Cheng 1979, 1997, among others) also consider the intervening elements like those in (23) and (24) to be infixes. However, this is rather unlikely since the elements are complex to some extent and clearly decomposable, rendering an infixation analysis untenable.

<sup>16</sup>Another potential derivation is that the main predicate (i.e., *chhoa* 'marry' in (23) and *than* 'earn' in (24)) may undergo a subsequent operation called excorporation (see Roberts 1991; among others), ending up in its surface position. However, this possibility is equally unlikely since these complex elements (i.e., *iau-beh*, *tih-beh*, and *long*) are strictly preverbal in the sense that the verb cannot move past them.

<sup>17</sup>The lexical compound analysis could not work to account for the examples even if *bo* and *u* were the secondary predicates.

<sup>18</sup>The detailed reviews of these previous analyses will be given in section 4.



sentences.<sup>19</sup> In other words, *bo* and *u* in these studies are analyzed as lexical verbs denoting possession or the lack thereof. Nevertheless, as previously mentioned, the postulated null predicate can surface as *tiu* ‘reach, arrive’, as in (25). This has effectively ruled out the possibility that *bo* and *u* are the secondary predicates.

(25) *Taiwanese Southern Min*:

I than { *bo* / *u* } (*tiu*) chiN.  
 3SG earn NEG.ASP ASP reach money  
 ‘He {didn’t / did } earn money.’

As for the nature of the null predicate in question, I have previously assumed that it is a null verb that bears achievement denotation. The postulation of such a verb as the secondary predicate (V2) to the main predicate (V1) results from the general requirement of resultative formation since the main predicate, as an activity verb, does not naturally specify a resultant state. The pattern is even more obvious in Chinese languages since almost no simplex activity verbs in Chinese languages inherently encode a resultant state (Tai 1984, 2003; Chief and Koenig 2007; Huang 2003; among others).<sup>20</sup> In addition, I have argued earlier that the construction under investigation is akin, if not identical, to resultatives. Therefore, the addition of the null secondary predicate in the postverbal negation construction is necessary because its occurrence is responsible for bringing about the resultant state, just as with typical resultatives (Sybesma 1997, 1999; Tham 2009; among others).

Another related question is why the secondary predicate in question can be covert in the postverbal negation construction. I suggest that the covertness is licensed by the aspects *bo* and *u*. As it stands, there are two major functions of the aspects *bo* and *u*, as extensively discussed in the (descriptive) literature (Cheng 1979, 1997; Tsao and Cheng 1995; Tsai 2002, 2004; Tang et al. 2010; among others). Firstly, *bo* and *u* in TSM can occur in the preverbal position of a stage-level predicate, serving as the (negated) perfective aspect.

(26) *Taiwanese Southern Min*:

- a. I *bo* chiah png.  
 3SG NEG.ASP eat rice  
 ‘He has not eaten the meal.’
- b. I *u* chiah png.  
 3SG ASP eat rice  
 ‘He has eaten the meal.’

<sup>19</sup>As mentioned in footnote 4, the motivation for advocating this line of analysis comes from the fact that TSM *u* and MC *you* can have a lexical possession reading, just like English *have*.

<sup>20</sup>This point can be illustrated with verbs denoting *kill*. In particular, while the verb *kill* in English necessarily entails a death-denoting resultant state, the counterparts of *kill* in MC and TSM, which are *sha* and *thai*, respectively, do not. In other words, it is felicitous to say the equivalent of *I killed someone but he is not dead* in MC and TSM even though the English counterpart sounds semantically odd.

Second, *bo* and *u* can also precede stative predicates, denoting the so-called emphatic aspectual interpretation.<sup>21</sup>

(27) *Taiwanese Southern Min*:

- a. I bo { sui / khiau / hoaNhi }.  
 3SG NEG.ASP beautiful smart happy  
 'He/She is not { beautiful / smart / happy }.'
- b. I u { sui / khiau / hoaNhi }.  
 3SG ASP beautiful smart happy  
 'He/She is { beautiful / smart / happy }.'

Granted that, I suggest that the covertness of the secondary predicate is licensed by *bo* and *u*, which have an emphatic aspectual denotation. In particular, the occurrence of *bo* and *u* emphasizes the existence (or lack thereof) of the resultant state, and the resultant predicate in this particular construction, as revealed by its potential overt counterpart *tiu* 'reach', can specify the general achievement denotation with respect to the emergence of the resultant state. As such, it can felicitously be left unexpressed.

In this section, I have further discussed the null secondary predicate in the postverbal negation construction, whose covertness is licensed by the emphatic use of *bo* and *u*. In the next section, I will further demonstrate that this particular aspectual denotation of *bo* and *u* in TSM is the source of the cross-linguistic contrast and correlations among Chinese languages.

### 3. CROSS-LINGUISTIC CORRELATIONS

In this section, I show that the emphatic aspectual use of *bo* and *u* is the key to the contrast between TSM and MC. An interesting pattern in Taiwanese Mandarin<sup>22</sup> is also covered in this section. In addition, I further show that the proposed analysis is supported by cross-linguistic correlations with Hakka, another Chinese language, and possibly all Chinese languages.

#### 3.1 Contrast between TSM and MC

It was suggested in section 2.3 that the aspects *bo* and *u* in TSM serve to emphasize the existence of the resultant state, as also revealed by the fact that such elements can precede and modify stative predicates like *beautiful*, *smart*, and *happy*. MC does not pattern in the same way. First, the MC counterpart of *u*, which is *you*, does not have

<sup>21</sup>This particular aspectual denotation has had a range of different names in the literature, including existential aspect or stative aspect. In the following discussion, I will use the term emphatic to refer to this usage. The crucial point is that the aspects *bo* and *u* can precede and modify stative predicates. Note also that, as suggested in Tsao and Cheng (1995) and Tang et al. (2010), the emphatic interpretation in question is possible only when the modified predicate is stative.

<sup>22</sup>MC and Taiwanese Mandarin are mutually intelligible and thus can be linguistically defined as dialects of the same language.

the preverbal aspectual usage and can be used only as a verb denoting possession or existence, as shown in (28):<sup>23</sup>

(28) *Mandarin Chinese*:

- a. \*Ta you chi fan.  
3SG ASP eat rice  
*Int.*: 'He has eaten the meal.'
- b. \*Ta you piaoliang.  
3SG ASP beautiful  
*Int.*: 'He/She is beautiful.'
- c. Ta you qian.  
3SG have money  
'He has (some) money.'
- d. You ren zhu zai zheli.  
EXIST person live at here  
'There is someone who lives here.'

Second, the negative counterpart *mei(you)* can occur preverbally and is generally considered to be sentential negation in MC. Crucially, however, *mei(you)* cannot precede stative predicates, unlike its TSM counterpart *bo* (cf. (27a)).<sup>24</sup>

(29) *Mandarin Chinese*:

- \*Ta mei(you) { piaoliang / congming / gaoxing }.  
3SG NEG beautiful smart happy  
*Int.*: 'He/She is not { beautiful / smart / happy }.'

Given that the emphatic aspectual usage is essential in forming the postverbal negation construction, the lack of such a use in MC thus predicts the non-occurrence of postverbal negation. In other words, the comparison shows that the emphatic aspect in TSM is indeed the key to the postverbal negation construction. The non-occurrence of the construction in MC follows from the fact that no such elements exist in MC.

<sup>23</sup>The sentence (28a) is acceptable for some speakers of Taiwanese Mandarin. See section 3.2 for more discussion.

<sup>24</sup>Most TSM negators are lexically complex in the sense that they have undergone some sort of lexical fusion, as exemplified in the following (Li 1971; Lin 1974; Teng 1992; Saillard 1992; Tang 1994, 1999; among others).

- (i) a. m 'NEG' + u 'ASP' → bo  
b. m 'NEG' + e 'MOD' → be  
c. m 'NEG' + ai 'MOD' → mai  
d. m 'NEG' + ho 'good' → m-mo

As shown above, the fact that *bo* in TSM is lexically derived via fusion of the negation *m* and the aspectual *u* further indicates that it is indeed a negated aspect. On the other hand, *mei(you)* is more likely to be a simple negation for two reasons. First, as seen in (28a), *you* alone cannot independently serve as a preverbal aspect marker (but see section 3.2 for its behaviour in Taiwanese Mandarin). Second, the *you* part can always be omitted, suggesting that the negation part *mei* is the crucial component and is thus likely to be a simple negation.

### 3.2 Notes on Taiwanese Mandarin

Taiwanese Mandarin is a variant of MC spoken in Taiwan and, as its name implies, has been greatly influenced by TSM. In other words, it exhibits quite a few dialectal variations in many aspects of the grammar compared to the so-called standard variant of MC. One such variation relevant to the current discussion concerns the element *you*. Specifically, for most speakers of Taiwanese Mandarin, *you* can occur preverbally, as shown in the following (cf. (26b) in TSM and (28a) in MC). This property is clearly influenced by its TSM counterpart *u*.

(30) *Taiwanese Mandarin:*

Ta you chi fan.  
3SG ASP eat rice  
'He has eaten the meal.'

As the translation indicates, *you* in Taiwanese Mandarin can have the perfective use, while MC (in the standard sense) utilizes the suffixal perfective aspect *-le*, as shown in (31):

(31) *Mandarin Chinese:*

Ta chi-le fan.  
3SG eat-ASP rice  
'He has eaten the meal.'

However, the preverbal perfective usage does not entail the possibility of the postverbal negation construction. The essential factor, as previously argued, is whether *you* and its negative counterpart *mei(you)* in Taiwanese Mandarin can have the emphatic usage.

The proposed variety distinction nicely corresponds to previous sociolinguistic studies on the distribution of *you* and *mei(you)* in Taiwanese Mandarin (Cheng 1979, 1985, 1997; Kubler 1985; Teng 2002; Tseng 2003; among others). For instance, Teng (2002) suggests that speakers of Taiwanese Mandarin exhibit different patterns towards the use of *you*. He suggests that the preverbal perfective use of *you*, as already shown in (30), is rather widespread in Taiwan; however, other usages, such as the emphatic one, are limited and thus result in sentences that sound non-authentic for many speakers in Taiwan. In other words, while most speakers of Taiwanese Mandarin accept the perfective usage of *you* as exemplified in (30), many fewer speakers would consider the sentences in (32), in which *you* and *mei(you)* precede and modify a stative predicate, to be fully acceptable.

(32) *Taiwanese Southern Min:*

- a. ??Ta you { piaoliang / congming / gaoxing }.  
3SG ASP beautiful smart happy  
*Int.:* 'He/She is { beautiful / smart / happy }.'
- b. ??Ta mei(you) { piaoliang / congming / gaoxing }.  
3SG NEG.ASP beautiful smart happy  
*Int.:* 'He/She is not { beautiful / smart / happy }.'

The data indicate that *you* and *mei(you)*, even in Taiwanese Mandarin, cannot readily have the emphatic aspectual meaning, in stark contrast to their TSM counterparts *u* and *bo*. Since the emphatic aspectual denotation is the key to the formation of the postverbal negation construction, the fact that the construction in question is not commonly accepted in Taiwanese Mandarin is thus expected, as exemplified in (33):<sup>25</sup>

(33) *Taiwanese Mandarin*:

??Ta zhuān { you / mei(you) } qian.  
 3SG earn ASP NEG.ASP money  
*Int.*: 'He { did / didn't } earn money.'

In this section, I have discussed the distribution of *you* and *mei(you)* in Taiwanese Mandarin, further points supporting the claim that the ability of *ulyou* and *bolmei(you)* to precede and modify stative predicates is indeed the key to the formation of the postverbal negation construction.

### 3.3 Correlation with Hakka

Another piece of evidence for the current proposal comes from a micro-comparative correlation with Hakka, another Chinese language. First, the Hakka counterparts of TSM *u* and *bo*, which are *yiū* and *mo* respectively, can occur preverbally as aspectual elements, as in (34):

(34) *Hakka*:

Aming { *yiū* / *mo* } hi migiet.  
 Aming ASP NEG.ASP go U.S.  
 'Aming { has / hasn't } gone to the U.S.'

Importantly, just like TSM *u* and *bo*, they can also precede and modify stative predicates, giving the emphatic interpretation. This is shown in (35):

(35) *Hakka*:

- a. Aming *yiū* { jiang / jing / fonhi }.  
 Aming ASP beautiful smart happy  
 'Aming is { beautiful / smart / happy. }'
- b. Aming *mo* { jiang / jing / fonhi }.  
 Aming NEG.ASP beautiful smart happy  
 'Aming is not { beautiful / smart / happy. }'

<sup>25</sup>This discussion implies that some speakers of Taiwanese Mandarin accept or actually produce the postverbal negation construction, as shown in (33). This is indeed the case. As Kubler (1985) observes, some Taiwanese people whose mother tongue is TSM and receive relatively less formal education actually use the postverbal negation construction (i.e., potential complements with *you* and *mei(you)* in Kubler's term). In fact, a quick internet search returns some rare instances of the postverbal negation construction from websites in Taiwan. It is crucial, nevertheless, for our purpose to note that the use of such elements in the postverbal negation construction, just like that of modifying stative predicates, is much less widespread than the perfective use. It is beyond the scope of this article to offer a comprehensive survey on the distribution of *you* and *mei(you)* among different groups of speakers and I leave it for future inquiry.

Given the distribution of *yi*u and *mo* in Hakka, we expect that Hakka should have a postverbal negation construction with these two aspect markers. The prediction is borne out, as shown in (36):

(36) *Hakka*:

- a. Aming chon *yi*u chien.  
Aming earn ASP money  
'Aming has earned (some) money.'
- b. Aming chon *mo* chien.  
Aming earn NEG.ASP money  
'Aming didn't earn any money.'

To sum up, I have further substantiated the proposal by showing that micro-comparative correlations among TSM, MC, Taiwanese Mandarin, and Hakka follow from and thus support the proposed analysis. Putting the observed contrasts together, we can thus derive a generalization regarding the occurrence of the postverbal negation construction among Chinese languages, as stated in (37):

- (37) If a given Chinese language allows the counterparts of TSM *u* and *bo* to occur pre-verbally as an emphatic aspect that can modify stative predicates, it also allows the postverbal negation construction.

#### 4. PREVIOUS STUDIES

In this section, I review the previous studies that specifically suggest a syntactic analysis of the postverbal negation construction. They can be divided into three major groups: resultatives, verb serialization and aspect.

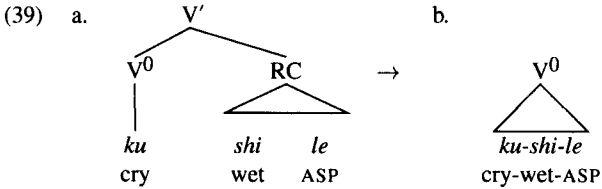
##### 4.1 Resultative analyses: Huang (2003) and Wang (2008)

Huang (2003), whose focus is on the distribution of negative DPs, suggests that the postverbal negation forms a RVC with its preceding verb. This amounts to saying that the postverbal *bo* and the affirmative *u* are parallel to resultant predicates, expressing what he calls "the successful execution (or lack thereof) of an action or the (non) attainment of a desired result" (p. 266). However, it is unclear how the analysis would account for the aforementioned intervening elements such as *long* 'all', *iau-beh* 'not yet', and *tih-beh* 'about to', as given in (23) and (24), repeated here as (38):

(38) *Taiwanese Southern Min*:

- a. I chhoa { *iau-beh* / *tih-beh* } u bou.  
3SG marry not.yet about.to ASP wife  
'He { hasn't married / is about to marry } a wife.'
- b. I than *long* bo chiN.  
3SG earn all NEG.ASP money  
'He always earns no money.'

Even if one assumes that the compound formation results from the V'-to-V<sup>0</sup> reanalysis (Huang 1992), it still cannot account for the fact pointed out above.<sup>26</sup> Specifically, Huang (1992) suggests that RVCs are derived via reanalyzing a V' that contains a main predicate (V1) and a phrasal resultative complement into V<sup>0</sup>, provided that the sequence dominated by V' is short enough (Huang 1992:125). The reanalysis process is demonstrated in the following.



The requirement that the sequence dominated by V' has to be short enough demands that the reanalysis process is sensitive to the bareness of participating elements. The fact that the intervening elements shown above are clearly non-atomic thus undermines the analysis. In addition, the analysis also fails to capture the fact that an additional predicate like *tiu* can show up after *bo* and *u*. As previously discussed in section 2.2, *bo* and *u* can precede the resultant predicate in a typical RVC. Given the parallelism between typical RVCs and the postverbal negation construction, the occurrence of *tiu* as the secondary predicate rules out the possibility of treating the co-occurring *bo* or *u* as the secondary predicate in the construction under investigation.

Lastly, Huang's analysis cannot explain the contrast between TSM and MC. Given that TSM *bo* and *u* are considered to be resultant predicates in his analysis, it is unclear why MC *mei*(*you*) and *you*, which, just like TSM *bo* and *u*, can also be predicative as verbs of possession or existence, cannot participate in the derivation.

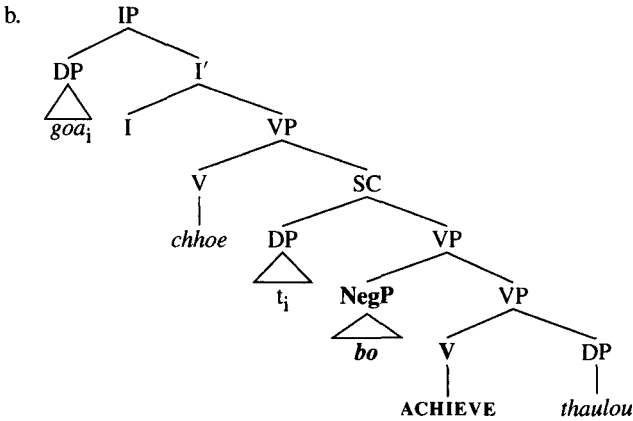
Wang (2008) also relates the postverbal negation construction to resultatives, but she assumes a small clause analysis of resultatives (for English, see Kayne 1985, Hoekstra 1988, Den Dikken and Hoekstra 1994, Kratzer 2005; for MC, see Gu 1992; Sybesma 1992, 1999; Gu and Pan 2001; Cheng 2007). In Wang's proposal, the resultant predicate in the small clause is a null ACHIEVE head, as also adopted in this article. In addition, the small-clause subject undergoes raising to the matrix subject position. Importantly, the postverbal negation *bo* is considered to be a VP adjunct, as shown in (40):

(40) *Taiwanese Southern Min*:

- a. Goa chhoe bo thaulou.<sup>27</sup>  
 1SG find NEG job  
 'I found no job.'

<sup>26</sup>Huang (1992) and Huang (2003) both assume that RVCs are real lexical compounds. See section 2.2 for arguments against the lexical treatment of RVCs.

<sup>27</sup>In reviewing previous studies, I keep the gloss of the examples consistent with each analysis.



Under this view, it is unclear how the affirmative counterpart *u* should be realized in the structure. More importantly, similar to Huang (2003), Wang's analysis also fails to account for the cross-linguistic contrast as previously noted. In particular, since she considers TSM *bo* to be an adjunct to VP, it should be in principle possible for MC *mei*(you), being negation as well, to be merged in the same syntactic position so as to generate the postverbal negation construction. In other words, the contrast is unexplained under her account as well.

#### 4.2 Verb serialization analysis

In addition to the resultative approach, some other previous studies (e.g., Huang 2009, Gillon and Yang 2009)<sup>28</sup> relate the occurrence of postverbal *bo* and *u* in TSM to the serial verb construction (henceforth SVC). From the feature-parametric perspective, the SVC can be defined as follows. Baker (1989, 1991) restates the Head-Licensing Condition (Chomsky 1986)<sup>29</sup> and opens the possibility that a maximal projection can be linked to two heads (i.e., the so-called double-headed VP analysis). On the other hand, Collins (1995, 1997) proposes that the availability of SVC in a language depends on the feature specification of the inflection node. If the V-feature in inflection is [+multiple] in a language, that language will be an SVC language. At any rate, both suggest that SVC sentences found in verb-serialization languages involve only a single inflection node that can license two lexical VPs. Typical SVC sentences are provided in (41) and (42):

<sup>28</sup>Huang's (2009) analysis focuses on the ambiguity between what she calls genetic and episodic readings of the postverbal *bo* and *u* in TSM, though she does propose a syntactic analysis based on the theory of light verb syntax (Huang 1997, Lin 2001). In particular, she suggests that the second verb in serialization is a light verb that denotes some sort of 'getting' event, which is different from Gillon and Yang's (2009) treatment of *bo* as a negated existential predicate. I will not review Huang's analysis but note that her analysis also fails to account for the cross-linguistic contrast.

<sup>29</sup>The Head-Licensing Condition in Chomsky (1986) requires that a head be linked to a maximal projection. Conceptually, this does not exclude the reversed possibility, as Baker (1989, 1991) suggests, that a maximal projection can be linked to two heads.

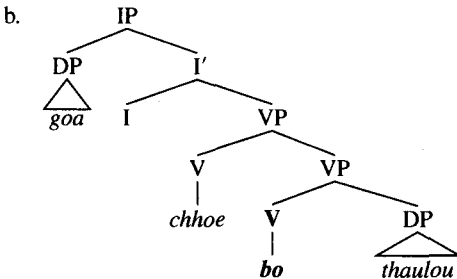


- (41) Òzọ lé èvbàré ré.  
Ozo cook food eat  
'Ozo cooked food (to) eat it'. (Edo et al. 1998: ex. 20a)
- (42) A téi dí fáka kóti dí beé.  
3SG take DET knife cut DET bread  
'He took the knife (to) cut the bread (with it).' (Saramaccan et al. 2006: ex. 3c)

Along this line, Gillon and Yang (2009) propose the following SVC structure for postverbal *bo*.

(43) *Taiwanese Southern Min*:

- a. Goa chhoe bo thaulou.  
1SG find NEG.EXIST job  
*Lit.*: 'I found no job.'



As in (43b), they consider the postverbal negation *bo* and the preceding verb to be separate verbs heading the higher and lower VPs respectively. There are thus two VPs under a single inflection node in the postverbal *bo* construction, which is typical of SVC.

At first blush, the SVC analysis is attractive since both TSM and MC are known to exhibit SVC characteristics, as exemplified in (44)–(47):

- (44) Abing tiaN chu mi chiah. (Consequential SVC, TSM)  
Abing often cook noodles eat  
'Abing often cooks noodles (to) eat them.'
- (45) Abing tuchiah theh to-a chhiat bah. (Instrumental SVC, TSM)  
Abing just take knife cut meat  
'Abing just took a knife (to) cut the meat (with it).'
- (46) Lisi chang zhu mian chi. (Consequential SVC, MC)  
Lisi often cook noodles eat  
'Lisi often cooks noodles (to) eat them.'
- (47) Lisi ganggang na daozi qie rou. (Instrumental SVC, MC)  
Lisi just take knife cut meat  
'Lisi just took a knife (to) cut the meat (with it).'

<sup>30</sup>Gillon and Yang (2009) consider *bo* in the postverbal negation construction to be a negated existential predicate; it is therefore glossed as NEG.EXIST.

However, like other previous analyses, the SVC analysis, with *bo* as a negated existential verb, fails to account for the cross-linguistic contrast as previously noted. In particular, *bo*, as a negated existential verb, is identical in all relevant properties to its MC counterpart *mei(you)*, as exemplified (48) and (49). The same parallelism is also attested for the affirmative counterparts *u* and *you*, respectively in (50) and (51). That is, no difference can be detected between the two languages when they are existential verbs.

(48) *Taiwanese Southern Min:*

Bo lang toa ti chia.  
NEG.EXIST person live at here  
'There is no one who lives here.'

(49) *Mandarin Chinese:*

Mei(you) ren zhu zai zheli.  
NEG.EXIST person live at here  
'There is no one who lives here.'

(50) *Taiwanese Southern Min:*

U lang toa ti chia.  
EXIST person live at here  
'There is someone who lives here.'

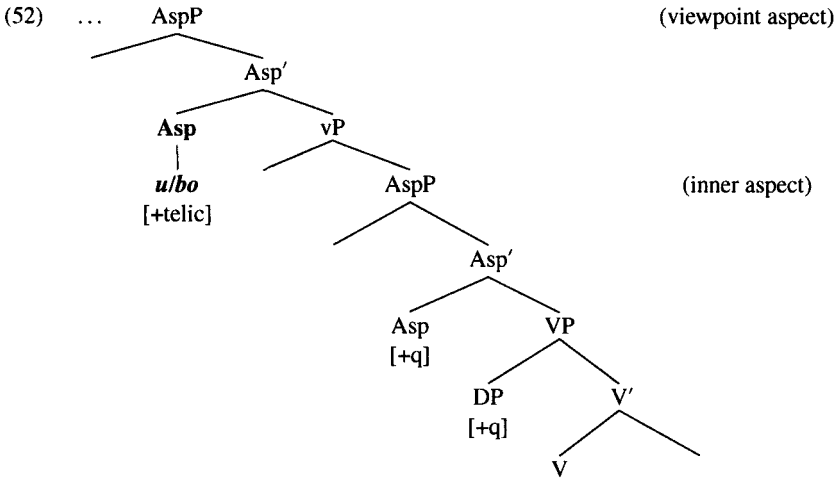
(51) *Mandarin Chinese:*

You ren zhu zai zheli.  
EXIST person live at here  
'There is someone who lives here.'

Given these facts, the SVC analysis would predict that the postverbal negation construction should be attested in MC as well since *mei(you)* and *you* are parallel to *bo* and *u* in their ability to serve as a (negated) existential predicate; however, the expectation is not met. As a result, the SVC analysis also fails to capture the cross-linguistic contrast and it seems unlikely that verb serialization underlies the postverbal negation construction.

### 4.3 Aspectual analysis

Huang (2011) proposes that the postverbal *bo* and *u* are perfective aspectual markers parallel to the MC aspect marker *-le*. She further suggests that *bo* and *u* are both [+telic] and can only be compatible with predicates that are inherently [+telic] or turned into [+telic] with a quantized ([+q]) internal argument. To facilitate the agreement between [+q] and [+telic], an inner aspect layer is projected (MacDonald 2008), as schematically demonstrated in (52):



However, the aspectual analysis encounters a problem similar to one observed in the previous resultative analyses. According to the aspectual analysis, the verb has to undergo head-movement to the higher  $\text{Asp}^0$  so as to precede *bo* and *u* since this is a necessary step in a mono-clausal analysis. Thus, it is odd to say that the head-movement in question incorporates complex intervening elements such as *long* 'all', *iau-beh* 'not yet', and *tih-beh* 'about to', as already discussed in (23) and (24).

Moreover, there is evidence showing that *long* 'all' and *tih-beh* 'about.to' are merged (at least) higher than the progressive aspect marker *teh*, as in (53), and the modal *ehiau* 'can', as in (54). Since no verb can move past such grammatical categories in TSM (and possibly in all Chinese languages), the aspectual analysis that relies on such verb movement is accordingly questionable.

(53) *Taiwanese Southern Min*:

Goa kin-a-jit *long teh* thak chheh.  
 1SG today all PROG read book  
 'I have always been reading books today.'

(54) *Taiwanese Southern Min*:

Hit e gin-a *tih-beh ehiau* kiaN a.  
 that CLF kid about.to can walk ASP  
 'That kid is about to be able to walk.'

## 5. CONCLUDING REMARKS

In this article, I have proposed an analysis of the postverbal negation construction in TSM. Specifically, I argue that the construction is derived in a way similar to resultatives. In addition, the postverbal negation *bo* and its affirmative counterpart *u* are aspectual elements of an extended VP complement of resultatives and they bear the emphatic aspectual denotation. MC lacks the postverbal negation construction because it lacks this particular aspectual use of affirmative *you* and negative *mei*(*you*),

and the construction therefore cannot be generated. I have also shown that the proposed analysis not only fares better than other previous approaches empirically and conceptually but also straightforwardly captures the micro-comparative differences and correlations among Chinese languages.

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