

A CASE OF PSEUDO-OPTIONALITY AS A CONSEQUENCE OF LANGUAGE CONTACT*

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Abstract. The current study demonstrates a case of pseudo-optionality in Chinese Wu, whereby certain adverbs can “optionally” appear in both pre-verbal position and post-verbal position. We argue that this is only a case of pseudo-optionality and that these “optional” constructions in fact result from language contact between Wu and Mandarin Chinese. Importantly, no derivational relationship exists between the two adverbs, given that both are base-generated. Furthermore, the current case suggests that some phenomena related to apparent optionality can be a result of language contact, which offers a plausible account for problems related to the existence of certain optional structures under the framework of the Minimalist Program (see Chomsky 2000).

Keywords: Optionality, Language contact, Chinese, Wu.

1. INTRODUCTION

The notion optionality becomes problematic in the Minimalist Program (see Chomsky 1995) in that MP requires that syntactic operations be obligatory. Significantly, an operation is needed only if its output satisfies the requirement from the external interface system, such as the Conceptual-Intentional system, which is in accordance with the Strong Minimalist Thesis (see Chomsky 2008). Therefore, how to account for the existence of optional operations becomes a crucial question in the Minimalist Program. A variety of solutions have been proposed to address the issue at hand, including the idea of co-existing grammars (see Roeper 1999), the hypothesis of equally costly derivations (see Biberauer and Richards 2006), the interface-based approach on the principles of economy (see Titov 2020). However, the aforementioned approaches seem to encounter difficulties when no derivational relationship exists in optional constructions, which is the case of the present study.

The current research discusses a case showing that some phenomena demonstrating apparent optionality can be a result of language contact, which offers a possible account for problems related to the existence of some apparent optional constructions under the framework of the Minimalist Program (see Chomsky 2000). Moreover, the case in target can provide supporting evidence for the plausibility of optionality as an outcome in microcontact situations, which refers to the contact between minimally different grammars (see D’Alessandro 2021).

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2. THE CASE OF WU DIALECT IN CHINESE

By Chinese, we refer to the notion ‘Sinitic’ (see Sybesma and Sio 2008), which encompasses a variety of groups that belong to the Sinitic language family: Mandarin, Wu, Min, Gan, Yue (Cantonese), Ke (Hakka) and Xiang (cf. Xiong and Zhang 2008)³. Among them, Mandarin is used as the lingua franca by the majority of the population. Despite the fact that these varieties are dialects, they are not mutually intelligible (see Handel 2015). The current study addresses a case of pseudo-optionality in Wu dialect.

The examples in (1) illustrate optional structures with the same meaning in Hangzhou Wu, a sub-variety of Wu dialects, which are referred to as the circum-adverbial construction. We first consider the type of circum-adverbial constructions in which the two circum-adverbs are identical in their phonetic forms. The adverb *kua*³³ ‘fast’ occurs in post-verbal positions following the complex verb *tɛ^{hy2}-hɔ³³* ‘eat.PERF’ (see Wang and Jiang 2020), as shown in (1a). *De* is a Sentence-Final particle (SFP), which expresses a confirmative mood of the speaker.⁴ In (1b), the adverb *kua*³³ can also appear in pre-verbal positions. Very interestingly, pre-verbal *kua*³³ and post-verbal *kua*³³ can co-occur in the same sentence, as shown in (1c). The three sentences in (1) roughly have the same interpretation, although (1c) may convey a more urgent attitude of the speaker, compared with (1a) and (1b), according to our native speakers. Regarding their pragmatics, the post-verbal *kua*³³ in (1a) usually occurs in a colloquial register whereas the pre-verbal one as in (1b) is normally used in formal situations (see Jing and Wang 2021).

- (1) a. Ji¹³ ja²¹ve³³ tɛ^{hy2}-hɔ³³ **kua**³³ de. (post-verbal)
 3.SG dinner eat-PERF fast DE
 b. Ji¹³ ja²¹ve³³ **kua**³³ tɛ^{hy2}-hɔ³³ de. (pre-verbal)
 3.SG dinner fast eat-PERF DE
 c. Ji¹³ ja²¹ve³³ **kua**³³ tɛ^{hy2}-hɔ³³ **kua**³³ de. (double-adverb)
 3.SG dinner fast eat-PERF fast DE
 ‘S/he is about to finish the dinner.’

In particular, direct objects in Chinese Wu are strongly intended to occupy the sentence initial position, which has been argued to be the topic position by Liu (2001). The sentence is less acceptable when the object *ja²¹ve³³* ‘dinner’ stays in the original post-verbal complement position, as in (2), compared with the case when the same object has been moved to the sentence initial position, as in (2a vs 1a), (2b vs 1b), and (2c vs 1c), respectively.

- (2) a. ?Ji¹³ tɛ^{hy2}-hɔ³³ ja²¹ve³³ **kua**³³ de. (post-verbal)
 3.SG eat-PERF dinner fast DE
 b. ?Ji¹³ **kua**³³ tɛ^{hy2}-hɔ³³ ja²¹ve³³ de. (pre-verbal)
 3.SG fast eat-PERF dinner DE
 c. ?Ji¹³ **kua**³³ tɛ^{hy2}-hɔ³³ ja²¹ve³³ **kua**³³ de. (double-adverb)
 3.SG fast eat-PERF dinner fast DE
 ‘S/he is about to finish the dinner.’

³ For a more detailed discussion on the Sinitic language family, see Handel (2015).

⁴ The following abbreviations are used: PERF – perfective marker; DE/LE – sentence-final particle, CL-classifier; SG-singular.

When the object *ja²¹ve³* ‘dinner’ stays in-situ (i.e., postverbal position as in (2a)), the post-verbal adverb cannot occur between the object and the verb in Wu dialect. In (3a), when the post-verbal adverb *kua³³* ‘fast’ occurs between the verb *tʃy²-hv³³* ‘eat-PERF’ and the object *ja²¹ve³³*, the sentence is ungrammatical. On the contrary, Cantonese permits this type of construction, as shown in (3b), where the adverb *do¹* ‘more’ occurs between the verb *sik⁶* ‘eat’ and the object *yat¹wun²faan²* ‘one bowl of rice’. If the adverb appears after the object, the sentence becomes ungrammatical, as illustrated in (3c).

- (3) a. *Ji¹³ tʃy²-hv³³ **kua³³** ja²¹ve³³ de. (Chinese Wu)
 3.SG eat-PERF fast dinner DE
 ‘S/he is about to finish the dinner.’
- b. Nei⁵ sik⁶ **do¹** yat¹wun² faan². (Cantonese)
 2.SG eat more one.CL rice
 ‘You eat one more bowl of rice.’
- c. *Nei⁵ sik⁶ yat¹wun² faan² **do¹**. (Cantonese)
 2.SG eat one.CL rice more
 ‘You eat one more bowl of rice.’

Both the pre-verbal and the post-verbal adverb in Wu dialect can be present in the embedded clauses, for instance, in a complement clause of a verb (see 4a) and in a sentential subject (see 4b). For ease of exposition, brackets are used to represent the three situations: pre-verbal, post-verbal and double-adverb⁵.

- (4) a. Complement clause of verb
 ŋo³⁵ ke²¹do³³ [sui³³ (kua³³) gun⁵³ (kua³³) de].
 I see water fast boil fast DE
 ‘I saw that the water was about to boil.’
- b. Sentential subject
 [Die²¹jiŋ²⁴ (kua³³) faŋ³³-hv³³ (kua³³) de gə.ŋeie³³ ʃi²¹] niŋ⁴³ ji¹³ ne²¹gu³³.
 Movie fast play-PERF fast DE this.CL thing make 3.SG sad
 ‘The fact that the movie is about to finish makes him/her sad.’

The same situation is observed with the adverb *ei¹¹* ‘first’ in Oujiang Wu, another sub-variety of Wu dialects, as shown in (5). The adverb *ei¹¹* can appear in a post-verbal position as in (5a) or a pre-verbal position as in (5b). Similarly, the adverb can co-occur in both pre-verbal and post-verbal positions, as shown in (5c), which might convey a more urgent mood of the speaker. The semantic interpretation of these three sentences is the same, just like the

⁵ For instance, when the pre-verbal adverb is absent, the sentence refers to the post-verbal type, as in (i-a). When the post-verbal adverb is absent, the sentence corresponds to the pre-verbal type, as in (i-b). When both adverbs are present, the sentence refers to the double-adverb type, as in (i-c).

- (i) a. Sui³³ gun⁵³ kua³³ de. (post-verbal)
 water boil fast DE
 b. Sui³³ kua³³ gun⁵³ de. (pre-verbal)
 water fast boil DE
 c. Sui³³ kua³³ gun⁵³ kua³³ de. (double-adverb)
 water fast boil fast DE
 ‘The water is about to boil.’

case of Hangzhou Wu in (1). Given these subtle differences in pragmatics, we take the cases like (1) and (5) as pseudo-optionality⁶.

- (5) a. Ni⁴⁴ zau⁴⁵ ei¹¹. (post-verbal)
 2.SG go first
 b. Ni⁴⁴ ei¹¹ zau⁴⁵. (pre-verbal)
 2.SG first go
 c. Ni⁴⁴ ei¹¹ zau⁴⁵ ei¹¹. (double-adverb)
 2.SG first go first
 ‘You go first.’

Another type of circum-adverbial construction arises when the pre-verbal adverb and the post-verbal adverb have distinct phonetic forms, as shown in (6). In (6a), the adverb *gu*² ‘again’ appears in post-verbal position, following the main verb *zo*⁴³ ‘do’. Interestingly, in (6b), the pre-verbal adverb can be either *ze*³³ ‘again’ or *zoŋ*²¹*ein*³³ ‘anew’, which has the same semantic meaning as the post-verbal adverb *gu*² ‘again’. A subtle difference between *ze*³³ and *zoŋ*²¹*ein*³³ is that *zoŋ*²¹*ein*³³ is often used in a context in which someone fails in doing something, and that person restarts doing it from the beginning. Importantly, *ze*³³/*zoŋ*²¹*ein*³³ and *gu*² can co-occur, as in (6c). The interpretation of the three sentences is the same, demonstrating an apparent case of pseudo-optionality.

- (6) a. Gə.də³³ tʃi²¹ zo⁴³ liɑŋ³³bie²¹ gu². (post-verbal)
 this.CL question do two.CL again
 b. Gə.də³³ tʃi²¹ ze³³/zoŋ²¹ein³³ zo⁴³ liɑŋ³³bie²¹. (pre-verbal)
 this.CL question again/anew do two.CL
 c. Gə.də³³ tʃi²¹ ze³³/zoŋ²¹ein³³ zo⁴³ liɑŋ³³bie²¹ gu². (double-adverb)
 this.CL question again/anew do two.CL again
 ‘(You) do this question again for twice!’

The question now pertains to whether any dependency relationship exists between the post-verbal and the pre-verbal adverbs in both cases. In particular, it seems that there might be a derivational relationship between the post-verbal and the pre-verbal adverbs when they are identical in phonetic forms. To investigate this, formal analyses will be conducted in the next section.

3. A FORMAL APPROACH FAILS TO DERIVE PSEUDO-OPTIONAL STRUCTURES

First of all, it should be noted that on the surface, circum-adverbial constructions like

⁶ Here we simply take the term pseudo-optionality as referring to optional constructions that have the same semantic interpretation but may differ in pragmatics, in contrast to true-optionality where the optional constructions are identical in every aspect. For a more detailed discussion on the term optionality, see Müller (1999).

(5) are similar to another construction, known as circumpositional phrases (see Koopman 2010, Paul 2015), where an element, most likely to be a noun, is surrounded by a preposition and a postposition. In (7), the preposition *zài* ‘at’ precedes the noun *zhuōzi* ‘table’ and *shàng* ‘on’ follows the noun, (see also Huang *et al.*, 2009, Paul 2015 for different types of analyses). Nevertheless, both the preposition and the postposition are obligatory in cases involving circumpositional phrases, which is crucially different from the current circum-adverbial constructions presented in (1, 2) and (5), in that neither the preverbal nor the postverbal adverb is obligatory in circum-adverbial constructions.

- (7) Gǒu pā *(zài) zhuōzi *(shàng). (Mandarin)
 dog lie at table on
 ‘The dog is lying on the table.’

In traditional Chinese linguistics, few analyses of circum-adverbial constructions adopt a syntactic approach. Within the Government and Binding framework, Tang (2006) proposes an analysis for the circum-adverbial constructions in Cantonese. He argues that both pre-verbal and post-verbal adverbs should form a phrase XP, which is projected based on the post-verbal adverb. The pre-verbal adverb occupies the specifier or the adjunct position of the (post)adverb phrase. For instance, the Cantonese sentence in (8) exhibits a similar pattern to the circum-adverbial constructions in (5) in Oujiang Wu. *Tim^l* ‘again’ appears in a post-verbal position while another adverb *zoi³* ‘again’ occurs in a pre-verbal position. Both the pre-verbal and the post-verbal adverbs can co-occur, as in (8c). Different from the case in Chinese Wu, the post-verbal adverb *tim^l* in Cantonese also serves to convey the speaker’s mood. As a result, both (8a) and (8c) express an imperative mood of the speaker, while (8b) lacks it due to the absence of *tim^l*.

- (8) a. Nei⁵ yam² bui¹ **tim^l**. (post-verbal)
 you drink cup again
 b. Nei⁵ **zoi³** yam² bui¹. (pre-verbal)
 you again drink cup
 c. Nei⁵ **zoi³** yam² bui¹ **tim^l**. (double-adverb)
 you again drink cup again
 ‘(Please,) you drink another cup (of tea).’

This analysis can successfully capture the fact that in some cases, the post-verbal adverb, as a head, can carry more semantic-pragmatic meaning comparing to the pre-verbal adverb. Different from Tang (2006), we take another approach in this article by examining the derivational relationship between the pre-verbal and post-verbal adverbs, especially for the first type of circum-adverbial construction in which they share the same phonetic form. Within the MP framework (see Chomsky 2000), we will examine the possibility whether the pre-verbal adverb can be derived by Internal Pair-Merge (IPM) of the post-verbal adverb.

Richards (2009) argues that Pair-Merge should also be subject to the internal and external dimensions just as Set-Merge. In addition, Internal Pair-Merge is agree-less, which can be solely triggered by an optional EPP feature. Following this idea, we can assume that the pre-verbal case (1b) is derived from (1a) through IPM of the adverb *Kua³³* ‘fast’. We first show the derivation for the post-verbal case in (1a). *Kua³³* is first-merged inside VP. The

complex verb $\widehat{te}^{hy^2}\text{-}hb^{33}$ ‘eat.PERF’ moves from V to v, as shown in (9a). The subject ji^{13} ‘s/he’ merges at the Spec vP, and the object $ja^{21}ve^{33}$ ‘dinner’ moves to the outer Spec vP, which is an intermediate landing site for A'-movement, as shown in (9b). Next, the subject ji^{13} raises to Spec TP. The Sentence-final particle (SFP) *de*, analyzed as a C head, merges with the TP, projecting a CP, which expresses an affirmative mood of the speaker. The subject ji^{13} and the object $ja^{21}ve^{33}$ are then both topicalized, as in (9c). Note that ji^{13} can also stay in Spec TP without being topicalized, as in (9d).

(9) For the post-verbal adverb case

- a. ① [_{VP} $\widehat{te}^{hy^2}\text{-}hb^{33}$ [_{VP} $\widehat{te}^{hy^2}\text{-}hb^{33}$ $ja^{21}ve^{33}$ ***kua*³³**]]
 eat-PERF dinner ast
- b. ② [_{VP} $ja^{21}ve^{33}$ [_{VP} ji^{13} [_{VP} $\widehat{te}^{hy^2}\text{-}hb^{33}$ [_{VP} $\widehat{te}^{hy^2}\text{-}hb^{33}$ $ja^{21}ve^{33}$ ***kua*³³**]]]]]
 dinner 3.SG eat-PERF fast
- c. ③ [_{Top1} ji^{13} [_{Top2} $ja^{21}ve^{33}$ [_{CP} [_{TP} ji^{13} [_{VP} $ja^{21}ve^{33}$ [_{VP} ji^{13} [_{VP} $\widehat{te}^{hy^2}\text{-}hb^{33}$ [_{VP} $\widehat{te}^{hy^2}\text{-}hb^{33}$ $ja^{21}ve^{33}$ ***kua*³³**]]]]]]] *de*]]]
 3.SG dinner eat-PERF fast DE
- d. ④ [_{Top} $ja^{21}ve^{33}$ [_{CP} [_{TP} ji^{13} [_{VP} $ja^{21}ve^{33}$ [_{VP} ji^{13} [_{VP} $\widehat{te}^{hy^2}\text{-}hb^{33}$ [_{VP} $\widehat{te}^{hy^2}\text{-}hb^{33}$ $ja^{21}ve^{33}$ ***kua*³³**]]]]]]] *de*]]]
 dinner 3.SG eat-PERF fast DE
- ‘S/he is about to finish the dinner.’

As suggested in Richards (2009), IPM takes place after Internal Set-Merge. At this point, the adverb *kua*³³ ‘fast’ undergoes IPM to modify the verb phrase in vP, satisfying the EPP feature on v if it has. Thus, the pre-verbal adverb case in (1b) is derived, as shown in (10). If the lower copy of *kua*³³ is not deleted, we will have (1c) representing the double-adverb case, as in (11).

(10) For the pre-verbal adverb case

- [_{Top1} ji^{13} [_{Top2} $ja^{21}ve^{33}$ [_{CP} [_{TP} ji^{13} [_{VP} $ja^{21}ve^{33}$ [_{VP} ji^{13} [_{VP} ***kua*³³** $\widehat{te}^{hy^2}\text{-}hb^{33}$ [_{VP} $\widehat{te}^{hy^2}\text{-}hb^{33}$ $ja^{21}ve^{33}$ ***kua*³³**]]]]]]] *de*]]]
 3.SG dinner fast eat-PERF
 DE
- ‘S/he is about to finish the dinner.’

(11) For the double-adverb case

- [_{Top1} ji^{13} [_{Top2} $ja^{21}ve^{33}$ [_{CP} [_{TP} ji^{13} [_{VP} $ja^{21}ve^{33}$ [_{VP} ji^{13} [_{VP} ***kua*³³** $\widehat{te}^{hy^2}\text{-}hb^{33}$ [_{VP} $\widehat{te}^{hy^2}\text{-}hb^{33}$ $ja^{21}ve^{33}$ ***kua*³³**]]]]]]] *de*]]]
 3.SG dinner fast eat-PERF
 fast DE
- ‘S/he is about to finish the dinner.’

The IPM of the adverb is semantically vacuous and seems to be an instance of optional movement. However, the trigger for the IPM is not clear in that the EPP feature in the v head should already be satisfied by the A'-movement of the object $ja^{21}ve^{33}$ ‘dinner’. Even if this

operation is allowed, it is still unclear why *kua*³³ ‘fast’ resulted from the IPM can land in a syntactic position higher than the verb *te^{hy2}-hv³³* ‘eat.PERF’ given that originally it occupies a syntactic position lower than the complex verb. Also, it is not clear why the lower copy of *kua*³³ is sometimes kept but sometimes deleted, which makes grammar rather random. In addition, adverbs are generally considered to occupy a stable position (see Pollock 1989, Cinque 1999) and are often used as a diagnostic test for verb movement (see Delfitto 2006).

If IPM fails in capturing the derivation for the pre-verbal adverb and the double-adverb cases, the question now is how to derive (1b) and (1c) if the adverb *kua*³³ ‘fast’ does not move. An alternative way is to make the complex verb *te^{hy2}-hv³³* ‘eat.PERF’ undergo rightward movement (see Wilder 1995, Sabbagh 2007) to the right of the adverb *kua*³³, on the basis of the derivation in (9), as shown in (12).

- (12) Derivation for the pre-verbal case
 [Top1 ji¹³ [Top2 ja^{21ve33} [CP [TP ji¹³ [VP ja^{21ve33} [VP ji¹³ [VP v-te^{hy2}-hv³³ [VP te^{hy2}-hv³³
 3.SG dinner
 ja^{21ve33} **kua**³³ te^{hy2}-hv³³]]]]]]] de]]]
 fast eat-PERF DE
 ‘S/he is about to finish the dinner.’

However, it is hard to determine whether *te^{hy2}-hv³³* ‘eat.PERF’ directly moves rightward or raises to v first and then moves to the right of the VP. Given that the elements undergoing rightward movement are often phrases, it will be problematic to assume that a verb can move rightward. Importantly, it cannot derive the double-adverb case at any rate because only one first-merged *kua*³³ ‘fast’ is present in the sentence. The above analysis suggests that no derivational relationship seems to exist between the pre-verbal and the post-verbal adverbs for the case in which they are identical in phonetic forms. As for the type of circum-adverbial construction in which the two adverbs have distinct phonetic forms, it is implausible to suggest that the pre-verbal and the post-verbal adverbs possess any derivational relationship given their distinct phonetic forms. In addition, it is doubtful for them to have any dependency relation as both can be optional. One may argue that the pre-verbal and the post-verbal adverbs are two distinct lexical items, which are merged separately in the structure during the derivation. Then, one of them undergoes PF-deletion, resulting in either the post-verbal or the pre-verbal case. The double-adverb case is derived if no PF-deletion takes place. However, this would just shift the tension to the PF side without a clear motivation.

To summarize, in this section, we demonstrate that all the potentially possible operations in deriving the three targeted cases cannot work without additional assumptions. Therefore, the pre-verbal and the post-verbal adverbs may not have a derivational or dependency relationship. Next, we probe on to our analysis to the circum-adverbial constructions in which we argue that both adverbs are first-merged independently as a result of language contact historically.

4. PSEUDO-OPTIONALITY RESULTED FROM LANGUAGE CONTACT

As circum-adverbial constructions do not necessarily involve any derivational or dependency relationship between the two adverbs, a natural assumption is that both the pre-

verbal and the post-verbal adverbs are first-merged independently. This is probably due to the microcontact between Wu dialect and Mandarin. The notion microcontact refers to the contact between two minimally different languages (see D’Alessandro 2021, Andriani et al., 2022a, Andriani *et al.*, 2022b). As a variety of Chinese, Wu does not differ to a large extent with Mandarin Chinese at the level of syntax. Especially in the current case, the only difference between the adverb *kuài* ‘fast’ in Mandarin and *kua*³³ ‘fast’ in Wu lies in their first-merge positions, post-verbal in Wu and pre-verbal in Mandarin. Before discussing the contact between Wu and Mandarin, a brief detour is in order to examine the cases where adverbs appear in the post-verbal position in Mandarin.

VO languages are overwhelmingly VOX (verb-object-oblique) as summarized in Dryer and Gensler (2013). Despite being a VO language, Mandarin represents a rare case of XVO (oblique-verb-object) type of languages⁷. Regarding the word order, adverbs behave on a par with oblique phrases when modifying verbs in Mandarin. That is, adverbs normally occur in pre-verbal positions. As shown in (13a), the adverb *jūrán* ‘unexpectedly’ precedes the verb *qù* ‘go’, expressing a surprising attitude of the speaker about the fact that ‘s/he went to France’. However, Mandarin exhibits instances where adverbs follow the verb. As in (13b), the adverb *jūrán* occurs after the verb phrase, in the sentence final position.

- (13) a. Tā jūrán qù fǎguó le!? (pre-verbal)
 3.SG unexpectedly go France LE
 b. Tā qù fǎguó le, jūrán!? (post-verbal)
 3.SG go France LE unexpectedly
 ‘Unexpectedly, s/he went to France.’

We argue that the adverb *jūrán* ‘unexpectedly’ in (13b) does not amount to a real post-verbal adverb like *kua*³³ ‘fast’ and *ɛi*¹¹ ‘first’ in Wu. Upon a closer examination, adverbs like *jūrán* occurring in the post-verbal position cannot be embedded. When (13a) is embedded, the sentence is degraded because *jūrán* expresses the subjectivity of the speaker, which is difficult for it to be embedded, as in (14a). Nevertheless, when the adverb *jūrán* occurs in the post-verbal position, (13b) can never be embedded, as illustrated in (14b). While in Wu dialect, the post-verbal adverb can perfectly occur in embedded clauses, as shown earlier in (4).

- (14) a. ?[[Tā jūrán qù fǎguó le] de] xiāoxi rang wǒ hěn jīngyà.
 3.SG unexpectedly go France LE DE news make I.SG very surprise
 b. *[[Tā qù fǎguó le, jūrán] de] xiāoxi rang wǒ hěn jīngyà.
 3.SG go France LE unexpectedly DE news make I.SG very surprise
 ‘The news that unexpectedly, s/he went to France make me very surprised.’

Another significant difference is that in Mandarin, an adverb cannot occur between the object and the sentence-final particle *le*. Whereas in Wu dialect, the relevant sentence is acceptable, although slightly degraded, as demonstrated by the contrast between (15a) and (15b).

- (15) a. *Tā qù fǎguó jūrán le!? (Mandarin)
 3.SG go France unexpectedly LE

⁷ Reported in Dryer and Gensler (2013), there are 210 representations of VOX type in VO languages.

- ‘Unexpectedly, s/he went to France.’
 b. ?Ji¹³ tɛ^{hy2}-hɔ³³ ja²¹ve³³ kua³³ de. (Chinese Wu)
 3.SG eat-PERF dinner fast DE
 ‘S/he is about to finish the dinner.’

Therefore, although on the surface, adverbs in Mandarin may occur post-verbally in some cases, they are not real post-verbal adverbs different from their counterparts in Wu dialect. Although most adverbs in Wu dialect occur pre-verbally, several post-verbal adverbs still exist. Given the distinction between the adverb placement in Mandarin and Wu, we can now probe into the discussion on how these two varieties impact each other at a micro-level.

Consider first the situation where the pre-verbal and the post-verbal adverbs share an identical phonetic form, as observed in (1) and (5). In Mandarin, the adverb *kuài* ‘fast’ and *èi¹¹* ‘first’ are first-merged in a pre-verbal position. In Wu dialect, the adverb *kua³³* and *èi¹¹* are first-merged in a post-verbal position. Affected by Mandarin, *kua³³* and *èi¹¹* can also be first-merged in the pre-verbal position in Wu dialect. Theoretically, two possibilities exist, either it is a case of lexical borrowing or a case of functional transfer.⁸

In the case of lexical borrowing, the pre-verbal lexical items, for instance the adverbs *kua³³* ‘fast’ and *èi¹¹* ‘first’ in Wu, are borrowed from Mandarin, different from their counterparts in Mandarin only in their first-merge positions. In this situation, two distinct lexical items, for instance the post-verbal adverb *kua³³* and the pre-verbal adverb *kua³³*, co-exist in Wu dialect, which are considered as two independent lexical items. In the case of functional transfer, only one lexical item is present, which is the original post-verbal adverb *kua³³* in Wu dialect. As a result of functional transfer from Mandarin, the first-merge position of the original adverb is no longer rigidly post-verbal but has been shifted to both the pre-verbal and the post-verbal positions. Notably, no derivational relationship exists between the pre-verbal and the post-verbal adverbs as they are independently merged into different positions in the structure during the derivation. Both possibilities can successfully derive the three types of constructions, pre-verbal, post-verbal and double-adverb. Importantly, the first-merge approach is consistent with the Strong Minimalist Thesis (see Chomsky 2008) as no additional operation takes place during the derivation.

At this point, it seems difficult to determine which types of transfer are at work here. However, a closer investigation on the second type of circum-adverbial construction, where the pre-verbal and the post-verbal adverb differ in their phonetic forms, such as in (6), reveals that it is the lexical item that is transferred. If functional transfer were at work here, we would expect that the post-verbal *gu²* ‘again’ in Wu dialect, repeated as (16a) for (6a), can also be first-merged in the pre-verbal position, while this is not the case, as demonstrated in (16b). Crucially, the double-adverb construction straightforwardly shows that these are two distinct lexical items, as illustrated in (16c=6c).

- (16) a. Gə.də³³ tɿ²¹ zo⁴³ liaŋ³³bie²¹ gu². (post-verbal)

⁸ According to Heine and Kuteva (2005), there are five types of transfer: (a) Form, that is, sounds or combinations of sounds; (b) Meanings (including grammatical meanings or functions) or combinations of meanings; (c) Form–meaning units or combinations of form–meaning units; (d) Syntactic relations, that is, the order of meaningful elements; (e) Any combination of (a) through (d). “Lexical borrowing” is considered as a transfer of linguistic form–meaning units. For our purposes here, lexical borrowing would refer to the transfer of lexical items while functional transfer refers to the transfer of abstract properties, i.e., the first-merge position.

- | | | | | | | |
|----|----------------------|-------------------|---|------------------|--|---|
| | this.CL | question | do | two.CL | again | |
| b. | *Gə.də ³³ | tʃi ²¹ | gu ² | zo ⁴³ | liɑŋ ³³ bie ²¹ . | (pre-verbal) |
| | this.CL | question | again | do | two.CL | |
| c. | Gə.də ³³ | tʃi ²¹ | zɛ ³³ /zɔŋ ²¹ ɛin ³³ | zo ⁴³ | liɑŋ ³³ bie ²¹ | gu ² . (double-adverb) |
| | this.CL | question | again/aneu | do | two.CL | again |
| | | | | | | ‘(You) try to solve this problem again, for twice already!’ |

It is worthwhile noting that different from a regular case of borrowing, the circum-adverbial construction also demonstrates a case of replication in the sense of Heine and Kuteva (2005: 7), where speakers create a new use pattern or category in the replica language based on the model of another language. Syntactically, the double-adverb construction is a new pattern created in Wu, which does not exist in the model language, i.e., Mandarin. Phonetically, the corresponding pre-verbal adverbs in Mandarin for *kua*³³ ‘fast’, *zè*³³ ‘again’, *zongxin*³³ ‘aneu’ in Wu are *kuài* ‘fast’, *zài* ‘again’ and *chóngxīn* ‘aneu’. For the first case, the pre-verbal adverb *kuài* ‘fast’ in Mandarin is transferred to Wu. In the process of contact-induced change, *kuài* takes the sound form of *kua*³³ as they are phonetically similar. Consequently, a new lexical item, the pre-verbal adverb *kua*³³, is generated in Wu, which only differs from the post-verbal adverb *kua*³³ in Wu in the first-merge positions. This results in an illusion of the existence of a derivational relationship between them. As for the second case, the phonetic form of the pre-verbal adverb *zài* ‘again’ or of *chóngxīn* ‘aneu’ in Mandarin is completely different from the post-verbal adverb *gu*² ‘again’ in Wu. Therefore, when *zài* ‘again’ and *chóngxīn* ‘aneu’ are transferred from Mandarin to Wu, they cannot simply take the phonetic form of *gu*². However, they are still nativized to conform to the sound system of Wu. As a result, two new lexical items, the pre-verbal adverb *zè*³³ and *zongxin*³³ are created, which differ not only in the first-merge positions but also in the phonetic forms in contrast to the post-verbal adverb *gu*² ‘again’.

Finally, a subtle difference exists between the two types of circum-adverbial constructions. Specifically, for the first type where the adverbs have the same phonetic form, only one pre-verbal adverb *kua*³³ is allowed. However, for the second type where the adverbs have distinct phonetic forms, two pre-verbal adverbs *zè*³³ ‘again’ and *zongxin*³³ ‘aneu’ are permitted to form the circum-adverbial constructions with the post-verbal adverb. In Mandarin, other pre-verbal adverbs like *mǎshàng* ‘right away’ can also be used in the context of (2), as shown in (17a), which have the same interpretation (see 17b=2b). However, the corresponding lexical item *mǎshàng*²¹ ‘right away’ in Wu for *mǎshàng* in Mandarin cannot form a double-adverb construction with the post-verbal adverb *kua*³³ ‘fast’, as shown in (17c).

- | | | | | | | | |
|------|----|-------------------|--|--|-----------------------------------|------------------------------|---------------------------------------|
| (17) | a. | Tā | mǎshàng | chī-hǎo | wǎnfàn | le. | (Mandarin) |
| | | 3.SG | right.away | eat-Perf | dinner | LE | |
| | b. | ?Ji ¹³ | kua ³³ | tɛ ^h y ² -hp ³³ | ja ²¹ ve ³³ | de. | (Chinese Wu) |
| | | 3.SG | fast | eat-Perf | dinner | DE | |
| | c. | *Ji ¹³ | ma ³³ - zɑŋ ²¹ | tɛ ^h y ² -hp ³³ | ja ²¹ ve ³³ | kua ³³ de. | (Chinese Wu) |
| | | 3.SG | right.away | eat-Perf | dinner | fast DE | |
| | | | | | | | ‘S/he is about to finish the dinner.’ |

Compared with the pre-verbal *mǎshàng* ‘right away’, the pre-verbal *kuài* ‘fast’ in Mandarin is a better match for the post-verbal *kua*³³ ‘fast’ in Wu in terms of semantics and phonetics, which makes it a more suitable candidate to form circum-adverbial constructions. Nevertheless, neither the pre-verbal adverb *zài* ‘again’ nor *chóngxīn* ‘aneu’ in Mandarin matches the phonetic form of the post-verbal adverb *gu*² ‘again’ in Wu. Consequently, both

zài ‘again’ and *chóngxīn* ‘anew’ are equally possible candidates to form circum-adverbials.

Having figured out the contact mechanism theoretically, we now present the argument in favour of the first-merge approach. The direct evidence for the contact-induced transfer lies in the number of post-verbal adverbs existing in Wu dialect. Recall that Chinese is comprised of seven major varieties. For our purpose here, three major varieties that are adjacent to Chinese Wu spoken areas are taken into consideration, which are Mandarin, Gan and Min. As mentioned earlier, Mandarin Chinese does not possess any post-verbal adverbs. However, Chinese Min and Chinese Gan do have post-verbal adverbs as reported in Lin (2002) and Li (2020)⁹. Importantly, Mandarin is the official language in China, which has been promoted nationwide since 1982¹⁰. Therefore, Wu is most likely to undergo micro-contact with Mandarin Chinese.

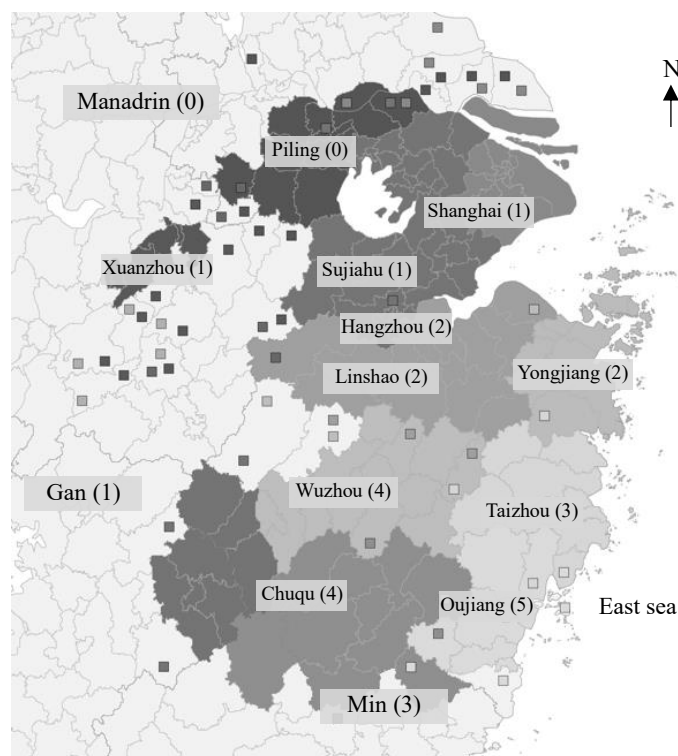


Fig. 1: Varieties of Chinese Wu.¹¹ The number inside the brackets represents

⁹ The cause of the emergence of post-verbal adverbs in Min Chinese is beyond the scope of the current paper. According to Lin (2002), the occurrence of post-verbal adverbs in Min Chinese are likely due to the influence of Chinese Wu.

¹⁰ For a history of promoting Mandarin as the official language in China, please refer the link: http://www.moe.gov.cn/s78/A18/s8357/moe_808/tnull_17136.html.

¹¹ The map is revised based on *Language atlas of China* (2012), 2nd edition, Beijing: The Commercial Press. Source: https://commons.wikimedia.org/wiki/File:Dialects_of_the_Wu_language.png. The small squares which are scattered in the map are Wu dialects that are spoken outside the main Wu dialect areas, which are probably dialect islands resulted from immigration.

the number of post-verbal adverbs in that dialect.

Chinese Wu comprises of six sub-varieties, Taihu, Oujiang, Taizhou, Xuanzhou, Wuzhou and Chuqu, as shown in the Fig. 1¹². The regions where Wu dialect is spoken are characterized by grey areas. The quantity of post-verbal adverbs present in each sub-variety is denoted within brackets¹³. As a general pattern, the number of these adverbs increases from the north-western regions to the south-eastern regions. The Piling Wu sub-variety, which is situated in the north-western area of the Wu dialect spoken regions, has no post-verbal adverbs, probably due to micro-contact with Mandarin Chinese. On the contrary, the Oujiang Wu sub-variety, which is in the south-eastern area, has five post-verbal adverbs as it is less likely to undergo contact with Mandarin Chinese compared with other sub-varieties in the north-western areas. As this generalization predicts, the southernmost region in China may retain more post-verbal adverbs. This is exactly the case for Cantonese, which has almost an equal number of pre-verbal adverbials and post-verbal adverbs (see Shi 1995, Tang 2006), as it is spoken in the southern China, far away from the region where Mandarin is spoken.

Nevertheless, a natural assumption is that if historically, no other post-verbal adverbs exist in the northern region of Chinese Wu, then no contact-induced change would take place on the usage of post-verbal adverbs. For instance, the reason why Piling Wu does not possess any post-verbal adverbs nowadays is that originally no such adverbs exist in the history but not that the post-verbal adverbs diminished due to the contact with Mandarin.

Evidence from Shanghai Wu demonstrates that more post-verbal adverbs did exist in the past. As reported in Lin (2013) and Wang and Jiang (2020), three post-verbal adverbs were present in Shanghai Wu, *kua*³³ ‘fast’, *gu*² ‘again’ and *tie*²¹ ‘more’ hundred years ago. However, only *kua*³³ is retained in contemporary Shanghai Wu. The diminishment of the other two post-verbal adverbs is very likely due to the contact between Wu and Mandarin. Unfortunately, due to the scarcity of written documents for Wu throughout history, it is difficult to identify a diachronic path for the post-verbal adverbs for each sub-variety in Chinese Wu. However, the case reported in Shanghai Wu can serve as a piece of evidence to illustrate that in earlier stages, more post-verbal adverbs might exist in other north-western sub-varieties of Chinese Wu as well, while some of which are faded away due to the contact between Wu and Mandarin.

As an interim summary, the aforementioned discussion demonstrates that both theoretically and empirically, the pre-verbal and the post-verbal adverbs do not have any derivational relation but are first-merged independently. The targeted case of pseudo-optionality actually results from language contact between Wu and Mandarin.

Evidence in favour of contact-induced optionality is also found in other syntactic domains¹⁴. A similar case exists in Zhuang, which belongs to the Kra-Dai language family and is spoken in the south of China. Observed by Yan (2018), Chongzuo-zuozhou dialect, a sub-variety of Zhuang, allows oblique phrases such as *ju*⁵*θuyn*² ‘at home’ either in a pre-verbal or in a post-verbal position optionally. The basic position of locative PPs in Zhuang is post-verbal. As shown in (18a), *ju*⁵*θuyn*² ‘at home’ occurs after the VP *kin*¹*a:m*¹ ‘eat rice’. Very probably influenced by Mandarin, *ju*⁵*θuyn*² can also precede *kin*¹*a:m*¹, as shown in (18b). Importantly, (18b) is much preferable than (18a) in Zhuang, which may indicate that

¹² Among the six sub-varieties of Wu dialect, Taihu is the biggest sub-variety, which can be further categorized into six subareas, namely, Piling, Xuangzhou, Shanghai, Sujiahu, Hangzhou and Linshao.

¹³ The number of post-verbal adverbs in Chinese Wu is taken from Wang and Jiang (2020).

¹⁴ Contact-induced vanishment of optionality is also discussed in Cardinaletti and Giusti (2018) and Molinari (2022) for determiners in Italian.

constructions generated due to contact have outweighed the original structure.

- (18) a. Ku¹ kin¹ a:m¹ ju⁵ θuŋ². (post-verbal)
 I eat rice at home
 b. Ku¹ ju⁵ θuŋ² kin¹ a:m¹. (pre-verbal)
 I at home eat rice
 ‘I eat rice at home.’

Another instance comes from Hainan Min, a sub-variety of Chinese Min. In Chinese Min, the base position of oblique phrases is pre-verbal. However, in Hainan Min, it is found that oblique phrases can occur both pre-verbally and post-verbally (see Zeng 2023). As shown in (19), the locative PP *du³³baŋ²¹le³³* ‘in the room’ can either precede the verb *hi²¹* ‘cry’ as in (19a) or follow the verb as in (19b).

- (19) a. ʔi²⁴ du³³ baŋ²¹ le³³ dʊa²⁴ tia²⁴ hi²¹. (pre-verbal)
 3.SG at room in big sound cry
 b. ʔi²⁴ dʊa²⁴ tia²⁴ hi²¹ du³³ baŋ²¹ le³³. (post-verbal)
 3.SG big sound cry at room in
 ‘S/he cry out loud in the room.’

According to Norquest (2007), Hlai, which also belongs to the Kra-Dai language family, is the largest minority language spoken in Hainan. Patterning with other Kra-Dai languages, oblique phrases also appear in the post-verbal position in Hlai. Therefore, it is very likely that Hainan Min undergoes contact with Hlai, as argued by Zeng (2023), which results in the use of post-verbal oblique phrases in Hainan Min.

The immigrant languages demonstrate similar phenomena as well, for instance, the optional usage between finite and non-finite subordinate clauses in Dutch Turkish (see Valk and Backus 2013). Subordination is predominantly non-finite in Turkish (see Göksel and Kerslake 2005). However, the Turkish immigrants in the Netherlands do not have such a preference on non-finite expressions, contrary to their homeland monolingual speakers. In an elicited imitation task, the Dutch Turkish produces a nearly equal number of finite (48%) and non-finite (52%) subordinate clauses whereas the Turkish monolinguals clearly prefer the non-finite type (73%) over the finite type (27%). Valk and Backus (2013) conclude that this change is due to the contact between Dutch and Turkish in that subordination in Dutch only appears in finite form for the corresponding sentences in Turkish.

To summarize, in this section, we demonstrate that pre-verbal and post-verbal adverbs in Wu are both first-merged independently in the structure. The targeted apparent optional constructions result from the contact between Wu and Mandarin. As the model language, if the influence of Mandarin continues, the post-verbal adverbs in Wu may fade away in the end, which is exactly the case for the north-western sub-varieties in Wu. Furthermore, the current study suggests that optional constructions are one of the plausible outputs when two minimally different grammars are in contact.

5. CONCLUSION

The notion optionality becomes problematic in the Minimalist Program (Chomsky 1995) as optional operations do not conform to the Strong Minimalist Thesis (Chomsky

2008). However, the fact that optional constructions do exist in natural languages poses problems for MP. The current study discusses a case of pseudo-optionality in Chinese Wu where certain adverbs can optionally appear in both the pre-verbal position and the post-verbal position. We argue that no derivational relationship exists between the two adverbs and that these optional constructions actually result from language contact between Chinese Wu and Mandarin Chinese, which offers a possible account for the existence of some optional structures in the framework of the MP.

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