THE INTERVENTION EFFECT OF NEGATION ON WH-ADVERBIALS IN LATE ARCHAIC CHINESE

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Abstract

This paper investigates the Intervention Effect of negation in Late Archaic Chinese (5th-3rd c BC; ‘LAC’). Wh-complements of adverbials must raise out of the head-initial PPs to a position between TP and vP due to obligatory wh-preposing, generating the reverted order wh-P. Fronted wh-constituents may target one of the two focalised positions in the medial domain, and the distributional asymmetry of wh-phrases is correlated with their base positions. The lower focused position below negation accommodates preposed wh-adverbials base-generated between negation and vP, while the higher focus position above negation is expected to exclusively permit wh-constituents base-generated above negation, viz. wh-complements of high PPs. However, when a negator is present and c-commands a wh-adverbial that is supposed to target the low focus position, it will trigger wh-movement to the high focused position due to the Intervention Effect of negation (Beck 1996, Beck and Kim 1997, Kim 2002, 2006).

1. Introduction

The blocking effect in the sense of Beck (1996) and Beck and Kim (1997) refers to the fact that a barrier may not intervene between a question existential operator (Q-operator) and a function variable bound by that Q-operator. Such a blocking effect applies to wh-in-situ, the stranded restriction of wh-constituents moving overtly, as well as wh-scope marking structures. Kim (2002, 2006) analyses the blocking effect on LF (covert) dependency of wh-in-situ as a function variable bound by a Q-operator (termed by Hagstrom (1998) and Pesetsky (1999) as the Intervention Effect), and proposes that it is a focus phrase that induces an Intervention Effect in modern Mandarin, instead of negation or quantifiers in general. Additionally, there is a repair strategy to circumvent the Intervention Effect in modern Mandarin by means of raising wh-in-situ to a position preceding the focus-induced barrier, as exemplified by (1).

(1) a. ?*Zhiyou Lili kan-le na-ben shu? (Kim 2002: 626)
    only Lili read-ASP which-CL book

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b. Na-ben shu zhiyou Lili kan-le?
   which-CL book only Lili read-ASP
   ‘Which book did only Lili read?’

Contrary to this, quantifiers or negation do not show the Intervention Effect. Consequently, a quantified structure or a negator can take a position between a Q-operator and a wh-in-situ bound by this Q-operator, as in (2a/b/c) that contain an ordinary quantifier NP, a frequency adverbal and a negator respectively (Kim 2002).

(2) a. Meigeren dou mai-le shenme?
    everyone all buy-ASP what
    ‘What did everyone buy?’

b. Zhangsan changchang mai shenme?
    Zhangsan often buy what
    ‘What does Zhangsan often buy?’

c. Zhangsan bu xiang mai shenme?
    Zhangsan not want buy what
    ‘What doesn’t Zhangsan want to buy?’

In this paper I investigate the Intervention Effect of negation in Late Archaic Chinese (LAC) that refers to Archaic Chinese during the Warring States period (5th-3rd c BC). Chinese has always been an SVO language from the earliest textual sources viz. the Shang inscriptions (14th-11th c BC) to modern Mandarin (Peyraube 1996, Djamouri 2001, Djamouri and Paul 2009, Meisterernst 2010, Djamouri et al 2012), and texts in LAC display predominant SVO word order. However, there are contexts in which nominal and pronominal object DPs appear preverbally in the ‘low IP area’ (dubbed by Paul (2005)), as shown in (3a-b), which involve nominal and pronominal non-wh-objects respectively. ZHI in (3) functions as an optional fronting marker accompanying preposed DPs. Various observations support the view that object preposing in LAC is derived, and should not be presumed as the vestige of basic OV word order.

(3) a. 吾百姓之不圖
    wu baixing, zhi bu [VP tu ti]
    I common.people ZHI not care.about
    ‘I did not care about common people’

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2 I follow Wang (1958), Zhou (1963) and Peyraube (2003) in terming Classical Chinese during the Warring States period as Late Archaic Chinese (LAC), which exhibits distinctive characteristics. I also agree that around the Han Dynasty (2nd c BC-2nd c AD) after the Warring States period, there was a transitional period with multiple typological changes (Xu 2006).

3 The primary sources of LAC examples in this paper are Peking University corpus, Academia Sinica electronic database, and the Sheffield Corpus of Chinese. The selected texts of these corpora are all received, representing a wide range of writing found in various time periods. In LAC period, the corpora cover more than twenty key books written by different authors.
b. 吾斯之未能信。

Wu si zi wei neng [vp xin ti].
I this ZHI not yet can be confident
‘I have not been able to be confident in this yet.’

Furthermore, if the objects or other VP-internal constituents are wh-DPs, they normally front to a position below the subject and above vP, because LAC was a wh-fronting language, and wh-in-situ did not emerge in Chinese until the Han Dynasty (2nd c BC-2nd c AD) (Feng 1996, Aldridge 2010). Examples (4a) and (4b) show wh-DPs functioning as a direct object and a locative element respectively, both of which raise to a preverbal position in LAC.

(4) a. 宋何罪之有?  
Song [he zui], zhi [vp you ti]?
Song what in ZHI have
‘What sin does the State of Song have?’

b. 其子焉往?
Qi zi yan, [vp wang ti]?
3 GEN son where go
‘Where will their sons go?’

I analyse wh-fronting in LAC, and propose that the Intervention Effect of negation is present in LAC. This paper is organised into two main sections. In Section 2 I introduce wh-fronting in LAC, including wh-complement of reason PPs and other adjunct adverbials. In Section 3 I examine the Intervention Effect on wh-adverbials and propose that negation exhibits such a blocking effect.

2. Wh-Fronting

Since LAC was a wh-fronting language, wh-complements of adverbials undergo obligatory movement and front out of the head-initial PP, generating the derived wh-P order. I explore the preposing of wh-adverbials in LAC, and propose that wh-phrases front to focalised positions in the ‘low IP area’. Wh-complements of ‘high’ adverbial PPs ‘why’ raise to a high focus above negation, yet wh-complements of other adjunct adverbials target a low focus position intervening between negation and vP.

2.1. Wh-Complements of Reason Adverbials

Wh-complements of reason adverbials undergo obligatory movement. In (5), a simplex wh-complement 何 he fronts out of a head-initial PP 為何 wei he ‘for what’ that functions as an adverbial of reason above negation, generating the inverted wh-P order.

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4 I argue that such inverse ordering is generated via separate movement of wh and the preposition, rather than inversion with PP, mere wh-fronting or pied-piping. See Wang (2013) for detailed discussion.
(5) a. 吾何為不增？ (Guoyu)
    Wu he j wei [pp ti tj] bu [vp zeng]?
    I what for not enhance
    ‘For what do I not enhance (it)?’

b. 吾何為獨不然？ (Mencius)
    Wu he j wei [pp ti tj] du bu ran?
    I what for alone not correct
    ‘For what am I alone not correct?’

The base position of ‘high’ reason adverbials in LAC is above negation, hence above vP, and the reversed order wh-P indicates that movement has happened. Therefore, I suggest that wh-complements of reason adverbials are base-generated above negation and move to an even higher position. In LAC, non-D-linked wh-constituents consistently display focus properties, so the landing site for adverbials of reason should be a focalised position, referred to as the High focus position.

Given the fact that reason adverbials are the only ‘high’ adverbials in LAC, the High focus position might be expected to allow reason wh-adverbials exclusively.

2.2. Wh-Complement of Other Adjunct Adverbials

A wh-complement of an adjunct PP also fronts to a preverbal position, triggered by obligatory wh-preposing. Some adjunct adverbials can be base-generated in a position between negation and vP, yet others are base-generated in a postverbal position. This observation coincides with the generalisation from Djamouri et al. (2012) that adjunct PPs in Classical Chinese may occur in a pre- or postverbal position. Wh-adverbials base-generated between negation and vP or postverbally always undergo movement and land in a focused position intervening between negation and vP.

First, the wh-complement of an adverbial of instrument undergoes obligatory wh-movement. In (6a), the same wh-complement 何 he as that in (5) raises out of a head-initial adjunct PP 以何 yi he ‘with what’ to the medial domain between TP and vP. Again, the reversed wh-P order proves that movement has occurred. As can be seen from a canonical example involving a non-wh-PP, instrumental adverbials are base-generated lower than negation and higher than vP (6b).

(6) a. 將何以守國？ (Guoyu)
    Jiang he j yi [pp ti tj] [vp shou guo]?
    FUT what with guard state
    ‘With what will (he) guard the state?’

5 In addition to being a fronting marker (see (3) and (4a)), the same graph 之 zhi can also act as a third person accusative pronoun.
Second, a manner adverbial is also base-generated preverbally, with its \textit{wh}-complement undergoing obligatory movement. Analogous to instrumental adverbials, moved manner adverbials can also be diagnosed by the inverted PP \textit{何以} (7a). (7b) shows a canonical example involving the basic order Neg-PP-VP.

(7) a. 子 何 以 知 之? \hspace{1cm} (Zuo zhuan)
\text{Zi he yi [PP yi ti] [VP zhi zhi]?
you what with know 3.OBJ}
‘How do you know it?’

b. 不 以 其 道 得 之 \hspace{1cm} (Analects)
\text{bu [PP yi qi dao] [VP de zhi]
not with 3.GEN means obtain 3.OBJ}
‘obtain them not by their means’

Third, the base position of source adverbials can be postverbal, and the \textit{wh}-element moves from the postverbal position to a preverbal position triggered by obligatory \textit{wh}-preposing, as in (8a). I assume that the source adverbial in (8a) involves an empty preposition \textit{于} ‘from’.

6 A supporting example for this view is (8b) where a question and its answer demonstrate structural similarity. As can be seen from the answer, source information is situated after the verb. So it is safe to assume that in the default, unmarked order, the \textit{wh}-word \textit{恶} \textit{wu} ‘where’ concerning the source information in the question should also appear after the verb.

(8) a. 仲尼 焉 学?
\text{Zhongni yan [VP xue [PP ti]]?
Zhongni where study}
‘(From) where does Zhongni study?’

\begin{footnote}{6}{The unmarked counterpart of (8a) is in (i) where the source PP headed by \textit{于} \textit{yu} is base-generated postverbally. This instance coincides with Peyraube’s (1997) generalisation that \textit{于} \textit{yu} is a preposition with a relatively rigid postverbal position.}

(i) 且 子 獨 不 閱 夫 壽陵 餘子 之 學 于 邯 鄲 悪?
\text{Qie zi du bu wen fu Shouling yuzi zhi [VP xue [PP yu Handan]] yu?
CONJ you alone not hear DET Shouling youth ZHI learn from Handan Q}
‘Besides, did you alone not hear of that youth from Shouling who learned (the manner of walking) from Handan?’
\text{(Zhuangzi)}
Fourth, when locative *wh*-adverbials are right-adjoined to VP, they front to a preverbal position triggered by obligatory *wh*-fronting. As suggested by Peyraube (1996), locative PPs are predominantly postverbal in Archaic Chinese. Example (9) contains a question and answer pair. Since in the answer the locative PP (also involving a null preposition) follows the VP, it is natural to posit that the *wh*-PP in the question is also base-generated postverably, and the surface order *wh*-P-VP is derived from *wh*-movement and P movement.

(9) 惡乎用之？用之社也。
    Wu jihu [VP yang zhi [pp t_t]]? [VP Yong zhi [pp she]] ye.
    where in use 3.OBJ use 3.OBJ shrine DECL
    ‘In where (did he) use him? (He) used him (in) the shrine.’

(10) 子獨不聞涸澤之蛇乎？ (Hanfeizi)
    Zi du bu [VP wen [he ze zhi she]] hu?
    You alone not hear.of dry marsh GEN snake Q
    ‘Have you alone not heard of (the parable about) snakes in a dry marsh?’

When the *wh*-complement of an adjunct PP raises to a higher position triggered by obligatory *wh*-preposing, it is still below negation, because it follows the adverb 獨 *du* ‘alone’ that always immediately precedes negation, and no element can intervene between *du* and the following negative, as in (10) (also refer to (5b) and (i)). So if a *wh*-element precedes or follows *du*, then this *wh* must precede or follow the position of negation accordingly. Therefore, *du* is a crucial diagnostic element to decide the relative order between *wh*-phrases and negation, even without the presence of a negator.

(11a) 和 (11b) illustrate manner and source PPs respectively.
(11)a. 先生 獨 何 以 說 吾 君 乎?
Xiansheng du he yi [PP ti tij][VP yue wu jun] hu?
‘sir(you) alone what with please my lord’
‘How were you alone able to please my lord?’
(Zhuangzi; Aldridge 2010:10)

b. 子 獨 惡 乎 閲 之?
Zi du wu hu [VP wen zhi [PP ti tij]]?
you alone whom from hear 3.OBJ
‘From whom did you alone hear it?’

To summarise, the High focus position above negation allows ‘high’ wh-adverbials exclusively, and the Low focus position below negation accommodates other adjunct wh-adverbials, including instrument and manner PPs base-generated between negation and vP, as well as source and locative PPs base-generated postverbally. So I conclude that for the preposing of wh-adverbials, their landing sites are correlated with and determined by their base positions, shown in the template as follows:

(12) Clausal positions of wh-fronting:
Subject > High focus position > High wh base position > Negation > du > Low focus position > Low wh base position > vP

3. The Intervention Effect of Negation

In this section, I investigate the presence of the Intervention Effect of negation on focalised wh-adverbials in the Low focus position.

3.1. Preposed Wh-Adverbials

Wh-adverbials other than reason PPs are base-generated preverbally or postverbally, and they always front to the Low focus position. So far, examples involving the Low focus position contain no negatives, and we do not expect negation to make any difference based on data in modern Mandarin. Nevertheless, such a prediction is not borne out for LAC, in that if a negative element is present and c-commands an interrogative wh-phrase, the negator will block the LF dependency of the wh-constituent, due to the Intervention Effect (Beck 1996; Beck and Kim 1997; Kim 2002, 2006). To be in a position where it can be interpreted semantically, the wh-element has to adopt a repair strategy by fronting to a position across negation, until the blocking effect is circumvented. As a consequence, the surface landing position of a wh-constituent is always above negation, corresponding to Aldridge’s (2010) generalisation that wh-words never follow negators.

Preposed wh-adverbials in the Low focus position below negation have to raise again to an operator position as their LF dependency cannot cross a negative barrier. Both source and locative PPs wh-complements are affected by the Intervention Effect of negation.
Wh-phrases functioning as source adverbials are subject to the Intervention Effect of negation. As illustrated earlier, source adverbials can be base-generated postverbally and their \textit{wh}-complements move to a position between negation and \textit{vP}, following the key diagnostic element 獨 \textit{du}, as in (13a) (= (11b)). However, in the context of negation, the \textit{wh}-adverb 焉 \textit{yan} ‘where’ in (13b) moves overtly from its postverbal base position to the High focus position across the negative. It can be seen that negation functions as a barrier for the interpretation (Q-binding) of \textit{wh}-adverbials base-generated above \textit{vP}: they would target the Low focus position if there was no Intervention Effect of negation. However, the Low focus position cannot accommodate these \textit{wh}-PPs, as it is c-commanded by the negator, parallel to the postverbal base position. So instead of raising to the Low focus position and still being c-commanded by the intervener, \textit{wh}-elements target the High focus position c-commanding the negative intervener.

\begin{align*}
\text{(13) a.} & \quad \text{子 獨 惡 乎 聞 之?} & \quad (Zhuangzi) \\
& \quad \text{Zi du wu j u, [VP wen zhi [PP t i t]]?} \\
& \quad \text{You alone whom from hear 3.OBJ} \\
& \quad \text{‘From whom did you alone hear it?’} \\
\text{b.} & \quad \text{夫子 焉 不 學?} & \quad (Zuozhuan) \\
& \quad \text{Fuzi yan bu [VP xue [PP t i]]?} \\
& \quad \text{Confucius where not study} \\
& \quad \text{‘(From) where does Confucius not study?’}
\end{align*}

Similarly, locative PPs are base-generated postverbally and their \textit{wh}-complements are expected to target a landing site between negation and \textit{vP}. However, with the presence of negation, location PPs always appear in a position preceding the negator (14). This fact also lends support to the proposal that the intervening negator blocks LF movement of a \textit{wh}-element to an operator position, so the \textit{wh}-element has to raise to a position c-commanding the negative barrier.

\begin{align*}
\text{(14) 于 何 所 不 逞 欲?} & \quad (Zuozhuan) \\
& \quad \text{Zi [he suo] bu [VP cheng yu [PP t i]]?} \\
& \quad \text{you what place not satisfy desire} \\
& \quad \text{‘(In) what place do you not satisfy desires?’}
\end{align*}

It is notable that the High focus position not only accommodates \textit{wh}-words as ‘high’ adverbials, but other non-D-linked \textit{wh}-adverbials to move to this position as well, due to the Intervention Effect of negation, as illustrated by examples (13b) and (14).

3.2. Landing Sites of \textit{Wh}-Adverbials

In terms of the landing sites of \textit{wh}-fronting, I adopt the theory that a preposed \textit{wh}-adverbal occupies a specifier position of some functional category below TP and above \textit{vP} (Paul 2002, 2005). Owing to the focalised nature of two positions for \textit{wh}-preposing, they are
termed as HighFocP and LowFocP respectively; and the optional fronting marker ZHI accompanying \(wh\)-DPs is thus a focus marker. Both the focus marker ZHI and prepositions which move out of PP target the head of these functional projections, so that is why there is complementary distribution of the focus marker ZHI and prepositions. To be more specific, the reason why the focus marker only follows a focused DP (see (3) and (4a)) but never coexists with a focused PP is because when the head node of a focus phrase (either the HighFocP or LowFocP) is occupied by a fronted preposition (see e.g. (5), (9) and (11)), there is no position for a focus marker, and vice versa (4a).

The tree diagram of (15a) (=13a)) without the Intervention Effect of negation is (15b), where the fronted \(wh\)-complement 惡 who‘whom’ occupies the specifier of the functional projection LowFocP, and the preposition 乎 ‘from’ moves to the head position.

(15)a. 子獨惡乎聞之?  
(Zhuangzi)  
You alone whom from hear 3.obj  
‘From whom did you alone hear it?’

b. TP
\[DP_{Subj} \quad T'\]
\[\triangle T \quad T'\]
\[\triangle \quad T'\]
You
AdvP
\[\quad T'\]
Adv
LowFocP
alone Spec_{LowFoc}
whom LowFoc
\[vP \quad PP\]
\[<DP_{Subj}> \quad v'\]
\[\quad vP \quad P \quad DP\]
\[<DP_{LowFoc}> \quad DP\]
\[\quad v \quad VP \quad <P_{LowFoc}> \quad DP\]
\[<hear> \quad 3.OBJ\]

With the Intervention Effect of negation, the complex \(wh\)-complement 何所 he suo ‘what place’ in (16a) (=14) moves from its postverbal base position to the specifier of
HighFocP. Since there is a null preposition, the head of HighFocP is not occupied by ZHI. The tree diagram of (16a) is (16b).

(16) a. 子何所不逞欲? (Zuozhuan)
Zi [he suo], bu cheng yu [pp ti]?
you what place not satisfy desire
‘(In) what place do you not satisfy desires?’

b. TP
  DP_{Subj} T'
  T
    HighFocP
      Spec_{HighFoc} HighFoc'
        what place HighFoc NegP
          Neg vP
            not vP PP
              <DP_{Subj}> v' P DP
                v VP DP
                  satisfy v V DP
                    <satisfy> desire

4. Conclusion

In this paper I explore the Intervention Effect of negation on wh-adverbials in LAC. Since LAC is a wh-fronting language, wh-complements of adverbials must front to a higher position in the medial domain. There are two focalised positions between TP and vP for preposed wh-constituents: the High focus position above negation is expected to exclusively accommodate wh-complements of ‘high’ reason adverbials base-generated above negation, yet the Low focus position below negation allows wh-adverbials base-generated between negation and vP or postverbally. When a negator is present and c-commands a wh-adverbial that is base-generated between negation and vP or postverbally, wh cannot land in the Low focus position c-commanded by negation, as its Q-binding would be blocked by the negative barrier. Therefore, negation triggers wh-movement to the High focus position that is expected to allow ‘high’ PPs exclusively.
Of course, there are still remaining issues for future research such as: the limited possibilities of wh-in-situ, the motivation for wh-fronting, the precise nature of the Intervention Effect for focus constructions, and the presence/absence of the Intervention Effect of negation in LAC compared to modern Mandarin.

References


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