Clause-internal Movement in Archaic and Modern Chinese

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A senior honors thesis submitted to the Department of Linguistics

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in partial fulfillment of the requirements for the degree of

Bachelor of Arts with Honors in Linguistics

December 2014
Abstract

This paper examines the clause-internal movement involving $wh$-elements in Archaic Chinese (prior to the 3rd century B.C.) and the resumptive pronoun $SUO$ in relative clauses in Modern Chinese (from 1919 onward). This paper argues for a unified structure which accounts for both types of movement. The landing site of such movement is argued to be the [Spec, $vP$] position. This paper argues that such overt movement is driven by a strong feature and targets the [Spec, $vP$] position. For the $wh$-movement, an operator base-generated at [Spec, $CP$] position unselectively binds the $wh$-variables. For the $SUO$-movement, a different operator also unselectively binds the resumptive pronoun $SUO$.

Keywords: $wh$-movement, $suo$, Phase theory, Unselective binding, Clause-internal movement
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1. Introduction

Chinese \textit{wh}-questions have been widely studied by linguists around the world. It is commonly agreed that one of the most important typological features of Chinese \textit{wh}-questions is that the \textit{wh}-elements in Chinese questions stay in their underlying positions, compared with their English counterparts which undergo movement from base positions to clause-initial positions. While languages like English are considered \textit{wh}-movement languages, languages like Chinese are described as in situ languages, as shown below.

(1)  
   a. What did he buy yesterday?
   b. When did Mary watch the movie?

(2)  
   a. 他 昨天 买了 什么?
      Ta zuotian mai-le shenme?
      ‘What did he buy yesterday?’
   b. 玛丽 什么 时候 看了 电影?
      Mali shenme shihou kan-le dianying?
      ‘When/What time did Mali watch the movie?’

Chinese, however, has a history of more than four thousand years, and it is imprecise to overgeneralize that Chinese has always been a \textit{wh}-in-situ language at any historical stage. Consider, for example, the following sentences from Archaic Chinese and their modern counterparts\textsuperscript{1}.

(3)  
   \textbf{AC:} 吾 谁 欺? 欺 天 乎?
      Wu shei qi? Qi tian hu?
      ‘Whom do I deceive? Do I deceive Heaven?’
   \textbf{MC:} 我 欺骗 谁? 欺骗 上天 吗?

\textsuperscript{1} In the following examples, AC stands for “Archaic Chinese” and MC stands for “Modern Chinese”. 
Wo qipian shei? Qipian shangtian ma?  
I deceive whom Deceive Heaven Q  
‘Whom do I deceive? Do I deceive Heaven?’

(4) AC: 吾 谁 与 为 亲? (Zhuangzi)  
Wu shei yu wei qin?  
I whom with BE close  
‘Whom am I close with?’

MC: 我 跟 谁 亲近 呢?  
Wo gen shei qinjin ne?  
I with whom close Q  
‘Whom am I close with?’

(5) AC: (闵公) 孰 继? (闵公) 继 子般 也。(Chunqiu)  
(Mingong) shu ji? (Mingong) Ji Ziban ye.  
(Mingong) whom inherit (Mingong) Inherit Ziban DECL  
‘(Mingong) Inherits whom? (Mingong) Inherits Ziban.’

MC: 闵公 继承 谁? 他 继承 子般。  
Mingong jicheng shei? Ta jicheng Ziban.  
Mingong inherit whom 3.Nom inherit Ziban  
‘Whom does Mingong inherit? He inherits Ziban.’

Examples from Archaic Chinese (AC) and their Modern Chinese equivalents (MC) demonstrate that, while Modern Chinese wh-questions are formed by leaving the wh-elements in situ, those in Archaic Chinese, on the contrary, do involve overt wh-movement from base position to positions which are between the subject and the verb, under the assumption that Archaic Chinese also has the SVO word order as Modern Chinese does.

These facts give rise to new understanding of overt wh-movement in Chinese, and also interesting questions regarding the nature of this movement. Do Archaic Chinese wh-elements undergo the same type of wh-movement as English? Where is the landing site of wh-movement in
Archaic Chinese? Why does Modern Chinese lose this type of movement later in history? In this respect, my argument is parallel with Aldridge’s (2010) short movement analysis, that wh-words and phrases in Archaic Chinese does not undergo the same movement as in English, in ways that they are moved to a clause-internal position, compared with their English counterparts which are moved to the [Spec, CP] position. Specifically, the landing site of wh-movement in Archaic Chinese targets a focus position in the edge of vP.

Interestingly, this type of movement is exhibited not only in wh-questions in Archaic Chinese, but also in (both Archaic and Modern) Chinese relative clauses involving SUO:

(5) **Archaic Chinese**

a. (穆子) 召 而 见 之，
(Muzi) Zhao er jian zhi,
(Muzi) Summon Conj. meet 3.Obj
则 所 梦 也。 (Chunqiu Zuo zhuan)
ze suo meng ye.
then SUO dream DECL
‘Muzi summons and meets him. And he is of whom Muzi dreams.’

b. 民 之 所 欲， 天 必 从 之。 (Shangshu)
Min zhi suo yu, tian bi cong zhi.
People Gen SUO want Heaven must follow 3.Obj
‘Heaven must follow/supply what people want.’

c. 教， 上 所 施，
Jiao, shang suo shi,
Education, the-superior SUO bestow
下 所 效 也。 (Shuowenjiezi)
xia suo xiao ye.
the-lower SUO follow DECL
‘Education is that the superior bestows and then the lower follows.’

(6) Modern Chinese

a. 相关 部门 (所) 提供 的 材料
Xiangguan bumen (suo) tigong de cailiao
Relevant departments (SUO) provide DE documents
‘the documents that relevant departments provide’

b. 张三 (所) 喜欢 的 小说
Zhangsan (suo) xihuan de xiaoshuo
Zhangsan (SUO) like DE novel
‘the novel that Zhangsan likes’

Sentences (5a) – (5c) are relative clauses with obligatory SUO from Archaic Chinese. (6a) and (6b) are examples with optional SUO in Modern Chinese. As can be seen, whenever SUO is present, it sits between a subject and a verb.

In this case, I propose that SUO undergoes a similar clause-internal short movement targeting the edge of vP as wh-movement in Archaic Chinese. A unified analysis accounts for the two types of movement found in Archaic and Modern Chinese.

This paper is organized as follows. Along the lines of Aldridge’s (2010) analysis of Archaic Chinese wh-movement, Sections 2.1 argues that the clause-internal wh-movement found in Archaic Chinese targets a focus position at the edge of vP. Section 2.2 provides the unselective binding analysis to account for the licensing of such wh-elements. Section 3 discusses SUO in relative clauses in Modern Chinese. In particular, Section 3.1 gives a general overview of the occurrence of SUO in Modern Chinese relative clauses. In Section 3.2, I give an analysis of SUO as a resumptive pronoun. I then propose a phrasal movement approach to SUO-movement, which employs a similar structure to that found in Archaic Chinese wh-movement. Section 3.3 argues
against against Ting’s (2003) head movement analysis. Lastly, Section 4 sums up the paper and discusses some possibilities to account for the loss of *wh*-movement and optionalization of *SUO* in the historical development of the Chinese language.

2. Clause-internal *wh*-movement in Archaic Chinese

Archaic Chinese differs from its modern counterparts with respect to overt movement. In Archaic Chinese, a question can be formed through the use of *wh*-elements such as 谁 *shei* and 孰 *shu* ‘who’, 何 *he*, 昌 *he*, 胡 *hu*, and 谁 *xi* ‘what’, 恶 *wu*, 安 *an*, and 焉 *yan* ‘where’, and so forth.

(7) a. 吾 之 于 人 也, 谁 毁 谁 誉? (Analects)
   Wu zhi-yu ren ye, shei hui shei yu?
   I toward people DECL whom undermine whom praise
   ‘Toward others, whom do I undermine? Whom do I praise?’

b. 孰 能 不 从?
   Shu neng bu cong?
   Who can not follow
   ‘Who can not follow?’
   Or: ‘Who is not going to follow?’

c. 何 福 不 除?
   He fu bu chu?
   What felicity not grant?
   ‘What felicity/good fortune will the people not be granted?’

d. 奚 以 知 其 然 也?
   Xi yi zhi qi ran ye?
   What by know it so DECL
   ‘By what do you know it is so?’
   Or: ‘How do you know it is so?’
2.1 The landing site of \textit{wh}-movement

In this section I argue that the landing site is located above VP but lower than T, specifically the edge of vP, by showing that (a) \textit{wh}-elements situate higher than negation; (b) subject and object occupy different positions, and (c) other preverbal material helps to provide evidence for this difference. Consider the structure given below.

(8)

The first piece of evidence is that \textit{wh}-elements precede the negator \textit{bu} (9) in Archaic Chinese. Assuming that the negator projects a NegP which situates within VP, the appearance of \textit{wh}-elements being higher than the negator \textit{bu} simply supports the idea that the landing site of \textit{wh}-elements is higher than that of the negation and thus above VP.
(9)  a. 何 城 不 克?  
He cheng bu ke?  
‘What city will you not conquer?’

b. 人 亦 孰 不 欲 富 贵?  
Ren yi shu bu yu fu gui?  
‘Also, for people, who do not want wealth and honor?’

The second piece of evidence comes from the observation that the positions for subject and object are different. The second clauses in (10a), (b), and (c) show that non-interrogative objects stay in post-verbal positions, whereas wh-elements (the first clause in (10a), (b), and (c) respectively) that function as direct objects undergo obligatory fronting to a pre-verbal position in questions.

(10)  a. 吾 谁 欺? 欺 天 乎?  
Wu shei qi? Qi tian hu?  
I whom deceive Deceive Heaven Q  
‘Whom do I deceive? Do I deceive Heaven?’

b. 王 者 孰 谓? 谓 文 王 也。  
King Det whom refer.to Refer.to Wenwang DECL  
‘Whom is ‘king’ referred to? ‘King’ refers to Wenwang.’

c. 然 则 易 祭?  
Ran ze he ji?  
Then so what worship  
祭 泰山 黄河 冲海。  
Ji taishan he hai.  
worship Mount.Tai Yellow.River ocean
‘So then what do we worship? We worship Mount. Tai, Yellow River, and the ocean.’

The last piece of evidence comes from other preverbal material which also helps to distinguish the relative positions of subject and object wh-phrases. Such material includes 将 jiang ‘will’, 敢 gan ‘dare’, and 独 du ‘alone’. For instance, when the wh-word 谁 shei ‘who’ serves as the subject of the second clause in (11a), it precedes the element 将 jiang ‘will’, and the same happens to the non-interrogative subject 我 wo ‘I’ in (11b). As for the position of object elements, the pronoun 之 zhi ‘him/her/it’ follows the verb 治 zhi ‘punish’, which also follows 将 jiang ‘will’ (11a); whereas the interrogative object 何 he ‘what’ is found preceding the verb 求 qiu ‘require’ but still lower than 将 jiang ‘will’ and thus lower than the subject 我 wo ‘I’ in (11b). The clause-internal movement analysis accounts for the asymmetry between the positions of subject and object wh-elements. Evidence confirms that object wh-elements undergo movement to the edge of vP whereas subject wh-elements only occupy the [Spec, TP] position.

(11)  

a. 君得罪于民，谁将治之？ (Yanzichunqiu)

Jun dezui yu min, shei jiang zhi zhi?

King displease Prep people who will punish 3.Obj

‘If the king displease the people, who will punish him?’

b. 我将何求？ (Zuozhuan)

Wo jiang he qiu?

I will what require

‘What will I require?’

Aldridge (2010) has demonstrated that the subjects’ movement out of vP is the result of the EPP (Extended Projection Principle) feature on T, which must be checked for the derivation to converge (p. 12). Thus, we can assume that [Spec, TP] is the A-position for Archaic Chinese
subjects. Following this, it is plausible to conclude that T carries an EPP feature that has to be checked obligatorily because raising of the subject is always required. The movement of subject \(wh\)-elements out of \(vP\) and the high position that they occupy after movement are then accounted for. Object \(wh\)-elements, on the other hand, raise only to the clause-internal position, that is, the edge of \(vP\) to check \(v\)’s focus feature (Aldridge 2010).

2.2 \(Wh\)-elements as indefinites

In this section, I demonstrate that the moved \(wh\)-elements get their interrogative interpretation by a base-generated operator in [Spec, CP] through unselective binding (see, among others Cole and Hermon (1998)). Such an analysis receives support from the fact that \(wh\)-phrases may be interpreted as indefinites in Archaic Chinese, as well as in Modern Chinese.

(12) 不知我者谓我何求。 \((Shijing)\)

\[\text{Bu zhi wo zhe wei wo he qiu.}\]

Not know me Det say I what ask for

‘Those who do not know me say that I am asking for something.’

(13) 何不树之于无何有之乡? \((Zuozhuan)\)

\[\text{He bu shu zhi yu wu he you zhi xiang?}\]

Why not plant it Prep not.exist what exist Gen place

‘Why not planting it in a place where there is not anything.’

In (12), the \(wh\)-element \(何 he\) ‘what’ functions as an indefinite translated as ‘something’. The second \(何 he\) ‘what’ in (13) is an example of \(wh\)-element with an NPI interpretation. While the first \(何 he\) carries the interrogative interpretation asking for reasons, the second \(何 he\) is interpreted as ‘anything’ because it is c-commanded by the negator \(无 wu\) ‘not’.
The above examples demonstrate that a fronted *wh*-element is capable of carrying a non-interrogative interpretation. This further supports the argument that Archaic Chinese *wh*-elements are also indefinites as their Modern Chinese equivalents. Thus it is plausible to conclude that there is an operator base-generated at [Spec, CP] position which unselectively binds the *wh*-variables (Cole and Hermon 1998) in Archaic Chinese.

3. *SUO* in relative clauses in Modern Chinese

3.1 General overview of *SUO* in Modern Chinese relative clauses

Let us now look at another interesting aspect of Chinese, the occurrence of *SUO* in relative clauses. The discussion shifts to Modern Chinese due to the fact that (a) *SUO* in Archaic Chinese relative clauses behaves exactly the same way as in Modern Chinese, and examples are very limited, and (b) more importantly, *SUO* in Archaic Chinese is always required, whereas it is optional in Modern Chinese.

Modern Chinese relative clauses have received much attention in the literature. It has been noticed that there is an optional particle *SUO* before a transitive verb in relatives (Chao (1968), Li (1947), Tang (1977), among others). However, there is still an ongoing debate about the syntactic status of *SUO*. The first scholar who studied *SUO* in great detail is Chiu (1993). She shows that *SUO* is only licensed when the relativization site is a direct object position (14), not a subject (15a) or adjunct position (15b) (Chiu 1995).

(14)  

[Lisi (suō) mai [e] de naxie shu]

Lisi *SUO* buy *DE* those book
‘those books that Lisi bought’

(15) a. *[[所 (所) 买 那些 书] 的 那个 人
               SUO buy those book DE that person
       ‘the person that bought those books’

b. *[[李 四 (所) 批评 张三] 的 原因/方法/时间/地方
               Lisi SUO criticize Zhangsan DE reason/method/time/place
       ‘the reason/method/time/place that Lisi criticized Zhangsan’

With these facts, Chiu (1995, cf. 1993) argues that SUO is restricted to relativization of elements receiving accusative case. However, Ting (2003) provides three more circumstances in which SUO can occur. The first set of facts concerns relativization of a locative, as shown in (16).

(16) a. [李四 (所) 工作/服务] 的 机构/地方
          [Lisi (suo) gongzuo/fuwu] de jigou/difang
          Lisi SUO work/serve DE organization/place
       ‘the organization/place that Lisi serves/works at’

b. [我们 (所) 生存] 的 社会
          [women (suo) shengcun] de shehui
          We SUO live DE society
       ‘the society where we live’

Ting (2003) also argues that the occurrence of SUO is also grammatical and acceptable by Chinese speakers when it precedes an unaccusative verb, demonstrated in (17).

(17) [那条 小溪 中 (所) 漂过] 的 枯叶
          [natiao xiaoxi zhong (suo) piaoguo [e]] de kuye;
       ‘the withered leaves that floated in the river’
The last circumstance where SUO occurs is noted by Jiang (2008) (retrieved from earlier works by Ting (1998), Huang (1999), An and Kuo (2007)). SUO is allowed in long passives (marked by BEI as in 18a and 18b) but not short passives\(^2\).

Before we get into a detailed discussion of SUO, it will be helpful to provide a preliminary word on the theoretical framework adopted in this section. Instead of regarding DE as a Complementizer (18) as proposed in Ning (1993), and Chiu (1993 cf. 1995) (with a NomP in place of IP), this paper treats DE as a Determiner (19), following analyses by Vergnaud (1985), Kayne (1994), Simpson (2002), and Wu (2004). Furthermore, the phrasal structure that I propose in Section 3.3 adopts a Kaynean-style (1994) approach in which the TP moves to [Spec, DP].

\(18\)

\begin{align*}
\text{NP} & \\
\text{CP} & \text{NP} \\
\text{Oi} & \text{C'} \text{ shu} \\
\text{IP} & \text{C'} \\
\text{wo zuotian mai t_i de} & \\
\end{align*}

\(2\) Jiang argues that while SUO is allowed in long passives (i), its appearance in short passive sentences (ii) are unacceptable. I agree with the observation, however, the reason for such difference may not come solely from the distinction between long and short passive. Rather, it remains unclear as for why this is the case. In order to propose a well-articulated account, further studies on SUO and Chinese passives will be needed.

(i)  [不 能 被 他 们 所 了 解] 的 这 些 事 情
   [bu neng bei tamen suo liaojie] de zhexie shiqing
   not can BEI they SUO understand DE these things
   ‘these things that cannot be understood by them’

(ii) *[不 能 被 所 了 解] 的 这 些 事 情
   *[bu neng bei suo liaojie] de zhexie shiqing
   not can BEI SUO understand DE these things
   ‘these things that cannot be understood’
These structures, however, do not directly involve \textit{SUO}, and thus will be modified somewhat below. While it is common to omit \textit{SUO} in colloquial speech, speakers of Chinese normally use relative clauses with this particle in written form and formal settings (as a remnant of Classical Chinese). The question regarding the nature of \textit{SUO} then needs to be solved. In the following subsection, I show that \textit{SUO} should be treated as a resumptive pronoun.

3.2 \textit{SUO} as a resumptive pronoun

Chiu (1995) first noticed that there is a conflict between \textit{SUO} and the resumptive pronoun \textit{ta} ‘he, she, or it’. That is, \textit{SUO}’s co-occurring with \textit{ta} result in the ill-formedness of relative clauses (20). But relative clauses with either \textit{SUO} (21) or the resumptive pronoun \textit{ta} (22) are both generally acceptable.

\begin{enumerate}
\item[(20)]
\begin{enumerate}
\item a. *\text{[我 所 爱 了 他 三 年] 的 那 个 人} \\
*\text{[ wo suo ai-le ta san nian] de nage ren}
\quad \text{I SUO love-ASP he three years DE that person} \\
\quad \text{‘the person who I loved for three years’}
\item b. *\text{[ 老 师 所 批 评 了 他] 的 那 个 学 生}
\end{enumerate}
\end{enumerate}
Note that although relative clauses with the resumptive pronoun \textit{ta} may sound odd to some speakers, they are still accepted by others; whereas the co-occurrence of \textit{Suo} and \textit{ta} is completely not acceptable by any speaker of Chinese. It is plausible to speculate that this ill-formedness arises because \textit{Suo} and \textit{ta} are both resumptive pronouns and that they compete for the same underlying position.

3.3 A new proposal

After setting up the theoretical foundations, I now propose a new structure that accounts for Chinese relative clauses with the resumptive pronoun \textit{Suo}, as shown in (23).
Similar to (19), this structure allows for a sequence of movements that convert the head-initial structure into the surface structure. The first step happens within the CP layer, where the resumptive pronoun $SUO$ undergoes phrasal movement to the left periphery of $vP$, as is the $wh$-element in Archaic Chinese. Meanwhile, an operator is base generated in [Spec, CP] and unselectively binds $SUO$. The subject NP also undergo movements and end up sitting at [Spec, TP] position. Following the first step occurs the movement of CP to the [Spec, DP] position. I have not followed the head-raising analysis since I analyze $SUO$, rather than the head of the relative clause, as occupying the relevant position within TP. After all of these derivations, we are able to arrive at the surface order of Chinese relative clauses with $SUO$. 
3.4 Against a head-movement approach to \textit{SUO}

Ting (2003) proposes a head-movement analysis of \textit{SUO} in which it adjoins to I, the head of the IP of the relative clause. The fact that \textit{SUO} may occur multiple times (24) and in a clause higher than its point of origin (25) confirms phrasal movement and provides evidence against head-movement.

(24) a. [玛丽所宣称约翰所看到史蒂夫所喜欢]的女孩
[ Mary \textit{SUO} claim John \textit{SUO} see Steve \textit{SUO} like [e] DE girl
‘the girl who Mary claims that John saw that Steve likes’

b. [这是我认为你应该具备的]的能力。
[zhe shi wo \textit{SUO} renwei ni \textit{SUO} yinggai jubei] de nengli
‘This is the competence that I think you should have.’

The shortcoming of Ting’s analysis is the well-formedness of multiple \textit{SUO} within a single relative clause. The very nature of head movement requires \textit{SUO} to move together with other elements but never \textit{SUO} itself. Following Ting’s approach, \textit{SUO} will never be able to undergo movement by itself. However, this runs counter to fact since it is grammatical to have multiple \textit{SUO} in a sentence.

I assume here that \textit{SUO} undergoes phrasal A’-movement, and that it adjoins to intermediate \textit{vP} as it moves. Multiple copies may be pronounced, deriving (24). The structure that I propose is
able to account for multiple *SUO* and its occurrence in two positions because the recursive movement is achievable through the phrasal movement but not the head movement.

4. Conclusion and Discussion

Thus far, I have reviewed some important literature on Archaic Chinese (roughly from Shang Dynasty to late Warring States Period) *wh*-movement and Modern Chinese relative clauses with the resumptive pronoun *SUO*. Archaic Chinese *wh*-elements undergo short-movement which is driven by the strong focus feature on *v*. *Wh*-elements are not moved to the [Spec, CP] position, but rather, to the edge of *vP*. What takes the [Spec, CP] position is the base-generated operator that assigns the interrogative interpretation to *wh*-elements (Aldridge 2010). This is supported by the facts that Archaic Chinese *wh*-elements are indefinites just as are their Modern Chinese equivalents. The second major part of this paper examines the occurrence of *SUO* in Modern Chinese relative clauses. Under the assumption that the linker *DE* in relative clauses should be recognized as a Determiner, I adopted the approach to relative clauses proposed by Vergnaud (1985), Kayne (1994), Simpson (2002), and Wu (2004), and have proposed the phrasal movement approach to *SUO*-movement. I argue that the movement of *SUO* resembles that of Archaic Chinese *wh*-elements in ways that it also targets the left periphery of *vP*.

Now, what remains to be explained is the loss of short *wh*-movement and the optionality of the *SUO* construction. Here I offer two possibilities to account for this loss. One explanation is that, the strong feature on *v* which used to drive *wh*-movement and the feature attracting *SUO* have been lost during the historical development and changes of Chinese language. Perhaps a requirement that the [Spec, *vP*] be overt, somehow connected to the EPP feature that attracted the
wh and SUO, has been lost. There is some evidence supporting this hypothesis. Starting from the end of late Archaic Chinese and beginning of early Middle Chinese, there had been a borderland where wh-questions both with and without movement co-occurred. Yang and He (1992) point out that, wh-in-situ started to become more commonly used after Han Dynasty. A detailed study and a set of data regarding the occurrence of wh-in-situ is provided by Yu (2003). She examines all the examples with wh-movement and wh-in-situ from the Archaic, Western Han, Eastern Han, Wei Jin and Nan Bei Dynasties, and Tang Dynasty. For the Archaic Period, 312 out of 314 (99.4%) wh-questions show wh-movement. Till Western Han Period, the number of moved wh-questions is found to be 219 out of 232 (94.3%). Eastern Han Period shows 314 out of 321 (97.8%) examples of wh-movement. 40 out of 43 (93.0%) moved wh-questions are found in literary works from Wei Jin and Nan Bei Dynasties. The dramatic change happens in Tang Dynasty, where the fronted wh-questions only take 37 out of 141 (26.2%). These data are summarized in the chart below for the ease of reading. Examples exhibiting both wh-movement and wh-in-situ from the same book or author are also demonstrated below.

<table>
<thead>
<tr>
<th>Period</th>
<th>wh-movement</th>
<th>wh-in-situ</th>
<th>total</th>
<th>% of wh-in-situ</th>
</tr>
</thead>
<tbody>
<tr>
<td>Archaic Period</td>
<td>312</td>
<td>2</td>
<td>314</td>
<td>0.63</td>
</tr>
<tr>
<td>Western Han</td>
<td>219</td>
<td>13</td>
<td>232</td>
<td>5.60</td>
</tr>
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<td>Eastern Han</td>
<td>314</td>
<td>7</td>
<td>321</td>
<td>2.18</td>
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<td>Wei Jin Nan Bei</td>
<td>40</td>
<td>3</td>
<td>43</td>
<td>6.98</td>
</tr>
<tr>
<td>Tang and Five Dynasties</td>
<td>37</td>
<td>104</td>
<td>141</td>
<td>73.76</td>
</tr>
</tbody>
</table>

(Data retrieved from Yu 2003)

(27)  

a. 余在，天下谁敢害吾者?  
Yu zai, tian xia shei gan hai wu zhe?  
I here, sky under who dare stop me DECL  
‘I am here, who in the world dares to stop me?’

b. 竟谓谁也?
19

Jing wei shei ye?
Actually refer to whom Q
‘Whom actually is referred to?’

(\textit{Lunheng}, from Eastern Han Period)

\begin{enumerate}
\item \textit{a.} 帝曰: “谁比?”
\textit{Di yue: “Shei bi?”}
King ask whom compare
‘The king asks, ‘with whom is he compared?’’
\item \textit{b.} 世论以我家领军比谁?
\textit{Shilun yi wojia Lingjun bi shei?}
the.public BA our Lingjun compare whom
‘With whom does the public compare our Lingjun?’
\end{enumerate}

(\textit{Shishuoxinyu}, from Wei Jin and Nan Bei Dynasties)

Another possible explanation for the loss of the strong focus feature on $\nu$ relates to the rising of the focus marker \textit{是} \textit{SHI} (Shi and Xu, 2001). Shi and Xu (2001) claim that the change from $wh$-movement to $wh$-in-situ is the result of two strategies competing with each other. The use of $wh$-movement started to decrease when \textit{是} \textit{SHI} underwent the change from a resumptive pronoun to the marker of focus starting from the late Warring States period. Evidence from books such as \textit{Shiji}, \textit{Analects}, and \textit{Zuo\zhuan} shows that, \textit{是} \textit{SHI} used to be a pure resumptive pronoun and a marker of judgment sentences because it was exclusively used as a pronoun in what Chinese scholars called judgment sentences (Wang 1958, Li and Thompson 1977, Guo 1990, Shi and Xu, 2001). During the stage of Archaic Chinese, a typical structure for judgment sentences is $A$, \textit{SHI B YE}, as shown in (29).

\begin{enumerate}
\item \textit{a.} 不善不能改, 是吾忧也。
\textit{Bu shan bu neng gai, shi wu you ye.}
Not good not can correct, \textit{SHI} my concern \textit{YE}
‘That one is not good in nature but cannot correct himself, is my concern.’
Or: ‘My concern is that one is not good in nature but still cannot correct his behavior.’

b. 若弃德不让，
Ruo qi de bu rang,
If abandon virtue not abdicate,
是废先君之举也。 (Zuo zhuan)
shi fei xian jun zhi ju ye.
SHI discard former kings Gen behavior YE
‘If I abandon the virtues but not abdicate the throne, this is the behavior that discards our former kings.’
Or: ‘The behavior for me to abandon the virtues but not abdicate the throne is discarding our former kings.’

The function of SHI is two-fold: (a) it is a pronoun referring to the previous clause (usually an NP), and (b) it serves as the subject of the clause containing it. What’s interesting about these judgment sentences during this Archaic period is that no verb was required in them.

Starting from the later Archaic Chinese period, YE became optional and the structure for judgment sentences became A, SHI B or A SHI B. And sentences like (30) and (31) started to appear. It is noticeable that wh-element like 何 he started to follow SHI.

(30) 五尺之竖子，颜羞称五伯，
Wu chi zhi shuzi, yan xiu cheng wu bo,
Five CL Det boy face ashamed mention Five Hegemonies
是何也?
shi he ye?
SHI why YE
‘Even the five-chi (about one-meter) boys feel ashamed to talk about the Five Hegemonies (of the Spring and Autumn period). Why is this?’
Or: ‘Why is it that even the boys feel ashamed to talk about the Five Hegemonies?’

(31) 君子之所以见大水必观焉者，
Junzi zhi-suo-yi jian da shui bi guan yan zhe,
Gentlemen reason.for see wide river must watch 3.Obj Gen
是何?
shi he?
SHI what
‘What is the reason for that when gentlemen see a large river they must stand and watch it?’

At this point, SHI is still a resumptive pronoun functioning as the subject of the clause. Wh-element he is not able to be fronted because essentially there is no verb. Later there appeared more structures resembling (30) and (31) along with the need of a verb-like word. As the language developed, SHI gradually gained the verb-like interpretation and eventually became a verb or a copula in Chinese. The structure of 是何 SHI he remained, and the complication of 何 he to [he + NP] started to appear.

(31) 此是何水?
Ci shi he shui?
This SHI what water
‘What river is this?’

(32) 汝是何人?
Ru shi he ren?
You SHI what person
‘Who are you?’

After the transition period (around 3rd century BC), wh-elements started to follow SHI and wh-in-situ started to be widely used in classical literatures. Although there were still examples with
$w_h$-in-situ in later works, Yu (2003), Lu (2004), and others claim that they were merely imitation of the ancient style of writing.

Just like the topics of $w_h$-movement and relative clauses in Chinese, the reasons for the changes from $w_h$-movement to $w_h$-in-situ, and from obligatory $SUO$ to optional $SUO$ in relative clauses remain unsettled and worth of further studying. Without a doubt, there remains much more in-depth work regarding the language change that has taken place in Chinese, especially in the optionalization of $SUO$. 
References


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