



Citation: A. Wang (2021)
Wh-phrases and *wh*-in-situ
in Late Archaic Chinese. *Qulso* 7:
pp. 155-179. doi: <http://dx.doi.org/10.13128/QUSO-2421-7220-12008>

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Data Availability Statement:
All relevant data are within the
paper and its Supporting Infor-
mation files.

Competing Interests: The
Author(s) declare(s) no conflict
of interest.

Wh-phrases and *wh*-in-situ in Late Archaic Chinese

Aiqing Wang

University of Liverpool (<aiqing.wang@liverpool.ac.uk>)

Abstract:

In this paper I explore *wh*-phrases and *wh*-in-situ in Late Archaic Chinese (LAC). Simplex and complex *wh*-phrases in LAC can be divided into eleven semantic categories. Since LAC is a *wh*-fronting language, *wh*-items undergo obligatory preposing, unless being subjects. Nonetheless, there are exceptions to the raising of non-subject *wh*-phrases, namely, obligatory and optional *wh*-in-situ. When *wh*-DPs function as the second complement of ditransitive verbs *nai/ruo/ru* 'to treat', or the second complement of the ditransitive verb *wei* 'to call', they must stay in their postverbal base position. In terms of optional *wh*-in-situ, there are two situations, i.e. *wh*-predicates and *wh*-complement of manner adverbials. When *wh*-DPs act as predicates indicating object/ activity, person or reason, they normally do not move, yet they can move under special circumstances; when *wh*-VPs act as manner adjuncts, they can be base-generated pre- or postverbally, and the *wh*-elements in both positions undergo optional movement. Finally, I propose that *wh*-in-situ is correlated with ditransitive verbs per se.

Keywords: *Late Archaic Chinese, Syntax, Wh-in-situ, Wh-phrases*

1. Introduction

1.1 Historical context

Pre-Archaic (14th BC-11th BC) and Archaic Chinese (10th BC-3rd BC) exhibit robust syntactic features that are discrepant from those of Middle Chinese (2nd BC-10th AD) and modern Mandarin. For instance, the almost total lack of morphological marking of grammatical relationships is more salient during the (Pre-)Archaic period than at later stages. To be more specific, in Archaic Chinese: 1) lexical roots can be used freely as nouns, verbs or adjectives, and verbs can be used either transitively or intransitively without mediation of morphological marking; 2) nominalisation is employed to compensate the lack of finite em-

bedded clauses, and relative clauses on subject position and VP-internal positions are formed via separate strategies; and 3) there are different types of word order alternation, e.g. *wh*-movement, object focus fronting and pronoun preposing in the context of negation. Following Archaic Chinese, Middle Chinese appeared around the Han Dynasty (2ndc BC-2ndc AD) after the pre-Qin period, which was a crucial transitional period with multiple typological changes that were complete by the end of the Tang Dynasty, such as a rise of resultative compounds and an increase in embedded *wh*-questions. To be more specific, developments in Middle Chinese are: 1) loss of genitive case, as reflected by the mixed use of genitive and accusative pronouns and the fact that subjects of other types of embedded clause were not required to appear with genitive marking; 2) loss of subject/object relativisation asymmetry, caused by loss of a nominal layer in embedded clauses, which triggers the occurrence of a CP layer so that operators can move from either a subject or object position; 3) loss of (Pre-)Archaic Chinese movement transformations, triggered by loss of morphology for case and nominalisation; 4) disappearance of bare passives that were replaced by overtly marked passives, connected with loss of nominalising morphology; and 5) development of verb-resultative compounds, related to loss of causativising morphology. Changes took place in Middle Chinese are triggered by earlier morphosyntactic alternations and their subsequent loss (Xu 2006; Peyraube 2008; Aldridge 2013, 2015a).

In this paper I investigate the Classical Chinese par excellence, Late Archaic Chinese (LAC), which contains well-known texts such as *Analects*, *Mencius* and *Zhuangzi*.

1.2 Distinctive features of late archaic chinese

Texts in LAC display predominant SVO word order, with objects appearing in a postverbal position. However, there are contexts in which nominal and pronominal objects appear preverbally in the low TP-internal domain (Aldridge 2019), as in (1a-b).

- (1) a. 吾 百姓 之 不 圖 (國語•越語下)
 wu baixing_i zhi bu [_{VP} tu t_i]
 I common.people ZHI not care.about
 'I did not care about common people'
- b. 吾 斯 之 未 能 信 (論語•公冶長)
 Wu si_i zhi wei neng [_{VP} xin t_i]
 I this ZHI not.yet can be.confident.in
 'I am not confident in this yet'

Nonetheless, there is a robust disparity between LAC and modern Mandarin: differently from modern Mandarin which is a *wh*-in-situ language (Li 1992; Aoun and Li 1993, 2003; Tsai 1994, among many others), LAC requires VP-internal *wh*-phrases to raise from their base position to a preverbal position in the 'low IP area' (dubbed by Paul 2005) between TP and *v*P. Such clause-internal movement is driven by obligatory preverbal positioning of non-subject *wh*-elements of LAC, which is a *wh*-fronting language.

Examples (2a) and (2b) illustrate that both simplex *wh*-words and internally complex *wh*-phrases move to a preverbal position in the medial domain when acting as direct objects. In (2b), the nouns *battle*, and *alliance* are modified by a *wh*-word 何 *he* 'what', and they form a complex phrase preceding the *v*P.

- (2) a. 然則 我 何 爲 乎? 何 不 爲 乎? (莊子•秋水)
 Ranze wo he_i [_{VP} wei t_i] hu? He_j bu [_{VP} wei t_j] hu?
 Then I what do Q what not do Q
 ‘Then what do I do? What (do I) not do?’
- b. 宋 何 役 之 不 會,
 Song [he yi]_i zhi bu [_{VP} hui t_i],
 Song what battle ZHI not enter
 而 何 盟 之 不 同? (左傳•昭公二十五年)
 Er [he meng]_j zhi bu [_{VP} tong t_j]?
 Conj what alliance ZHI not join
 ‘What battle does the State of Song not enter, and what alliance does (it) not join?’

In terms of subject *wh*-phrases, however, they remain in situ in LAC. When a *wh*-phrase occupies the subject position, it is in [Spec, TP], because Archaic Chinese has an A-position for the subject above *v*P.

1.3 Literature review

Notwithstanding examples (2-6) which exhibit preverbal objects, various observations support the view that LAC has always been an SVO language (Djamouri 2001; Djamouri and Paul 2009; Aldridge 2013; Djamouri, Paul and Whitman 2013), so object preposing is derived, and should not be assumed as the vestige of a basic OV word order, as proposed by Sun (1991), Feng (1996), Xu (2006), among others.

According to Aldridge (2012a, 2015b), non-*wh*-objects, including full NPs but excluding pronouns, always undergo syntactic focus movement into the low TP area, and obtain an interpretation of identificational focus. Meanwhile, topicalisation of non-pronominal DPs to the left periphery is common in LAC. With respect to the fronting of VP-internal *wh*-phrases, it is also limited to focus fronting, in that neither the base generation theory nor the cliticisation theory can explain the *wh*-fronting in LAC. Moreover, focalised *wh*-words are always located lower than modals and above negation (Aldridge 2006, 2007, 2010).

In terms of pronoun fronting in the context of negation, although the landing site of preposed pronouns intervenes between negation and *v*P, pronoun fronting to negation is not focus driven. A case-based approach has been put forward (Aldridge 2015b) to account for the motivation for pronoun fronting to negation in LAC: only pronouns in need of structural accusative case undergo fronting. As hypothesised by Aldridge (2015b), it is Neg that values accusative case on the fronted DPs, but the head of NegP selects a nominal complement *n*P where structural case is unavailable. Given the fact that *n* is a strong phase head and hence the unavailability of case in the domain of *n*, NP becomes impenetrable. As a consequence, DPs have to undergo object shift to [Spec, *n*P], so as to value accusative case from the head of NegP.

Paul (2002, 2005) suggests a parallelism between CP and the ‘low IP area’ in modern Mandarin, and she proposes a hierarchy ‘CP > TopicP > even FocusP > IP > inner TopicP > even FocusP > *v*P’. In Modern Chinese, both TopicP and ModP are situated above the projection of ‘even’ focus (whether it is clause-internal or -external). Paul (2002, 2005) also argues that preposed objects occupy a specifier position of some functional category, instead of being adjoined to *v*P directly. Consequently, a preposed object does not occur in an adjoined position, but occupy the specifier node of a functional projection above the ‘even’ FocusP within the ‘low IP area’ (Paul 2005).

Nevertheless, Hsu's (2008) analysis on object preposing in modern Mandarin argues that the sentence-internal domain between TP and *v*P may not only license foci, but also topics. Given appropriate contexts, a preposed object can have either topic or focus status. However, instead of being topic or focus itself (Paul 2005), a preposed object requires two distinct projections for two interpretations. A topic and a focus occupy different functional projections, and they can co-occur in the sentence-internal domain, with the topic NP preceding the focus NP. Following Rizzi's (1997) "fine structure of the left periphery", Hsu (2008) posits that the functional projection for internal topics is located higher than that for foci.

Developing these lines of reasoning, Wang (2013, 2015) proposes an external topic position in the left periphery as well as an internal topic position and focus positions between TP and *v*P for the preposing of *wh*- and non-*wh*-objects in LAC, with the external and internal topic positions being structurally more prominent than the focus positions. All positions are located above negation. A fronted element targets the specifier node of some functional projection, followed by an optional fronting marker ZHI/SHI occupying the head of the corresponding category.

Peyraube and Wu (2005) discuss the origin and evolution of question words in Archaic Chinese and propound: 1) the specific forms of 曷 *he* 'when' tend to disappear towards the end of the LAC period; 2) as a general pronoun/adverb, 何 *he* 'what/which, how, why' exhibited more complex linguistic behaviour and a more abstract level of conceptualisation from Early Archaic Chinese to LAC; and 3) during the Archaic period, the system became more complex, as reflected by an increase of polysemy and synonyms. They have also proposed cognitive contours of conceptual categories of interrogative words: person > object > process/quality > space > time.

In this paper I analyse *wh*-phrases in LAC. In Section 2 I provide a descriptive account of eleven types of *wh*-words and their corresponding data drawn from corpora. In Section 3 I present examples involving *wh*-preposing as well as optional and obligatory *wh*-in-situ, and account for the *wh*-in-situ phenomenon in this *wh*-fronting language.

2. Types of *wh*-phrases

In LAC, *wh*-phrases display various forms, and can be divided into eleven semantic categories: 1) object/activity 'what/which', 2) person 'who', 3) manner 'how', 4) rhetorical 'how', 5) reason 'why', 6) instrument 'with what', 7) time 'when', 8) location 'where', 9) source 'from where', 10) direction 'to where' and 11) quantity 'how much/how many'. Each category contains a range of question words, and some question words are polysemous and appear in more than one group.

In the first category for object/activity, seven *wh*-words are attested: 何 *he*, 曷 *he*, 奚 *xi*, 胡 *hu*, 惡 *wu* and 孰 *shu*, as in (3a-f). Among these *wh*-words, 何 *he* is most frequently attested, and 曷 *he* is its variant. 奚 *xi* might be a variant of 何 *he*, and both *he* and *xi* can function as a subject, object or attribute. 孰 *shu* and 奚 *xi* are different from their counterparts in this group, in that they convey the implication of choice, and the available options usually occur at the beginning of the sentence as antecedents (3f-g). That is to say, *shu* and *xi* mean 'which', whereas other *wh*-words in this group mean 'what' (Pulleyblank 1995).

- (3) a. 然则 我 何 爲 乎?
 Ranze wo he_i [_{VP} wei t_i] hu?
 then I what do Q
 'Then what do I do?' (莊子•秋水)

- b. 曷 謂 邪? (荀子•不苟)
 He_i [VP wei t_i xie]
 what call evil
 ‘What (do we) call as evil?’
- c. 孔子 奚 取 焉? (孟子•滕文公下; Peyraube 1997: 6)
 Kongzi xi qu yan?
 Confucius what approve.of in+him
 ‘What did Confucius approve of in him?’
- d. 胡 以 備 之? (管子•侈靡)
 Hu_i [VP [PP yi t_i] bei zhi?]
 what with prepare 3.Obj
 ‘With what to prepare it?’
- e. 女 將 惡 乎 比 予 哉?
 Ru jiang wu_i hu_j [VP bi yu [PP t_j t_i]] zai?
 you Fut what to compare me Q
 ‘To what will you compare me?’
- f. 禮 與 食 孰 重?
 Li yu shi shu zhong?
 etiquette Conj food which important
 ‘Which is more important: etiquette or food?’
- g. 其 一 能 鳴, 其 一 不 能 鳴, 請 奚 殺?
 Qi yi neng ming, qi yi bu neng ming, qing xi [sha t_i?]
 between 1 can honk between 1 not can honk please which kill
 ‘One (of the two geese) can honk, and the other cannot honk; which (goose should I) kill please?’

There is only one *wh*-word that falls into the group indicating person, namely, 誰 *shui* (4). 誰 *shui* has occurred since the period of Early Archaic Chinese (11th-6thc BC) and is still widely used as the main word for ‘who’ in modern Mandarin. 誰 *shui* in LAC may function as a subject, predicate, object or attribute.

- (4) 誰 能 出 不 由 戶?
 Shui neng chu bu you hu?
 Who can go.out not through door
 ‘Who can go out not through the door?’

The third group expressing manner ‘how’ contains both monosyllabic question words 何 *he*, 胡 *hu*, 安 *an*, 焉 *yan* and 奚 *xi* (5a-e) and disyllabic ones 何以 *heyi*, 奚以 *xiyi*, 惡乎 *wuhu*, 何如 *heru* and 何若 *heruo* (5f-j).

- (5) a. 何 可 廢 也?
 He ke fei ye?
 How can stop Q
 ‘How can (I) stop (it)?’
- b. 胡 可 得 也?
 Hu ke de ye?
 How can realise Q
 ‘How can (one) realise (it)?’

- c. 余 安 能 知 之? (國語•周語中)
 Yu an neng zhi zhi?
 I how can know 3.Obj
 'How can I know it?'
- d. 焉 知 賢才 而 舉 之? (論語•子路)
 Yan zhi xiancai er ju zhi?
 How recognise talent Conj recommend 3.Obj
 'How to recognise talents and recommend them?'
- e. 奚 可 得 邪? (莊子•山木)
 Xi ke de ye?
 How can realise Q
 'How can (one) realise (it)?'
- f. 子 何以 知 之? (禮記•檀弓上)
 Zi heyi zhi zhi?
 You how know 3.Obj
 'How did you know it?'
- g. 奚以 益 之 而 治? (荀子•正名)
 Xiyi yi zhi er zhi?
 How benefit 3.Obj Conj govern
 'How to benefit and govern it?'
- h. 天下 惡乎 定? (孟子•梁惠王上)
 Tianxia wuhu ding?
 World how be.stable
 'How (can) the world be stable?'
- i. 德 何如,則 可以 王 矣? (孟子•梁惠王上)
 De heru, ze keyi wang yi?
 Virtue how then can be.king Q
 'What kind of virtue can then make (one) king?'
- j. 事 之 何若? (莊子•外物)
 Shi zhi heruo?
 make.progress 3.Obj how
 'How is it going?'

All the above *wh*-words can be used in a rhetorical way and hence falling into the fourth category. The rhetorical interpretation of examples in (6a-j) is derived from context. Additionally, the question word 曷 *he* expressing object/activity (3b) can alternatively mean 'how' and be used in rhetorical sentences (6k).

- (6) a. 文 王 何 可 當 也? (孟子•公孫丑上)
 Wen wang he ke dang ye?
 Wen King how can match.up Q
 'How can King Wen be matched up?'
- b. 又 胡 可 得 而 有 邪? (莊子•知北遊)
 You hu ke de er you ye?
 Then how can obtain Conj keep Q
 'Then how can (one) obtain and keep (it)?'

- c. 安 能 為 孝 乎? (禮記•祭義)
 An neng wei xiao hu?
 How can be filial.propriety Q
 ‘How can (I be called a person of) filial propriety?’
- d. 未 能 事 人, 焉 能 事 鬼? (論語•先進)
 Wei neng shi ren, yan neng shi gui?
 not.yet can serve people how can serve ghost
 ‘(If you) cannot yet serve people, how can (you) serve ghosts?’
- e. 臣 奚 能 言? (呂氏春秋•貴公)
 Chen xi neng yan?
 Subject how can say
 ‘How can this subject (I) say?’
- f. 吾 王 不 遊, 吾 何 以 休? (孟子•梁惠王下)
 Wu wang bu you, wu heyi xiu?
 My king not travel I how rest
 ‘How can I rest (if) my king does not travel?’
- g. 奚 以 知 其 然 也? (莊子•逍遙遊)
 Xiyi zhi qi ran ye?
 How know Gen correctness Q
 ‘How (do they) know its correctness?’
- h. 君 子 去 仁, 惡 乎 成 名? (論語•里仁)
 Junzi qu ren, wuhu cheng ming?
 Gentleman abandon benevolence how form reputation
 ‘(If) gentlemen abandon benevolence, how (can they) form reputation?’
- i. 何 如 其 知 也? (論語•公冶長)
 Heru qi zhi ye?
 How Gen wisdom Q
 ‘How (can one call it) his wisdom?’
- j. 不 恥 不 若 人, 何 若 人 有? (孟子•盡心上)
 Bu chi bu ruo ren, heruo ren you?
 Not be.ashamed.of not be.comparable.to people how people then
 ‘(If one) is not ashamed of not being comparable to others, then how (can one catch up with) others?’
- k. 天 下 曷 敢 有 越 厥 志? (孟子•梁惠王下)
 Tianxia he gan you yue jue zhi?
 World how dare have disobey Gen will
 ‘How dare anyone in the world disobey his will?’

The fifth group expressing reason is constituted of eleven mono- and disyllabic *wh*-words, viz. 何 *he*, 胡 *hu*, 盍(闔) *he*, 奚 *xi*, 焉 *yan*, 何以 *heyi*, 何故 *hegu*, 何為 *hewei*, 曷為 *hewei*, 奚以 *xiyi* and 奚為 *xiwwei* (7). Among this group, 何 *he* and 胡 *hu* are the most common words for ‘why’, while 盍(闔) *he* is a newly emerged contracted form for 何 *he* and the negator 不 *bu*, indicating ‘why not’ (7c).

- (7) a. 何 患 於 喪 乎 (論語•八佾)
 He huan yu sang hu?
 why upset by loss Q
 ‘Why (are you) upset by the loss?’

- b. 今 之 君子 胡 莫 行 之 也? (禮記•哀公問)
 Jin zhi junzi hu mo xing zhi ye?
 Today Gen gentleman why nobody conduct 3.Obj Q
 ‘Why among today’s gentlemen nobody conducts it?’
- c. 子 盍 為 我 言 之? (孟子•公孫丑下)
 Zi he wei wo yan zhi?
 You why.not for me say 3.Obj
 ‘Why don’t you say it for me?’
- d. 子 奚 不 為 政? (論語•為政)
 Zi xi bu wei zheng?
 You why not do politics
 ‘Why do you not do politics?’
- e. 子 為 政, 焉 用 殺? (論語•顏淵)
 Zi wei zheng, yan yong sha?
 You do politics why use killing
 ‘When you do politics, why (do you) use killing?’
- f. 何以 不 言 也? (公羊傳•隱公元年)
 Heyi bu yan ye?
 Why not say Q
 ‘Why (did you) not say?’
- g. 我 何故 不 得 福 也? (墨子•公孟)
 Wo hegu bu de fu ye?
 I why not receive blessing Q
 ‘Why do I not receive blessing?’
- h. 吾 何為 獨 不 然? (孟子•公孫丑下)
 Wu hewei du bu ran?
 I why alone not correct
 ‘Why am I alone not correct?’
- i. 曷為 三 遇 齊 王 而 不 言 事? (荀子•大略)
 Hewei san yu Qi wang er bu yan shi?
 Why thrice meet Qi king Conj not say thing
 ‘Why (did you) meet the king of Qi thrice but not say anything?’
- j. 奚以 之 九 萬 里 而 南 為? (莊子•逍遙遊)
 Xiyi zhi jiu wan li er nan wei?
 Why go 9 ten.thousand li (length unit) Conj south Q
 ‘Why (do you) go (up for) ninety thousand li (a length unit) and then (fly) towards the south?’
- k. 君 奚為 不 見 孟 軻 也? (孟子•梁惠王下)
 Jun xiwei bu jian Meng Ke ye?
 Your.Majesty why not meet Meng Ke Q
 ‘Why did Your Majesty not meet Meng Ke?’

The next group expressing instrument involves two question words 何以 *heyi* and 奚以 *xiyi* (8a/b) that can mean ‘how’ (6f/g) or ‘why’ (7f/j) in other contexts.

- (8) a. 將 何以 守 國?
 Jiang heiyi shou guo?
 Fut what.with guard state
 ‘With what will (he) guard the state?’ (國語•周語上)

- b. 奚以 敬 民? (說苑•正諫)
 Xiyi jing min?
 what.with show.respect.to people
 ‘What with (do we) show respect to people?’

The seventh category querying time information consists of one monosyllabic question word 曷 *he* ‘when’ and two disyllabic ones 何時 *heshi* and 奚時 *xishi* ‘what time’, as in (9a/b-c) respectively.

- (9) a. 吾 子 其 曷 歸? (左傳•昭公元年)
 Wu zi qi he gui?
 My son part. When return
 ‘When will my son return?’
 b. 當 何時 作 之? (管子•度地)
 Dang heshi zuo zhi?
 Should what.time do 3.Obj
 ‘What time should (we) do it?’
 c. 而 人主 奚時 得 悟 乎? (韓非子•孤憤)
 Er renzhu xishi de wu hu?
 Conj monarch what.time can understand Q
 ‘While what time can the monarch understand?’

As for the group expressing location, there are seven *wh*-words that fall into this group: 何 *he*, 安 *an*, 焉 *yan* and 惡 *wu*, as well as 何所 *hesuo*, 安所 *ansuo* and 惡乎 *wuhu* (10).

- (10) a. 牛 何 之? (孟子•梁惠王上)
 Niu he_i [_{VP} zhi t_i?]
 ox where go
 ‘Where is the ox going?’
 b. 安 在? (禮記•檀弓下)
 An_i [_{VP} zai t_i?]
 where be.in
 ‘Where is (him)?’
 c. 將 焉 闕 之? (左傳•僖公九年)
 Jiang yan bi zhi?
 fut where avoid 3.Obj
 ‘Where will (I) avoid it?’
 d. 路 惡 在? (孟子•盡心)
 Lu wu_i [_{VP} zai t_i?]
 road where be.in
 ‘Where is the road?’
 e. 子 何所 不 逞 欲 (左傳•昭公十四年)
 Zi hesuo bu cheng yu?
 you what.place not satisfy desire
 ‘(In) what place do you not satisfy desires?’
 f. 周 尚 安所 事 金 乎? (莊子•說劍)
 Zhou shang ansuo shi jin hu?
 Zhou then what.place use gold Q
 ‘Then (in) what place does Zhou use the gold?’

- g. 所謂, 惡乎 在? (莊子•知北遊)
 Suowei dao, wuhu_i [VP zai t_i?
 so-called Dao where be.in
 ‘Where is the so-called Tao?’

The next category indicates source, and the question words are 焉 *yan* and 惡乎 *wuhu* (11).

- (11) a. 而 君 焉 取 余? (左傳•莊公六年)
 Er jun yan qu yu?
 then Your.Majesty where obtain surplus
 ‘Then (from) where does Your Majesty obtain the surplus?’
 b. 惡乎 取 之? 取 之 曹 也。(公羊傳•僖公三十一年)
 Wuhu_i [VP qu zhi t_i? Qu zhi Cao ye.
 where take 3.Obj take 3.Obj Cao Decl
 ‘(From) where to take it? Take it (from) Cao.’

In the group for direction, there are two interrogative words 焉 *yan* and 奚 *xi*, as in (12a) and (12b) respectively.

- (12) a. 其 子 焉 往? (孟子•離婁上; Aldridge 2013: 246)
 Qi zi yan wang?
 3.Gen son where go
 ‘Where will their sons go?’
 b. 彼 且 奚 適 也? (莊子•逍遙遊)
 Bi qie xi shi ye?
 3.Obj then where go Q
 ‘Where is it going?’

The last category consists of 幾 *ji* and 幾何 *jihe*, expressing ‘how much/many’. The usage of 幾何 *jihe* has been preserved from Early Archaic Chinese (13a), whereas 幾 *ji* is a new expression that emerged during the LAC period (13b) (Peyraube and Wu 2000, 2005). As can be seen from (13a/13c) and (13b/13d) respectively, both *jihe* and *ji* can occur independently or be followed by a NP.

- (13) a. 薛 之 地 小 大 幾何? (呂氏春秋•季冬紀)
 Xue zhi di xiao da jihe?
 Xue Gen land small big how.much
 ‘How big is the land of Xue?’
 b. 廢 者 幾? (禮記•曾子問)
 Fei zhe ji
 cease ZHE how.many
 ‘How many (situations are there that are) ceased?’
 c. 債 而 食 者 幾何 家? (管子•問第)
 Zhai er si zhe jihe jia?
 debt Conj feed ZHE how.many household
 ‘How many households that (borrow) debt to feed?’

- d. 子來幾日矣? (孟子•離婁上)
 Zi lai ji ri yi?
 you come how.many day Perf
 ‘How many days have you been (here)?’

3. *Wh-in-Situ and wh-preposing*

Although LAC is a *wh*-fronting language, there are exceptions to the obligatory preposing of non-subject *wh*-items. In this section, I first give a descriptive account of non-subject *wh*-items that undergo obligatory fronting. Following that, I present non-subject *wh*-phrases that do not have to move and those that must stay in situ. Through comparing data in LAC and those in the following historical period and in modern Mandarin, I finally discuss the reasons of *wh*-in-situ in LAC.

3.1 *Obligatory preposing of wh-phrases*

As mentioned previously, LAC requires non-subject VP-internal *wh*-elements to raise from their base position to a preverbal position between TP and *vP*, so it is a *wh*-fronting language. Example (14a/b) show that when a *wh*-phrase occurs within *vP*, it has to move to a preverbal position across the verb, and this *wh*-element may refer to object/activity or person. As can be seen from (14b), an interrogative sentence is followed by its non-interrogative answer (in the form of a rhetorical question) with the identical verb, and the latter displays the canonical V-O order; since questions and their rhetorical counterparts are expected to share the same underlying structure, I state that the former interrogative sentence in (14b) involves *wh*-preposing and the surface *wh*-V order is generated via such *wh*-preposing.

- (14) a. 然則 我 何 爲 乎?
 Ranze wo he_i [v_P wei t_i] hu?
 then I what do Q
 ‘Then what do I do?’
 b. 吾 誰 欺? 欺 天 乎?
 Wu shui_i [v_P qi t_i]? qi tian hu?
 I who deceive deceive Heaven Q
 ‘Whom do I deceive? (Do I) deceive the Heaven?’

By contrast, when *wh*-elements function as adverbials and precede *vP*, they do not undergo (obligatory) movement, as in (15a-e) that involve question words indicating manner, rhetorical, reason, instrument and time.

- (15) a. 余 安 能 知 之?
 Yu an neng zhi zhi?
 I how can know 3.Obj
 ‘How can I know it?’
 b. 吾 王 不 遊, 吾 何以 休?
 Wu wang bu you, wu heyi xiu?
 my king not travel I how rest
 ‘How can I rest if my king does not travel?’

- c. 子 奚 不 為 政? (論語•為政)
 Zi xi bu wei zheng?
 you why not do politics
 ‘Why do you not do politics?’
- d. 將 何 守 國? (國語•周語上)
 Jiang heiyi shou guo?
 fut what.with guard state
 ‘With what will (he) guard the state?’
- e. 當 何時 作 之 (管子•度地)
 Dang heshi zuo zhi?
 should what.time do 3.Obj
 ‘What time should (we) do it?’

In terms of *wh*-phrases for location, source and direction, their (lack of) movement is correlated with their position, thus nature, in the sentence. When a *wh*-phrase precedes VP, it remains in its base position, as in (16). In examples involving in-situ *wh*-elements, verbs are transitive and take direct objects, while *wh*-phrases function as adverbials preceding the verb phrases.

- (16) a. 子 何所 不 逞 欲? (左傳•昭公十四年)
 Zi hesuo bu cheng yu?
 you what.place not satisfy desire
 ‘(In) what place do you not satisfy desires?’
- b. 而 君 焉 取 余? (左傳•莊公六年)
 Er jun yan qu yu?
 then Your.Majesty where obtain surplus
 ‘Then (from) where does Your Majesty obtain the surplus?’
- c. 其 子 焉 往? (孟子•離婁上; Aldridge 2013: 246)
 Qi zi yan wang?
 3.Gen son where go
 ‘Where will their sons go?’

Nevertheless, if these *wh*-phrases are base-generated postverbally within the *vP*, they must undergo preposing across the verb and land in a preverbal position, generating a *wh-V* order. Differently from *wh*-phrases in (16) that are adverbials, *wh*-phrases in (17) act as verbal complements. (17a/b/c) contains a pair of question and answer which are expected to demonstrate a parallel structure, which means the questions involve *wh*-movement from postverbal to preverbal positions. Assuming non-interrogative statement displays the canonical word order *V-wh*, the interrogative sentences in (17a-c) involve *wh*-preposing and thus a reverse *wh-V* order.

- (17) a. 曰: ‘安 在?’ 曰: ‘在 寢。’ (禮記•檀弓下)
 Yue: ‘An_i [vp zai t_i]?’ Yue: ‘Zai qin.’
 say where be.in say be.in chamber
 ‘(He) said: “Where is (him)?” (Someone) said: “(He) is in the chamber.”’
- b. 惡乎 取 之? 取 之 曹 也。 (公羊傳•僖公三十一年)
 Wuhu_i [vp qu zhi t_i]? Qu zhi Cao ye.
 where take 3.Obj take 3.Obj Cao Decl
 ‘(From) where to take it? Take it (from) Cao.’

- c. 曰: ‘奚 之?’ 曰: ‘將 之 衛。’ (莊子•人間世)
 Yue: ‘Xi_i [_{VP} zhi t_i]?’ Yue: ‘Jiang zhi Wei.’
 say where go say Fut go Wei
 ‘(Confucius) said: “Where (are you) going?” (Yan Hui) said: “(I) will go to Wei.”’

3.2 Obligatory *wh-in-situ*

There are two exceptions to the obligatory preposing of non-subject VP-internal *wh*-items: 1) the second complement of ditransitive verbs 奈/若/如 *nai/ruo/ru* ‘to treat’; and 2) the second complement of the ditransitive verb 謂 *wei* ‘to call’. *Wh*-DPs in these two situations must stay in situ.

First, in some double object constructions, if a *wh*-DP functions as the second complement, it must remain in situ. In LAC, there are three verbs that indicate ‘to treat’ and take two internal arguments, viz. *nai/ruo/ru*, and their second complement is always in situ if it is a *wh*-item (18a-c).

- (18) a. 奈 吾 君 何? (國語•晉語二)
 Nai [wu jun] he?
 treat my lord what
 ‘What does (this) do to my lord?’
 b. 子 若 國 何? (左傳•僖公二十三年)
 Zi ruo guo he?
 you treat state what
 ‘What do you do about the state?’
 c. 將 如 君 何? (左傳•襄公二十三年)
 Jiang ru jun he?
 fut treat lord what
 ‘What will (we) do to the lord?’

Second, when a *wh*-item acts as the second complement of a ditransitive verb *wei* ‘to call’, this *wh*-item must stay in situ. *Wei* may take a *wh*-phrase as its first or second complement, but there is an asymmetry between the two arguments of *wei*. When a *wh*-element acts as the first complement, it always fronts to a preverbal position (19a); by contrast, if a simplex or complex *wh*-phrase functions as the second complement, it normally remains in situ, as shown in (19b-c) and (19d) respectively, regardless of whether the first complement moves (19d) or not (19b-c).

- (19) a. 何 謂 德義? (國語•晉語七)
 He_i [_{VP} wei t_i] deyi
 what call virtue.righteousness
 ‘What (do we) call as virtue and righteousness?’
 b. 國 謂 君 何? (左傳•僖公十五年)
 Guo wei jun he?
 state call lord what
 ‘How does the state speak of the lord?’ (Lit. ‘What does the state call the lord?’)
 c. 吾 獨 謂 先 王 何 乎? (呂氏春秋•季秋紀)
 Wu du wei xian wang he hu?
 I alone call former lord what Q
 ‘What do I alone call the former lord?’

- d. 此 所 謂 何 聲 也? (韓非子•十過)
 Ci_i suo [_{VP} wei t_i [he sheng]] ye?
 this SUO call what sound Q
 ‘What sound (do we) call this?’

However, there is one and only one exception to the non-movement of the second complement: if and only if 1) the first argument fronts to a preverbal position, and 2) the second argument, i.e. the *wh*-phrase, is simplex, then the second argument raises to a position intervening between the fronted first complement and the ditransitive verb, as in (20a-b). The reason why examples in (19b-c) do not involve *wh*-movement is that in those two questions, the first object remains in situ, hence failing to meet the first condition. As for (19d), it contains a complex *wh*-phrase, hence failing to meet the second condition. Therefore, *wh*-items remain in situ in (19b-d).

- (20) a. 是 何 謂 也? (左傳•昭公二十九年)
 Shi_i he_j [_{VP} wei t_i t_j] ye?
 this what call Q
 ‘What (do we) understand these?’
 b. 此 言 何 謂 也? (孟子•滕文公上)
 [Ci yan]_i he_j [_{VP} wei t_i t_j] ye?
 this sentence what call Q
 ‘What (do we) call this sentence?’

It should be pointed out that the *wh*-in-situ phenomenon is not motivated by these ditransitive verbs per se.

First, I discuss the in-situ phenomenon concerning *nai/ruo/ru* ‘to treat’. The first complement of *nai/ruo/ru* can raise out of the VP to a higher position, yet the movement of the first complement does not affect the non-movement of the second complement (*wh*-argument). In (21a), ZHI intervenes between the subject and verb to mark explicit subordination (Fuller 1999), and *Zhao Dun zhi fu guo* functions as the first argument of *nai* and raises to a preverbal position. The first argument in (21b) also moves out of the VP, but it also passes a modal verb and negation. As for (21c), it involves a hanging topic which is linked to a resumptive pronoun *zhi* as the first argument of the ditransitive verb, but again, this does not affect the second complement *he*. A *wh*-DP acting as the second argument in these three ditransitive constructions always remains in its base position, even if the first argument moves to a preverbal position (21a-b) or has a hanging topic (21c). Therefore, it is safe to say that the *wh*-in-situ is not caused by these three ditransitive verbs per se.

- (21) a. 趙 盾 之 復 國 奈 何? (公羊傳•宣公六年)
 [Zhao dun zhi fu guo]_i [_{VP} nai t_i he]?
 Zhao Dun ZHI recapture state treat what
 ‘What (do we) do with Zhao Dun’s recapture of the state?’
 b. 知 其 不 可 奈 何 而 安 之 若 命 (莊子•人間世)
 Zhi qi_i bu ke [_{VP} nai t_i he] er an zhi ruo ming
 know 3.Obj not can treat what Conj embrace 3.Obj as destiny
 ‘(They) know there is nothing (they) can do about it, so (they) embrace it as the destiny.’
 c. 君 使 臣, 臣 侍 君, 如 之 何? (論語•八佾)
 [Jun shi chen, chen shi jun]_i, [_{VP} ru zhi_i he]?
 lord employ official official serve lord treat 3.Obj what
 ‘A lord employing officials and officials serving the lord, what about it?’

Second, *wh*-in-situ is not motivated by the ditransitive 謂 *wei* ‘to call’ per se. Providing the second argument of this ditransitive is a non-*wh*-constituent, it may raise to a preverbal position. For instance, in example (22) involving *wei*, the second object *bu shi shangxing* ‘not neglect rewards and punishments’ moves from its base position to a position preceding the ditransitive *wei*. Additionally, the first complement moves to the CP domain as a left-dislocated topic clause that is syntactically related to *wei* through linking to a gap, and this gap occupies the position of the first object. Therefore, I argue that the ditransitive verb *wei* itself does not prevent its second argument from raising, and the fact that some second arguments cannot raise is due to their interrogative nature (see (19b-d)).

- (22) 惠 此 中 國， 以 綏 四方，
 [‘Hui ci zhong guo, yi sui sifang’],
 benefit this central state to appease four.direction
 不 失 賞 刑 之 謂 也 (左傳•僖公二十八年)
 [bu shi shangxing], zhi [_{VP} wei t_i t_j] ye
 Not neglect reward.punishment ZHI [_{VP} call t_i t_j] Decl
 ‘‘Benefiting this central state to appease (vassal states in) all directions’’, (people)
 call it not to neglect rewards and punishments’

3.3 Optional *wh*-in-situ

There are two types of optional *wh*-in-situ, namely, *wh*-predicates and *wh*-complement of adjunct adverbials. *Wh*-predicates in LAC take the form of DPs and they indicate object/activity, person or reason. When *wh*-DPs function as predicates, they normally do not front, but they can raise under special circumstances. Moreover, *wh*-VPs functioning as manner adjuncts display flexible distribution: they can be base-generated either in a higher position above *vP* or in a lower postverbal position. The *wh*-elements in both preverbal and postverbal manner adverbials demonstrate optional movement. To be more specific, four types of constructions are attested: 1) *V-wh-VP*; 2) *wh-V-VP*; 3) *VP-V-wh*; and 4) *VP-wh-V*.

3.3.1 *Wh*-predicates

It is generally acknowledged that Archaic Chinese has no copula, so in equational sentences ‘subject-nominal-*ye*’, predicate nominals directly follow the subject, with a declarative particle 也 *ye* often occurring in a sentence-final position (Chang 2006). When *wh*-nominals function as predicates, they usually stay in situ, and they can question object/activity, person and reason.

First, a nominal predicate indicating object/activity is the simplex *wh*-word 何 *he* ‘what’ that follows the subject and stays in situ (23a-b). 何 *he* ‘what’ can combine with an NP and form a complex sentential predicate, as in (23c). As can be seen from (23a) and (23c), the declarative particle 也 *ye* may follow the sentential predicate *he* in a sentence-final position, but it is not obligatory (23b). Since *ye* typically accompanies a nominal predicate in LAC (Aldridge 2007), it serves as an (extra) piece of evidence justifying the predicate nature of *wh*-DPs following sentential subjects.

- (23) a. 天下 之 害 何 也? (墨子•兼愛)
 Tianxia zhi hai he ye?
 world Gen calamity what Decl
 ‘What is the world’s calamity?’

- b. 七 律 者 何? (國語•周語下)
 [[Qi lv] zhe] he?
 Seven rhythm ZHE what
 ‘What are seven rhythms?’
- c. 是 何 物 也? (左傳•昭公二十一年)
 Shi [he wu] ye?
 This what thing Decl
 ‘What thing is this?’

Second, nominal predicates can ask for person information, indicated by the same simplex *wh*-word 何 *he* (meaning ‘who’ in this context) and another one 誰 *shui*. 何 *he* ‘who’ can appear independently (24a) or combine with an NP to form 何人 *he ren* ‘what person’ (24b), whereas 誰 *shui* can only be used alone (24c).

- (24) a. 來 者 何? (穀梁傳•僖公四年)
 [Lai zhe] he?
 come ZHE who
 ‘Who is the one that comes?’
- b. 舜 何 人 也? (孟子•滕文公上)
 Shun [he ren] ye?
 Shun what person Decl
 ‘What kind of person is Shun?’
- c. 追 我 者 誰 也? (孟子•離婁; Aldridge 2007: 144)
 [Zhui wo zhe] shui ye?
 Pursue me ZHE who Decl
 ‘Who is the one pursuing me?’

Third, simplex and complex *wh*-DPs indicating reason can serve as sentential predicates and stay in situ. As presented in Section 2, reason adverbials in LAC can be mono- or disyllabic, as in (25a) (=7d) and (25b) (=7g) respectively. Reason adverbials are ‘high’ adjuncts in modern Mandarin (Tsai 2008); unsurprisingly, reason adverbials in LAC always occupy high positions in tree diagrams too. As opposed to these two ‘high’ adverbial constructions that are always base-generated above negation thus above *vP*, when simplex and complex *wh*-phrases function as predicates, they have the option to stay in their base position following the sentential subject. When the bare *wh*-word 何 *he* as well as complex *wh*-nominals 何故 *hegu* and 何義 *heyi* follow the sentential subjects as predicates, they remain in their original positions, as in (26). I treat simplex and complex *wh*-phrases following VP subjects (e.g. (26b)) as nominal predicates, following Peyraube and Wu (2000).

- (25) a. 子 奚 不 為 政? (論語•為政)
 Zi xi bu wei zheng?
 you why not do politics
 ‘Why do you not do politics?’
- b. 我 何 故 不 得 福 也? (墨子•公孟)
 Wo hegu bu de fu ye?
 I why not receive blessing Q
 ‘Why do I not receive blessing?’

- (26) a. 君 與 我 此 何 也? (國語•晉語一; Aldridge 2007: 144)
 Jun yu wo ci he ye?
 lord give me this what Decl
 ‘Why is it that my lord gives me these things?’
- b. 受 之 何 義 也? (孟子•章句下)
 Shou zhi he yi ye?
 accept 3.Obj what reason Decl
 ‘(For) what reason (does one) accept it?’
- c. 子 賀 我 何 故? (國語•晉語八)
 Zi he wo he gu?
 you congratulate me what reason
 ‘(For) what reason do you congratulate me?’

It is important to point out that although the bare *wh*-word 何 *he* as well as complex *wh*-phrases 何故 *he gu* and 何義 *he yi* in (27) indicate reason, they cannot be treated as reason adverbials, as those in (25). First, according to my observation, only 何 *he* and complex phrases starting with 何 *he* can function as either predicative or adverbial phrases, yet the other *wh*-words such as 奚 *xi* (25a) can only act as adverbials. Second, as mentioned previously, *wh*-phrases functioning as adverbials of reason always appear as ‘high’ adverbials preceding *v*P (or more precisely, preceding negation), different from predicates that follow sentential subjects. Examples in (25) show that simplex and complex *wh*-adverbials are base-generated above negation. Moreover, examples in (27a-b) which are unmarked sentences with non-*wh*-PPs also help to show the base position of reason adverbials. Third, adverbials, but not predicates, can intervene between subject and *v*P. In (27c), if the adverbial 何 *he* was a predicate, *zi du fu zhi er xing* ‘you alone carry them and walk’ would be treated as a subject clause, but a predicate can never raise into a sentential subject and (27c) should not have been attested at all. Fourth, only under the analysis of *wh*-predicates can example (27d) be explained. Based on contextual information, 可 *ke* adopts the adjective meaning ‘appropriate’, so the *wh*-word 何 *he* has to act as a predicate rather than adverbial, otherwise this sentence would have no predicate. Moreover, movement of *wh*-phrases in LAC targets a node above negation (Aldridge 2006, 2007, 2010), which means LAC requires obligatory *wh*-preposing, and *wh*-phrases do not follow negation. If the *wh*-word 何 *he* in (27d) was a reason adverbial, it should have undergone *wh*-preposing to a position preceding the negator, but in the surface structure, the *wh*-word follows the negative. Therefore, the only justifiable account should be that 不可 *bu ke* functions as the sentential subject and the negation embedded within the subject cannot trigger the raising of the *wh*-predicate 何 *he*.

- (27) a. 吾 以 故 知 古 從 之 同 也 (管子•白心)
 Wu yi gu zhi gu cong zhi tong ye
 I for reason understand ancient follow Gen similarity Decl
 ‘For this reason I understand the ancient similarity of following’
- b. 大王 若 以 此 不 信 (韓非子•難言)
 Dawang ruo yi ci bu xin
 your.Majesty if for this not keep.promise
 ‘If Your Majesty does not keep promises because of this’

- c. 今 子 何 獨 負 之 而 行? (韓非子•喻老)
 Jin zi he du fu zhi er xing?
 now you why alone carry 3.Obj Conj walk
 ‘Now (for) what do you alone carry them and walk?’
- d. 其 不 可 何 也 (韓非子•外儲說上)
 Qi bu ke he ye?
 M od not appropriate what Decl
 ‘(For) what (is it) not appropriate?’

I state that *wh*-predicates involve optional *wh*-in-situ, because when serving as predicates, *wh*-phrases normally stay in situ, but they do undergo preposing under special circumstances. In (28), the simplex *wh*-DP *he* moves from a location following a sentential subject and lands in the left periphery as an external topic. In both examples, sentential subjects are nominalised by the morpheme 者 ZHE that can select a clausal complement projection and enable a TP to occupy an argument position as a sentential subject (Aldridge 2016).

- (28) a. 何 哉 君 所 謂 逾 者? (孟子•梁惠王下)
 He_i zai jun suo wei [yu zhe] t_i?
 what Q Your.Majesty SUO call arrogate ZHE
 ‘What is the arrogation that Your Majesty meant?’
- b. 何 哉, 爾 所 謂 達 者? (論語•顏淵)
 He_i zai, er suo wei [da zhe] t_i?
 what Q you SUO call understand ZHE
 ‘What is the understanding that you meant?’

3.3.2 *Wh*-complement of manner adverbials

In LAC, reason adverbials are ‘high’ adjuncts that always occupy high positions in trees, but non-reason manner adjunct adverbs can be base-generated either in a higher position above *vP* or be base-generated in a lower postverbal position. This observation coincides with the generalisation from Djamouri, Paul and Whitman (2013) that adjunct PPs in Classical Chinese may occur in a pre- or postverbal position.

Word order flexibility is a robust property of PPs in LAC, in that PPs can appear either before or after verbs (Peyraube 1996; Aldridge 2012b). Source PPs, for instance, display flexible distribution: in (29a), the preposition 自 *zi* ‘from’ and the nominal argument it selects precede the verb 反 *fan* ‘to return’, yet the source PP in (29b) occurs after the verb 出 *chu* ‘to exit’.

- (29) a. 世子 自 楚 反, 復 見 孟子 (孟子•滕文公上; Aldridge 2012b: 140)
 Shizi zi Chu fan, fu jian Mengzi
 heir from Chu return again see Mencius
 ‘The heir returned from Chu and again visited Mencius’
- b. 吾 聞 出 於 幽 谷 遷 于 喬 木 者 (Ibidem)
 Wu wen chu yu you gu qian yu qiao mu zhe
 I hear exit Loc dark valley move P tall tree Det
 ‘I have heard of leaving a dark valley and heading to a tall tree’

When *wh*-phrases indicate manner, they also display flexible distribution and appear pre- or postverbally (as in (30-31)/(32-33) below), parallel to those expressing location, source and direction. Nonetheless, *wh*-phrases concerning manner are disparate from location, source and direction *wh*-phrases that adopt different features in different positions. To be more specific, as presented earlier in (16), when location, source and direction *wh*-phrases occur preverbally above *vP*, they function as adverbial adjuncts and do not move; by contrast, when location, source and direction *wh*-phrases occur postverbally within the *vP*, they must undergo preposing across the verb and land in a preverbal position, generating a *wh-V* order, because in this situation they act as VP-internal verbal complements (17). Manner *wh*-phrases, however, are always adverbial adjuncts, regardless of their locations.

Wh-phrases functioning as manner adjuncts can take two forms, viz. *wh*-DPs and *wh*-VPs. I hypothesise that when *wh*-VPs function as manner adverbials, they are always flexible in terms of *wh*-fronting (hence word order), regardless whether these manner *wh*-adverbials appear preverbally or postverbally. That is to say, there are four possible word orders, namely, V-*wh*-VP, VP-V-*wh*, *wh*-V-VP and VP-*wh*-V; the former two orders are canonical yet the latter two are generated via *wh*-raising.

Manner *wh*-phrases can take two forms, viz. *wh*-DPs and *wh*-VPs. Apart from simplex and complex *wh*-phrases 何 *he*, 胡 *hu*, 安 *an*, 焉 *yan*, 奚 *xi*, 何以 *heyi*, 奚以 *xiyi*, 惡乎 *wuhu* (see examples in (5)), manner adverbials in LAC can adopt another form, i.e. VP construction consisting of a ditransitive verb 奈/若/如 *nai/ruo/ru* ‘to treat’ and its *wh*-complement 何 *he* or 奚 *xi* ‘what’. When a *wh*-VP functions as a manner adverbial, it can be base-generated preverbally. The *wh*-complement in the VP construction undergoes optional preposing, so that means both surface orders of [V-*wh*]-VP and [*wh*-V]-VP are attested. 何若 *he ruo* in (30a) is derived from *wh*-fronting out of the VP and the landing site of *he* is a preverbal position preceding the ditransitive verb *ruo*; the unmarked counterpart of (30a) is 若何 *ruo he* in (30b).

- (30) a. 齊王 何 若 是 之 賢 也? (韓非子•外儲說下)
 Qi.wang he_i [_{VP} ruo t_i] shi zhi xian ye?
 Qi.emperor what treat this ZHI virtuous Q
 ‘How can the Emperor of Qi (be) this virtuous?’
- b. 若 何 許 之? (晏子春秋•內篇諫下)
 [_{VP} Ruo he] xu zhi?
 treat what permit 3.Obj
 ‘How (can you) permit him?’

When a manner adverbial is in the form of V-*wh* (30b), it seems that *wh* remaining in situ violates the requirement of obligatory *wh*-preposing in LAC. However, as discussed previously, *nai/ruo/ru* are ditransitives which require their second complement to remain in situ. I assume that 何 *he* ‘what’ in these VP constructions is the second complement, and the first complement is null. For instance, the unmarked, complete counterpart of 若何 *ruo he* (30b) is 若之何 *ruo zhi he* which contains both the first and the second complement and acts as a manner adverbial preceding *vP* (31).

- (31) 若 之 何 不 弔? (左傳•襄公十四年)
 [_{VP} Ruo zhi he] bu diao?
 Treat 3.Obj what not condole
 ‘How (do we) not condole?’

I hypothesise that *wh*-in-situ in the surface structure of (30b) is caused by the fact that 何 *he* ‘what’ acts as the second argument of the ditransitive verb 若 *ruo*, thus prohibited from raising, even if being VP-internal. This presumption is supported by Peyraube and Wu (2000) that 若何 *ruo he* ‘treat what’ is derived from 若之何 *ruo zhi he* ‘treat it what’ from Early Archaic Chinese through the process of lexicalisation. Nevertheless, I notice that there are still instances involving *ruo zhi he* ‘treat it what’ in LAC period (as in (31)). With respect to examples that indeed involve *wh*-preposing like (30a), the explanation is that although adverbials in the V-*wh* order such as 若何 *ruo he* had developed into fixed expressions in the period of LAC, language users found the opposite order *wh*-V 何若 *he ruo* more acceptable based on their native speakers’ intuition (Peyraube and Wu 2000). Therefore, *wh*-V constructions as in (30a) are still attested in LAC period.

Alternatively, *wh*-VP manner adverbials can be base-generated postverbally, and *wh*-complements within the VP constructions also have two options: they either front to a higher position across the verbs or stay in situ. Examples in (32a-c) involve ditransitive verbs 若 *ruo* and 如 *ru*, and the *wh*-complements they take can be 何 *he* or 奚 *xi*. I claim that examples in (32) involve fronting, because the canonical order between the verb and its argument has been inverted. Again, as discussed earlier, as the second complement of a ditransitive verb, *he* or *xi* is supposed to remain in situ. However, despite the fact that the V-*wh* order 如何 *ru he* and 若何 *ruo he* had developed into fixed expressions in LAC, language users found the reverse order *wh*-V more acceptable (Peyraube and Wu 2000). Therefore, *wh*-V constructions as in (32) still exist in corpora.

- (32) a. 事 之 何 若? (莊子•外物)
 Shi zhi he_i [VP ruo t_i?
 make.progress 3.Obj what treat
 ‘How is it going?’
- b. 當 皆 法 其 父母 奚 若? (墨子•法儀)
 Dang jie fa qi fum xi_i [VP ruo t_i?
 if all emulate Gen parents what treat
 ‘How is it if (people) all emulate their parents?’
- c. 以 夫子 之 行為 奚 如? (莊子•天運)
 Yi fuzi zhi xingwei xi_i [VP ru t_i?
 Think Confucius Gen behaviour what treat
 ‘How (do you) think of Confucius’ behaviour?’

There are other data illustrating that *wh*-complements of these ditransitive verbs can stay in their postverbal base position, and these V-O structures also function as manner adverbials (33).

- (33) a. 而 為 之 若 何? (管子•侈靡)
 Er wei zhi [VP ruo he]?
 Conj conduct 3.Obj treat what
 ‘Then how to conduct it?’
- b. 佞人 之 事 君 如 何? (晏子春秋•內篇問上)
 Ningrenzhi zhi shi jun [VP ru he]?
 Sycophant ZHI wait.upon monarch treat what
 ‘How do sycophants wait upon the monarch?’

To summarise, manner adverbials in the form of VPs exhibit flexible distribution and can be base-generated, pre- or postverbally. In both situations, *wh*-complements of ditransitive verbs within these manner adverbials are always free to either raise to a preverbal position and generate *wh*-V, or remain in situ thus the canonical order V-*wh*. In other words, *wh*-in situ concerning manner *wh*-adjuncts is optional.

3.4 Account of *wh*-in-situ

As mentioned previously, Archaic Chinese has no copula, which means *wh*-elements follow subjects directly without any linking elements in between. According to Aldridge (2006, 2007), *wh*-phrases in LAC move to a position between the subject and *vp*, rendering fronting of predicates pointless, so predicates do not raise in general, giving the appearance of *wh*-in-situ.

In terms of ditransitive verbs, the mismatch between their first argument that is subject to *wh*-fronting and their second argument that must stay in situ (cf. (34a) and (34b)) may be accounted by Stepanov's (2001, 2007) theory. If a thematic argument contains any uninterpretable feature (structural Case or *wh*-feature) in its label, it enters the structure by substitution, hence a structural argument; if not, the thematic argument enters the structure by adjunction, hence a structural adjunct. Only a structural argument is subject to movement, yet a structural adjunct without structural Case or *wh*-feature always enters the structure postcyclically. Since a structural adjunct cannot be Merged by the time the interrogative feature Q of the matrix complementiser is Merged with IP, as a consequence, an inherent Case marked DP cannot undergo raising and is inert. Note that the unmarked non-interrogative counterpart of (34a) is in the first clause of (34c).

- (34) a. 何 謂 德義? (國語•晉語七)
 He_i [vp wei t_i] deyi
 What call virtue.righteousness
 'What (do we) call as virtue and righteousness?'
 b. 國 謂 君 何? (左傳•僖公十五年)
 Guo wei jun he?
 state call lord what
 'How does the state speak of the lord?' (Lit. 'What does the state call the lord?')
 c. 夫 謂 之 辱 者, 非 此 之 謂 也 (呂氏春秋•正名)
 Fu [wei zhi ru zhe]_i, fei ci zhi [vp wei t_i t_j] ye
 Decl call 3.Obj humiliation ZHE FEI this ZHI call Decl
 'That (we) call it humiliation, (we) do not call (it) as this'

In a ditransitive construction, the first complement is assigned accusative structural Case, yet the second argument receives dative inherent Case. A DP that is only marked inherent Case is inert (and transparent). For instance, a direct object in Albanian can move across an indirect object, but the indirect object cannot raise (McGinnis 1998; Stepanov 2007). Since both the first complement in (34a) and the second complement in (34b) display *wh*-feature, the only parameter that causes their disparity must be Case. The first thematic argument contains both *wh*-feature and structural Case, which makes it a structural argument, hence being subject to *wh*-fronting. However, the second thematic argument only has *wh*-feature, yet the inherent Case it receives brings the derivational property of inertness. Consequently, extraction out of an inherently Case marked DP is impossible.

With respect to the situations of obligatory *wh*-in-situ, they can be accounted for by the related verbs per se.

First, the second complement of ditransitive verbs *nai/ruo/ru* ‘to treat’ must stay in situ in LAC. I argue that these constructions were employed as fixed expressions in that historical period only, which explains the fact that such ditransitive use does not exist in modern Mandarin anymore.

Second, the second complement of the ditransitive verb *wei* ‘to call’ must stay in situ, and I argue that this is also due to the verb per se and is correlated with the Intervention Effect. The Intervention Effect as in Beck (1996) and Beck and Kim (1997) denotes the fact that a barrier may not intervene between a question existential operator (Q-operator) and a function variable bound by that Q-operator. The Intervention Effect in Mandarin is triggered by focus constructions, and it can be circumvented by a repair strategy raising an in-situ *wh*-item to a position preceding the focus-induced barrier (Kim 2002, 2006). I use (35a) that contains a ditransitive verb *gei* ‘to give’ to illustrate the Intervention Effect in Mandarin, and (35a) displays the canonical order. In (35b), if the first complement *Lisi* is focalised and fronts to a preverbal position, the Q-binding of the second complement, the *wh*-phrase *na-ben shu* ‘which book’, will be blocked by this focus barrier; as a consequence, (35b) becomes infelicitous, because the *wh*-element is preceded by a focalised object and subject to the Intervention Effect. (35c) and (35d) demonstrate that the *wh*-DP must move to a higher position across the focus-induced barrier in order to be bound by its operator, and the fronted *wh*-DP can move to the CP domain (35c) or stay in the low IP area (35d), as long as its landing site is more prominent than the focus-induced barrier.

- (35) a. Zhangsan gei Lisi na-ben shu?
 Zhangsan give Lisi which-CL book
 ‘Which book does Zhangsan give Lisi?’
- b. *Zhangsan lian Lisi_i dou [vp gei t_i [na-ben shu]]?
 Zhangsan even Lisi also give which-CL book
- c. [Na-ben shu]_j Zhangsan lian Lisi dou [vp gei t_i t_j]
 which-CL book Zhangsan even Lisi also give
- d. Zhangsan [na-ben shu]_j lian Lisi_i dou [vp gei t_i t_j]
 Zhangsan which-CL book even Lisi also give
 ‘Which book does Zhangsan give even Lisi?’

I propose that due to the language per se, the ditransitive verb *wei* ‘to call’ is even stronger than the Intervention Effect, in a sense that *wei* can suppress the Intervention Effect and allow its second complement (*wh*-DPs) to stay in situ, without having to undergo raising across focus-induced barriers. Consequently, owing to the robustness of *wei*, it is natural for its second complement to remain in situ under normal circumstances without the Intervention Effect. Due to insufficiency of data concerning *wei* in LAC corpora, I resort to its modern counterpart of *jiao* (36a). As shown in (35), the second complement of ditransitive verbs like *gei* is affected by preceding focus constructions, so the *wh*-DP has to move across the blocking element in order to circumvent the Intervention Effect. *Wh*-DPs introduced by *jiao*, however, are immune from the Intervention Effect. Therefore, *shenme* ‘what’ in (36b) can remain in its base position, despite the fact that there is a focused subject intervening between *shenme* and its Q-operator. Since the modern counterpart of *wei* is strong enough to circumvent the Intervention Effect, it is unsurprising to see that *wei* in LAC can enable its *wh*-complement to stay in situ.

- (36) a. Zhangsan [_{VP} jiao Lisi shenme]?
 Zhangsan call Lisi what
 ‘What does Zhangsan call Lisi?’
 b. Lian Zhangsan dou [_{VP} jiao Lisi shenme]?
 even Zhangsan also call Lisi what
 ‘What does even Zhangsan call Lisi?’

4. Conclusion

In this paper, I analyse *wh*-phrases in LAC, focusing on situations when they stay in situ. Analogous to modern Mandarin, LAC is an SVO language; yet differently from its modern counterpart, LAC requires non-subject VP-internal *wh*-elements to undergo obligatory clause-internal preverbal positioning, driven by the fact that LAC is a *wh*-fronting language. Nevertheless, there are data involving obligatory and optional *wh*-in-situ attested in this historical period (5thc BC-3rdc BC).

Before discussing *wh*-preposing and *wh*-in-situ, I give a descriptive account of eleven categories of simplex and complex *wh*-phrases and their corresponding data drawn from corpora. Question words in LAC can be divided into eleven semantic groups, indicating object/activity, person, manner, rhetorical, reason, instrument, time, location, source, direction and quantity. Each category is constituted of a range of different question words, and there are overlaps among groups, because it is common for (question) words to be polysemous in LAC, which might be related to lack of inflectional morphology.

LAC entails obligatory preposing of non-subject VP-internal *wh*-items, but there are two exceptions to such movement. First, if a *wh*-DP acts as the second complement of ditransitive verbs 奈/若/如 *nai/ruo/ru* ‘to treat’, it normally stays in situ, unless this *wh*-DP is simplex and the first argument fronts to a preverbal position. Second, if a *wh*-DP acts as the second complement of the ditransitive verb 謂 *wei* ‘to call’, it must stay in situ following the verb. I then point out that the obligatory *wh*-in-situ under these two circumstances is not motivated by these ditransitive verbs per se.

Apart from obligatory *wh*-in-situ, there are two situations when *wh*-elements do not have to undergo obligatory preposing, yet they do not have to stay in situ either. The first type of optional *wh*-in-situ is *wh*-predicates. When *wh*-nominals function as predicates, they can question object/activity, person or reason. A *wh*-predicate usually stays in situ, unless this predicate is 何 *he* ‘what’ and the raising takes place in the format of [_{TP} Subj-SUO-V₁-[V₂-ZHE]]-*wh-zai*; under this particular circumstance, the surface structure becomes *wh-zai*-[_{TP} Subj-SUO-V₁-[V₂-ZHE]]. The second type of optional *wh*-in-situ is the *wh*-complement inside *wh*-VPs that act as manner adverbials. When *wh*-VPs function as manner adjuncts, they show flexible distribution and can be base-generated either above *v*P or inside *v*P. Whether the VP adverbials being preverbal or postverbal, the *wh*-elements inside these VPs always undergo optional movement. That is to say, a manner adverbial may display a canonical order V-*wh* or a surface order *wh*-V (generated via *wh*-fronting); in either order, the manner adverbial can precede or follow the VP.

In the following section, I explain *wh*-fronting in LAC by referring to the theory of Stepanov (2001, 2007). I also suggest that obligatory *wh*-in-situ concerning *wei* is correlated with this ditransitive verb per se. Since the modern counterpart of *wei* enables its *wh*-complement to be immune from the Intervention Effect (Beck 1996; Beck and Kim 1997), I assume that *wei* can also suppress the Intervention Effect, and due to its robustness, it is not surprising for its complement to remain in situ without the Intervention Effect.

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