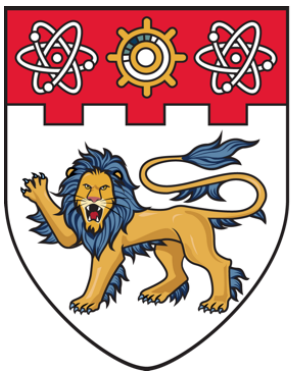

NANYANG TECHNOLOGICAL UNIVERSITY
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REVISITING THE DIACHRONIC DEVELOPMENT OF THE WORD ORDER OF LOCATIVE PREPOSITIONAL PHRASES IN CHINESE

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Revisiting the Diachronic Development of the Word Order of Locative Prepositional Phrases in Chinese

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A thesis submitted to the Nanyang Technological University in partial fulfilment of the requirement for the degree of Doctor of Philosophy

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I certify that all work submitted for this thesis is my original work. I declare that no other person's work has been used without due acknowledgement. Except where it is clearly stated that I have used some of this material elsewhere, this work has not been presented by me for assessment in any other institution or University. I certify that the data collected for this project are authentic and the investigations were conducted in accordance with the ethics policies and integrity standards of Nanyang Technological University and that the research data are presented honestly and without prejudice.

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Authorship Attribution Statement

This thesis contains material from one paper published in the following peer-reviewed journal(s) / from papers accepted at conferences in which I am listed as an author.

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ABBREVIATIONS

1	first person
2	second person
3	third person
ABL	ablative
ACC	accusative
AOR	aorist
ASP	aspect
CAUS	causative
CLF	classifier
CONJ	conjunction
DEM	demonstrative
DISP	disposal marker
F	feminine
GEN	genitive
GER	gerund
HON	honorific
LOC	locative
M	masculine
N	neuter
NEG	negation
NMLZ	nominalizer
OPT	optative
PASS	passive
PL	plural
POSS	possessive
PRES	present
PRON	pronoun
PTCL	particle
SFP	sentence final particle
SG	singular
VCM	verb complement marker

SUMMARY

This study revisits the diachronic development of the word order of locative prepositional phrases (PPs) in Chinese, a topic with significant implications for both typological research and Chinese historical linguistics. Locative PPs in Modern Chinese appear mostly before the verb in the presence of a verbal object. Typological findings from the World Atlas of Language Structures Feature 84A (Dryer with Gensler 2013) reveal that this word order is rarely observed in VO languages, making it a noteworthy exception. Diachronically, the placement of locative PPs has been a pivotal subject in the field of Chinese historical linguistics, as changes in their word order mark a crucial syntactic development in the history of the Chinese language (Chao 1968; L. Wang 1980 [1958]).

Previous studies generally indicate that there was a shift in the locative PP word order around the Eastern Han - Six Dynasties period (25 – 589 CE), from predominantly postverbal to preverbal (Peyraube 1994; C. Zhang 2002, inter alia). Discussions in the current literature regarding the underlying reasons for this shift have greatly enhanced our understanding. Nevertheless, several concerns need to be addressed. The first concern pertains to methodological aspects, particularly in data collection and handling. A systematic re-evaluation of linguistic materials with the aid of advanced diachronic corpus tools is recommended. Additionally, external influences should be considered when exploring the motivations and mechanisms underlying the word order development.

Adopting a diachronic corpus-based approach, this thesis examines the evolution of locative PP word order over 14 texts across 9 sub-stages. Results support earlier findings that the predominant word order for locative PPs in Old Chinese was postverbal. Eastern Han marked the onset of a transition towards the preverbal order, with the changes in dominant word order becoming more firmly entrenched during the Six Dynasties. This thesis explores the motivations and mechanisms behind the evolution of locative PP word order by evaluating both internal and external factors. The analysis of internal factors addresses four aspects: preposition decline and replacement, iconicity and syntactic processing, the Postverbal Constraint, and competition between constructions. Drawing on comparative studies, the examination of external factors focuses on how Buddhist scripture translations may have shaped the development of PP word order in Chinese.

By tackling the conflict between synchronic typological features and diachronic development patterns, this thesis enriches the discussion on locative PP word order evolution.

Lastly, this thesis explores the broader implications of the theoretical analyses proposed by extending the findings from the study of locative PPs to other PP categories. It presents a preliminary analysis of how the argument–adjunct distinction could potentially deepen our insight into PP placement and seeks to offer a more fundamental and unified account across all PP categories.

CHAPTER ONE
INTRODUCTION

This study seeks to revisit the diachronic development of the word order of locative prepositional phrases (PPs) in Chinese.[1] My decision to revisit this topic is motivated by two compelling reasons. Firstly, as the following sections show, the placement of locative PPs in Chinese presents a captivating subject that holds immense significance in the field of typological studies as well as Chinese historical linguistics. Due to its complexity and potential implications, this topic remains an area of ongoing interest and investigation. Secondly, my MA thesis (L. Jiang 2018) has attempted to examine this subject, with a specific focus on the development of locative PP word order in relation to verb–object (VO) in Chinese, and my preliminary exploration has revealed several unresolved issues and unexplored areas. Hence, my current PhD thesis aims to revisit the topic, with the goal of incorporating new linguistic materials, methodologies, and perspectives. Hopefully, this thesis will provide fresh dimensions and offer a more comprehensive understanding of the intricate nature of the topic.

This thesis differs from my MA thesis (L. Jiang 2018) in several key aspects:

1) This thesis has broadened its coverage of language materials, as indicated by the increased number of texts under scrutiny. Furthermore, due to the unique nature of Middle Chinese,[2] texts from this period are divided into two categories: native non-Buddhist texts and Buddhist texts (see Section 4.2, Chapter 4).

[1] It is important to consider how the concept of 'the Chinese language' is framed, particularly given the challenges of discussing syntactic changes over such a vast geographical and temporal span, alongside diverse linguistic, political, and economic contexts. This thesis recognises that the Chinese language is not a monolithic entity, but rather a broad term encompassing a range of varieties, registers, and historical forms that have evolved over time. In referring to syntactic changes, the intention is not to imply uniformity, but rather to highlight overarching patterns and trends that can be traced across various stages of the language's development, while being mindful of the variations and complexities within these stages.

[2] 'Middle Chinese' is a commonly used term in historical phonology research, such as in Pulleyblank (1984). However, in current literature on the history of Chinese grammar and periodisation, both 'Middle Chinese' and 'Medieval Chinese' are used. In other words, 'Middle Chinese' is applied in contexts beyond phonology, including in works such as Wei (2003) and Aldridge (2013). Additionally, Arcodia and Basciano (2021: 38) use 'Middle Chinese' to refer to 中古汉语 in the periodisation of Chinese, noting that it is one of the most frequently used labels for the major stages of Chinese. While this thesis adopts labels such as 'Old Chinese', 'Middle Chinese', and 'Early Mandarin Chinese' for the main historical stages, I will cite the terms used by the researchers in their original works when applicable. For clarity, the thesis also includes specific dynasties and/or the corresponding Gregorian calendar years as proposed by the respective scholars, provided such information is explicitly stated.

2) In contrast to L. Jiang (2018), which centres around locative VOPP and PPVO, this thesis expands its scope by collecting primary data on locative VPP and PPV, along with subclasses of locative PPs (see Chapters 5 to 7).[3]

3) Furthermore, this thesis incorporates a constructional perspective through an initial investigation into how competition between constructions may elucidate the diachronic changes in locative PP placement (see Section 8.2.4, Chapter 8).

4) In addressing the dominant word order change, I briefly discussed the contact between Chinese and non-Sinitic languages in my previous analysis in L. Jiang (2018). This thesis draws upon this foundation and probes further into external factors with a wider scope. Notably, it adopts a fresh line of inquiry, uncovering the possible influence of the translations of religious texts on the evolution of Chinese (see Section 8.3, Chapter 8).

5) Lastly, the current study is particularly interested in exploring whether the proposed theoretical framework not only sheds light on locative PPs but also extends its explanatory power to other PP categories. By doing so, I seek to establish a more comprehensive and unified account of PP word order in general (see Section 8.4, Chapter 8).

The rest of the chapter presents the key terms employed in this study, followed by introducing a peculiar typological trait of Modern Chinese. Subsequently, it explains the rationale for taking a diachronically-driven approach. The chapter ends with a brief overview of the thesis structure.

1.1 KEY TERMS IN THIS STUDY

This section addresses the key terms used in this study: prepositions and PPs, locative, and word order.

Firstly, prepositions and PPs are examined. This thesis recognises that introducing these concepts risks imposing categories from Indo-European languages onto Chinese, particularly Old Chinese, where their relevance may be questionable. This concern is evident in the ongoing debate over whether these elements are genuinely prepositions or merely verbs in the context of Old Chinese. Indeed, the word class of prepositions in Chinese is challenging to define. Huang, Li and Li (2009: 26) attribute the lack of a well-established category of prepositions in

[3] Although I did categorise locative PPs into subclasses of location, source, goal, and path in L. Jiang (2018), my main focus was on the placement of these different subclasses within locative VOPP and PPVO constructions, rather than in locative VPP and PPV. Furthermore, L. Jiang (2018) lacks an investigation of the distinction between goal-locative PPs and non-goal locative PPs, regarding the impact of these two types of locative PPs on word order changes. This part deserves closer scrutiny as it directly relates to observations made by prior studies.

Chinese to two reasons: 1) Prepositions in Chinese originated as verbs historically; 2) There is no inflectional morphology in Chinese for verb marking.[4] Huang, Li and Li (2009: 26-27) further argue that prepositions and verbs possess the same capability of directly introducing a nominal object without relying on any additional morpheme. Consequently, the word classes of prepositions and verbs are difficult to delineate in Chinese (cf. Fu et al. 1997). This poses an even more significant challenge when one deals with Ancient Chinese.[5] For instance, Huang, Li and Li (2009: 29) note that in Modern Chinese, the original verbal meaning for 从 *cong* (to follow) and 把 *ba* (to hold) is no longer readily accessible, except within certain "fossilized expressions".[6] However, in Ancient Chinese, the same form could possess both verbal and prepositional usage, hence further blurring the boundary between the two categories.

This challenge of establishing the category of prepositions in Ancient Chinese is evident in several studies. For instance, prepositions in Chinese are sometimes referred to as 'coverbs' (cf. Li and Thompson 1974a). Dryer (2017: 75) contends that it is reasonable to assume that some of these 'coverbs' have undergone sufficient grammaticalization to be called prepositions, though he does not provide specific criteria for the assessment. Likewise, Peck (2008: 23) acknowledges the difficulty in applying formal criteria and thus follows previous studies, particularly C. Zhang (2002), in selecting prepositions from historical written data.

Indeed, C. Zhang (2002) stands out as one of the most extensive and systematic in providing criteria for selecting prepositions and PPs. This thesis adopts the guidelines presented in C. Zhang (2002: 4):[7]

1) A phrase is deemed a PP only when used in conjunction with predicates.

2) Prepositions undergo substantial shifts in meaning compared to their usage as content words.

[4] The lack of verb marking in Chinese makes it challenging to differentiate between verbs and prepositions. As verbs do not undergo inflectional changes, they can have the same surface form as prepositions, which originated from verbs.

[5] The term 'Ancient Chinese' (古汉语) is consistently used in this thesis to denote Chinese from earlier periods in general, in contrast to 'Modern Chinese'. I would like to point out that this term is only employed when contrasting the dichotomy between the two stages. This thesis firmly supports a more refined periodisation of Chinese. Subsequently, the periodisation issue will be thoroughly discussed in Section 4.1 of Chapter 4.

[6] For instance, 从 *cong* subsequently developed into a preposition indicating 'from'. In Modern Chinese, its original verbal meaning is mainly preserved within idioms such as 力不从心 *li bu cong xin*, which literally translates to 'strength does not follow the heart'. However, even with the fading usage of their original verbal meanings as 'to follow' and 'to hold' in Modern Chinese, it must be pointed out that stating 从 *cong* and 把 *ba* cannot function as the main verb in constructions would be inaccurate.

[7] Like Peck (2008), L. Jiang (2018) follows C. Zhang's (2002) criteria as well, but L. Jiang (2018: 1) incorporates only Point 1 and Point 3 from C. Zhang's guidelines.

3) If there are no changes or only minor changes in meaning, assess whether the constituent introduced visibly modifies the predicate. Without an apparent modifying effect, it cannot be classified as a preposition, as seen with the preverbal 在 *zai* during the pre-Qin period. Additionally, consider the frequency of its prepositional usage within a certain period.

4) Prepositions that emerged before the Tang dynasty are generally multifunctional. For example, 从 *cong*, 向 *xiang*, 持 *chi*, and 用 *yong* can each introduce two types of PPs. Prepositions that only introduce one type of PP can also have multiple usages within that type, such as 在 *zai*. Consequently, exclude those from the pre-Tang period that only possess a single usage. For instance, 至 *zhi* and 到 *dao*, which solely indicate "the place reached" and only modify a few verbs like 来 *lai* and 往 *wang*. However, since the Tang dynasty, prepositions became specialised in function, rendering this criterion irrelevant. Therefore, 到 *dao* is considered a preposition from the Tang and Five Dynasties period onwards.

Much like C. Zhang's first and third point, He (1985: 65) states that PPs are lower in position than predicates in terms of hierarchical analysis and they modify predicates. Additionally, He (1985) advocates a prudent and conservative approach. She highlights that the vast majority of words identified as prepositions in her study are substantiated by previous works, while those posing identification uncertainties are excluded. This thesis shall follow this cautious approach.

Secondly, the term 'locative' is discussed. According to D. Zhao (2007: 26), a locative preposition is a preposition that introduces into the syntactic structure a location or range that relates to the action or state expressed by the predicate head. To elaborate further on the notion of 'locative', this thesis views locatives as a manifestation of spatial relations and distinguishes between two types of spatial relations: static and dynamic. Static spatial relations involve non-directional locatives and pertain to locations. In contrast, dynamic spatial relations include directional locatives and express directionality. This thesis focuses on four locative subclasses:

location, source, goal, and path. Location falls under non-directional locatives, while source, goal, and path belong to directional locatives.[8]

This thesis defines the four locative subclasses as follows: location refers to the place where an entity is situated or where an event occurs, source represents the starting point of a motion event, goal indicates the end point of a motion event, and path relates to the route of the movement. Note that the four subclasses here function as a broad classification, and some of them allow for more granular distinctions in the literature. For instance, some studies divide location into dynamic and static location (Hong 2010a), while a more refined categorisation further breaks down static location into location of existence and location of staying (C. Zhang 2002). Similarly, goal can be perceived as comprising an achieved goal, which is a reached endpoint, as well as an anticipated goal (Tai 1985). The four-way categorisation of location, source, goal, and path serves as a primary reference and general guide in this study.

Lastly, the term 'word order' concerns the placement of locative PP in relation to V(O), i.e., whether the locative PP is preverbal or postverbal. Morey (2006: 328) aptly highlights that the discussion on word order very often pertains to more than single words and suggests using the term 'constituent order' instead. Although the primary focus of this thesis is on the order of phrasal constituents rather than individual words, the literature cited frequently employs the term 'word order'. Moreover, constituent order falls under the broader concept of word order typology in general. Thus, to maintain consistency with the existing literature, this thesis will continue to use the term 'word order'.

1.2 A DISTINCTIVE TYPOLOGICAL FEATURE OF MODERN CHINESE

This section looks at a typologically distinctive feature of Modern Chinese that concerns the placement of locative PPs. In Modern Chinese, locative PPs appear mostly before the verb when the verb has an object:[9]

[8] The term 'locative' can be interpreted in different ways. I have summarised in L. Jiang (2018: 1) that there is a discrepancy in the terminology used within the current literature. Contrasting views exist regarding the classification of locative PPs and directional PPs. For instance, studies such as Koopman (2000) and Tungseth (2008) differentiate between the two, reserving the label 'locative' exclusively for non-directional locatives. Conversely, other studies, such as Nam (1995) and Surányi (2009), posit that both non-directional and directional locatives can be grouped under the overarching category of locatives. Chinese linguists tend to align with the second understanding and use 'locative' to encompass spatial relations in a general sense. This is reflected in the works of Cheung (1991), Sun (1996), C. Zhang (2002), D. Zhao (2007), and several other scholars. This thesis follows this perspective.

[9] LaPolla (2022a) astutely observes the limited adoption of natural language data in linguistic research. Data collection typically involves elicitations devoid of context, grammaticality judgments, or linguists creating their

(1) a.他们 在 博物馆 欣赏 文物
tamen *zai* *bowuguan* *xinshang* *wenwu*
3SG.PL in museum appreciate cultural.relics
'They are appreciating the cultural relics in the museum.'

b.*他们 欣赏 文物 在 博物馆
tamen *xinshang* *wenwu* *zai* *bowuguan*
3SG.PL appreciate cultural.relics in museum

The infrequency of postverbal locative PPs is also evident in the limited range of verb classes they can associate with. Li and Thompson (1989: 398-406) note that while Mandarin Chinese permits preverbal locative phrases with almost all verbs, the use of postverbal locative phrases is limited to only four specific verb classes: displacement, posture, appearing, and placement.

L. Jiang (2018: 2) cites typological findings from the World Atlas of Language Structures (WALS) to demonstrate the rarity of this placement for VO languages. This is illustrated by the map of WALS Feature 84A, which displays the sequence of object (O), oblique (X) and verb (V) across languages:[10]

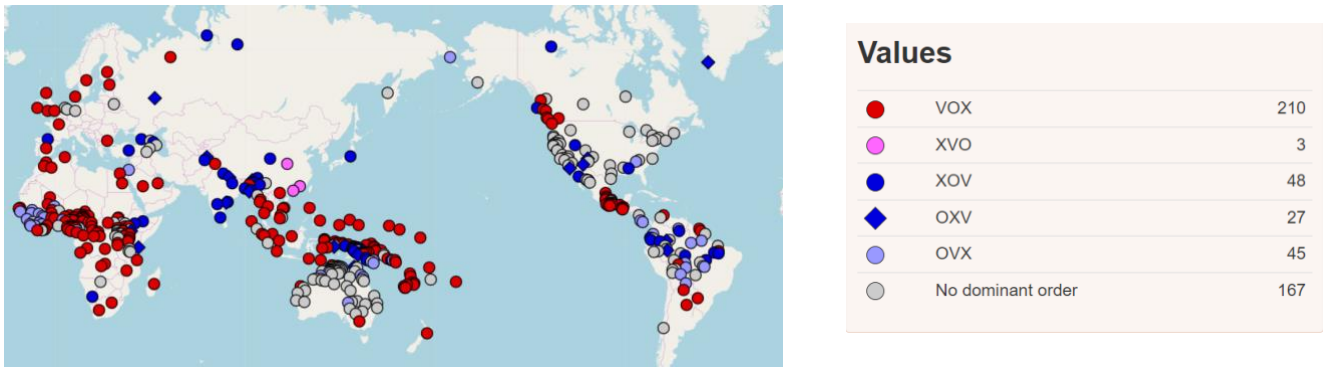


Figure 1.1 WALS Feature 84A: Order of object (O), oblique (X) and verb (V) (Dryer with Gensler 2013) [11]

own sentences. Given the prohibition of data fabrication in other scientific disciplines, LaPolla urges linguists to move away from this practice. While the purpose of listing these examples in (1a-b) is simply to illustrate the rarity of locative VOPP constructions in Modern Chinese, this approach conflicts with the advocacy for natural data. Thus, I proceeded to conduct searches in the Academia Sinica Balanced Corpus of Modern Chinese and the Modern Chinese sub-corpus of the Peking University CCL Corpus. Among the first 5000 results retrieved for the keyword 在 *zai*, no instances of locative VOPP constructions were detected. Nevertheless, an uncommon exception to the usual locative PPVO constructions may occur in pragmatically restricted situations. For example, 他有时看书在学校，有时看书在家 ('He sometimes reads books in school, sometimes reads books at home.'). There is an intentional contrastive focus here.

[10] WALS defines oblique as a noun phrase (NP) or adpositional phrase (AdpP) that serves as an adverbial modifier or adjunct to the verb.

[11] I took the legends of values on the right side of Figure 1.1 from an older version of the WALS website (July 2018). Presently, users have the flexibility of customising the legends by adjusting the colour and shape. This thesis follows L. Jiang (2018: 2) in keeping the original legends, as the current version's legend options make the shapes more difficult to identify and less suitable for screen capture. Despite the change in the website version, the value corresponding to each order remains the same.

Among the 213 VO languages surveyed, an overwhelming majority of 210 entries exhibit the dominant order of VOX. These languages, visually represented by red dots on the map, account for a substantial proportion of 98.6%. In contrast, merely 3 entries, illustrated by pink dots, follow the dominant order of XVO and constitute only 1.4% of VO languages. Remarkably, all these entries are modern Sinitic languages, namely Mandarin, Hakka, and Cantonese. Figure 1.1 indicates that the vast majority of VO languages adhere to the dominant order of VOX, yet Modern Chinese disobeys the trend. This evident deviation distinguishes Modern Chinese from other VO languages. Dryer (2017: 76) reiterates that the three Sinitic languages are the sole examples known to us with such characteristics. He finds that out of 199 VO languages, only these three exhibit a PPV order, while the rest are all VPP. [12]

This study emphasises a typological perspective, as research in linguistic typology and language universals often unveils peculiar features of a language, allowing us to observe and appreciate the unique aspects of the language under investigation. Here, WALS Feature 84A serves both as a motivation and starting point for this study. Nevertheless, while WALS is a large-scale database that provides a valuable resource for investigating cross-linguistic structural traits and can be instrumental in inspiring research, it is crucial to acknowledge its limitations and regard it primarily as a supplementary data source. Even though the initial reference point of this study stems from WALS Feature 84A, it is important to bear in mind that this particular feature holds much more relevance for the distribution of VOPP and PPVO, but it does not reflect the variation of VPP and PPV.

Additionally, there has been scepticism regarding the validity of word order universals. However, Verkerk et al. (2022) recently conducted a global phylogenetic study of more than 150 potential typological universals. Their results indicate that although two-thirds of the typological universals are not statistically robust, word order universals and universals on hierarchies do demonstrate substantial degrees of 'universality'. Still, we must acknowledge

[12] Yet another way to illustrate that the locative PP placement in Modern Chinese deviates from the expected pattern and appears to be a distinctive trait among VO languages in terms of word order typology, is to consider the organising principle put forth by Lehmann (1973) and Vennemann (1974). It suggests that VO languages typically adhere to the order of operand (head)–operator (modifier), while OV languages tend to have the structure of operator (modifier)–operand (head). A language is 'consistent' if all its modifiers are invariably placed on one side of the heads, that is, either all before or all after the heads. Consistency is deemed natural and desirable. Considering that Modern Chinese is widely recognised as a VO language, one would anticipate the prevalence of postverbal locative PPs, in accordance with the operand (head)–operator (modifier) structure. However, this organising principle falls short in empirical validation. As Cichosz et al. (2016: 5) point out, recent extensive typological investigations have not substantiated the idea that the relative order of V and O is the primary predictor for phrasal word order. Diessel (2019: 186) also notes that despite its prominence in theoretical discourse, the head-initial and head-final division lacks robust support from typological evidence, and the ordering patterns fail to be neatly sorted into the two overarching types of head-initial versus head-final.

that word order variations are complex in reality and we should not oversimplify them (Siewierska 1998). It is vital to consider diachrony, areal features and pragmatic functions in addition to syntactic factors when examining word order.

1.3 A DIACHRONICALLY-DRIVEN PERSPECTIVE

This section discusses why it is crucial to adopt a perspective driven by diachronic considerations.

First of all, as L. Jiang (2018: 2-3) states, depending exclusively on the examination of Modern Chinese is inadequate in capturing all the attributes of Chinese. In terms of typology, Modern Chinese displays a peculiar trait amongst VO languages. Adopting a diachronic approach might enhance our comprehension of what seems unusual in terms of synchronic analysis. L. Jiang (2018: 61) further argues her findings suggest that the present form of Chinese has been moulded by the impact of historical transformations and demonstrate how diachronic research can augment synchronic studies. The present study is relevant to ongoing research on prepositions in Modern Chinese, as it seeks to complement these synchronic analyses and collectively tackle the synchronic enigma in Modern Chinese.

Secondly, within Chinese historical linguistics, the positioning of locative PPs constitutes a key topic on its own. Locative PPs appear mostly after the verb in Old Chinese (L. Wang 1980 [1958]; Peyraube 1994; C. Zhang 2002, inter alia). For instance:

(2) 成大心 败 麇 师 於 防渚
Cheng Daxin *bai* *Jun* *shi* *yu* *Fangzhu*
Cheng Daxin defeat Jun(state name) army in Fangzhu(place name)
'Cheng Daxin defeated the Jun army in Fangzhu.'
(《左传・文公十一年》Zuo Commentary, Duke Wen, Year 11; circa 4th c. BCE[13])

(3) 因 迁 蔡 于 州来
yin *qian* *Cai* *yu* *Zhoulai*
thereupon move Cai(state name) to Zhoulai(place name)
'…thereupon moved (the capital of) Cai to Zhoulai.'
(《史记・管蔡世家》Records of the Grand Historian, Hereditary Household of Guan and Cai; early 1st c. BCE)

[13] For cited examples from historical texts, the composition date of the text will be provided. This date however does not relate to the year of the duke's reign.

In contrast to (1a), the location-locative PP in (2) and goal-locative PP in (3) both follow the verb. This implies a potential shift in the word order of locative PPs, transitioning from predominantly postverbal in Old Chinese to predominantly preverbal in Modern Chinese.

Indeed, the placement of locative PPs is a pivotal subject in the field of Chinese historical linguistics. Chao (1968: 13) notes that the only crucial syntactic distinction between Modern Chinese and *wenyan* 文言 (classical Chinese) lies in the position of PPs indicating locality and origin. In Modern Chinese, such locative PPs consistently appear before the main verb, whereas in *wenyan*, they may occur after the verb. Since the difference in locative PP word order is viewed as the only important syntactic contrast between Modern Chinese and *wenyan*, it serves as a compelling argument in support of Chao's (1968: 13) claim of "practically one universal Chinese grammar". Consequently, the evolution of word order in locative PPs emerges as an immensely noteworthy topic in the field of Chinese historical linguistics. Chao (1968: 13) maintains that there is a remarkably high degree of grammatical uniformity across all Chinese dialects with only minor deviations, even after factoring in *wenyan.* Chao therefore advocates for "practically one universal Chinese grammar". This is however debatable. For instance, findings from Chappell (2015) suggest a much broader diversity in Sinitic syntax than previously recognised. Such contentious assumptions also lead to a situation where research on the grammar of non-Mandarin Sinitic varieties was limited until recently (LaPolla 2015: 46). Although this thesis has reservations about the notion of 'universal Chinese grammar', Chao's emphasis on locative PP word order change being the sole diachronic syntactic contrast remains a critical point to the ongoing discussion.[14]

Likewise, L. Wang (1980 [1958]) highlights the pivotal status of locative PPs. Although not as assertive as Chao (1968), L. Wang (1980 [1958]: 357) does agree that in general, the word order in Chinese has not undergone substantial historical changes. However, it is not accurate to state that there have been no changes at all. Specifically, L. Wang identifies the shift in word order for locative and instrumental adverbials as one of the main changes from Old Chinese to Middle Chinese (L. Wang 1980 [1958]: 368-371).

I would like to highlight that, despite the general consensus that the dominant word order of locative PPs in Old Chinese is postverbal, when PPs are considered as a whole (regardless of whether they are locative or non-locative), the overall word order of PPs in Old

[14] Despite Chao's emphasis, it is important to note that other significant grammatical differences between *wenyan* and Modern Chinese exist, which are crucial for understanding the full scope of syntactic evolution in Chinese. For a discussion of key grammatical features in the history of Chinese from the pre-Qin period to modern times, see Wei (2000).

Chinese is still subject to debate. According to the summary by Phua and Jiang (2013: 87-88), there are currently three views regarding the distribution of PPs in Old Chinese: 1) PPs consistently appear after the verb (Li and Thompson 1976); 2) Postverbal PPs are more prevalent than preverbal PPs (He 1992; C. Zhang 2002); 3) Preverbal and postverbal PPs are equally distributed (Sun 1996). Phua and Jiang (2013) further argue that, ideally, the word order of PPs in Old Chinese is a matter of linguistic facts, and relevant research should not exhibit such notable discrepancies. They suggest that one factor contributing to the disagreements and confusion in PP distribution is the disregard of diverse semantic roles introduced by prepositions in numerous studies. These studies treat prepositions homogeneously, assuming that prepositions, as one word class, exhibit the same syntactic behaviour. Consequently, these studies gather and compare the frequencies of all preverbal PPs and postverbal PPs, regardless of semantic categories.[15]

In contrast to Phua and Jiang (2013), this thesis argues that the key aspect is not necessarily on the potential confusion or divergence caused by such an approach. Theoretically, inconsistencies in results across different studies can emerge from various factors, not just this one. Conversely, this thesis acknowledges that handling PPs of diverse functions as a uniform group indeed provides a general understanding and overview of PP distribution, and it also serves as evidence for scholars to debate the basic word order of Chinese.[16] What I find more significant is that this approach might conceal some underlying concerns and complexities. For instance, it is common to observe that the same semantic role can be introduced by different prepositions, and the same preposition can introduce different semantic roles (Phua and Jiang 2013: 91). This thesis maintains that categorising PPs into different semantic roles is necessary to achieve a more precise understanding of their distribution. Moreover, the predominance of postverbal locative PPs in Old Chinese suggests an intriguing contrast with non-locative PPs, whose distribution varies between preverbal and postverbal positions. This observation raises the question of whether the nature of spatial concepts is responsible for this difference in

[15] Phua and Jiang (2013: 93) note that both He (1992) and D. Zhao (2007) work on the overall PP distribution in *Zuo Zhuan*. He (1992) finds a preverbal to postverbal PP ratio of 1: 1.6, with preverbal PPs having an absolute frequency of 2228 and postverbal PPs 3570. However, D. Zhao (2007) suggests that the observed ratio difference is not as apparent as typically perceived. He obtains a ratio of 1: 1.15, with 3174 preverbal PPs and 3638 postverbal PPs. Phua and Jiang (2013: 93) therefore state that even when using the same linguistic materials and applying the same methodology to compare identical parameters, the results are not consistent.

[16] For instance, Li and Thompson (1974b) observe the transition of PP placement from S + V + PP in Archaic Chinese to S + PP + V in Modern Chinese, and use it to support their proposal that Chinese has been undergoing a shift in word order from SVO to SOV. Nevertheless, Hu, McLaughlin and Williamson (2007) agree with Sun (1996) in recognising a nearly balanced distribution of preverbal and postverbal PPs in Archaic Chinese, thereby undermining Li and Thompson's (1974b) assertion regarding the basic word order change in Chinese.

distribution, and if it does play a part, to what extent. Such a line of inquiry may have relevance beyond the immediate scope of the present study. According to Heine et al. (1991: 159), spatial concepts are more fundamental than other types of concepts. This highlights the potential of further exploration into this area, particularly in understanding how spatial concepts and non-spatial concepts differ in their influence on grammatical structures across different languages and historical periods.

Another compelling reason for this thesis to adopt a diachronic perspective is the potential impact of external factors. As will be explored in Chapter 3, it is essential to factor in external influences if we want to have a comprehensive analysis of locative PP word order in Chinese. A diachronic approach allows us to examine key historical events that led to demographic shifts and potential contact situations. This, in turn, affords a more holistic understanding of the factors that may have contributed to the shift in locative PP word order and expands the analysis beyond language-internal considerations.

In summary, there is a conflict between the synchronic typological patterns and the diachronic observations regarding the word order of locative PPs in Chinese. As this topic is of great significance both typologically and diachronically, this thesis aims to investigate the diachronic development of locative PP word order at different time periods in Chinese and propose a framework that potentially accommodates both synchronic and diachronic data. Such a framework would provide a more comprehensive understanding of locative PP word order and its evolution over time in Chinese.

1.4 STRUCTURE OF THIS THESIS

The remaining chapters of this thesis are organised as follows. Chapter 2 reviews prior studies, with particular attention to proposals addressing the triggering factors behind the change in locative PP word order. Building upon the review in Chapter 2, Chapter 3 highlights areas that require consideration and formulates research objectives and questions. Chapter 4 outlines the proposed methodology and data collection. Chapters 5 to 7 present findings on the evolution of locative PP word order from Old Chinese to Early Mandarin Chinese. Chapter 8 addresses the three main research objectives and related questions of this thesis. It provides an overview of locative PP word order from OC1 to EMC3, discusses the motivations and mechanisms underlying this development by investigating both internal and external factors, and explores whether the findings on locative PPs can inform our understanding of other PP categories. Finally, Chapter 9 concludes this thesis and proposes potential directions for future research.

CHAPTER TWO
A REVIEW OF PREVIOUS WORKS

This chapter strives to provide a comprehensive overview of the existing literature. It begins with a concise summary of major findings from past research on the evolution of locative PP word order in Chinese. Following this, it presents a detailed review of three proposals that seek to tackle the question of what triggered the change in locative PP word order, along with an evaluation of their feasibility. The objective here is to establish a basis for the next chapter, which will synthesise insights from the critique and identify pressing issues from two broad areas that necessitate our careful consideration.

2.1 OVERVIEW OF KEY FINDINGS FROM PREVIOUS STUDIES

Previous studies, as summarised in L. Jiang (2018: 5-8), generally suggest that a change of locative PP word order took place, from predominantly postverbal to predominantly preverbal. A selection of representative studies is presented here.

Peyraube (1994) observes that in Early Archaic Chinese (11th – 6th c. BCE), Late Archaic Chinese (5th – 3rd c. BCE), and Western Han period (206 BCE – 25 CE),[17] the common locative preposition is 於/于 *yu*[18] and the locative PPs formed with 於/于 *yu* are almost always postverbal. During Eastern Han period (25 – 220 CE), a notable and significant change occurred, involving the movement of postverbal locative 於/于 *yu*, alongside its prepositional object, to the preverbal position. Peyraube (1994: 373) attributes this shift of 於/

[17] The period from 206 BCE to 25 CE is referred to as Western / Former / Early / Earlier Han in the literature. It stands in contrast with the era from 25 to 220 CE, which is known as Eastern / Late / Later Han. Peyraube (1994) uses Early Han and Former Han interchangeably for the former, and Late Han for the latter. This thesis will adopt Western Han and Eastern Han to represent the two periods.

[18] According to Sun (1996: 24), while 于 *yu* is older than 於 *yu*, the two were employed interchangeably in most contexts based on historical documents from the Warring States (770 – 256 BCE). As a result, Sun (1996) does not differentiate between the two. This stance is also adopted by C. Zhang (2002) and Y. Zhu (2007). Furthermore, He (1989: 78) notes that several Qing dynasty philologists, including Duan Yucai, Wang Niansun, Wang Yinzhi and Qian Daxin, perceive 於 *yu* and 于 *yu* as more or less equivalent. To illustrate, N. Wang (1983 [1796]: 153) and Y. Wang (1956 [1798]: 33) both refer to the phrase "于, 於也" (meaning 于 *yu* is 於 *yu*. 'A, B 也' is a common pattern in Chinese exegesis). In line with this, I consider the two as the same preposition in my discussion. He (1989), however, discusses in detail the differences between the two, as exemplified in *Zuo Zhuan*, an important and representative piece of work in Old Chinese. Regarding their locative usages, He (1989: 89) contends that when it comes to introducing location, 于 *yu* is the primary choice for place names (proper nouns) in *Zuo Zhuan*, and 於 *yu* is predominantly used for common noun locations. When indicating direction, He (1989: 93) asserts that 於 *yu* exhibits more flexibility and diversity compared to 于 *yu*.

于 *yu* to the possible influence of analogy with PPs that had already assumed preverbal positions in Archaic Chinese (e.g., PPs formed by prepositions *zi* 自, *yi* 以, *wei* 为).

In a similar vein, Sun (1996) indicates that in Old Chinese (500 BCE – 200 CE),[19] PPs formed by the multi-functional preposition 於/于 *yu* are chiefly placed after the verb. For locative 於/于 *yu*, its three subclasses of source, location, and goal all feature postverbal PPs in Old Chinese predominantly. Sun (1996) contends that the postverbal usage of 於/于 *yu* faced rivalry from competing forms, even during Old Chinese. The postverbal locative 於/于 *yu* marking source and location initially became non-mandatory, and from Middle Chinese (201 – 1000 CE) onwards, the locative subclasses of source and location progressively developed a stronger connection with preverbal prepositions such as 在 *zai*, and subsequently in Early Mandarin (1001 – 1900 CE) the postverbal 於/于 *yu* ceased introducing source and location in the postverbal position.

C. Zhang (2002) conducts an extensive diachronic investigation of PP placement in Chinese by charting the word order progression of locative, instrumental, and object-PPs.[20] Notably, C. Zhang (2002: 245) highlights that locative PPs were primarily postverbal from pre-Qin to Western Han (before 25 CE), with only a few exceptions involving preverbal locative PPs. An intriguing divide surfaced during Eastern Han (25 – 220 CE). In non-Buddhist texts, the locative PP word order closely followed the pattern of pre-Qin and Western Han, with postverbal locative PPs enjoying a clear advantage. In contrast, a remarkable transformation unfolded within Buddhist texts, with locative PPs mostly positioned before VPs. This shift underscores a tendency wherein the semantics of locative PPs is tied to their word order. Following Eastern Han is Six Dynasties (220 – 589 CE), a period marked by drastic changes in PP word order. Within this timeframe, there was a significant relocation of non-goal locative PPs to the preverbal position in both Buddhist and non-Buddhist texts. C. Zhang (2002: 245) concedes that the enormous disparities in the locative PP word order reflected by these two genres of texts in Eastern Han render it challenging to provide an overall summary of the word order for this period. Nevertheless, she maintains that given the substantial shift of PP word order during the subsequent Six Dynasties period, it becomes evident that PP word order was

[19] Despite adopting common labels such as Old Chinese, Middle Chinese and Early Mandarin Chinese, scholars may categories different dynasties under these labels. For clarity, this thesis includes the specific dynasties and/or the corresponding Gregorian calendar years proposed by the respective scholars, provided such information is explicitly stated.

[20] D. Zhao (2007: 28) defines *duixiang jieci* 对象介词 (object prepositions) as prepositions that introduce into the syntactic structure objects that are related to the action or state expressed by the predicate head. For instance, in Old Chinese, object-PPs can assume the semantic roles of comitative, co-agent, comparative, and beneficiary.

already undergoing transformation in Eastern Han, a conclusion that aligns with Peyraube's (1994) findings.[21]

Previous studies have proposed a few triggering factors behind the change in locative PP word order. These are reviewed below in Sections 2.2 – 2.4. The review starts from a structural aspect. It focuses on the internal composition of locative PP constructions, specifically exploring proposals that discuss the impact of preposition decline and replacement on locative PP placement. Moving from structure to semantics, the review scrutinises the second triggering factor, which is based on iconicity. Lastly, the third proposal under review redirects the focus to structure.

2.2 PREPOSITION DECLINE AND REPLACEMENT

The first triggering factor under review pertains to preposition decline and replacement, specifically the decline of the preposition 於/于 *yu* and its substitution by other prepositions. Peyraube (1994) notes that 於/于 *yu* serves as the prevalent locative preposition spanning from Early Archaic Chinese to Western Han (11th c. BCE – 25 CE). This assertion is further substantiated by L. Jiang (2018), who demonstrates that 於/于 *yu* is involved in approximately 90% of locative VOPP and PPVO constructions in Old Chinese.[22] This underscores the pivotal role and high status of 於/于 *yu*, owing to its remarkable usage frequency among locative prepositions. Consequently, it helps in our comprehension of the usage pattern and frequency of locative PPs in Old Chinese. It is thus unsurprising that scholars investigating the decline and replacement of prepositions have largely centred their inquiries on the behaviour and development of 於/于 *yu*, with the aim of uncovering the underlying causes for the shift in locative PP word order.

2.2.1 於/于 *YU*'S DECLINE AND REPLACEMENT

First of all, it has been suggested that the downfall and subsequent substitution of 於/于 *yu* by alternative prepositions stems from its numerous roles. D. Zhao (1990) observes a general trend

[21] C. Zhang's finding resonates with Peyraube (1994) despite their different scopes of examination. While Peyraube (1994) focuses on locative PPs, C. Zhang (2002) arrives at her conclusion by taking into account not only locative PPs but also other PP categories. The behaviour of locative PP word order forms a compelling layer of support for C. Zhang's stance above.

[22] L. Jiang's (2018) data show that based on the historical texts of *Zuo Zhuan*, *Han Feizi* and *Shi Ji*, representing three developmental sub-stages of Old Chinese (OC), the frequency of locative 於/于 *yu* involved in VOPP and PPVO constructions stands at 95.9% in OC1 (pre-Qin, 4th c. BCE), 93.2% in OC2 (pre-Qin, 3rd c. BCE), and 89.9% in OC3 (Western Han, late 1st c. BCE).

in the evolution of prepositions in Chinese. The shift is from multi-functional prepositions to emerging prepositions with simpler and more specific functions. A salient example illustrating this trend is the preposition 於/于 *yu*, offering strong evidence for the transition from multi-functionality to functional specialisation. D. Zhao (1990) underscores the multi-functional nature of commonly used prepositions in Old Chinese. He suggests that utilising one grammatical form to convey diverse meanings is an adaptive response to the need for expanding semantic content as human thought evolves with societal progress. However, when this strategy of employing the same grammatical form to express an increasing range of semantic contents reaches a certain threshold, it inevitably impedes clarity and may lead to ambiguity.[23] For instance, as D. Zhao (1990: 117) highlights, 於/于 *yu* has more than 10 usages in Old Chinese.[24] Ambiguity arises precisely due to the diverse roles of 於/于 *yu*, as the distinction in meaning can only rely on specific linguistic contexts, rather than the grammatical construction itself. Here is an example from Y. Zhu (2007: 310) illustrating the ambiguity issue:

(4) 齐 人 歼 于 遂[25]
Qi *ren* *jian* *yu* *Sui*
Qi people annihilate at/PASS Sui
'The Qi state guards were annihilated at Sui./ The Qi state guards were annihilated by the Sui people.'
(《穀梁传・庄公十七年》Guliang Zhuan, Duke Zhuang, Year 17; mid-late Warring States period; adapted from Y. Zhu (2007: 310) with glosses and translation modified)

于 *yu* here can be interpreted as either a locative preposition or a passive marker. One has to rely on the context for the best interpretation.

[23] This argument may not hold up well, as there is no compelling necessity for changes to occur. We could logically argue against this. Consider the hand, a highly versatile part of the human body. Despite its broad and complex roles, no new organs have evolved specifically to take over its functions. Moreover, languages often have other strategies to resolve ambiguity. Many languages function perfectly well with just one preposition to encompass all possible semantic associations, potentially motivated by the principle of linguistic economy. This is evident even in large languages such as Tagalog.

[24] Scholars generally acknowledge the diverse roles of 於/于 *yu*. Apart from D. Zhao (1990), S. Huang (1978: 217) outlines 8 functions of 於/于 *yu* in Archaic Chinese, while He (1989: 109) also documents 8 functions of 於/于 *yu* based on *Zuo Zhuan*. Additionally, Sun (1996: 25) records 7 functions of 於/于 *yu* in Old Chinese, breaking down its locative function into three sub-categories.

[25] Both readings are valid in this example, given that the Qi army was in Sui when they were killed. The ambiguity can additionally be attributed to the place name 遂 *Sui*. Old Chinese is flexible in allowing a place name to refer to its populace, even when the word *ren* 人 (people) is omitted. For instance, in "楚师迁潜於南冈而还" (The Chu army relocated the Qian people to Nangang and then returned) from *Zuo Zhuan*, the place name 潜 *Qian* denotes the residents there.

Under such circumstances, new prepositions that can express meaning with better clarity and precision have surfaced and developed, progressively displacing specific roles of multi-functional prepositions like 於/于 *yu*, resulting in their declining usage. D. Zhao examines the usage of prepositions of three locative subclasses: location, source,[26] and goal in Old Chinese (pre-Qin to Eastern Han, before 220 CE), Middle Chinese (Six Dynasties to Tang, 220 – 907 CE) and Early Mandarin Chinese (Song to Qing, 960 – 1911 CE). Initially, Old Chinese saw a prevalence of prepositions serving various grammatical functions. During Middle Chinese, new prepositions with specific functions began to emerge and develop, while some of the earlier multi-functional prepositions persisted in usage. Consequently, new and old prepositions jointly performed certain functions. By Early Mandarin Chinese, this process of newer prepositions supplanting older ones has largely concluded. Within each specific function, one or two new prepositions have replaced the versatile prepositions from Old Chinese, becoming the primary preposition for that function.

To exemplify, D. Zhao (1990: 117-118) establishes that within the subclass of location in Old Chinese, 於/于 *yu* was the primary carrier of this role, accounting for over 90% of the total occurrences of locative prepositions that assume the same function. This proportion decreased to 50-60% in Middle Chinese due to the emergence of the preposition 在 *zai*, which competed with 於/于 *yu* and rapidly increased its frequency to 30-40%. In Early Mandarin Chinese, the use of 於/于 *yu* gradually declined to the point of near disappearance, while 在 *zai* continued to gain momentum, eventually replacing 於/于 *yu* in its role of introducing location. Likewise, for the other two locative subclasses, D. Zhao points out that in Early Mandarin Chinese, 从 *cong* substituted 於/于 *yu* and established itself as the chief preposition to introduce source, while 在 *zai* and 到 *dao* supplanted 於/于 *yu* in its goal function.[27]

Y. Zhu (2007) discusses the concepts of economy and clarity, using 於/于 *yu* as a prime example. In Y. Zhu's analysis (2007:305), the substitution of function words can be understood

[26] D. Zhao (1990) is not exclusively focusing on locative source, but also covers other kinds of sources such as people, time, and viewpoints.

[27] S. Huang (1978: 219) presents a comparable compilation and views it as a substantial lexical replacement of the archaic 於/于 *yu*. Specifically, 在 *zai* has taken over its location function, 从 *cong* has replaced its source function, while 在 *zai*, 到 *dao*, 给 *gei*, 向 *xiang* have all assumed its goal function. Furthermore, in opposition to considering 到 *dao* as a preposition, L. Jiang (2018: 46) regards 到 *dao* as a full-fledged verb denoting 'to arrive', in alignment with Lü's (1999: 151) word class classification. This opposing stance connects to the contentious nature of 到 *dao*'s status, as highlighted by Lamarre (2008: 73). As we will see in Section 2.3.1, the complexity of 到 *dao*'s classification is also reflected by how Tai (1985) handles it in a somewhat ambiguous manner. Nevertheless, the present study treats 到 *dao* as a verb in accordance with Lü (1999).

in terms of economy. Unlike open word classes, which can be expanded infinitely, function words such as prepositions fall under closed classes. The rivalry among analogous function words and the reduction in their number will maintain a "balanced inventory", hence upholding economy. Furthermore, Y. Zhu stresses that clarity takes precedence over economy when language use demands a trade-off. Following a similar line of thought as D. Zhao (1990), Y. Zhu also notes that 於/于 *yu* frequently leads to ambiguity in sentences. Consequently, other prepositions with specific functions progressively replaced 於/于 *yu*, with the aim of enhancing clarity and eliminating ambiguity.

2.2.2 Assessing the impact of 於/于 *yu*'s decline and replacement on locative PP word order

While D. Zhao (1990) and Y. Zhu (2007) both acknowledge 於/于 *yu*'s decline and replacement and attribute it to ambiguity, they do not address the shift in locative PP word order. In other words, their works do not explicitly propose a direct causal link between this decline and replacement and the change in locative PP word order. D. Zhao (1990) primarily discusses the trend of function specialisation among prepositions in Chinese, highlighting the transition from multi-functionality to functional specialisation. The discussion revolves around the nature of emerging prepositions in terms of their specialised functions, without deeply exploring preposition placement in relation to the verb. Similarly, Y. Zhu (2007) concentrates on understanding the motivation behind 於/于 *yu*'s replacement. Other scholars, however, have sought to establish a causal relationship between 於/于 *yu*'s decline and replacement and the shift in locative PP word order. Some of their perspectives are explored below.

To start with, both Sun (1996) and He (1985) talk about the decline of postverbal 於/于 *yu*, emphasising its optional nature as well as its replacement by preverbal prepositions. They argue that these factors contribute to the reduction of postverbal PPs. Sun (1996: 45) presents examples of optional postverbal locative 於/于 *yu* in Old Chinese, and references Wei (1993), who contends that in the later phases of Old Chinese, it became common to omit the postverbal 於/于 *yu* that introduces location and source. Sun (1996: 45-47) further argues that once it became non-obligatory, the postverbal 於/于 *yu* was supplanted by competing preverbal prepositions. This transition occurred as the non-goal locative functions (i.e., introducing location and source) of 於/于 *yu* progressively formed a tighter connection with preverbal prepositions. He (1985) shares a similar view. By comparing the distribution of PPs before and

after the predicate[28] in *Zuo Zhuan* (pre-Qin, 4th c. BCE) and *Shi Ji* (Western Han, late 1st c. BCE), He (1985: 61) finds that while the percentage of post-predicate PPs is higher than pre-predicate PPs in *Zuo Zhuan*, this trend is reversed in *Shi Ji*, with pre-predicate PPs becoming predominant. She attributes the reduction in post-predicate PPs mainly to the significant decrease in 於/于 *yu*. He (1985: 63-64) provides several scenarios, one being that locative constituents following the predicate no longer need to be introduced by 於/于 *yu*; in other words, post-predicate locative 於/于 *yu* can be omitted. Additionally, post-predicate 於/于 *yu* can be substituted by prepositions that are pre-predicate, such as 从 *cong*, causing the PP to move to the front of the predicate.

S. Huang (1978), on the other hand, holds the view that 於/于 *yu* was replaced by both preverbal and postverbal prepositions, and not just by preverbal prepositions alone. However, he raises a similar point about the omission of 於/于 *yu*. According to S. Huang (1978: 232), it is 於/于 *yu*'s omission, alongside the compulsion to adhere to prepositions that were already placed before the verb in Archaic Chinese, that collaboratively established and solidified the placement of prepositions before the verb in Modern Chinese. In a parallel vein, Peyraube (1994) raises a related argument on the influence of prepositions that were already preverbal in Archaic Chinese. While S. Huang's perspective is on the pressure to comply with such prepositions, Peyraube (1994: 373) suggests that the relocation of postverbal locative 於/于 *yu* to a preverbal placement likely took place "by analogy" with PPs that had long been positioned before the verb, dating back to the time of Archaic Chinese.[29]

On the contrary, C. Zhang (2002) questions whether the rise and fall of prepositions directly drove the shift in PP word order. C. Zhang (2002: 250) constructs her argument based on a comparison of two sets of timelines: (1) the rise and fall of prepositions and (2) the change in PP word order. The analysis reveals that even though these two phenomena did coincide for a certain historical period, they were not concurrent in the sense that (2) commenced earlier and concluded earlier than (1). Specifically, PPs began shifting to the preverbal position as early as Eastern Han, while the use of prepositions largely retained the pre-Qin conventions. Six Dynasties emerged as a pivotal phase when the PP word order underwent significant transformations, with locative PPs shifting extensively to the preverbal position. However, this

[28] He (1985) uses the label 'D' to encompass both verbs and adjectives collectively, extending beyond the analysis of preverbal and postverbal PPs. Hence, the term 'predicate' is applied in this context.
[29] Both S. Huang (1978) and Peyraube (1994) draw attention to the impact of preverbal prepositions in Archaic Chinese on the placement of locative 於/于 *yu*, without going into the specific mechanism. Nevertheless, Peyraube (1994) inspires the present study to proceed with an analysis based on analogy in subsequent chapters.

period only marked the inception of the rise and fall of prepositions. By Tang-Five Dynasties, the shift of PPs to the preverbal position has almost ended, while this period stood as the most crucial phase in the rise and fall of prepositions.

C. Zhang (2002: 250) also raises another compelling argument, suggesting that even when assuming that the rise and fall of prepositions was responsible for the change in PP word order, it is crucial to recognise that this change in word order would only manifest in language usage after the rise and fall of prepositions had been ongoing for a certain duration. Yet, this is inconsistent with the historical trajectory of the Chinese language. Therefore, C. Zhang (2002) contends that while the rise and fall of prepositions had some impact on the change in PP word order, the latter was not instigated by the former.

The table below summarises C. Zhang's (2002: 250) comparison of the timelines of these two phenomena:

Table 2.1: A summary of C. Zhang's (2002: 250) comparison of timelines

	(1) The rise and fall of prepositions	**(2) The change in PP word order**
Eastern Han	Little change in preposition situation compared to pre-Qin	Already underway
Six Dynasties	Just started	Significant changes observed: instrumental PPs finished moving preverbally and locative PPs moved preverbally to a substantial extent
Tang-Five Dynasties	The most critical period	Almost concluded

While C. Zhang (2002) explores the overarching connection between preposition usage and PP word order, L. Jiang (2018) investigates specifically the impact of locative preposition usage on locative PP word order, lending support to C. Zhang's findings. L. Jiang (2018) traces the adoption of locative roles by different prepositions. It is observed that from Eastern Han, there was a decrease in the locative functions of 於/于 *yu*, as other prepositions that are mostly preverbal began to shoulder its duties. Eastern Han also coincides with the transition from a predominantly VOPP to PPVO word order for locative PPs. Despite this temporal correlation, L. Jiang (2018) cautions against hastily attributing the shift in locative PP word order to preposition substitution. The fact that other prepositions took on the roles of 於/于 *yu* does not automatically imply its decline. The frequency of usage must be taken into account as well. L. Jiang (2018) finds that during Eastern Han, 於/于 *yu* still maintained a usage frequency of nearly 80% in locative VOPP/PPVO constructions, while the rest of the competing locative

prepositions combined to just over 20%. This indicates that the dominant status of 於/于 *yu* remains unchallenged. In other words, 於/于 *yu* has not experienced a notable decline or replacement yet. However, this period already saw a shift from predominantly VOPP to PPVO in terms of locative PP word order. Therefore, it appears unlikely that the change in locative PP word order was triggered by the decline and replacement of 於/于 *yu*.

To recap, this section has evaluated the potential impact of preposition decline and replacement on the word order of locative PPs. Scholars have noticed that in Old Chinese, locative PPs introduced by the common preposition 於/于 *yu* were nearly invariably positioned after the verb. However, due to its versatile roles, 於/于 *yu* has experienced a downfall and substitution by competing prepositions to reduce ambiguity and enhance clarity. Some researchers also argue that the omissibility of the postverbal locative 於/于 *yu* from Late Old Chinese, along with its replacement by preverbal prepositions, contributed to the decrease of postverbal PPs and the corresponding prevalence of preverbal PPs. Nevertheless, a comparison of timelines suggests that the shift in locative PP word order likely happened prior to the notable decline or replacement of 於/于 *yu*. Consequently, it is unlikely that the preposition decline and replacement instigated the shift in word order for locative PPs, although it may have had some impact. Moving on to the next section, the discussion navigates from a structural focus to the realm of semantics, with a particular emphasis on reviewing semantically grounded iconicity principles.

2.3 ICONICITY PRINCIPLES

While the studies reviewed in the previous section examine the internal composition of locative PPs, with a specific focus on the impact of preposition decline and replacement on word order within such constructions, a different line of research explores the realm of semantics. In particular, these researchers examine principles related to iconicity to explain the distribution patterns of locative PPs. Here, iconicity is loosely construed as a connection of likeness between the linguistic form and its semantic meaning. In the context of the present discussion, iconicity refers to how the linear arrangement reflects the conceptual world.

2.3.1 THE DEVELOPMENT OF TAI'S SEMANTIC PRINCIPLE AND PRINCIPLE OF TEMPORAL SEQUENCE[30]

Due to the lack of rich morphosyntactic devices such as case marking and cross-referencing, Chinese frequently utilises word order to convey differences in meaning. Tai (1975) proposes a semantic principle that governs the position of 在 *zai* locative adverbials in Mandarin. The principle states that while a preverbal locative adverbial specifies "the location of the action itself", a postverbal locative adverbial specifies "the location of the participant 'affected' by the action" (Tai 1975: 160). Tai (1975: 158) lists the following minimal pair to illustrate the contrast:

(5) a.小 猴子 在 马背 上 跳
xiao houzi zai mabei shang tiao
little monkey on horseback top jump
'The little monkey was jumping on the horse's back.'

b.小 猴子 跳 在 马背 上
xiao houzi tiao zai mabei shang
little monkey jump on horseback top
'The little monkey jumped onto the horse's back.'

(adapted from Tai (1975: 158) with glosses and translation modified)[31]

Both sentences have the locative PP 在马背上 *zai mabei shang*. Tai maintains that the preverbal PP in (5a) indicates the location of the jumping action, whereas the postverbal PP in (5b) indicates the eventual location of the monkey as a result of its jump. We can see this contrast as a manifestation of iconicity. A participant's physical presence at the location of the activity is normally a prerequisite for starting an action, hence the preverbal locative PP. Conversely, the affected participant ends up in the resulting location only after the action, hence the postverbal locative PP.

[30] The subsequent evaluation of iconicity principles will highlight that Tai's (1985) Principle of Temporal Sequence (PTS) essentially embodies Grice's (1975) maxim 'Be orderly', which Grice discusses as part of his Cooperative Principle. PTS is therefore not a semantic principle, but a pragmatic one. I am grouping PTS with Tai's (1975) semantic principle for two reasons: firstly, they both fall under the category of iconicity principles, and secondly, PTS can be perceived as an extension of his earlier semantic principle, aimed at refining and resolving limitations that the initial semantic principle faced.

[31] Tai's translation of (5b) is 'The little monkey jumped on the horse.' I modified the free translation here to better capture his intended semantic contrast between this minimal pair. Specifically, (5b) indicates that the monkey's jump ultimately lands on the horse's back. Additionally, the aspectual difference in Tai's free translation of the pair could be due to the extra role of 在 *zai* as a progressive aspect marker when used in a preverbal position, although his free translations of other examples with the same structure do not consistently reflect the progressive aspect.

Additional examples from Tai (1975: 155) demonstrate that a sentence becomes ill-formed when its locative interpretation, as stipulated by the semantic principle, appears peculiar from a realistic perspective or conflicts with the state of affairs in the real world:

(6) a.他 在 厨房 里 哭
ta *zai* *chufang* *li* *ku*
3SG.M in kitchen inside cry
'He cried in the kitchen.'

b.*他 哭 在 厨房 里
ta *ku* *zai* *chufang* *li*
3SG.M cry in kitchen inside

(7) a.*雨 在 地 上 下
yu *zai* *di* *shang* *xia*
rain on ground top fall

b.雨 下 在 地 上
yu *xia* *zai* *di* *shang*
rain fall on ground top
'The rain fell on the ground.'

(adapted from Tai (1975: 155) with glosses modified)

Tai (1975: 160) asserts that (6b) is ill-formed because based on the semantic principle, the postverbal locative PP 在厨房里 *zai chufang li* is expected to describe the location of the participant as a result of the crying. Yet, it is odd to state that the participant was 'affected' by his own action of crying that caused him to relocate to the kitchen. Instead, the locative PP should indicate the location where the crying action happened, hence (6a) is well-formed when the locative PP is in the preverbal position. Likewise, (7a) is ill-formed because the preverbal locative PP 在地上 *zai di shang* is expected to denote the location where raining occurred, but this interpretation would go against the reality, as the ground is the typical designated endpoint for the falling rain in real life.

Tai (1985) subsequently introduces a related but more generalised and comprehensive constraint known as the Principle of Temporal Sequence (PTS), which aims to explain the word order patterns across a broad range of syntactic categories in Chinese. According to PTS, the relative arrangement of two syntactic entities depends on the chronological sequence of the states they signify in the conceptual domain. For instance:

(8) a.他 昨天 到 美国 来
ta *zuotian* *dao* *Meiguo* *lai*
3SG.M yesterday arrive USA come
'He left for the United States yesterday.'

b.他 昨天 来 到 美国
ta *zuotian* *lai* *dao* *Meiguo*
3SG.M yesterday come arrive USA
'He arrived in the United States yesterday.'

(adapted from Tai (1985: 53-54) with my own glosses)

Tai (1985: 54) explains that the 到 *dao* phrase preceding the verb 来 *lai* conveys an anticipated goal (8a), whereas its postverbal placement signals an achieved goal (8b).[32] Chronologically, the movement towards a location comes before the state of reaching that location, and in contrast, the arrival at a destination comes after the movement.[33]

The development from Tai's (1975) semantic principle to Tai's (1985) PTS, both based on iconicity, could be due to the following reasons. Firstly, Tai (1985: 58) states that while he maintains the correctness of his earlier semantic principle on the distribution of 在 *zai* phrases, it does not address the more profound issue on why Chinese employs distinct word orders for two locative types. Neither does it provide insights into why it is the preverbal slot, as opposed to the postverbal one, that indicates where an event takes place. Tai deems PTS effective in tackling these questions.

The second motive for Tai's extension of his semantic principle to PTS could be to resolve the problem of free word order variation. A few scholars have noted challenges in applying Tai's semantic principle to account for the intricate characteristics of 在 *zai* sentences, particularly with sentences that lack notable semantic contrast between preverbal and postverbal locatives. S. Huang (1978: 229), for instance, argues that a fundamental aspect

[32] I have acknowledged the contentious nature of 到 *dao*'s classification in the footnotes of Section 2.2.1. The discussion in Tai (1985) precisely reflects the complexity of addressing 到 *dao*, as Tai appears rather ambiguous in his handling of 到 *dao*. Firstly, Tai places examples (8a-b) under the discussion on how PTS affects 'adverbial placement', and secondly, Tai mentions that the 到 *dao* phrase is a 'to' phrase. These instances seem to imply that Tai perceives 到 *dao* as a preposition rather than a verb. However, Tai subsequently states that the 到 *dao* phrase in these examples is more comparable to a VP than a PP. Thus, Tai's stance on 到 *dao* seems ambivalent. Nevertheless, the examples Tai provides still illustrate how PTS governs the word order variation in Chinese.

[33] My earlier finding in L. Jiang (2018) suggests that for the subclass of path PPs, the dominant word order has been PPVO since Middle Chinese. L. Jiang (2018: 54) attempts to account for this pattern by applying PTS and citing C. Zhang (2002: 275), who posits that people typically have the planned path in mind prior to engaging in the activity, hence most path PPs come before the verb. Here, Tai (1985) and C. Zhang (2002) appear to utilise a similar line of reasoning, emphasising the envisioning of an expected goal or path before carrying out the movement.

regarding the validity of the semantic principle is to determine whether the locatives before and after the verb should, and indeed demonstrate, the clear-cut semantic contrast as suggested in Tai (1975). He lists sentences with preverbal and postverbal 在 *zai* locatives that are semantically equivalent and maintains that their distinction is merely syntactic in nature. S. Huang (1978: 232) therefore concludes that relying solely on a semantic explanation falls short of fully portraying the situation. Tai (1985: 66) acknowledges that certain verbs are capable of having preverbal and postverbal 在 *zai* locatives with minimal difference in meaning, for example:

(9) a.他 在 上海 住
ta *zai* *Shanghai* *zhu*
3SG.M in Shanghai live
'He lives in Shanghai.'

b.他 住 在 上海
ta *zhu* *zai* *Shanghai*
3SG.M live in Shanghai
'He lives in Shanghai.'

(adapted from Tai (1985: 66) with my own glosses)

While his previous proposal of semantic principle does not effectively justify the free variation in (9a-b), Tai contends that an account based on temporal sequence can shed light on this. He suggests that 住 *zhu* belongs to the category of durative verbs, which express states and not momentary actions. The chronological order between the locative 在 *zai* phrase and such verbs thus becomes indistinct. As a result, PTS is not relevant in this context and both word orders are acceptable with negligible semantic difference.

Another possible motivation for proposing PTS could be due to its substantial explanatory power compared to the semantic principle. Tai (1985: 63) perceives PTS as an overarching, unified principle that can bring together numerous previously considered unrelated word order rules. To illustrate, Tai (1985) has demonstrated how PTS can account for the distribution of adjunct phrases, including locative, manner, instrumental, frequency, duration, resultative and extent adverbials, as well as the (in)definiteness of NPs in relation to the position of the verb. Consequently, it means PTS is also applicable to the placement of non-locative PP categories. This holds relevance to the present study, as it aligns with the third research objective subsequently outlined in Chapter 3, which seeks to investigate whether the proposed theoretical analyses derived from locative PPs can expand to other PP categories for a more integrated account of PP word order in general.

Lastly, Tai (1985) commends the naturalness of PTS. This could also be a contributing factor that led him to propose PTS as an enhancement to his previous semantic principle. He asserts that PTS is natural in two aspects. Firstly, Tai (1985: 64) cites Slobin (1966), who demonstrates that when the sequence of surface structure constituents diverges from the perceptual order, comprehending a sentence becomes complex. PTS is therefore natural, given its minimum demand of mental complexity during the processing of languages. As for the second reason that supports the naturalness of PTS, Tai (1985: 64) draws on Osgood's (1980) notable differentiation between two types of word order: natural and salient. Natural word order is rooted in perception, whereas salient word order involves the focus, interests, and other considerations of the speaker. As PTS governs the former order, it is clearly natural.

2.3.2 Applying iconicity principles to explain the evolution in locative PP word order

Tai's semantic principle and PTS have been instrumental and provided a fundamental framework for Chinese linguists, particularly those striving to incorporate a more functional approach in their works. It must be noted that Tai derives these two principles from investigating the word order patterns in Mandarin Chinese, which is a variety of Modern Chinese. However, Tai (1975: 177) suggests that his semantic principle carries an intriguing implication for the study of historical Chinese linguistics, as it could have acted as a guiding rule for the historical development of word order in the locatives. Yet, he has not elaborated on the exact mechanism, probably mentioning it only as a closing remark on future directions. Some researchers have attempted to extend the application of such principles to Ancient Chinese by employing Tai's semantic principle and PTS, as well as other related iconicity principles to account for the evolution of locative PP word order in Chinese, possibly owing to the notable explanatory competence of such principles. This is particularly evident in the capability of PTS to offer a concise and overarching constraint for syntactic patterns in Modern Chinese. Therefore, it may have prompted these researchers to expand the scope of Tai's semantic principle and PTS and apply them to the study of Ancient Chinese. Moreover, according to the Uniformitarian Principle, a pivotal tenet in contemporary historical linguistics, our observation of processes currently in operation allows for inferences about past processes (Trudgill 2020: 44). Therefore, it is reasonable to assume that these iconicity principles are also relevant to Ancient Chinese, and they are effectively governing locative PP placement over the centuries.

L. Jiang (2018) briefly references studies that adopt iconicity principles to explain the development of locative PP word order, including Peyraube (1994), C. Zhang (2002) and Hong (2010a). As L. Jiang's primary focus lies in the evaluation of PTS, Peyraube (1994) and C. Zhang (2002) are only concisely mentioned. Only Hong (2010a) receives a slightly more detailed examination, though not in depth. The following section will closely review Hong (2010a) and C. Zhang (2002).[34]

2.3.2.1 HONG'S (2010A) EMPLOYMENT OF PTS

Hong (2010a: 292) states how he interprets Tai's PTS. To him, the concept of 'temporal sequence' consists of two levels: one refers to temporal sequence in the physical world, and the other refers to temporal sequence in the logical world. The latter, formed based on the former, falls under human cognition. It involves not only human understanding and reflection on the temporal sequence in the physical world, but also the deducing of logical relationship between entities based on physical time. The logical temporal sequence people acquire via comprehending and reflecting the world is mirrored in language, leading to constraint and control over the arrangement of syntactic units, and this is what PTS is about in Hong's understanding. Hong then proceeds to discuss the spectrum of impact PTS may have over the arrangement of syntactic units in languages. In terms of morphological type, Hong suggests that PTS appears to play a relatively limited part in languages with extensive morphology. The less developed a language's morphology is, the more influential PTS becomes. In addition, PTS may also have varying extent of impact across various historical periods of the same language. Hong observes that Chinese exhibits a noticeable trend: the constraint and control held by PTS progressively strengthen as time passes. The trend is attested by the diachronic development of the distribution of locatives.

Based on his interpretation of PTS, Hong (2010a: 294) formulates the following conclusion: Locatives have undergone significant changes in word order from Old Chinese to Modern Chinese. PTS, which imposes a broad constraint on Chinese word order, is the motivation behind these changes. The outcome of this evolution is that locatives have transformed from an overall non-motivated distribution (i.e., generally disobeying PTS in Old Chinese) to an overall motivated distribution (i.e., generally obeying PTS in Modern Chinese).

[34] Peyraube (1994: 379-380) only briefly states that Tai's semantic principle started to function productively from the Early Medieval period (3rd – 6th c.), though it did not reach the same level of stringency seen in Modern Chinese. Therefore, Peyraube (1994) is not included in the next section.

Hong classifies locatives into six categories depending on their relationship with the predicate: starting point (Lq), route (Lj), location of activity (Lh), location of existence (Lc), directional goal (Lm), and endpoint (Lz).[35] Hong (2010a: 288-289) observes that initially, all six locative categories were placed after the verb. However, starting from the period of Old Chinese, five of them underwent changes in word order, with only endpoint (Lz) maintaining its original postverbal distribution. Among the five locative constituents that underwent changes, starting point (Lq), route (Lj), location of activity (Lh), and directional goal (Lm) shifted from being postverbal to preverbal, whereas location of existence (Lc) shifted from being postverbal to having both preverbal and postverbal distributions.

Hong (2010a: 293) concludes that the distribution of the six locative categories shifted from generally not following PTS to generally following PTS in Modern Chinese, and therefore PTS is the true force driving word order change in Chinese locatives. Hong (2010a: 293-294) then proceeds to justify how and why PTS governs the placement of all six locative categories. He starts with categories that are more straightforward to rationalise. Starting point (Lq) and location of activity (Lh) shifted from postverbal to preverbal, and endpoint (Lz) remained postverbal throughout. It is apparent why PTS motivates such a development.[36]

However, more clarification is needed on the word order change for route (Lj), location of existence (Lc), and directional goal (Lm). Hong posits that as route (Lj) represents the space that a person or object passes through during movement, it neither precedes nor follows the action in terms of time sequence in the physical word. However, Hong believes that Han people categorise route (Lj) together with starting point (Lq), as evidenced by their use of mostly identical prepositions to introduce both semantic categories throughout history.[37] Therefore, in terms of time sequence in the logical world, route (Lj) precedes the predicate for Han people. In accordance with PTS, it shifted from postverbal to preverbal. Similarly, directional goal (Lm) denotes the predetermined endpoint or direction. In the logical time sequence, only after

[35] Section 1.1 of Chapter 1 has highlighted that some locative subclasses can be more finely divided. Hong's six-way classification can be subsumed under the four-way classification in this thesis, although some of his specific definitions and examples may be open to further discussion.

[36] Hong however does not elaborate on how PTS motivates the word order development for these three categories. While it may seem self-explanatory, expanding the discussion on the rationale could be beneficial. L. Jiang (2018: 54) accounts for how PTS shapes the evolution of locative PP word order regarding different semantic roles. For source (corresponding to Hong's Lq) and location (roughly Hong's Lh), preverbal PPs would be the preferred choice. Conceptually, a source denotes where an action initiates, and naturally it comes before the action. Likewise, prior to engaging in an action, it is essential to be physically present at the location of the activity. On the contrary, postverbal PPs would be the more natural word order for goal (roughly Hong's Lz), as one must undertake the action first before reaching the destination.

[37] This statement reflects the interpretation of Hong (2010a) and does not represent the stance of this thesis.

having a planned goal does one move towards it. Therefore, the preverbal shift of directional goal (Lm) also obeys PTS. Lastly, for location of existence (Lc), Hong argues that the co-existence of its preverbal and postverbal distributions reflects from another perspective the constraint and control of PTS over the evolution of locative distribution. Location of existence (Lc) denotes static location, hence there is no clear temporal sequence relationship between the existence state and the location, both in the physical and logical sense. Hong's argument here resonates with Tai's (1985) justification on the free word order variations exhibited by some 在 *zai* phrases, which was addressed earlier in Section 2.3.1. In essence, both Tai and Hong contend that PTS does not apply to this context due to the lack of an explicit chronological order. In this light, instead of being perceived as an anomaly to PTS, it delineates the specific scope and boundary of PTS' constraint and control.

Hong (2010a: 295) also observes that in the process of shifting from an overall non-motivated distribution to an overall motivated distribution, a subset of directional verbs consistently retains the non-motivated distribution when combined with locative constituents. The locative constituents often occur without being introduced by prepositions and appear directly after these directional verbs. Hong suggests that this phenomenon, which violates the general trend of locative word order shift, is related to two factors. Firstly, such directional verbs are traditionally classified as intransitive verbs in Chinese, which are monovalent. However, they also require the collocation of at least one locative constituent, causing them to have one locative argument in addition to the agent argument. Chinese bivalent verbs, when used without prepositions, display a strong pattern in distribution that places the two arguments before and after the verb respectively. Thus, the locative constituent occupies the postverbal slot while the agent occupies the preverbal slot, in order to conform to the sentence structure pattern of bivalent verbs. Secondly, Hong refers to Feng (1997), who maintains that Chinese prosodic unit is disyllabic in nature. Grounded in this belief, Hong argues that such directional verbs are monosyllabic and cannot form an independent prosodic unit. Therefore, to satisfy the prosodic requirement, the desired word order is to position locative constituents after the directional verb.

2.3.2.2 C. ZHANG'S (2002) CORRESPONDENCE RULE

In light of the instances of exceptions or violations to PTS, C. Zhang (2002) introduces a related iconicity principle, which she deems more accurate than PTS. This semantic-based rule states that the sentential positions of locative PPs correspond to their semantic meaning. To put it differently, there exists a kind of correspondence relationship between the position of a locative

PP and the semantic role it carries, and the semantic meaning of the PP plays a vital role in redistributing its position. C. Zhang (2002: 251-252) provides a thorough and clear account regarding how this rule governs the placement of locative PP over time. A translation of her explanation is presented below:

> The Six Dynasties period saw a drastic change in PP word order. There was a substantial shift of locative PPs[38] to the preverbal position in both Buddhist and non-Buddhist texts. The general pattern is that locative subclasses indicating location of occurrence, existence, staying and passage, as well as the starting point of an action, all underwent the preverbal movement, while the locative that marks the endpoint of an action did not. During this period, the placement of locative PPs denoting location of occurrence and starting point of an action is flexible. For these PPs, the pre-VP position holds a slight advantage in non-Buddhist texts and a major advantage in Buddhist texts. By the Tang and Five Dynasties period, the preverbal movement of locative PPs basically concluded, and the position of a locative PP generally corresponded to its semantic meaning. Instances where the position did not correspond to the semantic meaning mainly occurred in special contexts or expressions such as contrastive and parallel constructions. This suggests that by the Tang and Five Dynasties period, for locative PPs indicating location of occurrence, passage and starting point of an action, the pre-VP position already became the basic word order in Chinese, with their placement after the head being a special word order. The correspondence between the position of a locative PP and its meaning had transformed into a common rule. This rule grew very strict during the Yuan and Ming dynasties, with the position for most locative PPs aligning with their semantic meaning, save for a few exceptions. Locative PPs indicating location of occurrence, existence, passage, and the starting point of an action were placed before the VP, while those denoting the endpoint of an action were placed after the head. PPs expressing location of staying or the direction of an action could be placed before or after the head, but those denoting the direction of an action were mainly positioned before the VP. The correspondence between PP word order and their semantic meaning has persisted until Modern Chinese.

[38] C. Zhang's original text employs the term "介词+场所"('preposition + locatives'). For simplicity, this translation uses 'locative PP' throughout.

> It is evident that from the Six Dynasties period onwards, the semantics of PPs strongly impacted their word order. The position of PP with respect to the VP was rearranged under its influence. With the gradual formation and stablising of the new word order, the effect of semantics over PP word order became more and more prominent, eventually leading to a rule that stipulates the correspondence of a locative PP's position to its semantic meaning. Over the course of PP word order changes, the semantics of PPs has always played a significant role.
>
> (Translated from C. Zhang 2002: 251-252)

Despite C. Zhang's assertion that her correspondence rule is more accurate than Tai's (1985) PTS, it actually more closely resembles Tai's (1975) semantic principle, which compares the semantic meaning of preverbal and postverbal locative 在 *zai* phrases. In other words, a more apt comparison would be between her correspondence rule and Tai's semantic principle, as both highlight the core position of the verb and seek to account for locative PP placement. The difference lies in the more elaborate nature of C. Zhang's correspondence rule compared to Tai's semantic principle. Moreover, just like Hong's use of PTS, C. Zhang employs this rule for the analysis of locative PP word order shift, working on diachronic instead of synchronic observations.

However, C. Zhang (2002: 25) acknowledges that her correspondence rule only applies to subclasses of locative PPs and hardly explains the word order evolution of other PP categories. In addition, it does not address why this rule suddenly became stronger and more pronounced during the Six Dynasties period, considering its earlier presence and weak influence during the pre-Qin period. To comprehensively account for all PP categories, she introduces a second motivating factor, which is the complication of grammatical structures during the Six Dynasties period. This includes the multi-syllabification and complication of the VP as well as the development of post-VP constituents. Accordingly, there was an increase in the frequency of verbal objects and other postverbal constituents, such as aspectual function words and complements that express direction, result, and degree. This factor motivated the movement of all PPs, both locative and non-locative, to the preverbal position. Explaining the rationale behind this, C. Zhang (2002: 264) states that semantic roles introduced by the preposition have a less direct and close relationship with the VP compared to the association between VP and verbal objects, complements, or aspects. Hence, when a PP is postverbal, it usually has to follow these postverbal constituents. This places the PP further away from the

VP, resulting in a less tight connection between PP and VP. Additionally, this arrangement leads to a considerable number of constituents after the verb. On the contrary, if a PP is preverbal, it is in closer proximity to the VP, forming a clear connection with the VP and preventing overloading the postverbal structure. Furthermore, there were already a few instances of PPs preceding the VP in sentences with complex structures in Chinese to start with. As sentences grow more intricate and expressions strive for more precision, the inclination for PPs in complex structures to move preverbally becomes apparent. Therefore, the complication of grammatical structures serves as another driving force behind the preverbal shifting of PPs and ultimately causes a fundamental change in PP word order.

Regarding the second question on the sudden strengthening of the correspondence rule during the Six Dynasties period, C. Zhang argues that this is connected to the surge in OL, an abbreviation she uses to represent a locative expression that acts as an adverbial or complement without the need for a locative preposition. She references C. Li (1992), who investigates the evolution of OL in Chinese. According to C. Li (1992), the pre-Qin period saw very few instances of OL; however, from Western Han onwards, there was a significant rise in OL usage. C. Li attributes this change in OL to the following factor. During the pre-Qin period, a common noun displays no difference in form whether denoting a locative or a concrete entity.[39] Therefore, it necessitates the addition of a locative preposition when it needs to convey a locative sense. However, starting from Western Han, a locative-denoting common noun demands the presence of a *fangweici* 方位词 (locality word). Within this formal distinction, the need for a locative preposition diminishes, leading to a notable surge in OL during Western Han.

Based on C. Li's findings, C. Zhang (2002: 268-269) further argues that this development of OL influences PP word order in two ways. Firstly, it undermines the general practice of introducing locatives with a locative preposition and weakens the role of 於/于 *yu*. Consequently, it disrupts the present pattern where locative PPs typically follow the verb and opens the potential for the emergence of a new rule. Secondly, OL entirely discards the need for prepositions and experiences little constraints from existing rules. A robust, new pattern soon establishes during Six Dynasties, aligning the position of an OL with its semantic meaning. The establishment of this correspondence pattern sets a model for the placement of locative PPs, which serve identical functions as the OL. C. Zhang believes this reasoning addresses why the strengthening of her correspondence rule occurs in the Six Dynasties period.

[39] For instance, 车 *che* can denote either the entity of 'carriage' or the locative sense (such as 'on the carriage').

Below are some important insights derived from C. Zhang's proposal. Firstly, the correspondence rule suggests that it is vital to classify locative PPs into different subclasses, as different locative subclasses behave differently in terms of their distribution. More insights on this matter are provided in Section 3.1 of Chapter 3, where the discussion focuses on methodological concerns during data collection and handling. Notably, there may be a dichotomy between goal locatives and non-goal locatives, as only locatives marking the endpoint of an action did not undergo the preverbal movement. This potential asymmetry between goal and non-goal locatives might further point to a connection with syntactic status concerning argument versus adjunct, a topic I will explore after reviewing Peck's (2008) DELIM constraint.

Secondly, C. Zhang is insightful in suggesting two rules to account for all PP categories. She cites Hsieh (1994), who presents two types of principles after identifying the limitations of the iconicity principle. Hsieh introduces an abstract principle alongside the iconicity principle. Grounded in logico-mathematical foundations, this abstract principle is related to the internal and autonomous rules of the entire symbol system within the language, and it is weak in iconicity. However, it is adept at expressions that are challenging to convey through perceptual categories, therefore facilitating language coding and decoding. According to C. Zhang, her correspondence rule belongs to the iconicity principle, and the complication of grammatical structures falls under the realm of abstract principle.

Drawing on Hsieh's view that these two types of principles compete and complement each other to reach a state of equilibrium in grammar, C. Zhang (2002: 262) argues that the competition and interaction between these two forces is also attested in the evolution of PP word order. In the pre-Qin period, the presence of the abstract principle is evident, and its influence on PP word order is that locative PPs were mainly introduced by the locative preposition 於/于 *yu* and placed after the predicate. The iconicity principle plays a weak role, affecting only locative PPs marking the endpoint of an action and preventing them from being positioned before the predicate. From Six Dynasties onwards, the abstract principle weakens relatively, while the iconicity principle strengthens. The strengthening of the iconicity principle results in the constraint that the starting point of an action as well as location of occurrence and passage cannot be placed after the predicate. Nevertheless, the abstract principle persists, as evidenced by the prohibition against PPs and objects of VP co-occurring after the VP since the

Yuan and Ming dynasties.[40] C. Zhang's incorporation of Hsieh's perspective in introducing two competing and complementary rules to analyse PP word order development is remarkable. This approach not only strives for a comprehensive account of the subject, but also recognises the complexity of the phenomenon, which a single rule may not be able to capture.

This thesis acknowledges that positing two rules may face the issue of being 'too explanatory'. Nevertheless, the merits of this approach are still commendable. In addition, M. Zhang (1995), who concurs with Hsieh's view on the co-existence of the two types of principles, presents a persuasive argument supporting the validity of this proposal. M. Zhang claims that the preposition 於/于 *yu*, which possesses versatile functionality, is a more abstract preposition than other prepositions that are deemed more 'verby'. There is a tendency for PPs introduced by such abstract prepositions to be understood as expressing a singular integrated activity, hence diminishing the effectiveness of iconicity principles like PTS. On the contrary, it is more probable that PPs introduced by the more 'verby' prepositions are construed as portraying a series of actions, making them more likely to be subject to the control of PTS. Consequently, the decline of the more abstract preposition 於/于 *yu* and its substitution by the more 'verby' prepositions may lead to the growing occurrence of constructions that exhibit iconicity. Furthermore, M. Zhang argues that the diminishing functionality of 於/于 *yu* itself could indicate an overall declining trend in the abstract grammatical apparatus of Archaic Chinese. From here, one observes how the two forces of abstract and iconic principles interact.

2.3.3 EVALUATION OF ICONICITY PRINCIPLES

This section aims to evaluate the use of iconicity principles, in particular, PTS, in addressing locative PP word order development. This assessment can be approached from both an empirical and a theoretical perspective.

Empirically, these iconicity principles come into effect only from a certain period onwards, as the linguistic materials before this time do not reflect the predicted pattern. To illustrate, both S. Huang (1978) and Peyraube (1994) observe that Tai's semantic principle

[40] C. Zhang uses the term 'abstract principle' throughout the discussion here, and specifically highlights that the complication of grammatical structures during the Six Dynasties period is within the scope of the abstract principle proposed by Hsieh. However, her analysis suggests that the abstract principle here does not solely pertain to the increase in grammatical complexity; instead, it represents Hsieh's overarching term that concerns the internal, autonomous rules of language. The abstract principle in operation in the pre-Qin era differs from the one during the period from Six Dynasties onwards, particularly due to C. Zhang's observation that the complication of grammatical structures only becomes apparent starting from Six Dynasties. Further discussion on this point can be found in Section 8.2.2 of Chapter 8.

starts to function only after the pre-Qin period.[41] Similarly, for Tai's PTS, Phua and Jiang (2013) find that it has not significantly affected the word order of locative PPs in Old Chinese, as locative PPs introduced by the highly frequent locative prepositions 於/于 *yu* and 诸 *zhu* consistently appear after the verb regardless of locative subclass.

This observation leads to the first theoretical concern, which challenges the Uniformitarian Principle. Earlier, it was highlighted that Tai's semantic principle and PTS are both derived from the examination of Modern Chinese, providing effective explanations for syntactic phenomena in Modern Chinese. Despite this, their impact on locative PP word order in Old Chinese does not appear to be substantial. Researchers who employ iconicity principles to explain diachronic changes also note this limitation and commonly assert that such principles are applicable only from a specific period onwards. While iconic principles "have strong explanatory value to Chinese word order" (X. Wu 1996: 7), a logical question that could be raised is, why are iconicity principles such as PTS activated or enhanced only at a certain point in time, and how did they come into existence? For instance, Peck (2008: 75) highlights that most iconicity arguments fail to explain why Old Chinese does not observe such an iconicity constraint while Modern Chinese does. In fact, as will be elaborated in Section 3.2 of Chapter 3, such a concern is not confined to PTS or iconicity principles; rather it pertains to internal factors in general.[42]

The second theoretical concern is the relevance and necessity of introducing such iconicity principles as an independent motivation in Chinese. PTS is an apt rule that describes Modern Chinese in terms of its sequencing of events. It has been widely used by Chinese linguists to explain how speakers of Chinese produce and interpret temporal relations. However, PTS is not a unique characteristic of the Chinese language, but rather, it is a manifestation of Grice's (1975) maxim 'Be orderly', which guides speakers to express ideas in a sequential manner that corresponds to the chronological sequence of events.[43] As Newmeyer (2000:121) rightfully points out, it is unclear why functionalists like Tai rarely appeal to the

[41] S. Huang (1978) suggests that the semantic principle is in effect from the Han dynasty while Peyraube (1994) maintains that it commences later, approximately from the Six Dynasties.

[42] Aitchison (2013: 172) states that languages unavoidably mirror and replicate some attributes from the environment, and she thus perceives iconicity as one intrinsic trigger driving language transformation. In line with this argument, this thesis also regards iconicity principles as an internal trigger.

[43] In English, a frequently cited pair of examples includes "Mary got married and had a baby" and "Mary had a baby and got married"; these two expressions are understood differently due to the temporal directionality of the coordinating conjunction (Behrens et al. 2014: 24).

Gricean maxims, but opting instead for independent, discourse-based principles such as PTS that have "lesser generality".[44]

In addition, attributing the positional shift of locative PPs to iconicity echoes Schoenemann's (1999) hypothesis that semantics drives syntax. Iconicity principles offer an explanation on cognitive grounds. However, is iconicity the only viable motivation? Could there be a structural reason? Additionally, there is potential to explore the role of pragmatics, particularly information structure (Lambrecht 1994). A case in point is the word order variation exhibited by constructions involving instrumental PPs in Old Chinese, as demonstrated by the following pair of examples:

(10) a.何 可 废 也? 以 羊 易 之
he ke fei ye yi yang yi zhi
how can abolish PTCL with sheep replace 3SG
'How can we abolish (the sacrifice)? Replace it (the ox) with a sheep.'

b.我 非 爱 其 财 而 易 之 以 羊 也[45]
wo fei ai qi cai er yi zhi yi yang ye
1SG NEG begrudge PRON money CONJ replace 3SG with sheep PTCL
'It is not because I begrudge the expense that I replaced it (the ox) with a sheep.'

(《孟子・梁惠王上》Mencius, King Hui of Liang (Part A); circa 4th c. BCE; adapted from J. Huang (2015: 32) with glosses and translation modified)

The examples in (10a-b) are typical of word order variation exhibited by instrumental PPs introduced by 以 *yi* in Old Chinese. Both Norman (1988) and Pulleyblank (1995) observe that 以 *yi* phrases can occupy either the preverbal or postverbal position. 以羊易之 *yi yang yi zhi* in (10a) has the PP 以羊 *yi yang* in the preverbal position, while 易之以羊 *yi zhi yi yang* has the PP 以羊 *yi yang* in the postverbal position. From the glosses and translation, it is evident that there is no notable difference in meaning between 以羊易之 *yi yang yi zhi* and 易之以羊 *yi zhi yi yang*, as both constructions carry the same meaning of 'to replace it (the ox) with a sheep'.

Pulleyblank (1995: 48) suggests that constructions with the 以 *yi* phrase preceding or following the main verb contrast solely in terms of their "main focus of attention". Norman

[44] However, Y. Li (2022: 36-37), in discussing serial verb constructions (SVCs) in Chinese, has defended linear iconicity by arguing against Newmeyer's advice of seeking Grice's maxim for assistance in explaining the word order for SVCs.

[45] While commonly labelled as a conjunction in Chinese, 而 *er* differs from conjunctions in English. It can serve as a phrasal and clausal linking device without necessitating that the conjoined constituents belong to the same class of structure.

(1988: 94) more explicitly highlights that constructions with the preverbal 以 *yi* phrase direct greater emphasis to the verb, whereas constructions with the postverbal 以 *yi* phrase normally draw attention to the instrument or means. In essence, this implies that the focus is on the latter component of the construction. Going back to the examples above, S. Wu (2008) has offered a compelling account of the contrast in emphasis between (10a) and (10b), therefore substantiating the argument by Norman (1988) and Pulleyblank (1995). The context for 以羊易之 *yi yang yi zhi* in (10a) is that the king could not bear to see the fearful trembling of the ox, but the sacrifice was not to be abandoned, so he requested the substitution of the ox with a sheep. S. Wu (2008: 496) asserts that the emphasis in 以羊易之 *yi yang yi zhi* is on 易之 *yi zhi*, which highlights the act of replacing the ox and clarifies that the ox was not intended for the sacrifice. Here, the identity of the animal substituting the ox only holds secondary importance. In contrast, the context for 易之以羊 *yi zhi yi yang* in (10b) is that the king explained it was not because he begrudged the cost of the ox that he replaced it with the sheep. S. Wu (2008: 496) argues that the sheep is now the focus, as the king was stressing what substituted the ox, instead of merely emphasising the act of freeing the ox. She thereby concludes that if we perceive the word order variation in (10a-b) as equivalent in meaning, we will fail to see what the king was trying to emphasise under different circumstances.

The discussion shows the importance of considering the role of pragmatics on the word order variation of PPs. While the analysis of (10a-b) pertains to instrumental PPs rather than locative PPs, it remains relevant due to the following reasons. Firstly, despite previous studies suggesting that the influence of pragmatics is more noticeable on instrumental PP word order, with limited investigation of its potential impact on locative PP word order, a more thorough examination of the different locative subclasses might reveal a similar effect, although it is likely to be less common and more subtle. Secondly, as this thesis seeks to extend the findings on locative PPs to other PP categories, it ultimately deals with instrumental PPs, making it sensible to consider the role of pragmatics.

In summary, Section 2.3 provided an overview of iconicity principles as a potential triggering factor. It began with Tai's semantic principle and its subsequent development into a more overarching and explanatory principle known as the PTS. These two foundational iconicity principles have inspired Chinese linguists who seek to incorporate a more functional approach in their treatment of diachronic changes. Following that, it examined in detail the application of iconicity principles in explaining locative PP word order development by Hong (2010a) and C. Zhang (2002). To conclude this section, an evaluation was conducted on

iconicity principles from both an empirical and a theoretical perspective. The next section intends to assess Peck (2008), who appears to draw inspiration from C. Zhang (2002) in the quest to comprehensively account for the word order of all PP categories.

2.4 THE DELIM CONSTRAINT

The previous section cited C. Zhang (2002), who acknowledges that her iconicity-based correspondence rule only applies to subclasses of locative PPs. To account for the word order of both locative and non-locative PPs, C. Zhang proposes an additional abstract principle. She contends that the complication of grammatical structures during Six Dynasties, especially the rising occurrence of verbal objects, motivated all PPs to the preverbal position as much as possible. At the same time, locative PPs, obeying the semantic correspondence rule, were split into preverbal and postverbal positions. This section will examine Peck (2008), who similarly accounts for the word order of all PPs, both locative and non-locative, but with the aim of providing a unified account.

While C. Zhang notes that grammatical structures became complicated in Six Dynasties, Peck (2008: 79) holds the view that the changes described by C. Zhang can fit into prevailing syntactic structures without introducing complexity to the syntax, hence they are not indicative of syntactic complication. Peck (2008: 136) further casts doubt on C. Zhang, as the results of her logistic regression models challenge C. Zhang's assertion that the complications of VP structure primarily drive the change of PP placement from postverbal to preverbal. Nevertheless, Peck's overall approach of proposing two constraints to explain the word order of PPs in general might still be inspired by C. Zhang.

Peck (2008) argues that the change in PP word order was motivated by the historical rise of two constraints: (1) the syntactic constraint of economy within the lowest VP (the ECON(VP) constraint) and (2) the syntactic-semantic constraint of delimitedness (the DELIM constraint). ECON(VP) favours fewer syntactic nodes within the postverbal structure (PVS), hence the frequency of simpler PVS increased, and the majority of PPs moved from postverbal to preverbal in Middle Chinese. DELIM, on the other hand, focuses on the aspectual property of PPs (i.e. delimitedness).[46] Peck suggests that Old Chinese allows PPs in the PVS regardless of whether the PP has an aspectual role (i.e. delimiting function). From Middle Chinese onwards, the PVS only permits PPs that delimit the temporal extent of given events; [+del]

[46] The DELIM constraint in Peck (2008) discusses the delimitedness of adverbial phrases (APs, which include adverbs, NPs, and PPs) in general. For the sake of simplicity, the discussion here is limited to the case of PPs.

goal locative PPs are preferred in the postverbal position while [-del] PPs are preferred in the preverbal position. DELIM aligns PP_{-del} to the preverbal position and PP_{+del} to the postverbal position, hence the split of PPs in Middle Chinese. For instance, [-del] PPs such as those denoting source shifted from postverbal in Old Chinese to preverbal in Middle Chinese (11), while [+del] goal locative PPs remained postverbal in Middle Chinese (12):

(11) 乃 于 楼 上 得 一 磨 石
nai yu lou shang de yi mo shi
then from floor up obtain one grind stone
'Then obtained a sharpening stone from upstairs.'
(《百喻经・就楼磨刀喻》One Hundred Parable Sutra, Sharpening the Knife Upstairs; late 5th c.; adapted from Peck (2008: 98) with glosses and translation modified)

(12) 迁 顽 民 于 洛邑
qian wan min yu Luoyi
move stubborn people to Luoyi
'…moved the stubborn people to Luoyi.'
(《世说新语・言语》A New Account of Tales of the World, Speech and Conversation; mid-5th c.; adapted from Peck (2008: 99) with glosses and translation modified)

Furthermore, Peck observes that the emergence of the serial verb construction (SVC) V_1V_{2+del} and the increase in preverbal PPs are simultaneous diachronic changes during the period of Late Old Chinese. V2 in the SVC could indicate delimitedness, and SVC was "the first hypotactic structure which may express both Process and delimitedness" (Peck 2008: 127). Peck therefore hypothesises that there is a correlation between the two: the emergence of V_1V_{2+del} acted as an analogical model and drew growing dominance of postverbal $PP_{+del.}$ However, assessing whether these two changes exhibit correlation requires more scrutiny. Peck (2008: 182) admits that to test the hypothesis that V_1V_{2+del} functioned as an analogical model, there should be evidence demonstrating that V_1V_{2+del} occurs prior to the onset of the rise in occurrence rate of preverbal PPs.

Peck's delimitedness hypothesis is inspiring as it offers a unified theory-internal account for the word order asymmetry of all PPs, not just subclasses of locative PPs. The notion of delimitedness, set forth by Tenny (1987), is central to Peck's (2008) argument. According to Tenny (1987: 181), both goal and source expressions are able to delimit an event. Tenny (1987: 183) presents the following pair of examples to illustrate the delimiting function of source phrases:

a. push the car (non-delimited)
b. push the car out of the snowbank (delimited)

If we were to adhere to Tenny (1987), it is puzzling to see Peck's categorisation of [+del] PPs excludes source-locative PPs entirely. While defining aspectuality, Peck (2008: 35) points out in the footnote section that her definition presumes that "[+del] PPs correspond to inherent or added arguments and [-del] PPs correspond to adjuncts in modern Chinese". This seems to imply that the aspectual property is dependent on the argument/adjunct status of PPs.[47] In addition, Peck's definition of aspectuality motivates this thesis to further explore the implications of the argument status of PPs in historical Chinese linguistics. One could possibly ask a bold question: Is the complexity of the DELIM constraint truly necessary if it ultimately reduces to the distinction between arguments and adjuncts?

In fact, Djamouri and Paul (1997) have already made this observation, contending that in Archaic Chinese, the placement of PPs can be attributed to their argument or non-argument status. Djamouri and Paul (1997: 235) propose the inclusion of the semantic link between PP and the verb as one criterion for analysis, stressing the need to ascertain whether the PP in question is an argument of the verb, i.e., whether its role is included in the lexical entry of the verb or if it is a circumstantial expression ("expression circonstancielle"). Thus, Djamouri and Paul appear to define the argument and non-argument status of PP based on a distinction between core and oblique, as determined by the argument structure of the verb. Their findings suggest that argument PPs are predominantly postverbal, with only a few exceptions when such PPs are marked constituents; in contrast, non-argument PPs can appear in both preverbal and postverbal positions. Outside the sphere of French sinologists, this study has received limited attention. However, the distinction between arguments and non-arguments (adjuncts) may offer a more fundamental and economical insight into the underlying mechanism governing the word order of PPs in Chinese. Put differently, could the issue lie in how adjuncts and arguments are syntactically encoded relative to the verb, which functions as the dividing point? Dryer (2007: 77-78) attributes variations in Mandarin word order to this distinction, observing that Mandarin typically places the head before an argument but after an adjunct. Nevertheless, Dryer acknowledges uncertainty as to whether this pattern is more than a coincidence, both synchronically and diachronically.

Before advancing the investigation in this direction, this thesis must first resolve a key question: how to distinguish an argument PP from an adjunct PP, particularly in the context of Ancient Chinese? Carnie (2021: 173-175) has laid out several tests to differentiate

[47] Tenny (1987: 308-309) notes that "aspectual properties were shown … to have something to say about the difference between adjuncts and arguments", but this issue was not further pursued in the study.

complements and adjuncts, which are briefly outlined here. Semantically, complements complete the meaning while adjuncts are more optional. Syntactically, Carnie (2021:171) presents the following formal definition: complement is "(a)n XP that is a sister to a head…and a daughter of a single bar level", while adjunct is "(a)n XP that is a sister to a single bar level…and a daughter of a single bar level". Therefore, complements are closer to the head and lower in the syntactic tree compared to adjuncts, as reflected by Figure 2.1:

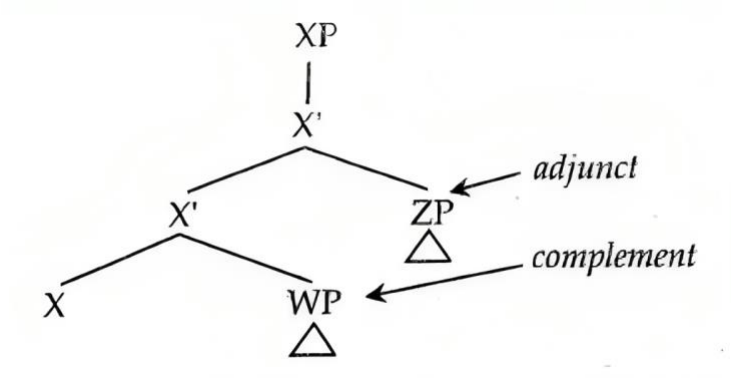


Figure 2.1 Syntactic tree displaying the structural difference between complement and adjunct (Carnie 2021: 172)

Additionally, Carnie (2021) posits an adjunct rule, which demonstrates the quality of recursion. It states that adjuncts are iterative, but complements are not. Consequently, there can be just one complement but more than one adjunct. With the feasibility of having multiple adjuncts, we are usually able to rearrange the sequence of adjuncts in relation to each other, but we cannot alter the positioning of a complement with the adjuncts. Lastly, as conjunction requires units of the same type, we are unable to conjoin complements with adjuncts.

However, a notable challenge emerges when implementing Carnie's tests to Chinese. Assuming Carnie's generative grammar is correct, the x-bar tree structure and Carnie's adjunct rule suggest that an adjunct ought to be 'stackable' due to its iterative nature. This is clearly attested in English, but its applicability to Chinese is less certain. If we follow Carnie's semantic criterion that an adjunct tends to be less closely related to the head and thus more optional, instances of a VP taking two PPs that seem to serve as adjuncts are rare to find in Ancient Chinese. If these PPs are indeed adjuncts, what might limit their iterative use in Ancient Chinese? Ultimately, this encourages us to reflect on the distinction between arguments and adjuncts within the context of historical Chinese linguistics.

To sum up, Chapter 2 has presented an overview of seminal works on the diachronic development of locative PP word order in Chinese. Section 2.1 started by summarising key findings from past research. It was observed that researchers mostly agree that the placement

of locative PPs was predominantly postverbal in Old Chinese; and approximately from the Eastern Han period, a shift in the dominant word order for locative PPs from postverbal to preverbal began and gained momentum in subsequent eras.

This was followed by a detailed examination of three proposals regarding what triggered the shift in locative PP word order. Beginning with a more structure-oriented perspective, Section 2.2 concentrated on the internal make-up of locative PPs. This included an investigation of preposition decline and replacement, as well as its potential effect on locative PP word order. However, owing to chronological incongruity after comparing two sets of timelines, it was deduced that this factor is unlikely to be the chief motivation behind the shift in locative PP placement, even though it could have had some degree of influence.

Transitioning to the next proposal in Section 2.3, the discussion subsequently steered away from this structural aspect and concentrated on semantics. This was in alignment with the second proposal's emphasis on semantically based iconicity principles, mainly exemplified by Tai's semantic principle and PTS. After scrutinising how Chinese linguists utilise iconicity principles in explaining locative PP word order evolution, it became evident that while these principles introduce a functional approach in their works, they face both empirical and theoretical challenges. Theoretically, one major pressing concern is, why are iconicity principles like PTS actuated or strengthened only from a certain point in history, instead of obeyed all along from Old Chinese to Modern Chinese consistently? Additionally, consideration was given to the question of whether iconicity and by extension semantics, comprise the sole feasible motivation behind the change in locative PP word order.

This inquiry directed attention back to structure, an aspect featured in the first reviewed proposal, as Section 2.4 progressed to examine the third proposal, Peck's (2008) DELIM constraint. Despite the coherence and elegance of the unified account offered by the DELIM constraint, it became apparent that aspectuality, a key term in Peck's proposal, simply depends on whether PP is an argument or adjunct. This prompted reflection on whether Djamouri and Paul's (1997) more fundamental discussion on the distinction between arguments and non-arguments (adjuncts) could already suffice as an alternative to the theoretical complexity in Peck (2008). Moving forward to the next chapter, this thesis will discuss important aspects that warrant careful consideration, drawing on insights identified through the review of previous studies.

CHAPTER THREE
AREAS REQUIRING CONSIDERATION AND RESEARCH OBJECTIVES

Chapter 2 has summarised and evaluated the literature relating to the development of locative PP word order in Chinese. Based on the review, this chapter first highlights key areas that require meticulous consideration. These areas fall into two broad categories. The first area concerns methodological aspects, specifically the process of data collection and handling. The second area inclines towards theoretical reflection, as it pertains to the potential motivations and mechanisms behind the evolution of locative PP word order. Nevertheless, once the significance of considering external influences is established, it not only impacts the theoretical perspective of this thesis but also offers guidance in the methodological approach to data collection. This process allows the present study to reflect and refine the study design in Chapter 4. Finally, the last section formulates research objectives and research questions of this thesis.

3.1 DATA COLLECTION AND HANDLING

This section evaluates how previous studies conducted data collection and handling. A few methodological issues are presented below.

The primary concern pertains to the data collection procedure. Specifically, this thesis examines whether the diachronic studies have utilised quality corpus tools. This investigation also reveals a moderately related problem, which is the use of a limited sample size. I have highlighted in L. Jiang (2018) that numerous studies in historical Chinese linguistics lack the incorporation of digital linguistic corpora. This limitation is particularly pronounced in studies conducted prior to 2000s, given the scarcity of sizeable repositories of electronically archived Chinese diachronic texts. As will be discussed under the methodology section in Chapter 4, even when such archives are available, most of them do not qualify as linguistic corpora in the modern sense. This creates an additional barrier for historical Chinese linguists to work with corpus tools. The situation contrasts sharply with historical English linguistic studies, which have benefitted from the use of diachronic corpora like the Helsinki Corpus of English Texts since its launch in the early 1990s. When we gather data, calculate frequencies and decipher patterns from extensive texts all manually, it usually requires a substantial amount of time and

effort, with a higher likelihood for errors. Consequently, studies in historical Chinese linguistics might be seen as falling behind their English counterparts simply due to the delay in developing diachronic corpora resources. To ensure that historical Chinese linguistic research remains concurrent with developments in other historical linguistic studies, it is vital to tackle this issue, especially in light of technological advancements.

A significant portion of studies under review have opted for relatively small sample sizes, possibly owing to the limited availability of robust diachronic corpora. While a small sample size is useful in conducting preliminary studies that inform future directions, it also introduces problems. Section 1.3 of Chapter 1 has pointed out that ideally, the distribution of PPs in Old Chinese should be a factual matter, yet current literature shows three distinct views. It was suggested that one contributing factor to the notable disparities could be the treatment of prepositions as a uniform class, without acknowledging the diverse semantic roles they introduce. However, it is plausible that the discrepancies could also stem from the use of small sample sizes, which potentially introduces bias and distortion. For instance, Sun (1996) obtains the results on the frequency of preverbal and postverbal PPs in Old Chinese based on linguistic materials of two chapters: one from Zuo Commentary, Duke Yin; and the other from Mencius, King Hui of Liang (Part A). Both Zuo Commentary and Mencius are pre-Qin texts with a relatively vernacular style. This makes them ideal choices for studying Old Chinese under the text selection criteria proposed in Chapter 4. Despite this, using only one chapter for each text does raise concerns, as it may challenge the credibility of the findings.

Peck's (2008) corpus-assisted study represents a step forward, and her use of a logistic regression model in explaining the PP word order variation is inspiring. However, her study is also based on a modest sample size, comprising 10,200-character blocks from 5 selected texts each. Preferably, Peck could have made good use of the abundant diachronic texts in the corpus. With her sound methodology and advanced statistical techniques, a larger sample size would have enhanced the quality of her results and analysis. Furthermore, Peck resorted to annotating part of the data on her own, as the Part-of-Speech (POS) tagging system of Academia Sinica Ancient Chinese Corpus was not fully developed then. In contrast, C. Zhang (2002) utilises extensive historical texts, as indicated by the list of texts in the appendix (C. Zhang: 288-289), which covers a total of 32 works from pre-Qin to Ming. Still, it is not completely evident how the occurrences of preverbal and postverbal PPs were determined from the extensive volume of texts. C. Zhang could have strengthened her quantitative section if she had made the data collection process more transparent by outlining the specific steps.

The subsequent concern is the tendency of prior studies to prioritise gathering data on locative VPP and PPV, with relatively little emphasis on locative VOPP and PPVO. L. Jiang (2018: 7-8) highlights that earlier research mainly revolves around the link between PP and V. In other words, these studies chiefly seek to determine whether PP occurs before or after V, while the issue of V having an object or not receives less attention or remains unexplored. It is advisable to refrain from presuming that previous findings, which are drawn from the distribution of VPP and PPV, automatically apply to the usage of VOPP and PPVO.

L. Jiang (2018) posits that investigating the sequence between locative PP and VO is just as vital as examining the situation of locative VPP and PPV. This assertion arises for two primary reasons. Firstly, like the present study, L. Jiang (2018) draws inspiration from WALS Feature 84A (Dryer with Gensler 2013) and emphasises its significance. L. Jiang (2018: 7) argues that we can obtain "a more straightforward comparison" with this feature only through inquiring about the sequence between PP and VO.[48] Secondly, L. Jiang (2018) suggests that exploring PP and VO would lead to an examination of the Postverbal Constraint (PVC), a critical concept that might be overlooked otherwise. Frequently utilised by linguists to discuss syntax, word order typology, and cross-dialectal variations in Chinese, PVC is a pronounced inclination in Chinese to prohibit more than one constituent after the verb (C.N. Li 1975; Light 1979; J. Huang 1982; S. Huang 1984; Sybesma 1999; M. Zhang 2016, inter alia). For instance, Modern Chinese tends to disapprove of VOPP due to its possession of two postverbal constituents.[49]

In addition to PVC, comparing the distribution of the two sets – locative VPP/PPV and VOPP/PPVO – may bring to light additional captivating phenomena. For instance, L. Jiang's (2018) results unveil a discrepancy in the timeline of dominant word order shift for locative PPs in the two sets, notably with the transition from locative VOPP to PPVO occurring earlier than the shift from locative VPP to PPV.[50] This chronological difference is an intriguing area

[48] The term 'straightforward' is used in this context to emphasise the contrast with the approach that solely focuses on VPP/PPV. WALS Feature 84A surveys the sequence of V, O, and the oblique X. Limiting the examination to the order between PP and V fails to generate a parallel comparison with this feature, as it overlooks the role of O. However, it must be acknowledged that, despite the more direct comparison that results from scrutinising the order between PP and VO, it is not entirely parallel, strictly speaking. This is due to the difference that WALS Feature 84A deals with obliques, which are adjuncts, while in both L. Jiang (2018) and the present study, PPs comprise both adjuncts and arguments.

[49] Not all linguists share the view that PVC affects the movement of PPs. For instance, Peyraube (1994: 373) cites Wei (1993), who asserts that the shift of 於/于 *yu* to the preverbal position may not be tied to the constraints that relate to the permissible number of postverbal PPs.

[50] My preliminary work in L. Jiang (2018) focuses on the diachronic development of locative VOPP/PPVO and does not include first-hand data on locative VPP/PPV. For the said comparison, I obtained the results on locative VPP/PPV from C. Zhang (2002).

for investigation and merits further consideration. Without the comparative analysis of the two sets, this aspect might have escaped attention.

The third methodological concern is the uniform handling of PPs, without distinguishing between those introducing locative and non-locative (such as instrumental, manner, comitative, etc.) semantic roles. Moreover, even among locative PPs, most prior studies lack detailed data on the diachronic placement of the locative subclasses.[51] In other words, there is insufficient information regarding the respective word order development of locative PPs expressing location, source, goal, or path. As argued earlier, although an indiscriminate treatment without accounting for distinct functions may present a broad overview of PP placement and serve as compelling support for scholars to debate on basic word order in Chinese, it simultaneously makes it challenging for us to identify and address some of the underlying complexities. For instance, different prepositions can introduce the same semantic role, and conversely, the same preposition can introduce different semantic roles. Additionally, PPs of distinct semantic roles behave differently in terms of synchronic distribution and diachronic development. If the same reasoning is extended to locative PPs, it becomes evident that significant issues could be hidden from discussion if distinctions between subclasses of locative PPs are not made. To illustrate, if we were to accept the claim that the goal locative/non-goal locative distinction is key to the sentential position split of locative PPs in history, as earlier studies have suggested, we will need to examine the syntactic behaviour of each subclass of locative PPs.

To conclude, Section 3.1 outlined the first area that requires attention, which pertains to the methodological aspect of data collection and handling. Three key methodological concerns were highlighted under this area. The chief concern was whether the diachronic studies have been assisted by qualified linguistic corpora, and related to this, whether these works have employed a reasonable sample size. The second concern was the observation that prior studies exhibited a tendency to focus on data collection for locative VPP and PPV and give limited attention to locative VOPP and PPVO. Another issue was the uniform treatment of PPs regardless of semantic roles. The next section tackles the second area on the necessity of considering external factors, which now leans towards a more theoretical concern.

[51] Hong (2010a) is a rare source with data on the preverbal and postverbal distribution of each locative subclass. However, it discusses locative constituents in general and lacks a specific breakdown of the data for locative PPs versus those without locative prepositions. Thus, it does not count as a true exception to this claim.

3.2 THE NEED TO CONSIDER EXTERNAL FACTORS

The review of studies in Chapter 2 indicates a notable tendency, with most studies leaning towards internal factors to account for changes in locative PP word order, albeit with divergent approaches. Nevertheless, analyses purely grounded in internal factors must address the actuation problem presented by Weinreich, Labov and Herzog (1968: 102), which queries why a change occurred at a specific time and not at other times. One logical and relatively straightforward solution to this challenge could be to explore external influences like language contact. This approach is however absent in many of the studies under review. Thus, the question arises: Why do historical Chinese linguists approach the explanation of language change with caution when it comes to external factors?

3.2.1 CHALLENGING THE HESITATION TO EMBRACE EXTERNAL FACTORS

Peyraube (2000) points out that scholars investigating grammatical change have long viewed borrowing with scepticism, believing it cannot be falsified and does not provide a robust explanation.[52] They advocate for internal mechanisms and turn to external factors only after every attempt to identify an internal cause has proven futile. Additionally, M. Zhang (2011: 243) references Chu's (1987) perspective on why studies in this field tend to be unreceptive to external factor analysis. A key reason contributing to this resistance is the perception that basic word order is a steady grammatical trait, exhibiting high resilience and least susceptibility to change through language contact. A prevalent argument asserts that, despite extensive borrowing from Chinese during prolonged contact, languages like Japanese, Korean, and Vietnamese do not showcase a shift in basic structure towards the direction of Chinese.

Disagreeing with this stance, M. Zhang references Dryer (1992), Thomason (2001), and Heine (2008) to demonstrate that recent advancements in language contact and typological studies challenge this belief. Dryer (1992) observes that when it comes to word order, diffusion seems to exhibit a notably extensive impact. Thomason (2001), drawing from a study of numerous language contact cases, asserts that nonbasic vocabulary stands out as the linguistic component most easily borrowed on the borrowing scale. Following closely are moderately superficial phonological traits like stress placement and syntactic attributes like word order, making them the next in line for ease of borrowing. Even though Heine (2008) assumes a more prudent position compared to Dryer (1992) and Thomason (2001), he ultimately concludes that

[52] Indeed, as Campbell (1993: 62) highlights, although modern linguistics recognises syntactic borrowing, hesitation about its validity has a long history, dating back to eminent scholars like Humboldt and Sapir. Such a perspective had considerably swayed opinions, particularly among American linguists.

the syntax of word order is "fairly vulnerable" when languages come into contact (Heine 2008: 36).[53] Expanding upon these arguments, it becomes clear that language contact can, in fact, shape word order. Embracing the prospect of such influence is important, and we should not refrain from exploring external factors.

Beyond the belief concerning word order and its connection to language contact in general, another factor that may have fuelled researchers' reluctance in exploring external influences could be temporal considerations. Specifically, within the scope of the study on locative PP word order, chronological issues come into play. Tai (1976) proposes that the transition in Chinese word order from SVO to SOV results from frequent and close contact between Chinese, particularly Northern Chinese varieties, and Altaic languages, under the influence of Altaic word order. The preverbal movement of PPs forms a part of this transformative process.[54] L. Jiang (2018: 56) highlights C. Zhang's (2002) reservations about Tai's proposal. C. Zhang's doubt stems from Tai's estimation that the initial interaction between the Han ethnic group and the Altaic group occurred in the 4th to 6th centuries. Yet, C. Zhang's analysis of timeframe indicates that the preverbal movement of PPs had already initiated during the Eastern Han period (25 – 220 CE). If we recall, her current line of reasoning echoes her earlier argument in Section 2.2.2 of Chapter 2, where she dismissed preposition decline and replacement as the trigger behind the change in locative PP word order. Her logic remains consistent, and in both instances, the scrutiny of timelines reveals chronological issues and challenges.

However, the purported chronological challenge poses no obstacle for M. Zhang (2011). On the contrary, it precisely highlights a more profound issue within the field of historical Chinese linguistics. M. Zhang (2011: 236-237) underscores the insufficient attention given to the early interactions between non-Sinitic languages in the north and the Chinese language. Scholarly discussions regarding the extensive contact among these languages often begin with the era of the Sixteen Kingdoms of the Five Barbarians (304 – 439 CE), and the focus is notably directed towards the dynasties of Liao (916 – 1125 CE), Jin (1115 – 1234 CE), Yuan (1271 – 1368 CE), and Qing (1636 – 1911 CE), which were geographically east-leaning

[53] Instances of this phenomenon exist in South Asia. For example, Morey (2006) examines how Tai Khamti exhibits SOV word order in specific pragmatic contexts. Additionally, while Austroasiatic languages are assumed to be head-initial, all the Munda languages are head-final, presumably due to contact.

[54] M. Zhang (1995) raises a valid concern: Assuming Tai's proposal on Altaic influence is correct, naturally we would expect that all postverbal PPs, subject to identical influence, should have moved preverbally. Yet, this is clearly not the actual diachronic trajectory of Chinese.

and established by Manchu-Tungusic and Mongolic ethnic groups. Yet, M. Zhang astutely notes that the political and cultural centers of the early Central Plains dynasties were predominantly in the geographically west-leaning Guanzhong region. Consequently, the integration between Han and northern non-Han ethnic groups like Xiongnu and Di-Qiang in the Guanzhong and adjacent areas before the Six Dynasties, along with its impact on the Chinese language, has been significantly underestimated. Drawing from historical records and studies by historians, M. Zhang (2011: 238) contends that ethnic integration in the northern regions had already attained a considerable scale before the 4th century. Therefore, the period from the 4th to the 6th century was by no means the earliest contact between the Han ethnic group and ethnic groups speaking SOV languages; rather, it was the peak of integration.

At this point, although this thesis lacks the same level of certainty as M. Zhang in stating that the period from the 4th to the 6th century signifies the zenith of integration, it is inclined towards his perspective. Essentially, I am open to the idea that inter-ethnic contact and integration occurred earlier than asserted, particularly when factoring in interactions with non-Sinitic ethic groups beyond the Altaic. This thesis acknowledges its potential influence on the word order of Chinese. Indeed, severe social upheavals leading to mass migration and language contact have occurred at various points throughout Chinese history, and it is plausible that such circumstances caused abrupt changes in language over just a few generations.

Moreover, problems emerge when approaching the analysis purely from an internal perspective. As discussed in Section 2.3.3, explaining the word order change based on internal factors such as iconicity principles must face the pertinent questions: How did such principles originate, and why does Old Chinese not adhere to them, yet Modern Chinese does? Yue-Hashimoto (1993: 224) advocates that attributing language change to external factors can be more convincing, particularly when we question why the change is only activated at this point, if all along the internal conditions for the change are present.

In addition, in his investigation of the ditransitive construction typology in Chinese dialects, M. Zhang (2011: 251) notices that, while surely one can attempt to analyse the diachronic evolution from a purely internal perspective, the various existing explanations based on internal factors have however prompted even more questions that are hard to tackle. For example, if the repositioning of PPs to the preverbal slot is solely a consequence of internal adaptive adjustment stemming from the omission of 於/于 *yu* in Old Chinese, then why do Northern Chinese varieties continue advancing towards the total elimination of postverbal PPs, while Sothern Chinese varieties display a much higher tolerance for postverbal PPs? Likewise,

although prosody can account for the phenomenon of PVC, why is there a significant difference in the extent of PVC enforcement between Northern and Southern varieties? Even if one contends that this discrepancy can be attributed to the distinct prosodic features found in Southern varieties, driven by their richer tones and higher occurrence of monosyllabic words, then why do internal variations in PVC enforcement exist within Northern varieties as well? Based on these considerations, M. Zhang (2011: 251) concludes that a synthesis of longitudinal historical evolution with horizontal external factors allows for reasonable explanations without compromising the insights gained from internal factor analysis.

This thesis supports M. Zhang's position. I would like to emphasise the necessity of exercising great caution when asserting limitations or impossibilities in language behaviour, particularly within the context of language contact. Making broad claims, such as suggesting that basic word order is minimally affected by language contact, can be risky, as it oversimplifies the complex reality of contact situations. For instance, it is rather disconcerting when Li and Thompson (1974b: 206) firmly claim that the predominant influence of Chinese civilisation in Asia before the twentieth century rules out the likelihood of external forces, and hence, any detected word order change in Chinese has to be internally driven. This oversight could lead to missed opportunities to understand the intricate ways in which languages interact. Taking a broader look at the Sino-Tibetan family, we will find that language contact situations have been known to influence the word order of Tibeto-Burman languages, as evidenced by the changes observed in the Karen and Bai languages (LaPolla 2017).[55]

3.2.2 EXPLORING THE MECHANISMS BEHIND LANGUAGE CONTACT

If we acknowledge that external factors, like language contact, can influence word order, what are the mechanisms? How precisely does language contact trigger changes in word order? One perspective on this subject has been particularly illuminating. After examining cases of changes in word order due to contact in regions such as South America, Central Asia, Northern Europe, and Eastern Europe, Heine (2008) observes that, as opposed to generating a completely foreign word order, speakers typically employ and redefine existent constructions in the target language to reflect and correspond with the word order in the source language. In other words, the effects of contact were not about direct borrowing but rather reinforcing a particular

[55] I want to clarify that this thesis does not oppose seeking solution internally. Indeed, C. Zhang (2002: 270) has presented a compelling argument in favour of exploring answers within the language itself. She argues that the emergence of many new forms is not without a source. For instance, there was already a very small number of preverbal PPs during the pre-Qin period, displaying a discernable pattern. Over time, this small set transformed into the majority. C. Zhang suggests that this implies when a language seeks changes in sentence expressions, it may first find solutions within the existing language system and modify existing patterns.

secondary word order already established in the target language. Heine (2008) thus proposes a more interactive type of change called 'contact-induced word order change without word order change'.

Citing Heine's findings, M. Zhang (2011: 243) claims that the fact that a certain word order already existed in Chinese is not sufficient grounds to deny the influence of external factors. If this originally marked, less dominant word order happens to be the same as the basic word order of another language that is in close contact, there could be an increase in its frequency, an expansion in its usage scope, and a gradual removal of its markedness. Similarly underscoring the interactive aspect of contact-induced change, Cao and Yu (2000) postulate a borrowing sequence of 'borrow-recreate-merge' to account for the development of the narrow disposal construction in Chinese. This interactive borrowing mechanism is likely to have played a crucial role in fostering the adoption of the construction.

Following his earlier exploration of the interactive nature of contact-induced change in M. Zhang (2011), M. Zhang (2016) subsequently examines the emergence of PVC and suggests the potential occurrence of an interactive compromise. Although M. Zhang's (2016) observations on PVC primarily derive from the study of ditransitive constructions, L. Jiang (2018) posits its relevance to the shift in locative PP word order and extends M. Zhang's proposal on interactive compromise to elucidate the transformation from predominantly VOPP to PPVO. The rationale unfolds as follows: Old Chinese permits two constituents after the verb, as seen in VOPP constructions. In contrast, the SOV non-Sinitic languages do not permit any constituent after the verb.[56] Arising as a plausible consequence of the interactive compromise, PVC compelled the relocation of postverbal PPs in locative VOPP constructions to the preverbal slot. Simultaneously, PPVO, being the resulting construction, upheld the basic VO order in Chinese. This likely made the shift in locative PP word order more acceptable for Chinese speakers of that time, thereby maintaining their comfort level despite the change.

Despite the potential promise of the interactive compromise as a suggested mechanism for contact-induced change, challenges lie ahead. I have acknowledged in L. Jiang (2018: 57) that while Chinese boasts a rich repository of well-maintained texts spanning more than two millennia, historical written texts for many potential contact languages are scarce. Recognising the present obstacles of obtaining suitable diachronic texts for these languages to track their evolution, it is important to note that the interactive compromise proposal lacks concrete

[56] Nevertheless, narrative texts provide numerous instances that challenge this assumption. Admittedly, there is frequently a pause after the verb, but speakers do generate postverbal arguments and other elements in natural language. This underscores the diversity and fluidity of linguistic patterns found in actual usage.

evidence and may aim solely to introduce a fresh perspective. Moreover, C. Zhang (2002: 281) correctly points out that, although Chinese was evidently influenced by Altaic languages, critical questions remain unaddressed, such as the specific languages that influenced it, the starting point of the changes, and the extent of the influence. Substantial and credible evidence is indispensable to support the assertion that Chinese word order changed under the influence of Altaic languages. Nonetheless, as Gvozdanović (2015) suggests, it is still possible to consider the typological properties and determine the language type that may have influenced the target language, even if we are unable to pinpoint the specific contacting language. This process could potentially enrich the data of diachronic typology of Sino-Tibetan languages. Additionally, as summarised by DeLancey (2011: 53), Chinese is not only connected to Tibeto-Burman languages, but also to Tai-Kadai, Hmong-Mien, and Austronesian languages. Thus, beyond the influence of other Sino-Tibetan languages, it is also important to recognise the links between Chinese and other language families. This broader perspective provides valuable insights into the complex history of language contact and borrowing that have shaped the development of Chinese.

Finally, it is worth noting that the translations of religious texts may also influence the development of Chinese, as studies by historical Chinese linguists have shown. N. Jiang (2011) highlights that the contact between Chinese and foreign languages includes both natural language contact formed through direct personal interactions and 'non-natural contact' via written dissemination or translation of texts. A prime example of the latter is the rich linguistic records contained within the Buddhist scriptures, which were translated with the goal of disseminating the teachings and principles of Buddhism to the general population. To achieve this, translators placed emphasis on the accessibility of the translations and utilised vernacular language that was widely understood by the masses. N. Jiang (2011) views the translation of these scriptures as the direct outcome of the first large-scale and traceable language contact during the evolution of Chinese.[57] She also references Q. Zhu (2001), who reports that just during the period from Eastern Han to the Sui dynasty, a total of 46 million characters were translated, comprising 1482 texts and 5702 scrolls. Consequently, she contends the ongoing indirect language contact through translation persisted for nearly a millennium, establishing a solid foundation for extensive interaction between Chinese and foreign languages such as Sanskrit. Additionally, she maintains that the widespread dissemination of translated Buddhist

[57] Yu (2019: 10) holds a similar view, stating explicitly that the contact between Chinese and Sanskrit during the Medieval Period marked the first substantial contact.

scriptures, retaining a significant portion of elements from the original texts, undoubtedly had a profound impact on the linguistic landscape of the Chinese populace.

Cao and Yu's (2000) research on the influence of translated Eastern Han Buddhist scriptures on the development of the Chinese disposal construction serves as a noteworthy case study. By comparing the disposal construction as seen in translated Buddhist scriptures and in native Chinese documents, they find that not only did the new grammatical forms appear earlier in Buddhist texts, but they also occurred with a higher frequency. This finding suggests that translated Buddhist scriptures could have played a role in shaping the development of the disposal construction in Chinese, as translators crafted a linguistic form known as 'Buddhist Chinese', blending elements from Sanskrit and Pali.

My gratitude goes to the audience at the 56th International Conference on Sino-Tibetan Languages and Linguistics (ICSTLL-56), particularly to the participant who brought up the following insightful comments: How could Buddhist text translations have potentially caused changes in word order in Chinese? Was the general population literate enough to read these texts? It appears more plausible that the process is reversed, with the change (such as the emergence of a new grammatical structure) initially emerging in the spoken language of the populace and subsequently exerting its influence on written texts. While I agree that this progression is more conventional, I maintain that the reverse is also viable. Within historical Chinese linguistics, Cao and Yu (2000) and Shi (2015) have demonstrated this possibility. I believe this is largely due to the highly vernacular nature of Buddhist works and their emphasis on oral transmission, whether through storytelling or chanting. Outside historical Chinese linguistics, Okell (1965) demonstrates the importance of Nissaya Burmese for analysing Burmese grammar and how this represents an instance of structured adjustment to the syntax of a foreign system.

The belief in the potential impact of translated religious texts is also reflected in C. Zhang's (2002) selection of linguistic materials. She classifies texts from the Eastern Han and Six Dynasties periods into two categories – non-Buddhist texts and translated Buddhist texts – to compare the distribution of PPs in each.[58] This approach is sound as it avoids grouping together text types that may have had different impacts on language development. Overall, these studies bring to light the possibility of another external factor that could impact language evolution – the influence of religious texts translations. Moreover, they underscore the

[58] Examining C. Zhang's choice of historical texts, it becomes evident that she is actually open to potential external influence, specifically regarding translations of Buddhist works, as long as there is no chronological discrepancy and it aligns with her proposed historical timeline.

importance of carefully considering the context in which texts were produced when we examine language development.

To summarise, Section 3.1 highlighted the need to re-evaluate linguistic materials through incorporating technologically assisted diachronic corpus tools. As for the motivations and mechanisms behind the diachronic development, Section 3.2 emphasised the importance of considering external factors. The focus of this study at the current stage is on the locative PP category, in view of its high occurrence and the significance of its word order change from predominantly postverbal to preverbal. However, this study is also concerned about the broader implications of the proposed theoretical analyses. In other words, can the framework shed light on other PP categories and provide a more consistent account for the diachronic development of PP word order in general? Iconicity principles may only work best for locative PPs; DELIM, in an attempt to provide a unified account for all PPs, might suffer from unnecessary complexity, making it theoretically costly. This study seeks to explore theoretical framework(s) which could be more fundamental and economical. Taking into account all the aspects discussed so far, Section 3.3 outlines the research objectives and questions of this study.

3.3 RESEARCH OBJECTIVES AND QUESTIONS

This study is progressive in nature, with three main goals that build upon one another. The first goal is to provide empirical data and chart the development of locative PP word order quantitatively. The second goal involves analysing the potential motivations and mechanisms behind this development. Finally, the third goal explores the broader implications of the research. To align with these goals, this study puts forward the following research objectives:

a. To examine the diachronic evolution of Chinese locative PP word order via the analysis of historical texts.
b. To identify the motivations and mechanisms behind the diachronic development of locative PP word order.
c. To explore the broader implications of the proposed theoretical analyses.

This study posits the following research questions to tackle the three research objectives:

RQ1: What does the historical development of Chinese locative PP word order look like across various stages?

1.1 What is the distribution of locative VPP/PPV and VOPP/PPVO diachronically?

1.2 What is the word order of each subclass of locative PPs diachronically?

1.3 Has there been a shift in locative PP word order from predominantly postverbal to preverbal, and if so, when did this shift take place?

RQ2: What are the motivations and mechanisms behind the diachronic development of locative PP word order?

2.1 What are the possible internal factors?

2.2 What are the possible external factors?

RQ3: What are the broader implications of the proposed theoretical analyses?

3.1 What is the argument–adjunct distinction?

3.2 Does viewing this distinction as a semantic continuum lead to a more consistent account for the word order of all PP categories?

To conclude, this chapter has discussed pressing issues from two broad areas. Section 3.1 revolved around methodological considerations, chiefly pertaining to the process of data collection and handling. Three key concerns were highlighted, most notably the lack of quality corpus tools and the use of a small sample size in several studies. Other concerns included the limited attention on locative VOPP and PPVO compared to VPP and PPV, and the homogeneous handling of all PPs regardless of semantic categories. Section 3.2 addressed the necessity and importance of incorporating external factors. It identified possible reasons behind the reluctance of Chinese historical linguists towards external influences and confronted this hesitation. Following this was a brief discussion on how language contact could have led to changes in word order. Having considered the salient points highlighted earlier, Section 3.3 formulated the research objectives and questions. With the aims laid out, the next chapter discusses important aspects in the methodological approach to data collection.

CHAPTER FOUR
METHODOLOGY

This chapter presents an overview of the key aspects in the methodological design. It comprises four sections. Section 4.1 starts by addressing the issue of periodisation in Chinese. After determining the periodisation proposal, Section 4.2 outlines criteria to select historical texts. This is followed by the selection of a high-quality diachronic corpus in Section 4.3. Lastly, Section 4.4 demonstrates how to use the chosen corpus.

4.1 Determining an appropriate periodisation for Chinese

This section addresses the task of determining among existing proposals an appropriate periodisation for Chinese that best aligns with the needs of this study. Firstly, it discusses the critical role of periodisation as well as its intricate nature. Thereafter, a few periodisation proposals are examined, with the most fitting one selected.

Periodisation is fundamental to historical linguistics. It allows us to compare and contrast linguistic features more easily. Its importance becomes even more evident when examining languages that boast rich and longstanding historical records. L. Wang (1980 [1958]) embeds the history of the Chinese language within the broader scope of historical analysis. He emphasises that any discourse of history inevitably involves periodisation, a key aspect that serves to highlight each major turning point more distinctly. As the history of the Chinese language is part of historical studies, periodisation is also indispensable for understanding the history of Chinese. L. Wang (1980 [1958]: 32) further argues that the absence of an appropriate periodisation indicates that we only have an unclear and shallow grasp of how Chinese evolved, and naturally, we cannot speak of any key historical moments in its development.

Despite its significance, periodisation remains a challenging issue in historical Chinese linguistics. This difficulty is highlighted by the notable variations among periodisation proposals, particularly in the number of major periods they suggest. Currently, proposals mainly include a two-way classification (Lü 1985; Tai and Chan 1999), a three-way classification (Ho 1994), a four-way classification (L. Wang 1980 [1958]; Y. Z. Pan 1982; Pulleyblank 1991; Sun 1996), and a five-way classification (Ōta 1988; Peyraube 1988). Even when there is agreement on how many major periods to propose, opinions still differ as to what

constitutes each period and there is no agreed demarcation. This situation arises primarily due to scholars using different sets of criteria and focusing on different aspects of the language system. Among the existing periodisation proposals, some are exclusively based on phonology, others focus solely on grammar (morphology and syntax),[59] a very few are rooted in lexicon, and some strive to adopt a comprehensive approach by incorporating all aspects.

Nevertheless, each of these approaches faces its own challenges, as summarised in Tai and Chan (1999) and Arcodia and Basciano (2021). Firstly, phonology-based periodisations represent the earliest proposals and used to hold the most influence, due to the focus on historical phonology in traditional Chinese philology. However, these proposals are derived from dictionaries, rhyme books or reconstructions. Arcodia and Basciano (2021: 38 - 39) point out that these are deemed artificial and unrepresentative of any actual spoken form. This is further muddled by the lack of a consensus on numerous facets of the phonological reconstructions. Secondly, grammatical periodisation, according to Tai and Chan (1999: 299), is relatively nascent due to the considerable ambiguities in dating the vernacular innovations. Moreover, Tai and Chan maintain that the profound impact exerted by classical models such as *wenyan* on written vernacular Chinese exacerbates the complexity.[60]

In addition, Arcodia and Basciano (2021: 39) highlight another difficulty in pinpointing the time of an innovation. While one group of researchers seeks the earliest instance of a particular construction, the other group only considers attestations that resemble or exactly match the contemporary use. Arcodia and Basciano refer to the case of Chinese resultative constructions, with the range of the proposed dating covering nearly two thousand years. Comparing to the first two approaches, a lexicon-based periodisation saw limited adoption. L. Wang (1980 [1958]: 34) illustrates with the period following the May 4th movement in China, when Chinese absorbed many foreign words, yet it did not cause changes to basic vocabulary; therefore, he contends that developments in non-basic vocabulary should only serve as a secondary criterion. Lastly, while Tai and Chan (1999) consider proposals that strive to comprehensively incorporate phonology, grammar, and lexicon as ideal, Arcodia and Basciano (2021: 42) raise doubts about equally weighting all three aspects. This is evident, as proposals that attempt to encompass all aspects still show varied emphasis on specific aspects. In line with Arcodia and Basciano's perspective, this thesis argues that since phonology, grammar,

[59] Chinese linguists usually employ the term 'grammar' to refer to morphology and syntax only.
[60] This underscores the challenge of handling the two written traditions in Chinese, a topic that is addressed in detail under text selection criteria in Section 4.2.

and lexicon may evolve at varying speeds and do not align, it could result in overlapping periods if equal weightage is assigned to each.

The discussion thus far explains the reasons behind the diverse proposals and the challenges in achieving a consensus on the periodisation of Chinese. Given the complexity, what is the stance of this thesis? Specifically, what are the main considerations in evaluating the proposals? First and foremost, this thesis favours a relatively more detailed periodisation. A two-way classification with only two major periods is fairly crude. Lass (1997: 288) differentiates 'macro-stories' and 'micro-stories' in studying language change. To fully comprehend the transition from the initial to the final state (the macro-story), one needs to trace the smaller-scale developments and intermediate stages along the path (the micro-stories). Thus, this thesis aims to document the locative PP word order in Chinese at different time periods in history and highlight the micro-stories. This approach aligns with the first research goal.

Secondly, this thesis is inclined towards a comprehensive proposal that integrates all aspects of phonology, grammar, and lexicon, but with a special emphasis on grammar. As this study pertains to word order of locative PPs, a concentration on grammatical features is clearly advantageous. However, why not pursue an exclusively grammar-based periodisation, which intuitively might better suit the needs? This is grounded in my belief that language system is complex and language evolution is holistic. A periodisation that attempts to encompass multiple aspects allows for a more holistic understanding of language developments, as these aspects are often interconnected in evolution. Therefore, this thesis would prefer a periodisation that utilises the comprehensive approach but with a stronger focus on grammar. This also avoids the issue of the unfeasibility of assigning equal weightage to all aspects.

With these two preferences in mind, a four-way classification, as exemplified in L. Wang (1980 [1958]: 35), represents an appropriate guiding proposal:

Table 4.1: A summary of L. Wang's (1980 [1958]) periodisation

1. 上古 Shanggu Period	Prior to 3rd c. (before the Upheaval of the Five Barbarians) [transitional stage: 3rd and 4th c.]
2. 中古 Zhonggu Period	From 4th to 12th c. (the first half of the Southern Song dynasty) [transitional stage: 12th and 13th c.]
3. 近代 Jindai Period	From 13th to 19th c. (Opium War) [transitional stage: from the 1840 Opium War to the 1919 May 4th Movement]
4. 现代 Xiandai Period	After the 1919 May 4th Movement

This periodisation considers all three aspects but with special attention to grammar, as L. Wang (1980 [1958]: 34) explicitly states that we should consider grammar as the chief criterion and a major shift in grammar as the key to language development. His four-way periodisation divides the historical development of Chinese into four major phases: *Shanggu Hanyu* 上古汉语 (Old Chinese or Archaic Chinese), *Zhonggu Hanyu* 中古汉语 (Middle Chinese), *Jindai Hanyu* 近代汉语 (Early Mandarin Chinese or Pre-modern Chinese), and *Xiandai Hanyu* 现代汉语 (Modern Chinese). These four stages of Chinese have gained wide acceptance. However, scholars differ in their delineation of each stage, specifically, what the corresponding dynasties or Gregorian years are. While appreciating the foundational four-way classification in L. Wang's periodisation and its pursuit of a more comprehensive approach, scholars have noted that the criteria used are not consistent across his four periods (Tai and Chan 1999; Wei 2000; Arcodia and Basciano 2021). Specifically, Shanggu Period was based on phonology and grammar, Zhonggu Period was based mainly on grammar with just one phonological feature, Jindai Period was exclusively based on phonology, and Xiandai Period was based on 'grammar influenced by the West' and lexicon.

Guided by the two preferences described previously, this thesis has adopted L. Wang's proposal as a broad, initial framework that establishes the four major periods of Chinese. I remain, however, open to alternative proposals that may fine-tune this foundation. In this case, what appears particularly troubling is what constitutes Zhonggu Period, and correspondingly, Middle Chinese. Its classification shows considerable variations across proposals, whereas the other three periods maintain a higher degree of similarity. More recently, a growing number of scholars advocate that Middle Chinese should refer to language of the Eastern Han and Six Dynasties periods.[61] For instance, Wei (2000) asserts the independent status of Eastern Han and Six Dynasties, as he finds that during this period, the morphosyntactic characteristics of the pre-Qin period had almost vanished and it equally set itself apart from Early Mandarin Chinese. Furthermore, this period spanned over 500 years and maintained a set of unique morphosyntactic features for a considerably long time. Wei therefore posits that the language of this period lies roughly halfway between Old Chinese and Early Mandarin Chinese, and it should constitute Middle Chinese by itself.[62]

[61] There are also proposals that include the Sui dynasty (581 – 618 CE). However, as Ōta (1988) highlights, we can omit it due to its brief existence.

[62] Additionally, Ōta (1988) also advocates for the exclusion of the Tang dynasty from Middle Chinese, suggesting that it should be placed under Early Mandarin Chinese due to the notable emergence of the vernacular in Late Tang.

Previously, I adopted Wei's proposal in L. Jiang (2018), without first acknowledging the foundational work of L. Wang (1980 [1958]) in proposing a four-way classification. The present study still supports Wei's stance on Middle Chinese. The decision is underpinned by the fact that Eastern Han and Six Dynasties experienced drastic grammatical transformations, as attested by the development in locative PP word order. Such evidence strongly justifies a more focused and in-depth investigation of this period on its own. However, it should be noted that Wei's periodisation of Middle Chinese is solely based on grammatical features, which appears to clash with the preferred criterion of having a comprehensive approach with just an emphasis on grammar. Nonetheless, this is not viewed as a true contradiction. As previously mentioned, the two criteria were designed to guide the identification of a suitable periodisation with the appropriate number of major periods. Once this preliminary framework is in place, it is then refined to better align with the research objectives.

Finally, drawing from L. Wang's four-way periodisation and Wei's proposal for Middle Chinese, this study adopts the following periodisation of Chinese:

Table 4.2: A periodisation of Chinese based on L. Wang (1980 [1958]) and Wei (2000) [63]

1.	上古汉语 **Old Chinese**	Prior to 25 CE (pre-Qin period to Western Han dynasty)
2.	中古汉语 **Middle Chinese**	From 25 to 589 CE (Eastern Han dynasty to Six Dynasties)
3.	近代汉语 **Early Mandarin Chinese**	From 7th to 19th c. (Tang dynasty to Qing dynasty)
4.	现代汉语 **Modern Chinese**	After the 1919 May 4th Movement

4.2 CRITERIA TO SELECT HISTORICAL TEXTS

Now that the periodisation of Chinese is in place, the next step is to choose from the vast collections of historical documents the most appropriate ones. The wealth of historical texts in Chinese is both a blessing and a challenge. On the one hand, researchers are blessed with rich

[63] I would like to acknowledge that Wei is among the key developers of the Academia Sinica Ancient Chinese Corpus, the main diachronic corpus this thesis intends to use. The three sub-corpora of this corpus nicely match the first three periods proposed here. This connection might raise concerns about bias, but the decision on the final periodisation here and the subsequent selection of the corpus are both based on scholarly merit rather than mere convenience. Section 4.3 discusses the strengths of this particular corpus.

resources, in contrast to studies grappling with limited materials. On the other hand, this abundance also makes the task of choosing the most appropriate linguistic materials more challenging. Thus, it is vital to first identify a set of criteria for text selection from each major period.

According to Cheng (1991), the suitability of a text as a valid written source in the study of historical Chinese linguistics relies on three conditions:

(1) Firstly, it depends on whether the composer of the text belongs to the period under scrutiny. This necessitates an investigation into the authenticity and authorship of the text. Cheng (1991: 34) exemplifies this point by highlighting the case of *Shang Shu* 尚书 (The Book of Documents). It is found that only 13 chapters of this supposed Western Zhou book are genuine works from the actual Western Zhou period, while the rest are later fabrications. Consequently, this book cannot be considered a valid source for understanding Western Zhou language use due to these later additions. In line with Cheng's (1991) first criterion, L. Wang (1980 [1958]: 19) notes a historical tendency for people to forge writings and attribute them to ancient times, and researchers of historical Chinese linguistics should cultivate basic expertise in ascertaining the authenticity and the composition date of the text. L. Wang further emphasises that even if the text is not forged, the era described within the text should not be taken as the default; rather, attention should be given to the era in which the book was written. For instance, Fan Ye, the author of *Hou Han Shu* 后汉书 (Book of the Later Han), lived during the Southern Song dynasty, rendering his work an inappropriate representation of the language of the Han dynasty. Similarly, caution is advised when considering recorded conversations of ancient individuals in texts, as they may not faithfully reflect the language of their time. To support this point, L. Wang cites the novel *San Guo Yan Yi* 三国演义 (Romance of the Three Kingdoms) from the Ming dynasty, arguing that dialogues attributed to characters like Liu Bei and Cao Cao cannot represent the language of the Three Kingdoms period.

Synthesising the arguments of Cheng (1991) and L. Wang (1980 [1958]), this thesis consolidates these ideas into a central criterion: The text should have been composed during the period under study. Additionally, this thesis seeks to introduce supplementary considerations linked to their discussion. Notably, it is vital to consider the possibility of scribal interference during the copying of the original manuscript subsequently. This is intended to mitigate the impact of potential distortions due to scribal alterations and to select a text that

mirrors the linguistic context of the given period as closely as possible.[64] Furthermore, historical texts may incorporate direct quotes from earlier literature. To obtain an accurate representation of the language use during the historical period under examination and avoid skewing the analysis, it is crucial to exclude these quoted sections from the frequency calculations.[65]

(2) Secondly, the suitability of a text depends on whether the language of the text resembles or reflects the colloquial speech of the era under investigation. According to Cheng (1991), this criterion is paramount in text selection. He contends that the entire history of the Chinese language, since the advent of written records, has been marked by the co-existence of *wenyan* 文言 (classical Chinese) and the spoken language. Only written language that closely aligns with or mirrors the spoken language can authentically capture the historical progression of the Chinese language. Cheng refers to the Eastern Han philosopher Wang Chong, author of *Lun Heng* 论衡 (Discourses Weighted in the Balance), who champions the principles of "文字与言同趋" (written language should align with spoken language) and "口则务在明言，笔则务在露文" (strive for clarity in speech and aim for ease of understanding in writing) in the afterword of the book. Thus, although the language in *Lun Heng* has undergone crafting and refinement in its written form by Wang Chong, Cheng argues that it retains to some degree the oral characteristics of Eastern Han, qualifying it as an appropriate text for study.

Cheng's statement on the co-existence of *wenyan* and the spoken language corresponds to Literary Sinitic (LS) and Vernacular Sinitic (VS) in Mair (2001: 20), who asserts that LS and VS are the sole two forms of written Sinitic in the history of Chinese. Like Cheng (1991) and Mair (2001), Chen (2001) recognises the presence of these two literary traditions and the dichotomy between *wenyan* and *baihua* 白话 (vernacular Chinese). However, Chen (2001: 49) goes on to highlight that *wenyan* draws heavily from Old Chinese in terms of grammar and lexicon. In its initial development stages, *wenyan* is perceived as being strongly tied to the language commonly spoken during that time, only later distancing itself from colloquial speech and eventually becoming disconnected from the contemporary spoken form for over a

[64] Scribal changes are however challenging to totally circumvent in old texts. Qin Shihuang's decree to burn books and bury scholars has left few surviving texts from before his reign. Instead, they were later recalled and transcribed in Han times, often susceptible not only to diverse writing styles and choppy content but also to taboos of the Han era. Consequently, texts were modified.

[65] Instances of quoted materials from earlier texts include 诗经 *Shi Jing* within 左传 *Zuo Zhuan*, and excerpts of writings authored by the key characters in the biography section of 史记 *Shi Ji*, such as《谏逐客书》by Li Si in the biography dedicated to him within 史记 *Shi Ji*. These are to be eliminated from frequency calculations.

millennium.[66] Based on this premise, L. Jiang (2018: 12) deduces that, in contrast to the Old Chinese period, more attention should be given to texts from Middle Chinese and Early Mandarin Chinese, due to the increasing divergence and separation of *wenyan* from spoken language during these periods.[67]

In the exploration of appropriate vernacular texts for these two periods, Buddhist texts stand out as a prime choice. The use of colloquial language in Buddhist works aimed to disseminate the religion to the masses, especially the illiterate. This approach served to enhance the accessibility and persuasiveness of the teachings for the public, thereby creating an ideal and invaluable resource for examining the vernacular language. Besides, Mair (2001: 29-30) compellingly argues that it is the introduction and expansion of Buddhism that led to the progressive legitimisation and utilisation of vernacular writing in China, owing to the following factors: Buddhism's endorsement of vernacular languages over classical ones,[68] its philosophical devaluation of written texts, the Indian emphasis on oral transmission and its advanced linguistic science that underscored the significance of speech for scholars in China, as well as the translation process.

Chapter 3 has briefly discussed the potential impact of religious texts translation on the evolution of the Chinese language. Of particular interest are the Buddhist works from the Middle Chinese period, a time during which scholars argue that Chinese underwent substantial changes. Examining these works can shed light on the extent to which religious texts impacted the development of Chinese. Additionally, according to Chen (2001: 50), *baihua* gained popularity since the end of Tang dynasty and found its way into Ming-Qing dynasty novels. L. Jiang (2018) consequently proposes Buddhist works and *baihua* novels as the preferred vernacular genres for these two periods. More specifically, we can examine translated Buddhist scriptures from the Middle Chinese period. This particularly applies to early translations of Buddhist scriptures, which are remarkably close to spoken language (Kao 2006: 3). For the Early Mandarin Chinese period, an exploration of prosimetric narrative *bianwen* 变文

[66] While this view correctly notes that the model for *wenyan* became increasingly different from the way people spoke as the latter changed, it underestimates the influence of the vernacular on *wenyan* over the millennia.

[67] In addition, it is widely observed that spoken language is generally more prone to change than written language, which tends to be more conservative. As highlighted by a member of my PhD confirmation panel, the use of locative VOPPs, such as "等你，在雨中" (waiting for you in the rain, a line from a poem by Yu Guangzhong), is still present in modern Chinese language. Conversely, in contemporary spoken language, the PPVO structure, "在雨中等你" (in the rain waiting for you), is more commonly used. It is however worth noting that the use of VOPP in Yu's poem may also be a deliberate poetic device.

[68] This statement holds true from Eastern Han to Tang. However, during the Song dynasty, there were revisions made to Buddhist texts to align them more closely with *wenyan*, in an effort to enhance their perceived respectability.

(transformation texts) preserved in Dunhuang manuscripts, along with the examination of widely-read vernacular novels, is suggested.

The importance of choosing texts that mirror the spoken language of the era under scrutiny is evident. The preceding discussion has been relatively general in nature. Now, let us look at a specific case study that not only highlights the significance of this criterion but also pertains directly to the subject of this thesis. Peyraube (1994) refers to Chang's (1987) study of *Sanguo Zhi* 三国志 (Records of the Three Kingdoms), a book composed in the Early Medieval Chinese period. Chang finds few instances of preverbal 於/于 *yu* in the first quarter of the book. The results appear surprising, considering the earlier period of Eastern Han already saw many instances of preverbal 於/于 *yu*. Peyraube (1994: 375) suggests that this could be attributed to *Sanguo Zhi* being written in classical Chinese, thus preserving a rather frozen syntax from the Warring States period. In contrast, Buddhist texts from Eastern Han contain numerous examples of preverbal 於/于 *yu* that mirror the colloquial Chinese of that era. Peyraube (1994: 375-377) further points out that among Early Medieval Chinese texts that exhibit a greater vernacular style compared to *Sanguo Zhi*, the distribution of locative 於/于 *yu* is akin to that observed from Eastern Han. Peyraube's discussion underscores the significance of prioritising vernacular texts. Neglecting this aspect could potentially distort the results and analysis, resulting in a deceptive trend that deviates from the actual trajectory of language development.

(3) Cheng's (1991) third criterion revolves around the volume of a text. Inadequate volume compromises the ability to effectively describe and analyse the linguistic elements, rendering a text unsuitable. This is exemplified by Cheng's (1991: 34) reference to *Chengyi Bo Wen Ji* 诚意伯文集 (The Writings of Master Chengyi), a text meeting the first two criteria but falling short due to its limited volume. This limitation echoes the concerns raised in Chapter 3, which discuss how studies employing small sample sizes face challenges in establishing reliable findings. While this third criterion may not carry the same weight as the preceding two, acknowledging it remains pivotal for enhancing the credibility of the analysis.

L. Jiang (2018) follows Cheng's (1991) three criteria for text selection and introduces a fourth one, highlighting sinologists' consensus on a text's significance. L. Jiang (2018) uses *Zuo Zhuan* as a case study to illustrate all four criteria and showcases its suitability for studying the Old Chinese period. Firstly, its pre-Qin composition date aligns with the early phase of Old Chinese. Secondly, its narrative history genre exhibits a vernacular style. Thirdly, its substantial size surpasses other classics of the same era. Lastly, it receives commendation from

Bernhard Karlgren and Marcel Granet. In line with L. Jiang (2018), the present study adopts Cheng's (1991) three criteria but opts to exclude the fourth criterion proposed in L. Jiang (2018) for the following reasons. Firstly, assessing the importance of a text is subjective in nature and scholars may have diverse views on what constitutes an important text. Relying on a unanimous agreement might limit the scope of the texts considered. Secondly, while the first three criteria directly contribute to the methodological rigour and analytical robustness of the study, this criterion may be considered less critical. Prioritising the first three criteria helps maintain a focus on the methodological soundness in the process of text selection.

It should be noted that each of the major periods is not a homogeneous era, and significant variations exist even within each major period itself. For instance, there are discernible differences between Early Old Chinese and Late Old Chinese, with considerable changes in word order likely having transpired. Therefore, this thesis further divides Old Chinese, Middle Chinese and Early Mandarin Chinese into three sub-stages each. When analysing the Middle Chinese period, L. Jiang's (2018) text selection for the Middle Chinese period is problematic as it compares Buddhist and non-Buddhist works over the entire period. It selects one non-Buddhist work for the second sub-stage of Middle Chinese (MC2), and two Buddhist works, one each for the first (MC1) and last (MC3) sub-stages. Such an approach lacks a systematic comparison within each sub-stage of Middle Chinese, which could significantly skew the ultimate results and conclusion. Given the more rapid development of preverbal locative PPs observed in Buddhist works compared to non-Buddhist ones, a fair and balanced comparison would require a parallel examination of appropriate texts from both categories in each sub-stage.

To improve my previous treatment, I adopt C. Zhang's (2002) approach of comparing non-Buddhist texts with translated Buddhist texts. However, C. Zhang's comparison of four non-Buddhist texts and two translated Buddhist texts during the Six Dynasties period focused mainly on the dichotomy between the text types. Consequently, the quantitative analysis was mainly tabulated based on this dichotomy, rather than breaking down the results to individual texts. Yet, the Six Dynasties period forms a significant portion of Middle Chinese, which is a crucial stage in the evolution of the Chinese language marked by many significant grammatical changes. Moreover, the texts used in the comparison were not all composed within the same century. Hence, it would be useful to present results obtained from each individual text to capture the development of PP word order in a more nuanced and detailed manner.

However, it is undeniably challenging to locate suitable texts from both text types that date to the same century and fulfil all the criteria above, due to the limited availability of

vernacular non-Buddhist texts for Middle Chinese. In addition, some texts may not be available within a high-quality corpus. That is, even with the utmost attempts to obtain the most suitable corpora, the corpus containing the desired historical texts could be less than ideal. For instance, there may be occasions in which a particular corpus lacks proper tagging, or instances where quantitative analysis proves difficult due to the corpus being composed of plain text with limited search functions. In such cases, manual counting becomes necessary. To supplement the analysis, additional representative examples that can help contextualise the discussion are also provided.

By applying the aforementioned criteria, 14 texts from OC1 to EMC3 have been selected, as presented in Table 4.3 (see next page). Here are some explanatory notes for the table. Firstly, Table 4.3 is mostly based on L. Jiang (2018: 13) but with major modifications to the MC period, for reasons discussed previously. Highlighted entries denote the newly added texts. Secondly, the need for compiling a collection of translated Buddhist scriptures for Eastern Han arises due to the generally limited volume of each individual scripture. This compilation is essential for gathering a reasonable amount of data on the distribution of locative PPs. It contains ten scriptures by various translators from the same period (late 2nd c.). Likewise, the same rationale justifies why some sub-periods feature multiple texts for the same category.

In addition, it is worth considering the placement of locative PPs for the period preceding *Zuo Zhuan*. For instance, how were locative PPs positioned with respect to the verb in oracle bone inscriptions? This question is relevant as it can potentially provide insight into whether Chinese word order typology underwent a shift from SOV to SVO, followed by a reversion back to SOV, as claimed by Li and Thompson (1974b: 208). Materials prior to OC1 mostly include oracle bone inscriptions and bronze inscriptions. Djamouri and Paul (1997) provide a reference for the analysis of the former, while Guan (1981) and Y.K. Pan (2005) cover the latter. This study may consider consulting these sources where applicable. The heavy reliance on existing findings over collecting first-hand data is owing to my limited expertise in this area. Besides, oracle bone inscriptions and bronze inscriptions fall under 出土文献 (excavated texts), whereas the linguistic materials in Table 4.3 belong to 传世文献 (transmitted texts). The question of whether the progression from excavated texts to transmitted texts constitutes a linear trajectory within the same linguistic variety remains a subject of ongoing debate. Therefore, the focus of this thesis is mainly on the investigation of transmitted texts from OC1 to EMC3.

Table 4.3: Historical texts employed for this study (based on L. Jiang (2018: 13))

	Title		Composition date	Genre
Old Chinese (OC)				
OC1	*Zuo Zhuan* 左传 (The Zuo Commentary)		pre-Qin (4th c. BCE)	Narrative history
OC2	*Han Feizi* 韩非子 (The Works of Han Fei)		pre-Qin (3rd c. BCE)	Prose
OC3	*Shi Ji* 史记 (Records of the Grand Historian)		Western Han (early 1st c. BCE)	Narrative history
Middle Chinese (MC)				
MC1	Non-Buddhist works	*Lun Heng* 论衡 (Discourses Weighted in the Balance)	Eastern Han (1st c.)	Prose
	Translated Buddhist works	*Compilation of Eastern Han Buddhist Scripture Translations*[69]	Eastern Han (late 2nd c.)	Translation of Buddhist works
MC2	Non-Buddhist works	*Sou Shen Ji* 搜神记 (Anecdotes about Spirits and Immortals)	Six Dynasties (4th c.)	*Zhiguai* 志怪 (mysterious tales)
		Shi Shuo Xin Yu 世说新语 (A New Account of Tales of the World)	Six Dynasties (mid-5th c.)	*Zhiren* 志人 (records of people)
	Translated Buddhist works	*Miaofa Lianhua Jing* 妙法莲华经 (Lotus Sutra)	Six Dynasties (early 5th c.)	Translation of Buddhist works
		Weimojie Suoshuo Jing 维摩诘所说经 (Vimalakirti Nirdesa Sutra)		
MC3	Non-Buddhist works	*Qimin Yaoshu* 齐民要术 (Essential Techniques for the Welfare of the People)	Six Dynasties (mid-6th c.)	Agricultural texts
	Translated Buddhist works	*Foben Xingji Jing* 佛本行集经 (Abhiniṣkramaṇa Sutra)	Six Dynasties (late 6th c.)	Translation of Buddhist works
Early Mandarin Chinese (EMC)				
EMC1	*Dunhuang Bianwen Ji* 敦煌变文集 (A Collection of Dunhuang Transformation Texts)		Tang to Five Dynasties (7th to 10th c.)	*Bianwen* 变文 (transformation texts)
EMC2	*Shui Hu Zhuan* 水浒传 (The Water Margin)		late Yuan to early Ming (14th c.)	Vernacular novel
EMC3	*Ru Lin Wai Shi* 儒林外史 (The Scholars)		Qing (mid-18th c.)	Vernacular novel

In the same vein, questions may arise regarding the lack of an in-depth investigation of Modern Chinese. This can be a concern as some developments may still be ongoing, and they can be better explored and validated through a more detailed study, rather than being based on

[69] Refer to Appendix A for a complete list of the ten scriptures compiled.

intuition. Thus, this thesis may cite quantitatively derived findings from secondary sources. A more compelling justification is from C. Zhang (2002: 246), who observes that the Song, Yuan, and Ming dynasties were a time when the relevant rules governing PP word order were further tightened and refined, and the PP word order during this period fundamentally aligned with the situation in Modern Chinese. Therefore, the primary investigation of this thesis concludes at EMC3.

By now, the first two sections have addressed the issues of periodisation and text selection. The subsequent section will focus on the selection of a suitable diachronic corpus.

4.3 SELECTING AN APPROPRIATE DIACHRONIC CORPUS

Chapter 3 has discussed the primary concern regarding the data collection procedure, which is the relative lack of quality corpus tools. Compared to manual analysis, digitally assisted diachronic corpus research excels in computing the occurrence rates of a linguistic form. It also enhances pattern detection by sifting through data and consolidating findings across extensive text collections. This thesis strives to include a commendable diachronic corpus. L. Jiang (2018: 14) states that, preferably, the diachronic corpus should provide annotations, be publicly accessible, and contain texts that satisfy the text selection criteria across different periods.

Selecting the appropriate corpus is relatively straightforward for studies in historical Chinese linguistics, as Hu and McLaughlin (2007) contend that most of the repositories hosting electronically archived Chinese diachronic texts do not qualify as linguistic corpora in the modern sense, with the Academia Sinica Ancient Chinese Corpus (ASACC) and the Sheffield Corpus of Chinese (SCC) being the only exceptions. The footnote section at the end of Section 4.1 highlighted that the periodisation of the three sub-corpora in ASACC matches the first three periods proposed in Table 4.2, likely because Wei is among the key developers. L. Jiang (2018: 14) has provided a table for a succinct comparison of ASACC and SCC. For a more thorough evaluation and assessment of their suitability, as well as to mitigate the potential bias in favouring the former corpus solely based on its alignment with the proposed periodisation, the table of comparison in L. Jiang (2018) is now refined and expanded with more details:

Table 4.4: A comparison between ASACC and SCC (modified from L. Jiang (2018: 14))

	ASACC[70]	SCC[71]
Developer	Institute of Linguistics, Academia Sinica	The University of Sheffield
Accessibility	Free public access online	Free public access online
Periodisation and sub-corpus	▪ Old Chinese (pre-Qin to Western Han, prior to 25 CE) ▪ Middle Chinese (Eastern Han to Six Dynasties, 25 – 589 CE) ▪ Early Mandarin Chinese (Tang to Qing, 618 – 1911 CE)	▪ Archaic Chinese (12th c. BCE – 220 CE) ▪ Medieval Chinese (220 – 1368 CE) ▪ Modern Chinese (1368 – 1911 CE)
Corpus size	▪ Old Chinese: 58 texts, 5,128,068 characters ▪ Middle Chinese: 69 texts, 8,101,662 characters ▪ Early Mandarin Chinese: 20 texts, 4,406,381 characters ▪ Total: 147 texts, 17,636,111 characters	▪ Archaic Chinese: 10 texts, 109,670 characters ▪ Medieval Chinese: 17 texts, 147,500 characters ▪ Modern Chinese: 13 texts, 175,500 characters ▪ Total: 40 texts, 432,670 characters
Features	▪ Keyword search ▪ Part-of-Speech (POS) tagging ▪ Concordance ▪ Individual diachronic text selection ▪ Feature marking ▪ Data sorting ▪ Filtering parameters ▪ Collocation analysis ▪ POS tally	▪ Keyword search ▪ Part-of-Speech (POS) tagging ▪ Concordance ▪ Genre selection only[72]

Table 4.4 shows that ASACC and SCC are indeed good-quality diachronic corpora in the field of historical Chinese linguistics. Firstly, both ASACC and SCC offer online access to the public at no cost. This is an advantage compared to the Helsinki Corpus and Penn Parsed Corpora of Historical English, which cost a few hundred dollars (Schlüter 2013). Both feature a considerable number of texts that are diverse in genre, including fiction, history, philosophy, religion, travelogue, among others. Additionally, both are annotated with POS tagging and possess useful features such as keyword search and concordance.

Nonetheless, it is quite apparent that ASACC serves as a more suitable diachronic corpus. Firstly, ASACC has a much more substantial corpus size both in terms of number of texts and character count. A larger corpus is more likely to reveal peculiar instances. Furthermore, it may facilitate the application of advanced statistical tests if one intends to

[70] Information regarding ASACC is from the accompanying instructions for use for each sub-corpus and Wei et al. (1997).
[71] Information on SCC is from its online manual (https://www.dhi.ac.uk/scc/db/scc/manual.html), last accessed on 30 Dec 2023.
[72] Although Hu, McLaughlin and Williamson (2007) indicate that SCC allows the option of selecting specific texts, this function was not operational during each access.

conduct a quantitative study. Currently, most of the texts listed in Table 4.3 are accessible through ASACC, apart from *Lun Heng* 论衡 (Discourses Weighted in the Balance). Secondly, ASACC allows the selection of individual text. This is particularly relevant as not every text meets the criteria established in the preceding section. In contrast, some features of SCC have become inaccessible, possibly due to a lack of maintenance over the years. For instance, it is currently not possible to select a sub-corpus, and only the option to browse text contents under each sub-corpus remains. Similarly, only the keyword query within a given genre can be performed, with the system creating a table showing its distribution across texts under that genre. For instance, a search of 於 *yu* under the genre of philosophy generates the following distribution:

Table 4.5: The distribution of 於 *yu* across the genre of philosophy in SCC

The Doctrine of the Mean	16	03.5%
The Great Learning	17	03.7%
The Analects	93	20.4%
The Mencius	229	50.1%
The Classic of the Tao and its Virtue	48	10.5%
Classified Conversations of Master Zhu	54	11.8%

Moreover, ASACC has other useful features. It has a very elaborate annotation system, particularly for nouns and verbs. While all words are annotated with POS tagging, some words receive additional feature marking. For instance, the online manual of its Old Chinese sub-corpus shows the example of "東風(NA2)[+attr]". NA2 is the POS tag denoting inanimate common nouns, while +attr is the feature marking denoting that the word 東風 (east wind) here has a 'modifier-head' structure. This annotation system not only enhances our understanding of the often-obscure Old Chinese texts, particularly in examining the role of verb semantics given its detailed annotation of the verbs, but it also makes data sorting and filtering easier. Furthermore, its collocation analysis with Mutual Information (MI) score also facilitates the analysis of verb semantics. One way to utilise this feature is to look out for verbs that most frequently collocate with postverbal PPs and consider the implications of their associations.

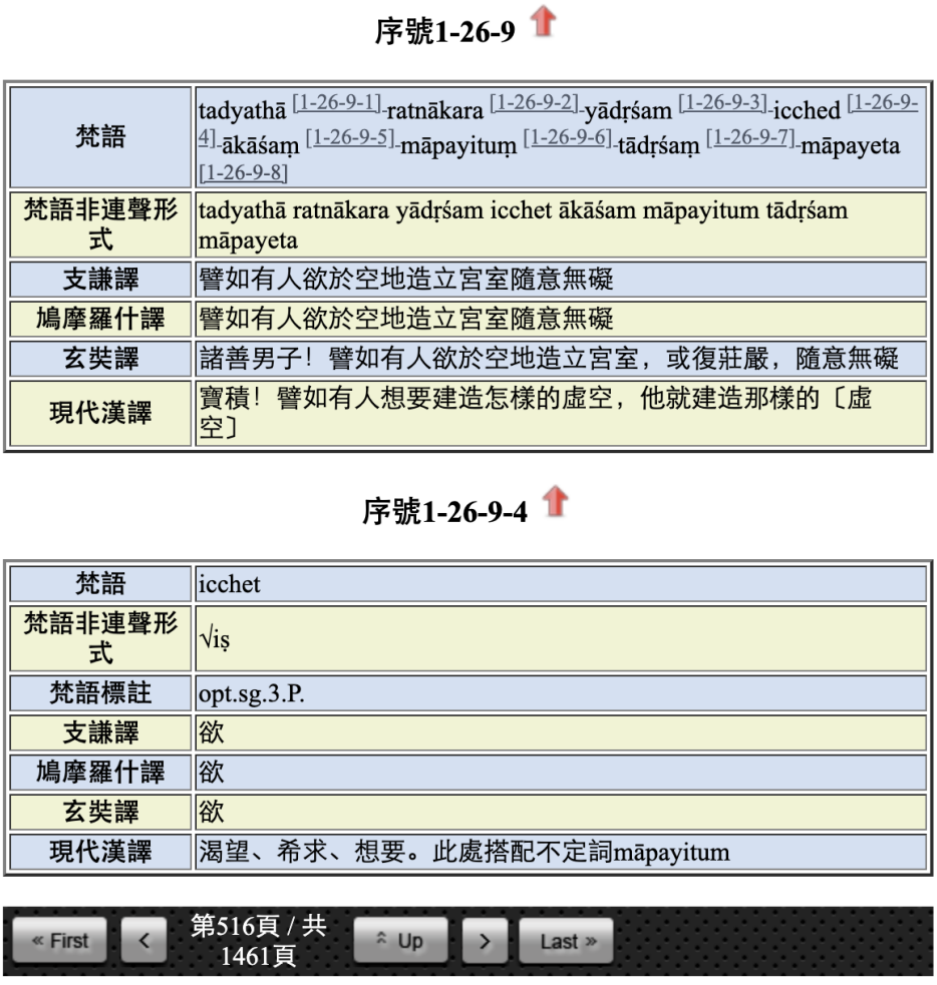
Based on the comparison, this thesis adopts ASACC as the primary diachronic corpus. However, it is important to keep in mind its limitations and exercise caution when using it to gather and analyse data. Firstly, it would be beneficial if the texts of each sub-corpus are organized according to the composition date. This presently absent feature will be particularly

useful in facilitating the selection of parallel texts of roughly the same period for Middle Chinese. Secondly, its concordance limits the range of visible immediate texts and does not permit clicks to view longer context. However, as will be explored later, context plays a very crucial role in the data collection process. Moreover, it does not have the option of exporting the full results of the concordance lines or specific lines. An Excel export feature will facilitate the analysis of the raw data, offering the flexibility to annotate and comment where necessary. Lastly, its elaborate annotation system, though advantageous, is fairly complicated, and POS tags are not consistent across the three sub-corpora. Therefore, mastering the system requires a considerable amount of time.

In addition to ASACC and SCC, another notable resource is the corpus developed by the Centre for Chinese Linguistics (CCL), Peking University (available at http://ccl.pku.edu.cn:8080/ccl_corpus/index.jsp). The CCL corpus contains modern and ancient Chinese texts. Based on the corpus guide (http://ccl.pku.edu.cn:8080/ccl_corpus/CCLCorpus_Readme.html), the corpus has a collection of texts ranging from 11th c. BCE to the present and comprises an impressive total of more than 700 million characters. Remarkably, the ancient Chinese sub-corpus alone has 201,668,719 characters, surpassing both ASACC and SCC in terms of corpus size. However, as noted by Xiao and Hu (2015: 39), despite being the largest openly accessible Chinese corpus, the texts in the CCL corpus are neither segmented nor annotated with POS tags. The lack of these features renders the CCL corpus less than ideal as the primary corpus for this thesis, as such a corpus demands considerable manual effort, and it may also compromise accuracy. Nevertheless, when the required texts are unavailable elsewhere, the CCL corpus can then serve as a valuable supplementary corpus that has the fundamental search function.

Furthermore, if the quantitative findings demonstrate a significant distinction in the distribution of locative PPs in non-Buddhist texts and translated Buddhist texts during the Middle Chinese period, suggesting a possible impact of language contact through Buddhist text translations on Chinese locative PP word order, a diachronic parallel corpus is then utilised. The Education University of Hong Kong's 汉译佛经梵汉对比分析语料库 (A Database of Chinese Buddhist Translations and their Sanskrit Parallels for Buddhist Chinese Studies, available at https://bcbs.eduhk.hk/) provides a list of different versions of translations alongside their common source in Sanskrit, enabling researchers to examine how various translators have chosen to convey the same construction. This is particularly helpful as this thesis would like to ascertain whether the involvement of early translators, who were mostly non-native Chinese

speakers, has played a part in locative PP word order change. These non-Chinese translators could have mapped traits from their native languages onto their translations. A comparison of translations of a common source by both Chinese and non-Chinese translators can be made to verify this claim. At present, the database contains only three Buddhist scriptures, namely, *Fahua Jing* 法华经 (the Lotus Sutra), *Weimojie Jing* 维摩诘经 (the Vimalakirti Sutra), and *Jushe Lun* 俱舍论 (the Abhidharmakośabhāsya). While the number of Buddhist scriptures in the database is limited, this corpus provides key information with an easily navigated presentation. It contains a comparison of the Chinese translations of Buddhist scriptures by different translators against the parallel Sanskrit texts paragraph by paragraph, followed by a description of the semantics and grammar of the Sanskrit components. For illustration, a sentence from the corpus is extracted to show the presentation:



序號1-26-9

梵語	tadyathā [1-26-9-1] ratnākara [1-26-9-2] yādṛśam [1-26-9-3] icched [1-26-9-4] ākāśaṃ [1-26-9-5] māpayituṃ [1-26-9-6] tādṛśaṃ [1-26-9-7] māpayeta [1-26-9-8]
梵語非連聲形式	tadyathā ratnākara yādṛśam icchet ākāśam māpayitum tādṛśam māpayeta
支謙譯	譬如有人欲於空地造立宮室隨意無礙
鳩摩羅什譯	譬如有人欲於空地造立宮室隨意無礙
玄奘譯	諸善男子！譬如有人欲於空地造立宮室，或復莊嚴，隨意無礙
現代漢譯	寶積！譬如有人想要建造怎樣的虛空，他就建造那樣的〔虛空〕

序號1-26-9-4

梵語	icchet
梵語非連聲形式	√iṣ
梵語標註	opt.sg.3.P.
支謙譯	欲
鳩摩羅什譯	欲
玄奘譯	欲
現代漢譯	渴望、希求、想要。此處搭配不定詞māpayitum

« First < 第516頁 / 共 1461頁 Up > Last »

Figure 4.1 Presentation style of the diachronic parallel corpus

With the selection of the diachronic corpus completed, the next section proceeds to present a hands-on demonstration of how to use ASACC.

4.4 A DEMONSTRATION ON HOW TO USE ASACC

This section intends to show the procedure to retrieve locative PP constructions introduced by the preposition 于 *yu* using the Old Chinese sub-corpus of ASACC. Previously, I had screen captured several figures to show each step of data collection in L. Jiang (2018: 15-21). These figures are reused below for illustrative purposes, but with a more comprehensive discussion.

First, select *Zuo Zhuan* as the diachronic text. Although the sub-corpus has the function of searching across all its texts, the search query is not performed over the entire sub-corpus for two reasons. Firstly, not all the texts were composed around the same time. Secondly, not every text meets the text selection criteria. Therefore, the targeted texts need to be specified.

Figure 4.2 Select *Zuo Zhuan* as the diachronic text (L. Jiang 2018: 16)

Next, input 于 *yu* as the keyword. The search starts with a preposition, which is perceived as the lowest common denominator of a locative PP construction and treated as the invariable. The main query page offers the flexibility of specifying the part-of-speech of the keyword and P is selected here. Although this section is proceeding with this function for demonstration, the limitations are duly acknowledged. It is crucial not to blindly follow the tagging assigned by the system. There may be controversial cases where the word is labelled as a verb but is gradually functioning more like a preposition. Relying on this function alone will not capture all instances. For such cases, V may be selected as its part-of-speech, with each generated instance reviewed by considering the criteria set in Chapter 1, the context of the word, and comparing it with its P-labelled counterpart.

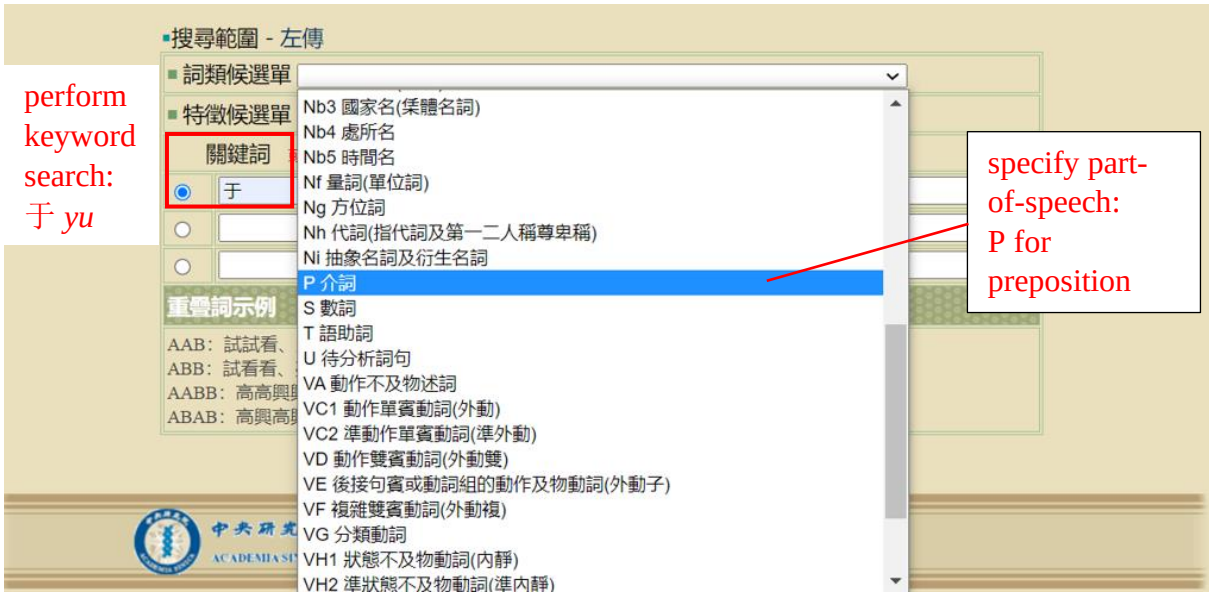


Figure 4.3 Perform keyword search on the main query page (L. Jiang 2018: 16)

After performing the query in Figure 4.3, a total of 1876 instances are generated. The first 20 instances are displayed as neat concordance lines in Figure 4.4. Despite the constraint of the limited range of co-texts on each side of the keyword as mentioned in the previous section, the concordance here facilitates the evaluation of the immediate environment.

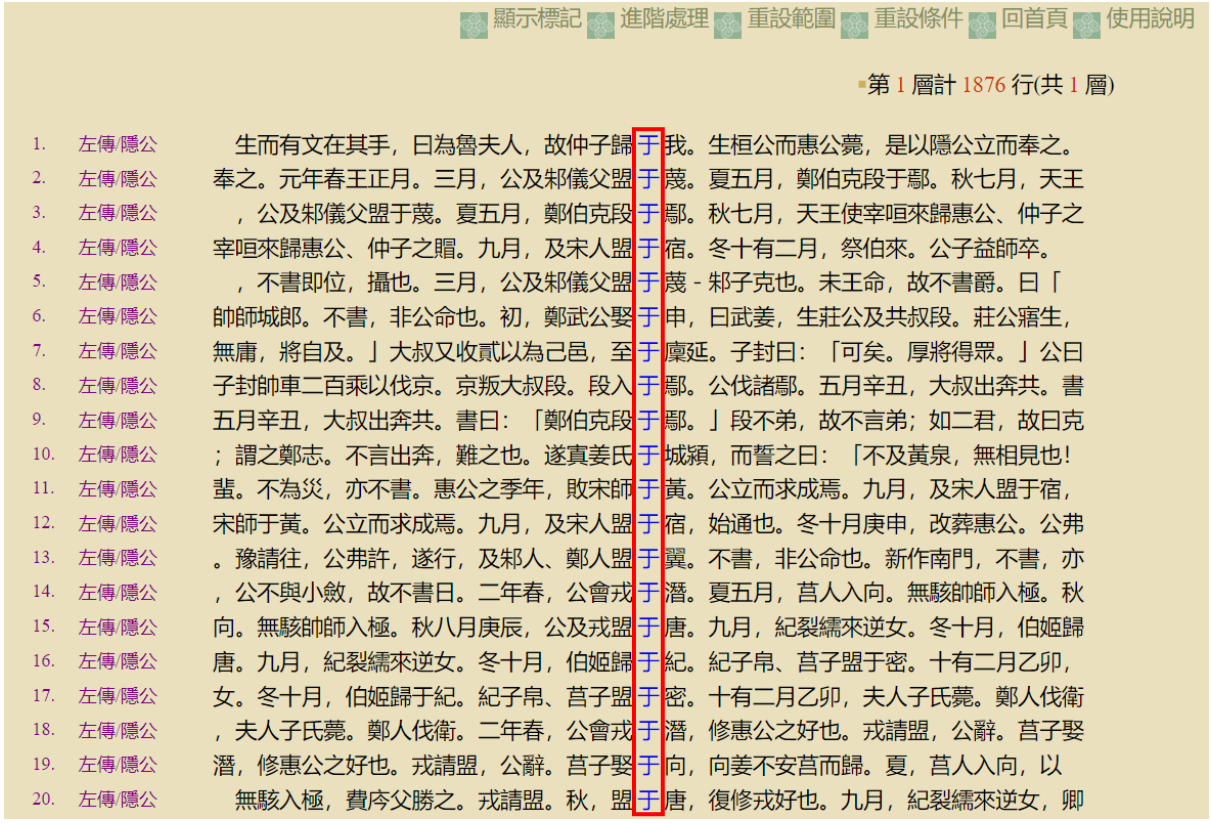


Figure 4.4 Concordance of 于 *yu* (L. Jiang 2018: 17)

To prepare for data sorting, click the button to display POS tagging:

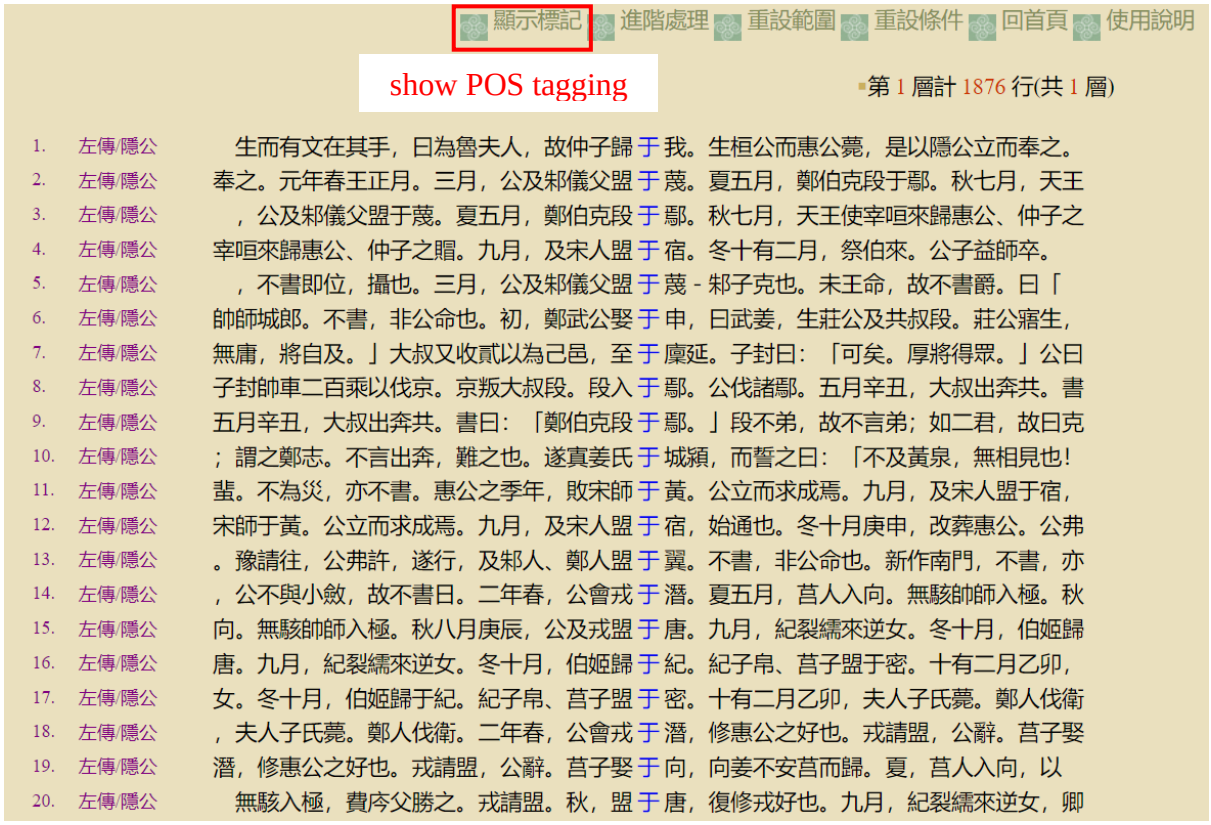


Figure 4.5 Click to display POS tagging (L. Jiang 2018: 18)

The concordance lines are now annotated with POS tags:

Figure 4.6 Concordance lines with POS tagging (L. Jiang 2018: 18)

Due to the multiple functions of 于 *yu* as a preposition, its non-locative usage needs to be excluded. In addition, instances that are not in the form of V(O)PP or PPV(O) are also irrelevant. L. Jiang (2018: 19) states that since the search for just one preposition from a single text already produces almost 1900 concordance lines, the immense task of sifting through irrelevant instances and calculating frequencies of the relevant constructions from all the texts under investigation is evident. In addition, the concordance lines displayed thus far are organised according to their sequence in the passage. This arrangement makes it challenging to discard unwanted instances efficiently. L. Jiang therefore advocates the use of data sorting under advanced processing, as it aids in identifying patterns and retrieving data. After clicking 'advanced processing', select 'sorting'. The sorting process in Figure 4.7 involves arranging first by the part-of-speech of the keyword, then by the part-of-speech of the word to its right, and finally by the part-of-speech of the word to its left:

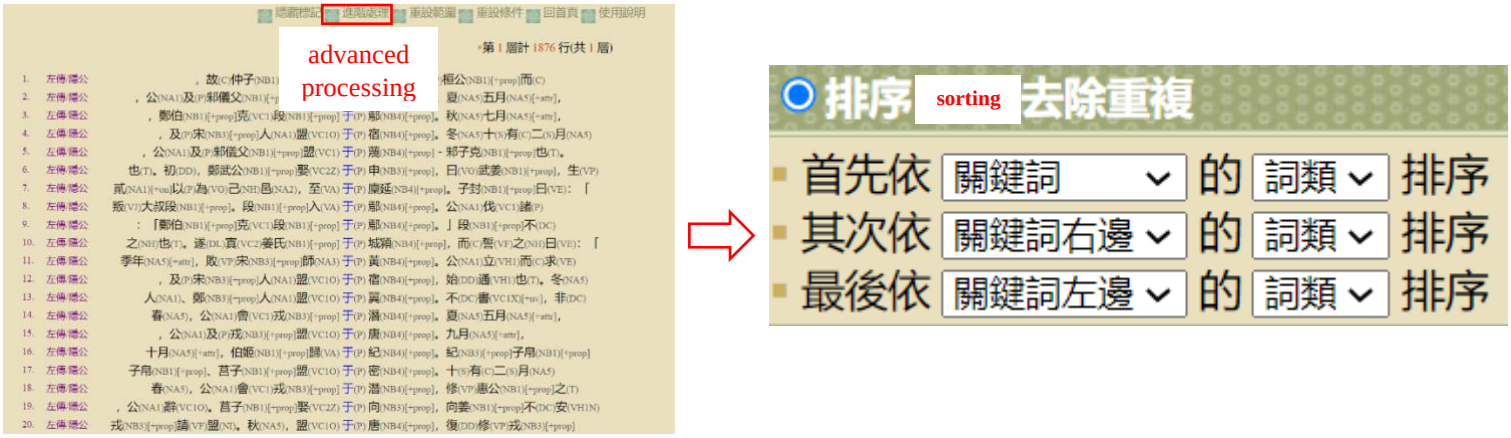


Figure 4.7 Data sorting (L. Jiang 2018: 19)

A locative PP typically has locative-related elements following the preposition. Therefore, special attention is directed towards the POS tags to the right of 于 *yu*, most notably to NA4, denoting a common place noun, NB3, denoting a state name, and NB4, denoting a place name. However, L. Jiang (2018: 20) also alerts to the need to consider elements that intervene. The focus should not solely be on the individual word that directly follows the preposition, but the overall semantic role assumed by the entire adjoining constituent. For instance:

(13) 封 周 公 旦 於 少昊 之 虛 曲阜
feng *Zhou* *gong* *Dan* *yu* *Shaohao* *zhi* *xu* *Qufu*
enfeoff Zhou duke Dan in Shaohao GEN old.site Qufu
'Enfeoffed Dan (Duke of Zhou) in Qufu, the old site of Shaohao.'
(《史记・鲁周公世家》Records of the Grand Historian, Hereditary House of Duke Zhou of Lu; early 1st c. BCE)

少昊 *Shaohao*, the immediate word after 於 *yu*, carries a POS tag of NB1, indicating its usage as a person's name. However, the semantic role of the entire prepositional object is locative. It is important not to hastily dismiss such instances. This thesis agrees with L. Jiang's perspective as manual review is indispensable, even though sorting is convenient. It is better to filter out unwanted instances manually when inspecting the results after sorting, rather than granting technology full control over the corpus and risking the omission of relevant entries. Conversely, there are constructions where the immediately adjoining word carries a typical locative POS tag, yet the overall constituent is not locative. Care must be taken to avoid including these instances. With the complication of syntactic constructions in later periods, this issue is likely more pronounced in the sub-corpora of MC and EMC.

After eliminating non-locative PPs, the next step is to discard entries not adhering to the format of V(O)PP or PPV(O). L. Jiang (2018: 20) highlights the example in Line 157 of Figure 4.8. While the immediate constituent after 于 *yu* in all the constructions is tagged as NA4 and therefore prototypically denotes a locative role, the construction in Line 157 must be discarded, as V is absent: [73]

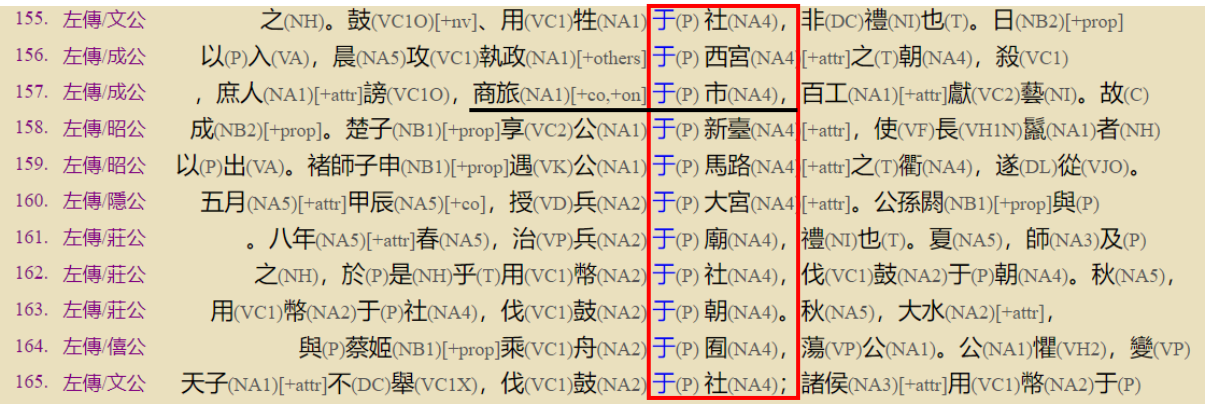

155. 左傳/文公 之(NH)。鼓(VC1O)[+nv]、用(VC1)牲(NA1)于(P)社(NA4)，非(DC)禮(NI)也(T)。日(NB2)[+prop]
156. 左傳/成公 以(P)入(VA)，晨(NA5)攻(VC1)執政(NA1)[+others]于(P)西宮(NA4)[+attr]之(T)朝(NA4)，殺(VC1)
157. 左傳/成公 ，庶人(NA1)[+attr]謗(VC1O)，商旅(NA1)[+co,+on]于(P)市(NA4)，百工(NA1)[+attr]獻(VC2)藝(NI)。故(C)
158. 左傳/昭公 成(NB2)[+prop]。楚子(NB1)[+prop]享(VC2)公(NA1)于(P)新臺(NA4)[+attr]，使(VF)長(VH1N)鬣(NA1)者(NH)
159. 左傳/昭公 以(P)出(VA)。褚師子申(NB1)[+prop]遇(VK)公(NA1)于(P)馬路(NA4)[+attr]之(T)衢(NA4)，遂(DL)從(VJO)。
160. 左傳/隱公 五月(NA5)[+attr]甲辰(NA5)[+co]，授(VD)兵(NA2)于(P)大宮(NA4)[+attr]。公孫閼(NB1)[+prop]與(P)
161. 左傳/莊公 。八年(NA5)[+attr]春(NA5)，治(VP)兵(NA2)于(P)廟(NA4)，禮(NI)也(T)。夏(NA5)，師(NA3)及(P)
162. 左傳/莊公 之(NH)，於(P)是(NH)乎(T)用(VC1)幣(NA2)于(P)社(NA4)，伐(VC1)鼓(NA2)于(P)朝(NA4)。秋(NA5)，
163. 左傳/莊公 用(VC1)幣(NA2)于(P)社(NA4)，伐(VC1)鼓(NA2)于(P)朝(NA4)。秋(NA5)，大水(NA2)[+attr]，
164. 左傳/僖公 與(P)蔡姬(NB1)[+prop]乘(VC1)舟(NA2)于(P)囿(NA4)，蕩(VP)公(NA1)。公(NA1)懼(VH2)，變(VP)
165. 左傳/文公 天子(NA1)[+attr]不(DC)舉(VC1X)，伐(VC1)鼓(NA2)于(P)社(NA4)；諸侯(NA3)[+attr]用(VC1)幣(NA2)于(P)

Figure 4.8 Elimination of unwanted results after sorting (L. Jiang 2018: 20)

[73] Line 157 is likely to be a shortened form of "庶人谤于道，商旅议于市" (Ordinary people make criticisms on the roadside, and businessmen discuss matters in the marketplace), omitting the locative PP 于道 for the first part and the verb 议 for the second part. This omission is probably enabled by the 互文 (intertextual) device commonly employed in Ancient Chinese.

This study would like to reiterate the significance of manual review and the necessity to exercise great care during the process of manual elimination. While POS tagging is well-developed at this stage for ASACC, the encoding of location is intricate in Ancient Chinese, and context plays a crucial role in interpretation. For instance, in Old Chinese, even a person's name can indicate a locative semantic role, a feature that became increasingly absent in later periods. This is exemplified by the following example, where there is no need to add a place noun, such as *suo* 所 (place), after a person's name or a common noun, if it serves as the object of a verb denoting location or movement (Chappell and Peyraube 2008):

(14) 不 之 尧 之 子 而 之 舜
bu zhi Yao zhi zi er zhi Shun
NEG go Yao(person's name) GEN son but go Shun(person's name)
'(The princes) went not to the son of Yao, but to Shun.'
(《孟子・万章上》Mencius, Wan Zhang (Part A); circa 4th c. BCE; adapted from Chappell and Peyraube (2008: 19) with glosses modified)

As mentioned earlier, during the sorting and elimination stages, the primary focus is on three major POS tags on the right of the keyword: NA4 – place noun (common noun), NB3 – state name, and NB4 – place name. This however does not imply disregarding the possibility of other POS tags encoding locative semantic roles. Instead, NA4, NB3, and NB4 can be used as a starting point to identify locative semantic roles, given that these tags are typically associated with place names or nouns that are more likely to indicate locative semantic roles. Once the results have been extracted from these three tags, the next step is to examine other POS tags to identify the relatively less common cases of non-place nouns or names bearing locative semantic roles, particularly when such nouns are combined with a *fangweici* 方位词 (locality word, also called *houzhici* 后置词 (postposition) by some scholars) such as *shang* 上 (up) and *xia* 下 (down). Consequently, it is imperative to exercise discernment and caution in the manual filtering of results, and refrain from hasty inclusion or exclusion.

Another issue underscoring the significance of context is the potential ambiguity introduced by multifunctional prepositions such as 於/于 *yu*, a concern discussed in Chapter 2. Example 4 from Section 2.2.1 of Chapter 2 is reproduced below:

(15) 齐 人 歼 于 遂
Qi *ren* *jian* *yu* *Sui*
Qi people annihilate at/PASS Sui
'The Qi state guards were annihilated at Sui./ The Qi state guards were annihilated by the Sui people.'
(《穀梁传・庄公十七年》Guliang Zhuan, Duke Zhuang, Year 17; mid-late Warring States period; adapted from Y. Zhu (2007: 310) with glosses and translation modified)

Example (15) shows, within the same construction that features identical preceding verb and succeeding noun, 于 *yu* may be construed as either a locative preposition or a passive marker. In addition, He (1989: 91-93) observes that, within its capacity as a locative preposition, 於/于 *yu* is able to denote entirely opposite directions, even when preceded by the same verb. For instance, He (1981: 92) states that, when used in conjunction with the motion verb 迁 *qian*, 於 *yu* can introduce either goal (16a) or source (16b):

(16) a.迁 权 於 那处
qian *Quan* *yu* *Nachu*
move Quan to Nachu(place name)
'Move the people of Quan to Nachu.'
(《左传・庄公十八年》Zuo Commentary, Duke Zhuang, Year 18; circa 4th c. BCE)

b.寡君 使 群臣 迁 大 国 之 迹 於 郑
guajun *shi* *qunchen* *qian* *da* *guo* *zhi* *ji* *yu* *Zheng*
unworthy.ruler send ministers move big state GEN footprint from Zheng
'Our unworthy ruler delegated the ministers to erase the presence of the powerful state from Zheng.'[74]
(《左传・宣公十二年》Zuo Commentary, Duke Xuan, Year 12; circa 4th c. BCE)

This pair of examples reiterates the critical nature of context, as 於 *yu* can result in opposite interpretations within its locative function, even after considering lexical semantics of the verb. Sometimes, ambiguity arises not only from the versatile preposition but also from the prepositional object. As previously discussed in the footnote section of Section 2.2.1 of Chapter 2, the ambiguity in example (15) may additionally be attributed to the place name 遂 *Sui*, as Old Chinese is flexible in allowing a place name to denote its populace, even without the presence of the word *ren* 人 (people). Thus, even if the corpus tags a noun as locative, its meaning can differ in that specific construction:

[74] "迁大国之迹" is a diplomatic euphemism implying the request for a state to withdraw from one's territory, with the intent of chasing the other party away.

(17) 愚弄　其　民，而　虞　羿　于　田
yunong *qi* *min* *er* *yu* *Yi* *yu* *tian*
deceive 3.POSS people CONJ amuse Yi with hunting
'Deceived and manipulated his people, and made Yi indulge in hunting.'
(《左传・襄公四年》Zuo Commentary, Duke Xiang, Year 4; circa 4th c. BCE)

The noun 田 *tian* typically refers to a field, and here it is tagged as NA4 by the corpus, indicating a common place noun. Yet in this context, 田 *tian* refers to 田猎 (the activity of hunting). Consequently, 虞羿于田 should not be treated as a locative VOPP, despite the surface form alignment. A more nuanced instance involves the POS tag NB3, which denotes a state name. While 楚 *chu* receives the tag NB3 uniformly in the corpus, it apparently performs different roles in the two VPP constructions 迁于楚 (to relocate to Chu) and 告于楚 (to inform Chu about something). Collectively, these examples illustrate how context plays a significant role in determining the most appropriate interpretation. Moreover, they highlight the double-edged nature of corpus features such as a comprehensive POS tagging system. Although these features undoubtedly expedite and facilitate data handling and pattern detection, without meticulous manual inspection, they also potentially skew analysis.

This section has outlined the major steps in using the sub-corpus of ASACC for data collection. Not only does this process enable a deeper familiarity with the corpus, but it also encourages reflection on the procedure. This process highlights good practices to follow and potential pitfalls to avoid, ultimately refining the methodology of this thesis.

Summarising this chapter, several critical aspects in methodology have been addressed. Starting with the complex issue of periodisation in historical Chinese linguistics, Section 4.1 explored why it is difficult to reach a consensus. Drawing from the proposals of L. Wang (1980 [1958]) and Wei (2000), this thesis eventually opted for a periodisation that divides Chinese into four major periods, with Eastern Han and Six Dynasties comprising Middle Chinese. Section 4.2 focused on text selection criteria, adopting and expanding Cheng's (1991) three conditions. Having tackled the issues of periodisation and text selection in the first two sections, Section 4.3 conducted a comparison and assessment of two key diachronic corpora, ASACC and SCC, along with other supplementary corpora. Lastly, Section 4.4 provided a step-by-step demonstration of how to use the Old Chinese sub-corpus of ASACC, highlighting good practices and cautionary areas. The methodological discussions here set the groundwork, paving the way for the results and analysis in the subsequent chapters.

CHAPTER FIVE
THE DIACHRONIC DEVELOPMENT OF LOCATIVE PP WORD ORDER IN OLD CHINESE

This chapter, along with the subsequent two, examines the diachronic development of locative PP word order in Chinese. The investigation spans the sub-stages from OC1 to EMC3, drawing upon the 14 texts listed in Table 4.3 of Chapter 4. Each sub-stage starts with an examination of the overall usage of locative PPs in the text, considering instances of the verb both with and without a verbal object. This examination highlights the dichotomy between preverbal and postverbal locative PP usages. This is followed by a breakdown of usage into locative VPP/PPV and locative VOPP/PPVO. This chapter begins by exploring the locative PP behaviour in Old Chinese across its three sub-stages, OC1 to OC3, based on three classic texts.

5.1 OC1

The investigation of locative PP usage during the sub-stage of OC1 is based on the pre-Qin classic *Zuo Zhuan* 左传 (The Zuo Commentary), composed in 4th c. BCE. Firstly, in terms of the overall usage regardless of whether the verb takes an object or not, the locative prepositions in *Zuo Zhuan*, ranked in order of decreasing frequency, are as follows: 於/于 *yu* (82.74%), 自 *zi* (10.08%), 诸 *zhu* (6.94%), and 从 *cong* (0.24%).[75] Table 5.1 presents an overview of the locative PP word order in *Zuo Zhuan*:

Table 5.1: An overview of locative PP word order in *Zuo Zhuan*

Locative preposition	VPP	VOPP	Post-V sub-total	Ratio	PPV	PPVO	Pre-V sub-total	Ratio	Post-V + Pre-V
於/于 *yu*	1294	733	2027	99.95%	0	1	1	0.05%	2028
自 *zi*	130	0	130	52.63%	72	45	117	47.37%	247
诸 *zhu*	170	0	170	100%	0	0	0	0%	170
从 *cong*	0	0	0	0%	4	2	6	100%	6
Total	1594	733	2327	94.94%	76	48	124	5.06%	2451

[75] When calculating percentages, rounding may yield a total that slightly deviates from the sum of 100%. The Largest Remainder Method is applied to address this issue. Sort the values in descending order based on their fractional remainders beyond the second decimal place. Round down all values to two decimal places and calculate the difference between their cumulative total and 100%. Distribute this difference by incrementing the values by 0.01 in the arranged order until the sum reaches 100%. This approach is consistently applied to all calculations of similar circumstances. In addition, while 乎 *hu* can function as a preposition, it appears exclusively as a sentence final particle in all instances within *Zuo Zhuan*.

Considering the total occurrences of locative PPs, *Zuo Zhuan* primarily employs a postverbal locative PP word order (94.94%), with a very limited usage of preverbal placement (5.06%).[76] The function and distribution of individual locative prepositions are as follows:

於/于 *yu* emerges as the locative preposition most frequently used and most versatile in *Zuo Zhuan*. It exhibits an almost exclusive postverbal distribution (99.95%). Chapter 1 has outlined four major locative subclasses under scrutiny: location, source, goal, and path. 於/于 *yu* is capable of introducing all four subclasses. Let us begin by examining its usage within the location subclass. This thesis defines location as referring to the place where an event occurs or where an entity is situated. Section 1.1 of Chapter 1 highlights that some studies have undertaken a more granular classification, differentiating between dynamic and static locations. Within the definition of location in this thesis, the aspect denoting event occurrence can be perceived as dynamic, while the aspect concerning entity location is deemed static. The latter aspect roughly corresponds to C. Zhang's (2002) subcategory of 'location of existence'.[77]

Location

VPP

(18) a.晋 人、 秦 人 战 **于** 河曲
*Jin ren Qin ren zhan **yu** Hequ*
Jin people Qin people fight in Hequ
'The Jin people and the Qin people fought in Hequ.'[78]
(《左传・文公十二年》Zuo Commentary, Duke Wen, Year 12; circa 4th c. BCE)

b.二 人 浴 **于** 池
*er ren yu **yu** chi*
two people bathe in pond
'Two people bathed in the pond.'
(《左传・文公十八年》Zuo Commentary, Duke Wen, Year 18; circa 4th c. BCE)

[76] Phua and Jiang (2013: 105) propose an additional indicator, beyond usage frequency, to reinforce the dominance of the VOPP word order. They note the extremely low usage frequency of the locative preposition 从 *cong*. Additionally, locative PPs introduced by 於/于 *yu* and 诸 *zhu* consistently follow the verb, while those introduced by 自 *zi* can appear both before and after the verb. Leveraging the concept of typological implication, they assert that the presence of the PPVO order necessitates the presence of the VOPP order. Consequently, they conclude that whether considering usage frequency or implicational relations, the evidence strongly supports VOPP as the dominant word order here.

[77] C. Zhang proposes an additional subcategory of 'location of staying/lingering', exemplified by locative PPs introduced by verbs such as *ju* 居 (to reside) and *yin* 隐 (to hide). Nevertheless, this thesis does not treat it as a separate subcategory under location, as it could also be construed as indicating the location of an event, even though the event in such instances tends to be less dynamic.

[78] This thesis does not use a generic 'LOC' to gloss locative prepositions. Instead, they are variously glossed as 'in', 'on', 'from', 'towards', 'to' and others. While it is generally advised to avoid multiple glosses for the same morpheme, using just 'LOC' for all is less explanatory.

VOPP

(19) a.里克　杀　公子　　卓　**于**　朝
Li Ke　*sha*　*gongzi*　*Zhuo*　***yu***　*chao*
Li Ke　kill　ducal.son　Zhuo　in　court
'Li Ke killed Ducal Son Zhuo in the court.'
(《左传・僖公九年》Zuo Commentary, Duke Xi, Year 9; circa 4th c. BCE)

b.公　会　齐 侯、　宋　公、陈　侯、　卫 侯、　郑　伯、
gong　*hui*　*Qi*　*hou*　*Song gong*　*Chen*　*hou*　*Wei*　*hou*　*Zheng*　*bo*
duke　meet　Qi marquis　Song duke　Chen marquis　Wei marquis　Zheng　earl
许 男、曹　伯　**于**　咸
Xu nan　*Cao*　*bo*　***yu***　*Xian*
Xu baron　Cao earl　in　Xian
'The duke met the Marquis of Qi, the Duke of Song, the Marquis of Chen, the Marquis of Wei, the Earl of Zheng, the Baron of Xu, and the Earl of Cao in Xian.'
(《左传・僖公十三年》Zuo Commentary, Duke Xi, Year 13; circa 4th c. BCE)

c.怨　郑　申　侯　　之　反　己　**於**　召陵
yuan　*Zheng*　*Shen*　*hou*　*zhi*　*fan*　*ji*　***yu***　*Shaoling*
resent　Zheng　Shen marquis　GEN　betray self　in　Shaoling
'(Yuan Xuanzhong of Chen) resented that Marquis Shen of Zheng betrayed him in Shaoling.'
(《左传・僖公五年》Zuo Commentary, Duke Xi, Year 5; circa 4th c. BCE)

d.有　淖　**於**　前
you　*nao*　***yu***　*qian*
have　mire　in　front
'There was a mire in front (of the military camp).'
(《左传・成公十六年》Zuo Commentary, Duke Cheng, Year 16; circa 4th c. BCE)

The 於/于 *yu* PPs in examples (18a-b) and (19a-c) indicate the place of occurrence for an event. In contrast, 於前 in (19d) denotes the place where an entity is located and evidently illustrates C. Zhang's 'location of existence' subcategory, given its placement within an existential construction led by the verb *you* 有 (to have). The VOPP in (19b) merits attention due to its lengthy verbal object. This prompts inquiry into whether word order preference is affected by the length of a constituent, a topic worth revisiting in later chapters. In addition, the locative VOPP 反己於召陵 in (19c) is also worth noting. The insertion of a structural particle 之 *zhi* between a subject (郑申侯) and a predicate (反己於召陵) nullifies the independence of the clause, converting it into a modifier-modified structure. This structure, in turn, functions as the object of the main verb *yuan* 怨 (to resent).

Source is defined as the starting point of a motion event. Unlike location-denoting 於/于 *yu* PPs, which accommodate a diverse range of verbs, source-denoting 於/于 *yu* PPs are much more constrained in verb selection. Typically, the predicates inherently imply a motion away from a starting position:

Source

VPP

(20) 公 惧，队 **于** 车
*gong ju dui **yu** che*
duke fear fall from carriage
'The duke was frightened and fell from the carriage.'
(《左传·庄公八年》Zuo Commentary, Duke Zhuang, Year 8; circa 4th c. BCE)

VOPP

(21) 王 起 师 **于** 滑
*wang qi shi **yu** Hua*
king dispatch troop from Hua
'King Jing of Zhou sent out troops from Hua.'
(《左传·昭公二十六》Zuo Commentary, Duke Zhao, Year 26; circa 4th c. BCE)

The predicates in these examples already hint at movement from an initial point. For instance, *dui* 队 (to fall) in (20) normally depicts dropping from a certain height,[79] and 起师 (to dispatch troops) in (21) suggests sending out the army from a location. Additional examples involve verbs like *chu* 出 (to set off).

Opposite to the subclass of source, goal marks the endpoint of a motion:

Goal

VPP

(22) 孙桓子 还 **於** 新筑
*Sun Huanzi huan **yu** Xinzhu*
Sun Huanzi return to Xinzhu
'Sun Huanzi returned to Xinzhu.'
(《左传·成公二年》Zuo Commentary, Duke Cheng, Year 2; circa 4th c. BCE)

[79] The act of falling also naturally implies a landing spot. Yet, in this context, the lord was already inside the carriage prior to his fall. Thus, the carriage can only be interpreted as the source of the fall, not the eventual landing point.

VOPP

(23) a.荀伯 尽 送 其 帑 及 其 器用 财贿 **於** 秦
*Xun Bo jin song qi nu ji qi qiyong caihui **yu** Qin*
Xun Bo all send 3.POSS wife.and.children and 3.POSS tool treasure to Qin
'(Upon Xian Mie's exile), Xun Bo sent all his family, tools, and treasures to Qin.'
(《左传・文公七年》Zuo Commentary, Duke Wen, Year 7; circa 4th c. BCE)

b.投 其 首 **於** 宁风 之 棘 上
*tou qi shou **yu** Ningfeng zhi ji shang*
throw 3.POSS head into Ningfeng GEN thorn.tree top
'Threw his head into a thorn tree of Ningfeng.'
(《左传・昭公五年》Zuo Commentary, Duke Zhao, Year 5; circa 4th c. BCE)

Examples (23a) and (23b) not only illustrate the goal usage of 於/于 *yu* PPs but also demonstrate the presence of complex structures within VOPP constructions in OC1. (23a) features a long and fairly complex verbal object 其帑及其器用财贿, while the locative PP 於宁风之棘上 in (23b) involves a genitive phrase and the use of the localizer 上.

Lastly, path pertains to the trajectory taken to move from one point to another. Compared to the three other locative subclasses of location, source, and goal, it shows the least frequent usage in *Zuo Zhuan* and is only observed in VPP constructions:[80]

Path

VPP

(24) 栾盈 过 **於** 周, 周 西 鄙 掠 之
*Luan Ying guo **yu** Zhou, Zhou xi bi lüe zhi*
Luan Ying pass through Zhou, Zhou west border loot 3SG
'As Luan Ying passed through Zhou, people from the western border of Zhou looted him.'
(《左传・襄公二十一年》Zuo Commentary, Duke Xiang, Year 21; circa 4th c. BCE)

Path PPs are rare in *Zuo Zhuan* because the concept of path is chiefly conveyed by path verbs alone, rending the use of locative prepositions redundant. Although 过於周 in (24) is perfectly acceptable, *Zuo Zhuan* frequently opts to express the same meaning solely through the path verb *guo* 过 (to pass), without employing 於/于 *yu*. Other path verbs like *xun* 循 (to follow along) and *yan* 沿 (to go along) follow the same pattern.

[80] Please note that when this thesis states that PPs introduced by a particular locative preposition only appear in a specific type of construction, it merely indicates that they are not found within other types of constructions in the given text. In other words, it does not assert that these PPs are necessarily syntactically restricted to only the said type of construction. This applies throughout the thesis.

As indicated by Table 5.1, locative 於/于 *yu* PPs are almost always postverbal. There is only one occurrence of preverbal locative 於/于 *yu* PP out of 2028 total instances:

(25) 诸侯　宋、鲁，**於**　是　观　礼
*zhuhou Song Lu **yu** shi guan li*
vassal Song Lu in DEM observe ritual
'Among the vassals, it is (only) in the vassal states of Song and Lu that one can observe rituals.'
(《左传・襄公十年》Zuo Commentary, Duke Xiang, Year 10; circa 4th c. BCE)

The locative PPVO construction 於是观礼 in (25) has a demonstrative pronoun 是 *shi* as its prepositional object, referring back to Song and Lu. The context is that Song preserved rites of the Yin, and Lu preserved rites of the Zhou. The intent of the speakers (荀偃 Xun Yan and 士匄 Shi Gai) was to highlight these two vassal states as the exclusive sites to observe proper rituals. The placement of the resumptive pronoun in the preverbal position forms a narrow focus construction (LaPolla 2015). Hence, the use of a locative PPVO construction could be a deliberate choice to fulfil a pragmatic purpose, akin to the cleft structure in the free translation. This supports the view that preverbal 於/于 *yu* PPs of this period are commonly perceived as marked constituents (Peyraube 2003).

A very few instances appear to have preverbal locative 於/于 *yu* PPs in the surface form, but their status becomes debatable upon closer scrutiny. For example:

(26) 兵　作　於　内　为　乱，　**於**　外　为　寇
*bing zuo yu nei wei luan **yu** wai wei kou*
war arise from inside be unrest from outside be invasion
'War that arises from within is unrest; (war that starts) from outside is invasion.'
(《左传・文公七年》Zuo Commentary, Duke Wen, Year 7; circa 4th c. BCE)

Although the surface form of 於外为寇 conforms to a PPVO construction, the locative PP 於外 resembles more of an elliptical structure. 於外为寇 constitutes part of a contrastive pair, with the full form being 兵作於内为乱，兵作於外为寇. In essence, 於外 here forms a closer association with the omitted verb 作，and together, 作於外 modifies the head noun 兵. In contrast, 於外 forms a looser connection with 为寇. Thus, it seems more reasonable to treat it as an instance of elliptical locative VPP 作於外, and not part of the locative PPVO 於外为寇.

自 *zi* is the next commonly used locative preposition in *Zuo Zhuan*, primarily serving to introduce source. Its distribution is relatively balanced, slightly favouring postverbal placement (52.63%). However, this postverbal usage is confined to VPP constructions, with no

instances of VOPP constructions. Hence, in terms of VO usage, it is exclusively preverbal, as only PPVO constructions are present.

Source

VPP

(27) a.叔鞅 至 **自** 京师， 言 王室 之 乱 也
*Shu Yang zhi **zi** jingshi yan wangshi zhi luan ye*
Shu Yang arrive from capital speak royal.house GEN upheaval PTCL
'Shu Yang came back from the capital and talked about the upheaval within the royal family.'
(《左传・昭公二十二年》Zuo Commentary, Duke Zhao, Year 22; circa 4th c. BCE)

b.郑 伯 归 **自** 晋， 使 子西 如 晋 聘
*Zheng bo gui **zi** Jin shi Zi Xi ru Jin pin*
Zheng earl return from Jin dispatch Zi Xi go Jin visit.as.envoy
'The Earl of Zheng returned from Jin and dispatched Zi Xi to visit Jin as an envoy.'
(《左传・襄公二十六年》Zuo Commentary, Duke Xiang, Year 26; circa 4th c. BCE)

The overwhelming majority of verbs employed in the 自 *zi* VPP constructions include *zhi* 至 (to arrive), as well as *gui* 归, *huan* 还 and *fan* 反 (to return). The VPP 至自京师 in (27a) conveys arrival from the capital rather than arrival at the capital, as the subsequent part of the sentence describes Shu Yang recounting the turmoil within the royal house, which was in the capital. Likewise, the VPP 归自晋 in (27b) indicates the earl's return from Jin rather than his return to Jin. Firstly, he was the earl of Zheng, not Jin; and secondly, upon his return, he dispatched an envoy to visit Jin. Therefore, it is evident the locative PPs in both instances denote source and not goal.

Compared to its postverbal counterpart, the preverbal 自 *zi* constructions exhibit a higher degree of flexibility in verb selection. They accommodate not only verbs that appear in VPP constructions, but also a variety of others:

PPV

(28) a.昭子 **自** 阚 归
*Zhaozi **zi** Kan gui*
Zhaozi from Kan return
'Zhaozi returned from Kan.'
(《左传・昭公二十五年》Zuo Commentary, Duke Zhao, Year 25; circa 4th c. BCE)

b.**自** 墓 门 之 渎 入
zi *mu men zhi dou ru*
from tomb gate GEN hole enter
'Entered from the drainage holes of the Tomb Gate.'
(《左传・襄公三十年》Zuo Commentary, Duke Xiang, Year 30; circa 4th c. BCE)

PPVO

(29) a.卢蒲癸 **自** 后 刺 子之
Lupu Gui ***zi*** *hou ci Zi Zhi*
Lupu Gui from behind stab Zi Zhi
'Lupu Gui stabbed Zi Zhi from behind.'
(《左传・襄公二十八》Zuo Commentary, Duke Xiang, Year 28; circa 4th c. BCE)

b.及 宋 平、 元 之 族 **自** 萧 奔 郑
ji Song Ping Yuan zhi zu ***zi*** *Xiao ben Zheng*
when Song Duke.Ping Duke.Yuan GEN clan from Xiao flee Zheng
'When the clansmen of Duke Ping and Duke Yuan of the Song state fled from Xiao to Zheng.'
(《左传・哀公十二年》Zuo Commentary, Duke Ai, Year 12; circa 4th c. BCE)

While the basic function of locative 自 *zi* is to introduce source, occasionally it may also denote the location where the action occurs. Nonetheless, as C. Zhang (2002: 9) points out, it can be challenging to decide which interpretation is more appropriate:

(30) 公 **自** 城 上 见 己氏 之 妻 发 美
gong ***zi*** *cheng shang jian Ji shi zhi qi fa mei*
duke from city top see Ji lineage GEN wife hair beautiful
'The duke saw from atop the city wall that Ji's wife had beautiful hair.'
(《左传・哀公十七年》Zuo Commentary, Duke Ai, Year 17; circa 4th c. BCE)

Similar to (23a), this example also features a complex verbal object, with 己氏之妻发美 acting as a sentence-like complement. The event here pertains to observation, which differs from prototypical motion events and involves no physical movement. If adhering strictly to the definition that source is the starting point of a motion event, it might be more apt to interpret the locative PP 自城上 as indicating the location of the duke's observation. However, the act of observation could be construed as involving perceptual movement.[81] Moreover, under a slightly broader definition, source denotes the spatial origin of an action. These seem to suggest

[81] Jackendoff (1983: 150), in his semantic study of the verb *see*, suggests that one of its meanings could be perceived as "x's gaze goes to y", and this insight encourages the interpretation of *see* as "a verb of motion". Additionally, Jackendoff references Goldsmith (1979), who remarks that the preposition *from* establishes the source of the gaze, much like it pinpoints the starting point of motion.

that 自城上 could also represent the origin of the duke's act of observation. Therefore, the boundary between source and location can indeed be ambiguous at times.

诸 *zhu* presents an interesting case. Similar to 於/于 *yu*, 诸 *zhu* displays functional versatility, capable of introducing all four locative subclasses in *Zuo Zhuan*. In terms of distribution, it is strictly postverbal. Much like the postverbal pattern of 自 *zi*, its postverbal usage exclusively consists of VPP constructions, without any occurrence of VOPP constructions. Its function and distribution might be attributed to the following reason. When functioning as a preposition, 诸 *zhu* is considered equivalent to 於/于 *yu*. This clarifies why 诸 *zhu* behaves like 於/于 *yu*, introducing all four locative subclasses and occurring postverbally. As for what led to the absence of VOPP constructions, it could be related to a special feature of 诸 *zhu*. 诸 *zhu* is generally recognised as a phonetic fusion of two characters: the pronoun 之 *zhi* and the preposition 於/于 *yu*, allowing it to fulfill the functions of both. Thus, its VPP construction alone will suffice in performing the same function as a corresponding VOPP construction, due to the inherent pronoun 之 *zhi* in 诸 *zhu*. As a result, there are no instances of 诸 *zhu* VOPP constructions.[82]

Location

VPP

(31) 杀 夏征舒， 轘 **诸** 栗 门
sha Xia Zhengshu huan ***zhu*** *Li men*
kill Xia Zhengshu tear.asunder.between.chariots at Li gate
'Executed Xia Zhengshu and had him torn asunder between chariots at Li Gate.'
(《左传・宣公十一年》Zuo Commentary, Duke Xuan, Year 11; circa 4th c. BCE)

Source

VPP

(32) 使 吏 遣 **诸** 其 室
shi li qian ***zhu*** *qi shi*
dispatch official remove from 3.POSS house
'Dispatched officials to send him (Hui) away from his house.'
(《左传・哀公二十五年》Zuo Commentary, Duke Ai, Year 25; circa 4th c. BCE)

[82] While the inherent pronoun 之 *zhi* could be perceived as the object of the preceding verb semantically, these instances are not counted as VOPP because there is no explicit verbal object structurally.

Goal

VPP

(33) a.原、 屏 放 **诸** 齐
*Yuan Ping fang **zhu** Qi*
Yuan Ping banish to Qi
'Yuan and Ping banished him (Zhao Yingqi) to Qi.'
(《左传・成公五年》Zuo Commentary, Duke Cheng, Year 5; circa 4th c. BCE)

b.出 旧 宫人， 寘 **诸** 火 所 不 及
*chu jiu gongren zhi **zhu** huo suo bu ji*
move.out former palace.maid place in fire PTCL NEG reach
'Moved out the palace maids of the late duke and placed them in an area where fire could not reach.'
(《左传・昭公十八年》Zuo Commentary, Duke Zhao, Year 18; circa 4th c. BCE)

The VPP constructions in (31-33) illustrate how 诸 *zhu* is used with an inherent pronoun implication. Example (33b) is particularly remarkable. It features a placement verb 寘 *zhi* (to place) followed by the goal PP. What merits attention is the prepositional object 火所不及, functioning like a headless relative clause. As with examples (23a-b) and (30), this instance highlights the capacity of locative VPP and VOPP constructions to accommodate structural complexity during OC1.

Although 诸 *zhu* can introduce path, akin to 於/于 *yu*, instances of path PPs are scarce. The path example below also demonstrates a different pattern in comparison to examples (31-33), as 诸 *zhu* functions purely like 於/于 *yu*, without the inherent pronoun implication:

Path

VPP

(34) 过 **诸** 廷
*guo **zhu** ting*
pass through court
'Passed through the court.'
(《左传・襄公三十年》Zuo Commentary, Duke Xiang, Year 30; circa 4th c. BCE)

Lastly, 从 *cong* occurs only sporadically in *Zuo Zhuan*. It primarily serves to introduce source, with a strict preverbal placement:

Source

PPV

(35) 遂　行，　**从**　近　关　出
sui *xing,* ***cong*** *jin* *guan* *chu*
then leave from near pass exit
'He then left, exiting from a frontier pass nearby.'
(《左传・襄公十四年》Zuo Commentary, Duke Xiang, Year 14; circa 4th c. BCE)

PPVO

(36) **从**　台　上　弹　人，　而　观　其　辟　丸　也
cong *tai* *shang* *tan* *ren* *er* *guan* *qi* *bi* *wan* *ye*
from terrace top shoot people CONJ watch 3PL dodge pellet PTCL
'(Duke Ling of Jin) shot people from atop the terrace and watched them dodge the pellets.'
(《左传・宣公二年》Zuo Commentary, Duke Xuan, Year 2; circa 4th c. BCE)

The discussion thus far has covered the overall distribution of locative PPs and the behaviour of each locative preposition in *Zuo Zhuan*. The next step involves an examination of instances of locative PPs with and without a verbal object, and a comparison with the overall preverbal and postverbal distribution. Tables 5.2 and 5.3 summarise the distribution of locative VPP/PPV and VOPP/PPVO in *Zuo Zhuan* respectively:

Table 5.2: The distribution of locative VPP and PPV in *Zuo Zhuan*

Locative preposition	VPP	Ratio	PPV	Ratio	VPP + PPV
於/于 ***yu***	1294	100%	0	0%	1294
自 ***zi***	130	64.36%	72	35.64%	202
诸 ***zhu***	170	100%	0	0%	170
从 ***cong***	0	0%	4	100%	4
Total	1594	95.45%	76	4.55%	1670

Table 5.3: The distribution of locative VOPP and PPVO in *Zuo Zhuan*

Locative preposition	VOPP	Ratio	PPVO	Ratio	VOPP + PPVO
於/于 ***yu***	733	99.86%	1	0.14%	734
自 ***zi***	0	0%	45	100%	45
从 ***cong***	0	0%	2	100%	2
Total	733	93.85%	48	6.15%	781

Several observations can be drawn here. Firstly, locative PPs used without a verbal object (1670 tokens) outnumber those with one (781 tokens). Secondly, the preverbal and postverbal

percentages presented in Tables 5.2 and 5.3 closely match the overall preverbal and postverbal distribution in Table 5.1. Additionally, locative VPP/PPV displays an even closer alignment with the overall distribution, with both having approximately 95% for postverbal placement and roughly 5% for preverbal placement. For VOPP/PPVO, the postverbal proportion is marginally lower (93.85%). Thus, it appears that the postverbal predominance is even more evident in locative VPP/PPV constructions, albeit only slightly in this phase.

5.2 OC2

The investigation of locative PP usage during the sub-stage of OC2 is based on another pre-Qin classic *Han Feizi* 韩非子 (The Works of Han Fei), a prose work composed in the 3rd c. BCE. Firstly, in terms of the overall usage regardless of whether the verb takes an object or not, the locative prepositions in *Han Feizi*, ranked in order of decreasing frequency, are as follows: 於/于 *yu* (94.57%), 从 *cong* (3.15%), 自 *zi* (1.14%), and 乎 *hu* (1.14%). Table 5.4 presents an overview of the locative PP word order in *Han Feizi*:

Table 5.4: An overview of locative PP word order in *Han Feizi*

Locative preposition	VPP	VOPP	Post-V sub-total	Ratio	PPV	PPVO	Pre-V sub-total	Ratio	Post-V + Pre-V
於/于 ***yu***	205	126	331	100%	0	0	0	0%	331
从 ***cong***	0	0	0	0%	6	5	11	100%	11
自 ***zi***	0	0	0	0%	1	3	4	100%	4
乎 ***hu***	3	1	4	100%	0	0	0	0%	4
Total	208	127	335	95.71%	7	8	15	4.29%	350

Considering the total occurrences of locative PPs, *Han Feizi* closely mirrors *Zuo Zhuan* in its predominant use of postverbal locative PPs (95.71%), with a highly limited preverbal placement (4.29%). Compared to the postverbal distribution in *Zuo Zhuan* (94.94%), the continued prominence of the postverbal dominance suggests a remarkably stable state, with few changes between OC1 and OC2. The function and distribution of individual locative prepositions in *Han Feizi* are as follows:

於/于 *yu* emerges yet again as the locative preposition most frequently utilised, with the widest range of functions. It is capable of introducing all four locative subclasses and the placement is consistently postverbal:

Location

VPP

(37) a.公 请 自 刃 **於** 庙
*gong qing zi ren **yu** miao*
duke request self kill in temple
'The duke requested to commit suicide in the ancestral temple.'
(《韩非子・奸劫弑臣第十四》Chapter 14 Treacherous, Coercive, and Murderous Officials; 3rd c. BCE)

b.立 **於** 矢 石 之 所 不 及
*li **yu** shi shi zhi suo bu ji*
stand in arrow stone GEN PTCL NEG reach
'Stood in a place where arrows and stones could not reach.'
(《韩非子・难二第三十七》Chapter 37 Difficulties II; 3rd c. BCE)

VOPP

(38) a.殷 之 法, 弃 灰 **于** 公道 者 断 其 手
*Yin zhi fa, qi hui **yu** gongdao zhe duan qi shou*
Yin GEN law dump ash on street NMLZ cut.off 3.POSS hand
'The law of the Yin (Shang) dynasty stipulated that anyone who dumped ashes on the street would have his hands cut off.'
(《韩非子・内储说上第三十》Chapter 30 A Collection of Sayings I; 3rd c. BCE)

b.凿 穴 **於** 王 之 所 常 隐 语 者
*zao xue **yu** wang zhi suo chang yin yu zhe*
dig hole in king GEN PTCL often secretly speak NMLZ
'Dug a hole in the place where the king often held secret conversations.'
(《韩非子・外储说右上第三十四》Chapter 34 A Collection of Sayings V; 3rd c. BCE)

c.今 有 马 **於** 此
*jin you ma **yu** ci*
now have horse in here
'Now there is a horse here.'
(《韩非子・外储说右上第三十四》Chapter 34 A Collection of Sayings V; 3rd c. BCE)

Similar to the location-encoding 於/于 *yu* in *Zuo Zhuan*, the 於/于 *yu* PPs in *Han Feizi* can introduce both types of location. Those in examples (37a-b) and (38a-b) indicate the place of occurrence for an event, while 於此 in (38c) denotes C. Zhang's (2002) 'location of existence' subcategory. Additionally, some structural aspects of these examples are intriguing. Much like 火所不及 in (33b), the prepositional object 矢石之所不及 in (37b) acts like a headless relative clause. (38a) and (38b) both feature the nominalizer 者 *zhe*. The addition of 者 *zhe* transforms

the VOPP 弃灰于公道 into the agent of this event in (38a), [83] whereas in (38b), 者 *zhe*, along with structural particles 之 *zhi* and 所 *suo*, results in a locative nominal 王之所常隐语者 that functions as the prepositional object.

Below are instances of source-denoting 於/于 *yu* PPs in *Han Feizi*:

Source

VPP

(39) 彘 突 出 **於** 沟 中
zhi tu chu ***yu*** *gou zhong*
pig suddenly go.out from ditch inside
'The pig suddenly rushed out from the ditch.'
(《韩非子・外储说右下第三十五》Chapter 35 A Collection of Sayings VI; 3rd c. BCE)

VOPP

(40) 失火 而 取 水 **於** 海
shihuo er qu shui ***yu*** *hai*
catch.fire CONJ take water from sea
'Take water from the sea when there is a fire.'
(《韩非子・说林上第二十二》Chapter 22 Collections of Persuasions I; 3rd c. BCE)

Tai (1985) further classifies goal into achieved goal and anticipated goal. The locative PPs in (41a) and (42) exemplify the former, while the one in (41b) falls under the latter subcategory:

Goal

VPP

(41) a.师延 东 走，至 **於** 濮 水 而 自 投
Shi Yan dong zou zhi ***yu*** *Pu shui er zi tou*
Shi Yan east flee arrive at Pu river CONJ self throw
'Shi Yan fled eastward, arrived at the Pu River and drowned himself.'
(《韩非子・十过第十》Chapter 10 Ten Faults; 3rd c. BCE)

b.而 欲 徙 **於** 越
er yu xi ***yu*** *Yue*
CONJ want move to Yue
'Wanted to move to Yue.'
(《韩非子・说林上第二十二》Chapter 22 Collections of Persuasions I; 3rd c. BCE)

[83] Alternatively, 弃灰于公道者 can be interpreted as the topic, with 断其手 as the comment.

VOPP

(42) 韩 昭 侯 使 骑 **於** 县
Han Zhao hou shi qi ***yu*** *xian*
Han Zhao marquis dispatch cavalryman to county
'Marquis Zhao of Han sent cavalrymen to the county.'
(《韩非子・内储说上第三十》Chapter 30 A Collection of Sayings I; 3rd c. BCE)

Lastly, just like in *Zuo Zhuan*, path PPs are rare in *Han Feizi* and occur only in VPP constructions:

Path

VPP

(43) 杨子 过 **於** 宋 东 之 逆旅
Yangzi guo ***yu*** *Song dong zhi nilü*
Yangzi pass through Song east GEN inn
'Yangzi passed by the inn located in the east of Song.'
(《韩非子・说林上第二十二》Chapter 22 Collections of Persuasions I; 3rd c. BCE)

Collectively, the remaining locative prepositions in *Han Feizi* amount to less than 6% of all occurrences. Both 从 *cong* and 自 *zi* are employed to introduce source and occur only before the verb:

Source

PPV

(44) 庞恭 **从** 邯郸 反
Pang Gong ***cong*** *Handan fan*
Pang Gong from Handan return
'Pang Gong came back from Handan.'
(《韩非子・内储说上第三十》Chapter 30 A Collection of Sayings I; 3rd c. BCE)

PPVO

(45) a.田子方 **从** 齐 之 魏
Tian Zifang ***cong*** *Qi zhi Wei*
Tian Zifang from Qi go.to Wei
'Tian Zifang went from Qi to Wei.'
(《韩非子・外储说左下第三十三》Chapter 33 A Collection of Sayings IV; 3rd c. BCE)

b.公子 **自** 曹 入 楚
gongzi ***zi*** *Cao ru Chu*
ducal.son from Cao enter Chu
'The ducal son went to Chu from Cao.'
(《韩非子・十过第十》Chapter 10 Ten Faults; 3rd c. BCE)

In comparison to their behaviour in *Zuo Zhuan*, 从 *cong* maintains its strict preverbal placement, while 自 *zi* shifts from a relatively balanced distribution to exclusively preverbal. 自 *zi* also experiences a reduction in its locative usage, as it also serves as a temporal preposition.

Lastly, 乎 *hu* introduces location and it occurs only postverbally:

Location

VPP

(46) 亡 国 使 兵 公 行 **乎** 其 地
wang guo shi bing gong xing ***hu*** *qi di*
destroyed state let soldier openly roam in 3.POSS territory
'A perishing country allows enemy soldiers to openly roam freely in its territory.'
(《韩非子・制分第五十五》Chapter 55 Standards and Distinctions; 3rd c. BCE)

VOPP

(47) 播 骨 **乎** 平 原野 者
bo gu ***hu*** *ping yuanye zhe*
scatter bone on flat field NMLZ
'Those who have their bones scattered on the plains.'
(《韩非子・诡使第四十五》Chapter 45 Absurd Encouragements; 3rd c. BCE)

Tables 5.5 and 5.6 summarise the distribution of locative VPP/PPV and VOPP/PPVO in *Han Feizi* respectively:

Table 5.5: The distribution of locative VPP and PPV in *Han Feizi*

Locative preposition	VPP	Ratio	PPV	Ratio	VPP + PPV
於/于 ***yu***	205	100%	0	0%	205
从 ***cong***	0	0%	6	100%	6
乎 ***hu***	3	100%	0	0%	3
自 ***zi***	0	0%	1	100%	1
Total	208	96.74%	7	3.26%	215

Table 5.6: The distribution of locative VOPP and PPVO in *Han Feizi*

Locative preposition	VOPP	Ratio	PPVO	Ratio	VOPP + PPVO
於/于 ***yu***	126	100%	0	0%	126
从 ***cong***	0	0%	5	100%	5
自 ***zi***	0	0%	3	100%	3
乎 ***hu***	1	100%	0	0%	1
Total	127	94.07%	8	5.93%	135

Similar trends to those observed in *Zuo Zhuan* are found here. Firstly, locative PPs used without a verbal object (215 tokens) outnumber those with one (135 tokens). Secondly, for VOPP/PPVO, the postverbal proportion (94.07%) is marginally lower than both the overall postverbal proportion (95.71%) and the postverbal for VPP/PPV (96.74%). In summary, OC2 continues to uphold the predominant prevalence of postverbal locative PPs.

5.3 OC3

The investigation of locative PP usage during the sub-stage of OC3 is based on the Western Han text *Shi Ji* 史记 (Records of the Grand Historian), composed in early 1st c. BCE. Firstly, in terms of the overall usage regardless of whether the verb takes an object or not, the locative prepositions ranked in descending order of frequency in *Shi Ji* are as follows: 於/于 *yu* (86.31%), 从 *cong* (6.98%), 自 *zi* (5.45%), 乎 *hu* (0.89%), 诸 *zhu* (0.23%), and 由 (0.14%). Table 5.7 presents an overview of the locative PP word order in *Shi Ji*:

Table 5.7: An overview of locative PP word order in *Shi Ji*

Locative preposition	VPP	VOPP	Post-V sub-total	Ratio	PPV	PPVO	Pre-V sub-total	Ratio	Post-V + Pre-V
於/于 *yu*	1015	826	1841	99.30%	3	10	13	0.70%	1854
从 *cong*	0	1	1	0.67%	93	56	149	99.33%	150
自 *zi*	8	0	8	6.84%	39	70	109	93.16%	117
乎 *hu*	19	0	19	100%	0	0	0	0%	19
诸 *zhu*	5	0	5	100%	0	0	0	0%	5
由 *you*	0	0	0	0%	2	1	3	100%	3
Total	1047	827	1874	87.24%	137	137	274	12.76%	2148

Considering the total occurrences of locative PPs, *Shi Ji* upholds the postverbal predominance (87.24%). Still, it has slightly dropped compared to the first two sub-stages of OC (94.94% and 95.71% respectively), with the preverbal proportion rising to 12.76%. The function and distribution of individual locative prepositions in *Shi Ji* are as follows:

於/于 *yu* remains the primary locative preposition in terms of both frequency and functionality. Although it is still chiefly postverbal (99.30%), there are now a few preverbal instances. Here are some examples to illustrate its usage in all four locative subclasses:

Location

VPP

(48) 亡匿 **於** 幕 北 寒 苦 无 水 草 之 地
wangni ***yu*** *mo* *bei* *han* *ku* *wu* *shui* *cao* *zhi* *di*
hide in desert north cold miserable NEG water grass GEN place
'Hid in the cold and miserable place in the north of the desert, where there is no water or plants.'
(《史记・匈奴列传》Treatise on the Xiongnu; 1st c. BCE)

VOPP

(49) 秦 败 我 龙贾 军 四万 五千 **于** 雕阴
Qin *bai* *wo* *Long Jia* *jun* *siwan* *wuqian* ***yu*** *Diaoyin*
Qin defeat 1PL Long Jia army forty.thousand five.thousand in Diaoyin
'The Qin army defeated our 45,000-strong army led by Long Jia in Diaoyin.'
(《史记・魏世家》Hereditary House of Wei; 1st c. BCE)

The postverbal PP constructions in these two examples both exhibit complex structure. Specifically, the VPP in (48) has a lengthy and complex prepositional object, while the VOPP in (49) has a complex verbal object. As previously highlighted, locative VPP and VOPP constructions already possess the ability to accommodate structural complexity during OC1. This capacity continues to grow in OC3.

Given our likely familiarity with the postverbal usage of 於/于 *yu* PPs by now, let us examine more examples of their preverbal placement and the environment they appear in:

PPV

(50) 景 帝 入 卧 内， **於** 后宫 祕 戏
Jing di *ru* *wo* *nei* ***yu*** *hougong* *mi* *xi*
Jing emperor enter bedroom inside in inner.palace secretly play
'Emperor Jing entered the bedroom and secretly frolicked in the inner palace.'
(《史记・万石张叔列传》Biographies of Wan Shi and Zhang Shu; 1st c. BCE)

PPVO

(51) a.文 公 获 若 石 云， **于** 陈仓 北 阪
Wen *gong* *huo* *ruo* *shi* *yun* ***yu*** *Chencang* *bei* *ban*
Wen duke obtain like stone PTCL in Chencang north hillside
城 祠 之
cheng *ci* *zhi*
place.for.worshipping offer.a.scrifice.to 3SG
'Duke Wen obtained a stone-like object, and offered a sacrifice to it in a temple on the northern hillside of Chencang.'
(《史记・封禅书》Treatise on the Feng and Shan Sacrifices; 1st c. BCE)

b.**於** 梁 举 壶遂、 臧固、 郅他， 皆 天下 名士
yu *Liang ju* *Hui Sui Zang Gu Zhi Tuo* *jie tianxia mingshi*
in Liang recommend Hu Sui Zang Gu Zhi Tuo all world famous.scholar
'In the state of Liang, he recommended Hu Sui, Zang Gu, and Zhi Tuo, all of whom were renowned scholars in the world.'
(《史记・韩长孺列传》Biography of Han Changru; 1st c. BCE)

c.欲 **於** 何 所 王 之?
yu ***yu*** *he suo wang zhi*
want in what place make.king 3SG
'Where do you want to make him king?'
(《史记・三王世家》Hereditary House of the Three Kings; 1st c. BCE)

d.**於** 湖 有 周 天子 祠, **於** 下邽 有 天神
yu *Hu you Zhou tianzi ci* ***yu*** *Xiagui you tianshen*
in Hu have Zhou son.of.heaven temple in Xiagui have heavenly.deity
'There is the temple of the Zhou Son of Heaven in Hu County, and the temple of Heavenly Deity in Xiagui.'
(《史记・封禅书》Treatise on the Feng and Shan Sacrifices; 1st c. BCE)

e.君 **於** 赵 为 贵 公子
jun ***yu*** *Zhao wei gui gongzi*
2SG.HON in Zhao be noble ducal.son
'You are a noble ducal son in Zhao.'
(《史记・廉颇蔺相如列传》Biographies of Lian Po and Lin Xiangru; 1st c. BCE)

Previously, the preverbal locative 於/于 *yu* PP instance of *Zuo Zhuan* was discussed in example (25). It appears to be a marked constituent and the use of a preverbal locative PP construction could be a deliberate choice to serve a pragmatic purpose. Similar observations can be made about some of the examples above. (51c) is an interrogative sentence, with the preverbal PP 於何所 (in what place) functioning as an interrogative element. This type of interrogative also represents a narrow focus construction, with the interrogative element usually found in the preverbal position in Old Chinese, though this changed over time due to shifts in information structure (LaPolla 2015). The juxtaposition of two preverbal PPs in (51d) could be to highlight the contrast that different places have their own temples, a theme of the entire paragraph. In the context of (51e), Zhao She persuaded Lord Pingyuan that condoning his family's illegal behaviour would weaken the laws of the Zhao state. Thus, the use of a preverbal locative PP 於赵 might serve to emphasise Lord Pingyuan's affiliation with the Zhao state and the impact on Zhao's legal system. However, this pattern does not seem to hold true for all the preverbal instances here. The contexts of preverbal PPs in (50) and (51a-b) are relatively neutral. It

therefore suggests that while the preverbal 於/于 *yu* PPs in the earlier sub-stages are typically marked and assume certain pragmatic functions, by now the environment in which they appear seems less constrained, as such restrictions are not necessarily required in all instances. Admittedly, instances of preverbal locative 於/于 *yu* PPs still remain scarce. Ongoing observation is required to assess the validity of this claim.

Instances of source-encoding 於/于 *yu* PPs are very limited in *Shi Ji*, possibly owing to the competition from 从 *cong* and 自 *zi*. Their placement is strictly postverbal:

Source

VPP

(52) 使者 载 行， 出 **於** 泉阳 之 门
shizhe *zai* *xing* *chu* ***yu*** *Quanyang* *zhi* *men*
messenger carry walk exit from Quanyang GEN gate
'The messenger carried (the turtle) and walked out from the gate of Quanyang.'
(《史记・龟策列传》Biographies of Turtle-shell Diviners; 1st c. BCE)

VOPP

(53) 乃 取 汉 王 父母 妻子 **於** 沛
nai *qu* *Han wang* *fumu* *qizi* ***yu*** *Pei*
then kidnap Han king parents wife.and.children from Pei
'Then kidnapped the parents, wife, and children of King of Han from Pei County.'
(《史记・高祖本纪》Basic Annals of Emperor Gaozu; 1st c. BCE)

Similar to source-encoding 於/于 *yu* PPs, goal and path 於/于 *yu* PPs are positioned exclusively after the verb:

Goal

VPP

(54) 而 燕 军 乐毅 独 追， 至 **于** 临菑
er *Yan* *jun* *Yue Yi* *du* *zhui* *zhi* ***yu*** *Linzi*
CONJ Yan army Yue Yi alone chase arrive at Linzi
'And the Yan army, led by Yue Yi, chased alone, until they reached Linzi.'
(《史记・乐毅列传》Biography of Yue Yi; 1st c. BCE)

VOPP

(55) 徙 卫 元 君 之 支属 **於** 野王
xi *Wei Yuan* *jun* *zhi* *zhishu* ***yu*** *Yewang*
move Wei Yuan lord GEN collateral.relatives to Yewang
'Moved Lord Yuan of Wei's collateral relatives to Yewang.'
(《史记・刺客列传》Biographies of Assassins; 1st c. BCE)

Like OC1 and OC2, occurrences of path PPs remain rare in *Shi Ji* and are only attested in VPP constructions. Earlier instances have shown that path PPs chiefly collocate with the verb *guo* 过 (to pass). In the present text, path PPs can also be paired with the verb 经 *jing*, which expresses the same meaning as 过 *guo*:

Path

VPP

(56) 常 有 流星 经 **於** 祠坛 上
*chang you liuxing jing **yu** citan shang*
often have meteor pass across altar above
'Meteors often streak across the sky above the altar.'
(《史记・乐书》Treatise on Music; 1st c. BCE)

Compared to OC1 and OC2, the use of 从 *cong* is on the rise. It is employed to introduce source, with an almost exclusive preverbal distribution:

Source

VOPP

(57) 抵 蜀 **从** 故 道，故 道 多 阪
*di Shu **cong** gu dao gu dao duo ban*
arrive Shu from old road old road many slope
'Enter Shu from the Old Road, which has many slopes.'
(《史记・河渠书》Treatise on Rivers and Canals; 1st c. BCE)

PPV

(58) 错 父 闻 之，**从** 颍川 来
*Cuo fu wen zhi **cong** Yingchuan lai*
Cuo father hear 3SG from Yingchuan come
'Cuo's father heard about it and made his way from Yingchuan.'
(《史记・袁盎晁错列传》Biographies of Yuan Ang and Chao Cuo; 1st c. BCE)

PPVO

(59) 秦 使 将军 王贲 **从** 燕 南 攻 齐
*Qin shi jiangjun Wang Ben **cong** Yan nan gong Qi*
Qin order general Wang Ben from Yan south attack Qi
'(The King of) Qin ordered General Wang Ben to attack Qi from the south of Yan.'
(《史记・秦始皇本纪》Basic Annals of the First Emperor of Qin; 1st c. BCE)

Example (57) is the only instance of a postverbal locative 从 *cong* so far. It deviates not only from its preverbal instances (149 tokens) in *Shi Ji* but also departs from its strict preverbal pattern exhibited in *Zuo Zhuan* and *Han Feizi*. It must be acknowledged that the total

occurrences of locative 从 *cong* in the previous two texts are limited, thus casting doubt on this observation. Still, the locative VOPP in (57) remains the sole exception to the distribution of 从 *cong* and it calls for closer scrutiny. The paragraph discusses a proposal to construct a new road. A minister was sent to assess the situation and reported that all visitors to 蜀 *Shu* must enter from the Old Road currently, which is steep and long. Thus, using the postverbal PP 从故道 could be a way to highlight the Old Road and contrast it with the newly proposed road. Alternatively, as the discourse addresses two distinct paths into 蜀 *Shu*, 抵蜀从故道 could be understood as 'When I came to Shu, it was along the Old Road'. 抵蜀 would be a scene-setting topic in such a scenario, and 抵 should not be considered the main verb of the clause.

Like 从 *cong*, 自 *zi* also introduces source, with a predominantly preverbal distribution (93.16%). The difference in its preverbal and postverbal distribution becomes even more apparent when the verb takes an object, with 70 tokens of PPVO and no instance of VOPP:[84]

Source

VPP

(60) 秦 质子 归 **自** 赵
*Qin zhizi gui **zi** Zhao*
Qin hostage return from Zhao
'The Qin hostages returned from Zhao.'
(《史记・秦始皇本纪》Basic Annals of the First Emperor of Qin; 1st c. BCE)

PPV

(61) a.邹衍 **自** 齐 往
*Zou Yan **zi** Qi wang*
Zou Yan from Qi go
'Zou Yan went from Qi.'
(《史记・燕召公世家》Hereditary House of Duke Shao of Yan; 1st c. BCE)

b.楚 兵 惧，**自** 秦 归
*Chu bing ju **zi** Qin gui*
Chu soldier fear from Qin return
'The Chu soldiers were frightened and returned from Qin.'
(《史记・屈原贾生列传》Biographies of Qu Yuan and Master Jia; 1st c. BCE)

[84] There are three locative 自 *zi* VOPPs in *Shi Ji*, all starting with the verb 道 (historically interchangeable with 导 when used as a verb denoting 'to divert'): 道淮自桐柏, 道渭自鸟鼠同穴, and 道雒自熊耳 (all indicating river diversion from a mountain, with the river name as the verbal object and the mountain name as the prepositional object). However, the passage featuring the three 自 *zi* VOPPs originates from an excerpt of the pre-Qin text *Shang Shu* 尚书 (Book of Documents). Thus, they are disregarded in the token count for *Shi Ji*.

PPVO

(62) a.帝 **自** 甘泉 之 高奴
di ***zi*** *Ganquan* *zhi* *Gaonu*
emperor from Ganquan go.to Gaonu
'The emperor went from Ganquan to Gaonu.'
(《史记・孝文本纪》Basic Annals of Emperor Xiaowen; 1st c. BCE)

b.于是 缪 公 乃 **自** 茅 津 渡 河
yushi *Mu* *gong* *nai* ***zi*** *Mao* *jin* *du* *he*
so Mu duke then from Mao ford cross Yellow.River
'So Duke Mu crossed the Yellow River from the Mao Ford.'
(《史记・秦本纪》Basic Annals of Qin; 1st c. BCE)

Collectively, the remaining locative prepositions in *Shi Ji* amount to less than 2% of all occurrences. 乎 *hu* and 诸 *zhu* are strictly postverbal, whereas 由 *you* is preverbal. Though used only sparingly in *Shi Ji*, 乎 *hu* showcases the same multifunctionality as 於/于 *yu*:[85]

Location

VPP

(63) 有 玄 鹤 二八 集 **乎** 廊门
you *xuan* *he* *erba* *ji* ***hu*** *langmen*
have black crane sixteen gather at corridor
'Sixteen black cranes gathered at the corridor.'
(《史记・乐书》Treatise on Music; 1st c. BCE)

Source

VPP

(64) 我 起 **乎** 少曲, 一 日 而 断 大行
wo *qi* ***hu*** *Shaoqu* *yi* *ri* *er* *duan* *Taihang*
1SG dispatch from Shaoqu one day CONJ cut.off Taihang
'I can dispatch troops from Shaoqu and cut off the passage of Taihang Mountain within one day.'
(《史记・苏秦列传》Biography of Su Qin; 1st c. BCE)

[85] The use of locative 乎 *hu* is not exactly rare in *Shi Ji*, but a considerable portion of its occurrences are found in excerpts from other texts, particularly essays authored by Sima Xiangru. Such instances are hence excluded from frequency calculation.

Goal

VPP

(65) 至 **乎** 泰山 下
zhi ***hu*** *Taishan* *xia*
arrive at Mt.Tai below
'Arrived at the foot of Mount Tai.'
(《史记・封禅书》Treatise on the Feng and Shan Sacrifices; 1st c. BCE)

Path

VPP

(66) 过 卫 阳晋 之 道， 径 **乎** 亢父 之 险
guo *Wei* *Yangjin* *zhi* *dao* *jing* ***hu*** *Kangfu* *zhi* *xian*
pass Wei Yangjin GEN road pass through Kangfu GEN narrow.pass
'It must traverse the main road of Yangjin in Wei and pass through the narrow pass of Kangfu.'
(《史记・苏秦列传》Biography of Su Qin; 1st c. BCE)

The consistently postverbal 诸 *zhu* serves to introduce location of an event:

Location

VPP

(67) 髡 有 愚 志， 愿 陈 **诸** 前
Kun *you* *yu* *zhi* *yuan* *chen* ***zhu*** *qian*
Kun have humble ambition wish state in front
'I (Chunyu Kun) have some humble ambitions, and I wish to state them in front (of you).'
(《史记・田敬仲完世家》Hereditary House of Tian Jingzhong (Tian Wan); 1st c. BCE)

由 *you* is the least frequently used locative preposition in *Shi Ji*, as its main prepositional function in this text is non-locative and it often appears in fixed expressions like 由此 (from then on) and 由是观之 (seen from this perspective). Within its rare locative usage, it occurs preverbally and introduces both source and path:

Source

PPV

(68) 夫 礼 **由** 外 入， 乐 自 内 出
fu *li* ***you*** *wai* *ru* *yue* *zi* *nei* *chu*
PTCL ritual from outside enter music from inside produce
'Rituals act on people from the outside; music comes from deep inside.'
(《史记・乐书》Treatise on Music; 1st c. BCE)

PPVO

(69) 建 首善 自 京师 始， **由** 内 及 外
jian *shoushan* *zi* *jingshi* *shi* ***you*** *nei* *ji* *wai*
establish primary.excellence from capital start from inside reach outside
'The establishment of primary excellence must start from the capital, and be extended from inside the capital to outside its confines.'
(《史记・儒林列传》Biographies of Confucian Scholars; 1st c. BCE)

Path

PPV

(70) 上 自 南 郡 **由** 武 关 归
shang *zi* *Nan* *jun* ***you*** *Wu* *guan* *gui*
emperor from Nan commandery via Wu pass return
'The emperor returned from Nan Commandery via Wu Pass.'
(《史记・秦始皇本纪》Basic Annals of the First Emperor of Qin; 1st c. BCE)

Tables 5.8 and 5.9 summarise the distribution of locative VPP/PPV and VOPP/PPVO in *Shi Ji* respectively:

Table 5.8: The distribution of locative VPP and PPV in *Shi Ji*

Locative preposition	VPP	Ratio	PPV	Ratio	VPP + PPV
於/于 ***yu***	1015	99.71%	3	0.29%	1018
从 ***cong***	0	0%	93	100%	93
自 ***zi***	8	17.02%	39	82.98%	47
乎 ***hu***	19	100%	0	0%	19
诸 ***zhu***	5	100%	0	0%	5
由 ***you***	0	0%	2	100%	2
Total	1047	88.43%	137	11.57%	1184

Table 5.9: The distribution of locative VOPP and PPVO in *Shi Ji*

Locative preposition	VOPP	Ratio	PPVO	Ratio	VOPP + PPVO
於/于 ***yu***	826	98.80%	10	1.20%	836
自 ***zi***	0	0%	70	100%	70
从 ***cong***	1	1.75%	56	98.25%	57
由 ***you***	0	0%	1	100%	1
Total	827	85.79%	137	14.21%	964

OC3 displays trends that align consistently with those of OC1 and OC2. Firstly, locative PPs used without a verbal object (1184 tokens) outnumber those with one (964 tokens). Secondly, for VOPP/PPVO, the postverbal proportion (85.79%) is marginally lower than both the overall postverbal proportion (87.24%) and the postverbal for VPP/PPV (88.43%). Although the overall postverbal proportion in OC3 declines to around 87% from the approximately 95% seen in the first two sub-stages of Old Chinese, the predominant prevalence of postverbal locative PPs remains unchanged.

5.4 AN INTERIM SUMMARY OF OC1 TO OC3

To conclude, this chapter has examined the behaviour of locative PPs across the three sub-stages of Old Chinese, based on *Zuo Zhuan*, *Han Feizi*, and *Shi Ji* respectively. Besides assessing the overall preverbal and postverbal distribution, it has also compared their placement in the presence or absence of a verbal object. Additionally, examples are provided to illustrate the usage of individual locative prepositions in each sub-stage. Here is a summary of the key findings:

Firstly, in terms of overall placement, the dominant word order of locative PPs in Old Chinese is evidently postverbal, with the postverbal proportions for the three sub-stages being OC1 (94.94%), OC2 (95.71%), and OC3 (87.24%). After considering whether a verbal object is present, it is observed that the postverbal proportion in locative VOPP/PPVO constructions consistently stays marginally lower than its locative VPP/PPV counterpart. This indicates that the postverbal predominance is even more apparent in locative VPP/PPV constructions, albeit to a small extent only. This observation prompts valid queries regarding whether the gap between the two will persist and even widen in later periods. Should this trend continue, it reasonably leads to the question of whether locative VOPP constructions will take the lead in undergoing word order change compared to VPP; in other words, whether VOPP constructions are more prone to word order change and experience a shift in word order at a faster rate. The credibility of this line of inquiry needs to be substantiated by observations from Middle Chinese and Early Mandarin Chinese.

Secondly, 於/于 *yu* maintains its status as the primary locative preposition from OC1 to OC3, both in frequency and functionality. The other locative prepositions have not posed a noticeable threat to its dominance. Furthermore, the preverbal locative 於/于 *yu* PP instance in OC1 seems to be a marked constituent fulfilling a pragmatic role. By OC3, despite its continued

rarity, not all preverbal 於/于 *yu* PPs appear to be marked, as some instances occur in fairly neutral contexts. Consequently, it implies that while the preverbal 於/于 *yu* PPs in the earlier sub-stages are often perceived as marked constituents with particular pragmatic functions, the environment surrounding their usage now appears less restrictive, as former constraints are not necessarily required. Again, ongoing observation remains crucial to verify this claim.

Thirdly, locative VPP and VOPP constructions already demonstrate the capability to accommodate and handle structural complexity during OC1.[86] This capacity continues to enhance in OC3. Moreover, we have observed instances of lengthy verbal object and prepositional object. This encourages investigation into whether word order preference is affected by the length of a constituent, an area worth further exploration in subsequent discussions.[87]

Lastly, not all locative subclasses hold the same status. Among the four, path PPs are the least common. This scarcity is attributed to the fact that the path concept is largely expressed by path verbs alone, thus eliminating the need for a locative preposition. This might further support the view that Old Chinese mainly conforms to Talmy's (1991) verb-framed language, where path in encoded by the main verb (Peyraube 2006).[88] Could this observation also suggest that, at least when it comes to prepositional function, the introduction of path is a later development and hence not as essential as introducing other locative subclasses? Building upon these observations and inquiries, the next chapter proceeds with the investigation of locative PP behaviour in Middle Chinese.

[86] This phenomenon is hardly unexpected across different languages. As noted by Diessel (2019: 56), a study of diachronic corpora reveals that even the earliest documented languages boast a wide array of complex structures comparable to those in use today.

[87] Length and structural complexity are commonly discussed together in the literature. Smith and Seoane (2013: 216-217) note in their review of the Principle of End Weight that weight has been interpreted from different angles. Some researchers measure weight by constituent length, whereas others factor in structural complexity.

[88] Peyraube (2006) identifies Archaic Chinese as a verb-framed language, with subsequent developments in Chinese transitioning towards satellite-framed patterns. Despite reservations regarding categorising Old Chinese as a verb-framed language outright, Zhang and Li (2009) concur that given the lack of fully developed structures featuring satellite components, such as verb-directional and verb-complement, Old Chinese can only be classified as a verb-framed language within Talmy's binary typology.

CHAPTER SIX
THE DIACHRONIC DEVELOPMENT OF LOCATIVE PP WORD ORDER IN MIDDLE CHINESE

Earlier research generally suggests that Middle Chinese constitutes a pivotal period characterised by substantial changes in locative PP word order. Chapter 4 has explained the rationale for dividing texts from this period into two broad categories: non-Buddhist texts and Buddhist texts. For each sub-stage of Middle Chinese, non-Buddhist works and translated Buddhist works with comparable composition dates to the greatest extent feasible are selected. As previously noted, owing to the relatively short length of certain texts, multiple texts are consulted for MC2. In total, 8 texts, comprising 4 non-Buddhist works and 4 translated Buddhist works, are under investigation from MC1 to MC3. Following the approach of Chapter 5, the investigation within each sub-stage begins by examining the overall usage of locative PPs in the text, including a comparison of its overall distribution in the preverbal and postverbal positions, alongside a study of individual locative prepositions with relevant examples. Lastly, the locative PP placement concerning the presence or absence of a verbal object is also compared.

6.1 MC1

The study of locative PP usage during MC1 relies on two Eastern Han texts: the non-Buddhist work *Lun Heng* 论衡 (Discourses Weighted in the Balance), composed in the 1st century, and *Compilation of Eastern Han Buddhist Scripture Translations*. The latter includes ten Chinese translations of Buddhist scriptures that I have selected. These translations, carried out by leading translators like An Shigao (安世高) and Lokakṣema (支娄迦谶) in the late 2nd century, form part of the earliest collections of such works in Chinese. Let us now examine the locative PP usage in these two texts respectively.

6.1.1 LUN HENG

Firstly, concerning the overall PP occurrences regardless of whether a verbal object is present, the locative prepositions in *Lun Heng*, ranked in decreasing order of frequency, are as follows: 於/于 *yu* (81.23%), 从 *cong* (9.56%), 在 *zai* (5.35%), 自 *zi* (1.59%), 乎 *hu* (1.37%), 诸 *zhu*

(0.45%), and 由 *you* (0.45%). Table 6.1 presents an overview of the locative PP word order in *Lun Heng*:

Table 6.1: An overview of locative PP word order in *Lun Heng*

Locative preposition	VPP	VOPP	Post-V sub-total	Ratio	PPV	PPVO	Pre-V sub-total	Ratio	Post-V + Pre-V
於/于 ***yu***	551	162	713	99.86%	0	1	1	0.14%	714
从 ***cong***	0	0	0	0%	52	32	84	100%	84
在 ***zai***	30	9	39	82.98%	0	8	8	17.02%	47
自 ***zi***	0	0	0	0%	4	10	14	100%	14
乎 ***hu***	12	0	12	100%	0	0	0	0%	12
诸 ***zhu***	4	0	4	100%	0	0	0	0%	4
由 ***you***	0	0	0	0%	4	0	4	100%	4
Total	597	171	768	87.37%	60	51	111	12.63%	879

The postverbal predominance in Old Chinese continues to hold in *Lun Heng*, with the overall proportion of postverbal locative PPs in *Lun Heng* (87.37%) closely resembling that in *Shi Ji* (87.24%). The function and distribution of individual locative prepositions in *Lun Heng* are outlined below:

In terms of frequency and functionality, 於/于 *yu* retains its status as the dominant locative preposition, yet it appears to cease introducing path in *Lun Heng*. Its placement remains predominantly postverbal (99.86%):

Location

VPP

(71) 夏 后 孔甲 畋 **于** 首山
Xia hou *Kong Jia* *tian* ***yu*** *Shoushan*
Xia supreme.ruler Kong Jia hunt on Mt.Shou
'Kong Jia, king of the Xia dynasty, hunted on Mount Shou.'
(《论衡・指瑞》Thoughts on Omens; 1st c.)

VOPP

(72) 句践 亦 试 其 士 **於** 寢宫 之 庭
Gou Jian yi *shi* *qi* *shi* ***yu*** *qingong* *zhi* *ting*
Gou Jian also train 3.POSS soldier in inner.palace GEN courtyard
'Gou Jian also trained his soldiers in the courtyard of his inner palace.'
(《论衡・率性》The Forming of Characters; 1st c.)

PPVO

(73) 当 **於** 此 章 中 言 之，何 故 反 居
dang ***yu*** *ci zhang zhong yan zhi he gu fan ju*
should in this chapter inside mention 3SG what reason instead be.in
《释四时章》 中
Shi Sishi Zhang zhong
Shi Sishi Zhang inside
'It should be mentioned in this chapter; why is it recorded in the chapter of *Shi Sishi Zhang* instead?'
(《论衡・是应》Auguries Verified; 1st c.)

Example (73) shows the only preverbal locative 於/于 *yu* PP in *Lun Heng*.[89] It appears to be a marked constituent employed to stress that the stated content ought to be recorded in this chapter. This is discernible from the questioning of why it is recorded in another chapter instead.

The source and goal 於/于 *yu* PPs exhibit identical behaviour, as previously observed:

Source

VPP

(74) 珠光 出 **於** 鱼 腹
zhuguang chu ***yu*** *yu fu*
pearly.lustre emerge from fish belly
'The lustre of pearls emerges from the belly of the fish.'
(《论衡・自纪》Autobiography; 1st c.)

VOPP

(75) 铸 阳燧 取 飞 火 **於** 日
zhu yangsui qu fei huo ***yu*** *ri*
cast solar.lighter catch flying fire from sun
'Cast a solar lighter to catch fire from the sun.'
(《论衡・乱龙》A Last Word on Dragons; 1st c.)

Goal

VPP

(76) 天 雨 晦冥， 入 **于** 民 家
tian yu huiming ru ***yu*** *min jia*
sky rain dim enter into civilian house
'It was raining and the sky was dark, so (Kong Jia) entered a civilian's house.'
(《论衡・指瑞》Thoughts on Omens; 1st c.)

[89] Another locative 於/于 *yu* PPVO 於此有人焉 (there is a person here) is found in《论衡・刺孟》, but the paragraph is a direct citation from Mencius' original writing in《孟子・滕文公下》.

VOPP

(77) 不 进， 拔 剑 到 而 弃 之 **於** 沟 中
*bu jin ba jian jing er qi zhi **yu** gou zhong*
NEG advance draw sword cut.neck CONJ throw.away 3SG into ditch inside
'(When the horse) refused to proceed, (the horseman) drew a sword, cut its neck and threw it away into a ditch.'

(《论衡・非韩》Strictures on Han Feizi; 1st c.)

The locative preposition 从 *cong* introduces source and occurs exclusively in preverbal position:

Source

PPV

(78) 更 有 醴泉 **从** 地 中 出
*geng you liquan **cong** di zhong chu*
still have sweet.spring from ground inside flow.out
'Should sweet springs still flow out from the ground.'

(《论衡・是应》Auguries Verified; 1st c.)

PPVO

(79) 龙 随 而 上， 故 谓 **从** 树木 之 中 升 天 也
*long sui er shang gu wei **cong** shumu zhi zhong sheng tian ye*
dragon follow CONJ rise so say from tree GEN inside ascend sky PTCL
'The dragon followed up, so it was said to be ascending to the sky from among the tress.'

(《论衡・龙虚》On Dragons; 1st c.)

In contrast to its previous usage primarily as a verb, a portion of 在 *zai* has taken a locative preposition role in *Lun Heng* to introduce location. This usage is observed both before and after the predicate, with the postverbal placement being the majority (82.98%). When positioned before the verb, it is confined to PPVO and not found in PPV constructions:

Location

VPP

(80) 坐 **在** 深 室 之 中
*zuo **zai** shen shi zhi zhong*
sit in deep room GEN inside
'(If one) sits in a deep room.'

(《论衡・语增》Exaggerations; 1st c.)

VOPP

(81) 察　　火　**在**　地，　一　气　也
cha　*huo*　***zai***　*di*　*yi*　*qi*　*ye*
examine fire　on　ground　one　gas　PTCL
'Examine fire on the ground; it is the same kind of gas.'
(《论衡・说日》On the Sun; 1st c.)

PPVO

(82) 文　王　**在**　母　身　之　中　已　受　命　也
Wen wang ***zai*** *mu*　*shen*　*zhi*　*zhong*　*yi*　*shou*　*ming*　*ye*
Wen king　in　mother body　GEN inside　already　receive　heavenly.mandate　PTCL
'King Wen had already received the heavenly mandate inside his mother's body.'
(《论衡・初禀》Heaven's Original Gift; 1st c.)

The remaining locative prepositions 自 *zi*, 乎 *hu*, 诸 *zhu*, and 由 *you* make up less than 4% of total usage. Like 从 *cong*, 自 *zi* introduces source and has a strict preverbal distribution:

Source

PPV

(83) 代　王　**自**　代　入　为　文　帝
Dai wang ***zi***　*Dai*　*ru*　*wei*　*Wen*　*di*
Dai king　from　Dai　enter　become Wen emperor
'The King of Dai arrived from Dai and became Emperor Wen.'
(《论衡・命禄》On Destiny and Fortune; 1st c.)

PPVO

(84) **自**　琅邪　北　至　劳、成　山
zi　*Langya*　*bei*　*zhi*　*Lao Cheng*　*shan*
from　Langya　north　reach　Lao Cheng　mountain
'Reached the Lao and Cheng Mountains from the northern region of Langya.'
(《论衡・实知》The Knowledge of Truth; 1st c.)

Both 乎 *hu* and 诸 *zhu* introduce location and goal and they only occur in VPP constructions:

Location

VPP

(85) a.北　息　**乎**　沉薶　之　乡
bei　*xi*　***hu***　*chenmai*　*zhi*　*xiang*
north　stop　in　hidden　GEN　place
'Halted north in hidden places.'
(《论衡・道虚》Daoist Untruths; 1st c.)

b.古 今 帝王 死，葬 **诸** 地 中
*gu jin diwang si zang **zhu** di zhong*
ancient modern emperor die bury in ground inside
'After the death of ancient and modern emperors, they were buried in the ground.'
(《论衡・死伪》False Reports about Death; 1st c.)

Goal

VPP

(86) a.太子 遂 不 下， 反 **乎** 舍
*taizi sui bu xia fan **hu** she*
prince then NEG get.off return to residence
'The prince did not get off but returned to his residence.'
(《论衡・异虚》Fictitious Prodigies; 1st c.)

b.四夷 入 **诸** 夏，
*Siyi ru **zhu** Xia*
non-Han.peoples.from.four.border.regions enter into China
因 译 而 通[90]
yin yi er tong
rely.on translation CONJ communicate
'When the non-Han peoples from the four border regions come to China, they require translation to communicate.'
(《论衡・变虚》Fictitious Phenomena; 1st c.)

Lastly, 由 *you* introduces source and it is only found in PPV constructions:[91]

Source

PPV

(87) 雨 露 冻凝 者， 皆 **由** 地 发， 不 从 天 降 也
*yu lu dongning zhe jie **you** di fa bu cong tian jiang ye*
rain dew freeze NMLZ all from ground proceed NEG from sky fall PTCL
'Rain, dew, and frost all proceed from the ground and do not fall from the sky.'
(《论衡・说日》On the Sun; 1st c.)

The source-encoding preverbal PP in 由地发 contrasts with the other source-encoding preverbal PP in 从天降 in (87).

[90] Some translations have rendered 四夷 as 'Four Barbarians'. However, 夷 does not inherently mean 'barbarian'; rather, it refers to people living east of the centre. 四夷 was an ancient collective term for various ethnic groups surrounding the central plains, namely: 东夷, 南蛮, 西戎, and 北狄. The association with 'barbarian' arose due to the central population's perception of superiority over others.

[91] There is one postverbal instance of path-encoding 由 *you* PP in 谁能出不由户 (Who can go out (of the house) without passing through the door). However, it is a direct quote from Confucius, as documented in 论语 (The Analects).

Tables 6.2 and 6.3 summarise the distribution of locative VPP/PPV and VOPP/PPVO in *Lun Heng* respectively:

Table 6.2: The distribution of locative VPP and PPV in *Lun Heng*

Locative preposition	VPP	Ratio	PPV	Ratio	VPP + PPV
於/于 ***yu***	551	100%	0	0%	551
从 ***cong***	0	0%	52	100%	52
在 ***zai***	30	100%	0	0%	30
乎 ***hu***	12	100%	0	0%	12
自 ***zi***	0	0%	4	100%	4
诸 ***zhu***	4	100%	0	0%	4
由 ***you***	0	0%	4	100%	4
Total	597	90.87%	60	9.13%	657

Table 6.3: The distribution of locative VOPP and PPVO in *Lun Heng*

Locative preposition	VOPP	Ratio	PPVO	Ratio	VOPP + PPVO
於/于 ***yu***	162	99.39%	1	0.61%	163
从 ***cong***	0	0%	32	100%	32
在 ***zai***	9	52.94%	8	47.06%	17
自 ***zi***	0	0%	10	100%	10
Total	171	77.03%	51	22.97%	222

Consistent with prior findings across OC1 to OC3, the proportion of postverbal occurrences for VOPP/PPVO (77.03%) remains lower than both the overall postverbal proportion (87.37%) and the postverbal proportion for VPP/PPV (90.87%). The postverbal dominance continues to be more prominent in locative VPP/PPV constructions, and the disparity in postverbal proportions between VPP/PPV and VOPP/PPVO has grown in this context. Nevertheless, despite the noticeable decrease in postverbal proportion for VOPP/PPVO, the locative PP distribution in *Lun Heng* appears to be relatively conservative, showing little deviation from the pattern observed in *Shi Ji* from OC3. Essentially, it largely upholds the general trend of locative PP word order in Old Chinese.

6.1.2 COMPILATION OF EASTERN HAN BUDDHIST SCRIPTURE TRANSLATIONS

Firstly, in terms of the overall PP occurrences regardless of whether a verbal object is present, the locative prepositions in this compilation, ranked in decreasing order of frequency, are as

follows: 於/于 *yu* (62.70%), 从 *cong* (25.87%), 在 *zai* (10.96%), and 自 *zi* (0.47%). Table 6.4 presents an overview of the locative PP word order in this compilation:

Table 6.4: An overview of locative PP word order in *Compilation of Eastern Han Buddhist Scripture Translations*

Locative preposition	VPP	VOPP	Post-V sub-total	Ratio	PPV	PPVO	Pre-V sub-total	Ratio	Post-V + Pre-V
於/于 *yu*	71	2	73	27.14%	113	83	196	72.86%	269
从 *cong*	0	0	0	0%	79	32	111	100%	111
在 *zai*	21	1	22	46.81%	21	4	25	53.19%	47
自 *zi*	1	0	1	50%	0	1	1	50%	2
Total	93	3	96	22.38%	213	120	333	77.62%	429

The table above indicates that Buddhist texts present a stark departure compared to native non-Buddhist works from roughly the same period. The dominant locative PP word order in terms of overall distribution has been reversed, with the postverbal distribution now accounting for only 22.38%, while the preverbal distribution has surged to 77.62%. Moreover, this transition seems to occur abruptly and drastically.[92] As previously stated, this compilation features works by multiple translators. Therefore, the locative PP usage here might not necessarily reflect the style of any specific translator, but rather provides an indication of the broader state and general trends in the earliest stage of Buddhist scripture translations. The function and distribution of individual locative prepositions in this compilation are presented below:

Firstly, although 於/于 *yu* continues to be the predominant and multi-functional locative preposition, its share among all locative prepositions has declined from consistently exceeding 80% in earlier texts to 62.70%. Like *Lun Heng*, it does not appear to introduce path. Even more strikingly, its postverbal proportion has undergone a dramatic shift, falling from a minimum of 99% in previous instances to just 27.14% now, with its preverbal distribution soaring to 72.86%:

[92] It is also possible that the observed change does not genuinely indicate a sudden and drastic shift in the dominant word order of locative PPs. Instead, the shift is attributed to the transition of texts under scrutiny from classical Chinese to vernacular. While acknowledging this possibility, the analysis here remains open to discussion. Section 4.2 of Chapter 4 has stressed the importance of selecting texts that approximate spoken language. The translated Buddhist scriptures from the Middle Chinese period serve as valuable vernacular resources, yet the non-Buddhist texts from the same era, chosen for this study, are also sourced from a limited pool of appropriate materials to ensure they are as colloquial as possible. *Lun Heng*, which is nearly contemporaneous with the MC1 compiled scriptures, exemplifies such indigenous, non-Buddhist texts. Section 4.2 has mentioned the advocacy of its author, Wang Chong, for the use of colloquial and easily understandable language in writing. Guided by this principle, the language of *Lun Heng* is straightforward, making it an important source for the study of Eastern Han Chinese. On the other hand, Q. Zhu (2008), in his discussion of linguistic features of Buddhist Chinese, suggests that researchers tend to overstate the influence of spoken language on Buddhist Chinese and overlook the fact that Buddhist Chinese is not equivalent to vernacular Chinese. Rather, he contends that it combines attributes of classical Chinese and the vernacular. Therefore, the transition from *Lun Heng* to the MC1 compiled scriptures might not be simply from classical Chinese to vernacular.

Location

VPP

(88) 譬若　　工　射人　射　空中，　其　　箭　住　　**於** 空中
piruo　*gong sheren she kongzhong*　*qi*　*jian zhu*　***yu*** *kongzhong*
for.instance adept archer shoot air　3.POSS arrow suspend in air
'For instance, an adept archer shoots into the air and his arrow suspends in the air.'
(《道行般若经》Aṣṭasāhasrikā Prajñāpāramitā Sūtra; late 2nd c.)

VOPP

(89) 以　无　有　慈孝　　**於**　佛　　所
yi　*wu*　*you*　*cixiao*　　***yu***　*fo*　　*suo*
CONJ NEG have compassion.and.respect in Buddha place
'And there will be no affection or respect in Buddha's place.'
(《道行般若经》Aṣṭasāhasrikā Prajñāpāramitā Sūtra; late 2nd c.)

PPV

(90) a.各各 **於** 自然　师子座　交路　　帐　中　坐
gege ***yu*** *ziran*　*shizizuo*　*jiaolu*　　*zhang zhong zuo*
each in natural sijhāsana criss-crossing.road　tent inside sit
'Each one sat in the natural sijhāsana (lion seat) inside the tent on the criss-crossing road.'
(《佛说兜沙经》The Scripture on the Tusita Heaven; late 2nd c.)

b.萨陀波伦　菩萨　便　**於** 城　外　园　中　止宿
Satuobolun　*pusa*　*bian*　***yu*** *cheng*　*wai*　*yuan*　*zhong*　*zhisu*
Sadāprarudita Bodhisattva then in city outside garden inside lodge
'Bodhisattva Sadāprarudita then lodged in the garden outside the city.'
(《道行般若经》Aṣṭasāhasrikā Prajñāpāramitā Sūtra; late 2nd c.)

PPVO

(91) a.**於** 其　殿　前　列种　甘　果　树
yu *qi*　*dian*　*qian*　*liezhong*　*gan*　*guo*　*shu*
in 3.POSS palace front plant.in.rows sweet fruit tree
'Planted sweet fruit trees in rows in front of his palace.'
(《修行本起经》Cāryanidāna; late 2nd c.)

b.菩萨　**於** 此间　国土　念　阿弥陀佛
pusa　***yu*** *cijian*　*guotu*　*nian*　*Emituofo*
Bodhisattva in here territory recite Amitābha
'The Bodhisattva recited Amitābha in this territory.'
(《般舟三昧经》Pratyutpanna Samādhi Sūtra; late 2nd c.)

Occurrences of source-encoding 於/于 *yu* PPs are extremely rare in this compilation, possibly owing to the intense competition from 从 *cong*, which specialises in introducing source and has experienced a rise in usage. Instances of source-encoding 於/于 *yu* PPs only appear in VPP constructions:

Source

VPP

(92) 便 行起 **於** 斯奈园, 投暮 往造 迦叶
bian *xingqi* ***yu*** *Sinaiyuan* *toumu* *wangzao* *Jiaye*
then set.out from Sinai.Garden at.dusk visit Kāśyapa
'Then (the Blessed One) set out from Sinai Garden and visited Kāśyapa at dusk.'
(《中本起经》Madhyama - ityukta - Sūtra; late 2nd c.)

Despite the predominance of preverbal 於/于 *yu* PPs in this text, instances of the goal subclass are still restricted to the postverbal placement:

Goal

VPP

(93) 譬如 摩尼珠 堕 **於** 屎 中
piru *monizhu* *duo* ***yu*** *shi* *zhong*
for.instance mani.bead fall into feces inside
'For instance, a mani bead falls into feces.'
(《佛说遗日摩尼宝经》Kaśyapaparivrata; late 2nd c.)

VOPP

(94) 叩 头 **于** 地, 愿 见 矜恕
kou *tou* ***yu*** *di* *yuan* *jian* *jinshu*
bow.down head to ground wish see mercy.and.forgiveness
'Bowed down the head to the ground, wishing to see mercy and forgiveness.'
(《中本起经》Madhyama - ityukta - Sūtra; late 2nd c.)

从 *cong* is the next frequently used locative preposition and has a strict preverbal distribution:

Source

PPV

(95) 其 人 沸 血 便 **从** 面孔 出
qi *ren* *fei* *xue* *bian* ***cong*** *miankong* *chu*
that person boiling blood then from face come.out
'That person's boiling blood then came out of the face.'
(《道行般若经》Aṣṭasāhasrikā Prajñāpāramitā Sūtra; late 2nd c.)

PPVO

(96) 从 释氏 精舍 入 迦维罗卫国
cong *Shishi* *jingshe* *ru* *Jiaweiluoweiguo*
from Śākya.lineage vihāra(monastery) enter Kapilavastu
'Entered Kapilavastu from the monastery of Śākya lineage.'
(《中本起经》Madhyama - ityukta - Sūtra; late 2nd c.)

在 *zai* shows a fairly balanced distribution before and after the verb, with a slight preference for preverbal placement (53.19%). It introduces location and goal. Location 在 *zai* PPs may precede or follow the verb, while its goal PPs are only present in VPP constructions:

Location

VPP

(97) 去 家 修 道 者 若 游 **在** 山泽
qu *jia* *xiu* *dao* *zhe* *ruo* *you* ***zai*** *shanze*
leave home practice way NMLZ if wander in mountains.and.rivers
'If those who leave home to practice the way of Buddha wander in the mountains and rivers.'
(《法镜经》Ugra-paripricchā; late 2nd c.)

VOPP

(98) 以 紫磨黄金 为 素， 书 般若波罗蜜
yi *zimohuangjin* *wei* *su* *shu* *boreboluomi*
with polished.red-gold be.used.as writing.material write Prajñāpāramitā
在 其中
zai *qizhong*
in within
'Using polished red-gold as the writing scroll, write Prajñāpāramitā in it.' [93]
(《道行般若经》Aṣṭasāhasrikā Prajñāpāramitā Sūtra; late 2nd c.)

PPV

(99) 拘利刹帝 有 二 女， 时 **在** 后园 池 中 沐浴
Julichadi *you* *er* *nü* *shi* ***zai*** *houyuan* *chi* *zhong* *muyu*
kṣatriya.of.Koliyā have two daughter then in backyard pool inside bathe
'The kṣatriya of Koliyā had two daughters; they were bathing in the backyard pool at that time.'
(《修行本起经》Cāryanidāna; late 2nd c.)

[93] The character 素 *su* denotes white silk, a highly favoured medium for copying documents in China during that period. Then, how did polished red-gold transform into white silk in this example? Karashima (2010) points out that 素 *su* corresponds to suvarṇapaṭṭa, which refers to golden tablets used for inscribing scriptures. This might reflect the translator's adherence to local customs by employing 素 *su* as an equivalent to the original text.

PPVO

(100) 可 识 人 本 何 因缘 **在** 世间 得 苦
*ke shi ren ben he yinyuan **zai** shijian de ku*
can know people be.based.on what cause in world obtain suffering
'One can understand the causes of why people suffer in the world.'
(《长阿含十报法经》Sutra on the Law of Ten Rewards in the Dirghagama; late 2nd c.)

Goal

VPP

(101) 於 道 中央 失堕, 钱 散 **在** 地
*yu dao zhongyang shiduo qian san **zai** di*
in road middle fall money scatter onto ground
'(I) fell down in the middle of the road and the money was scattered onto the ground.'
(《文殊师利问菩萨署经》Mañjuśrī Asks How One Should Act as a Bodhisattva; late 2nd c.)

Only two instances of locative 自 *zi* exist, both serving to introduce source:

Source

VPP

(102) 乃 至 **自** 我 座
*nai zhi **zi** wo zuo*
then arrive from 1SG seat
'Then arrived from my seat.'
(《道行般若经》Aṣṭasāhasrikā Prajñāpāramitā Sūtra; late 2nd c.)

PPVO

(103) 何得 **自** 外 诣 门 求 通 耶?
*hede **zi** wai yi men qiu tong ye*
how.can.one from outside reach gate request inform PTCL
'Why would he request the gatekeeper to inform the master of his name upon arrival from outside?'
(《中本起经》Madhyama - ityukta - Sūtra; late 2nd c.)

Tables 6.5 and 6.6 summarise the distribution of locative VPP/PPV and VOPP/PPVO in this compilation respectively:

Table 6.5: The distribution of locative VPP and PPV in *Compilation of Eastern Han Buddhist Scripture Translations*

Locative preposition	VPP	Ratio	PPV	Ratio	VPP + PPV
於/于 ***yu***	71	38.59%	113	61.41%	184
从 ***cong***	0	0%	79	100%	79
在 ***zai***	21	50%	21	50%	42
自 ***zi***	1	100%	0	0%	1
Total	93	30.39%	213	69.61%	306

Table 6.6: The distribution of locative VOPP and PPVO in *Compilation of Eastern Han Buddhist Scripture Translations*

Locative preposition	VOPP	Ratio	PPVO	Ratio	VOPP + PPVO
於/于 ***yu***	2	2.35%	83	97.65%	85
从 ***cong***	0	0%	32	100%	32
在 ***zai***	1	20%	4	80%	5
自 ***zi***	0	0%	1	100%	1
Total	3	2.44%	120	97.56%	123

As previously stated, this compilation of translated Buddhist scriptures highlights a reversal in the dominant word order of locative PPs, with preverbal PPs constituting the majority. Drawing from the two tables above, it is apparent that this emerging preverbal dominance becomes highly conspicuous when the verb is accompanied by an object. The proportion of preverbal PPs for VOPP/PPVO peaks at an astonishing 97.56%, surpassing both the overall preverbal proportion (77.62%) and the preverbal proportion for VPP/PPV (69.61%). Section 5.4 of Chapter 5 speculated whether VOPP constructions exhibit a greater susceptibility to word order shift and undergo a faster rate of change in word order compared to VPP constructions. Judging by the data collected from this compilation of some of the earliest Chinese translations of Buddhist scriptures, it appears that this might indeed be the case.

6.2 MC2

The investigation of locative PP usage during MC2 is based on four texts from the Six Dynasties period. The two non-Buddhist works are the 4th century *zhiguai* 志怪 (mysterious tales) novel *Sou Shen Ji* 搜神记 (Anecdotes about Spirits and Immortals), and the mid-5th

century *zhiren* 志人 (records of people) novel *Shi Shuo Xin Yu* 世说新语 (A New Account of Tales of the World). The two contemporaneous Buddhist works are *Miaofa Lianhua Jing* 妙法莲华经 (Lotus Sutra) and *Weimojie Suoshuo Jing* 维摩诘所说经 (Vimalakirti Nirdesa Sutra), both translated in early 5th century by Kumārajīva (鸠摩罗什), a native of Kucha.

6.2.1 SOU SHEN JI

Firstly, the locative prepositions in *Sou Shen Ji*, ranked in order of decreasing frequency, are as follows: 於/于 *yu* (71.18%), 从 *cong* (15.63%), 在 *zai* (8.68%), 自 *zi* (3.47%), and 乎 *hu* (1.04%). Table 6.7 presents an overview of the locative PP word order in *Sou Shen Ji*:

Table 6.7: An overview of locative PP word order in *Sou Shen Ji*

Locative preposition	VPP	VOPP	Post-V sub-total	Ratio	PPV	PPVO	Pre-V sub-total	Ratio	Post-V + Pre-V
於/于 *yu*	118	48	166	80.98%	11	28	39	19.02%	205
从 *cong*	0	0	0	0%	37	8	45	100%	45
在 *zai*	10	0	10	40%	10	5	15	60%	25
自 *zi*	0	0	0	0%	7	3	10	100%	10
乎 *hu*	3	0	3	100%	0	0	0	0%	3
Total	131	48	179	62.15%	65	44	109	37.85%	288

The locative PP distribution in *Sou Shen Ji* appears to lie between that of the two MC1 texts: the non-Buddhist work *Lun Heng* and the Buddhist work *Compilation of Eastern Han Buddhist Scripture Translations*. Although postverbal placement remains dominant as in *Lun Heng*, its proportion has decreased from 87.37% in *Lun Heng* to 62.15% in *Sou Shen Ji*. Below is an examination of the function and distribution of individual locative prepositions in *Sou Shen Ji*:

於/于 *yu* retains its status as the main locative preposition both in frequency and function. As with the two MC1 texts, *Sou Shen Ji* does not contain instances of 於/于 *yu* introducing path. Furthermore, the distribution of 於/于 *yu* before and after the verb has reverted to its previous pattern, with a predominant placement after the verb (80.98%):

Location

VPP

(104) 又 有 一 乌 一 鹊， 斗 **於** 燕 宫 中 池 上
*you you yi wu yi que dou **yu** Yan gong zhong chi shang*
also have one crow one magpie fight in Yan palace inside pool top
'In addition, a crow and a magpie were fighting on the pool in the palace of Yan.'
(《搜神记・卷六》Chapter 6; 4th c.)

VOPP

(105) 有 燕 生 巨 鷇 **于** 卫 国 李盖 家
you yan sheng ju kou ***yu*** *Wei guo Li Gai jia*
have swallow give.birth huge fledgling in Wei state Li Gai house
'A swallow gave birth to a huge fledgling in the house of Li Gai from the Wei state.'
(《搜神记・卷六》Chapter 6; 4th c.)

PPV

(106) 两 三 日，乃 **於** 圊 中 粪 下 啼
liang san ri nai ***yu*** *qing zhong fen xia ti*
two three day then in latrine inside dung under cry
'After two or three days, (the child) then cried under the dung pile in the latrine.'
(《搜神记・卷三》Chapter 3; 4th c.)

PPVO

(107) 狗 又 **於** 灶 前 畜 火
gou you ***yu*** *zao qian xu huo*
dog additionally in stove front cultivate fire
'In addition, the dog made a fire in front of the stove.'
(《搜神记・卷十八》Chapter 18; 4th c.)

Just like *Compilation of Eastern Han Buddhist Scripture Translations*, there are very few instances of source-encoding 於/于 *yu* PPs, and they are found only in VPP constructions:

Source

VPP

(108) 当 有 兵革 起 **於** 四方
dang you bingge qi ***yu*** *sifang*
ought have war break.out from four.directions
'There ought to be wars breaking out from all directions.'
(《搜神记・卷七》Chapter 7; 4th c.)

Lastly, its goal PPs remain confined to postverbal distribution:

Goal

VPP

(109) 亦 谓 人 死，精魂 归 **於** 蒿里
yi wei ren si jinghun gui ***yu*** *Haoli*
also say person die spirit return to Mt.Haoli
'It is also said that when a person dies, his spirit returns to Mount Haoli.'
(《搜神记・卷十六》Chapter 16; 4th c.)

VOPP

(110) 汉武 徙 南岳 之 祭 **於** 庐江
Hanwu *xi* *Nanyue* *zhi* *ji* ***yu*** *Lujiang*
Emperor.Wu.of.Han move Southern.Mountain GEN sacrifice to Lujiang
灊县 霍山 之 上
Qianxian *Huoshan* *zhi* *shang*
Qian.County Mt.Huo GEN above
'Emperor Wu of Han moved the sacrifices of Southern Mountain to Mount Huo in Qian County, Lujiang Commandery.'
(《搜神记・卷十三》Chapter 13; 4th c.)

Much like its usage in the MC1 Buddhist work, 从 *cong* is the next frequently used locative preposition and strictly precedes the verb:

Source

PPV

(111) 火 **从** 篾簏 中 起， 衣物 尽 烧
huo ***cong*** *qielu* *zhong* *qi* *yiwu* *jin* *shao*
fire from bamboo.box inside break.out clothes all burn
'Fire broke out from the bamboo box and burned all the clothes.'
(《搜神记・卷三》Chapter 3; 4th c.)

PPVO

(112) 梦见 青 蜥蜴 **从** 屋 落 其 腹 内
mengjian *qing* *xiyi* ***cong*** *wu* *luo* *qi* *fu* *nei*
dream.about green lizard from house fall 3.POSS belly inside
'Dreamed about a green lizard falling from the house into his belly.'
(《搜神记・卷十》Chapter 10; 4th c.)

在 *zai* can appear before or after the verb, albeit with a stronger inclination towards preverbal positions (60%). When introducing location, 在 *zai* may occur in both preverbal and postverbal positions, although its postverbal placement is absent in VOPP constructions:

Location

VPP

(113) 又 有 女子， 阴 在 首， 居 **在** 扬州
you *you* *nüzi* *yin* *zai* *shou* *ju* ***zai*** *Yangzhou*
also have woman vulva be.on head live in Yangzhou
'There is also a woman whose vulva is on the head; she lives in Yangzhou.'
(《搜神记・卷七》Chapter 7; 4th c.)

PPV

(114) 蛇　　**在**　皮　　中　　动摇　　良久
she　***zai***　*pi*　*zhong*　*dongyao*　*liangjiu*
snake　in　skin　inside　shake　for.a.long.time
'The snake shook in her skin for a long time.'
(《搜神记・卷三》Chapter 3; 4th c.)

PPVO

(115) 魏武　　**在**　洛阳　　起　　建始　殿
Weiwu　***zai***　*Luoyang*　*qi*　*Jianshi dian*
King.Wu.of.Wei　in　Luoyang　build　Jianshi　hall
'King Wu of Wei built the Jianshi Hall in Luoyang.'
(《搜神记・卷六》Chapter 6; 4th c.)

Example (113) illustrates how 在 *zai* assumes different roles. It is still a verb in 阴在首, with the meaning of "be on/in/at"; while in the VPP 居在扬州，it is a preposition indicating location. This exemplifies Hopper's (1991) notion of 'layering', as the retained lexical use overlaps with the grammaticalized use.

When introducing goal, 在 *zai* PPs are only observed in VPP constructions:

Goal

VPP

(116) 随　　母　　归　　**在**　舅姑　　之　　家
sui　*mu*　*gui*　***zai***　*jiugu*　*zhi*　*jia*
follow　mother　return　to　maternal.uncle　GEN　house
'He followed his mother and returned to his maternal uncle's house.'
(《搜神记・卷十四》Chapter 14; 4th c.)

The remaining locative prepositions 自 *zi* and 乎 *hu* collectively make up less than 5% of total usage in *Sou Shen Ji*. 自 *zi* introduces source and path and it occurs solely before the verb:

Source

PPV

(117) 逡巡，　　其　女　　魂　**自**　墓　出
qunxun　*qi*　*nü*　*hun*　***zi***　*mu*　*chu*
instantly　that　woman　spirit　from　tomb　emerge
'In an instant, that woman's spirit emerged from the tomb.'
(《搜神记・卷十五》Chapter 15; 4th c.)

PPVO

(118) 有 人 **自** 云龙 门 入 殿 前
you ren ***zi*** *Yunlong men ru dian qian*
have person from Yunlong gate enter palace front
'Someone entered the front of the palace from Yunlong Gate.'
(《搜神记・卷七》Chapter 7; 4th c.)

Path

PPV

(119) 有 一 妇人 过 其 田， **自** 塍 上 度
you yi furen guo qi tian ***zi*** *cheng shang du*
have one woman pass 3.POSS field through ridge top pass
'There was a woman passing by his field; she then proceeded through the field ridge.'
(《搜神记・卷十八》Chapter 18; 4th c.)

Example (119) depicts two passing events. The first is conveyed through 过其田, employing the conventional form of directly combining a path verb with a locative object. The second is expressed by the PPV 自塍上度, utilising the preposition 自 *zi* to introduce path.

Lastly, 乎 *hu* introduces location and it is restricted to VPP constructions:

Location

VPP

(120) 虎 者， 阴 精 而 居 **乎** 阳
hu zhe Yin jing er ju ***hu*** *Yang*
tiger PTCL Yin.world spirit CONJ live in Yang.world
'Tigers are spirits of the Yin world (underworld), but they live in the Yang world (the living world).'
(《搜神记・卷七》Chapter 7; 4th c.)

Tables 6.8 and 6.9 summarise the distribution of locative VPP/PPV and VOPP/PPVO in *Sou Shen Ji* respectively:

Table 6.8: The distribution of locative VPP and PPV in *Sou Shen Ji*

Locative preposition	VPP	Ratio	PPV	Ratio	VPP + PPV
於/于 ***yu***	118	91.47%	11	8.53%	129
从 ***cong***	0	0%	37	100%	37
在 ***zai***	10	50%	10	50%	20
自 ***zi***	0	0%	7	100%	7
乎 ***hu***	3	100%	0	0%	3
Total	131	66.84%	65	33.16%	196

Table 6.9: The distribution of locative VOPP and PPVO in *Sou Shen Ji*

Locative preposition	VOPP	Ratio	PPVO	Ratio	VOPP + PPVO
於/于 ***yu***	48	63.16%	28	36.84%	76
从 ***cong***	0	0%	8	100%	8
在 ***zai***	0	0%	5	100%	5
自 ***zi***	0	0%	3	100%	3
Total	48	52.17%	44	47.83%	92

Again, the proportion of postverbal PPs for VOPP/PPVO (52.17%) falls below both the overall postverbal proportion (62.15%) and the postverbal proportion for VPP/PPV (66.84%). Although the lead of VOPP over PPVO persists, the gap is narrow, suggesting that PPVO has the potential to surpass VOPP as the new dominant word order. In contrast, the proportion of PPV still lags far behind VPP. Therefore, this supports the earlier conjecture that VOPP constructions might be more susceptible to word order shift and undergo a more rapid word order transition compared to VPP constructions.

6.2.2 SHI SHUO XIN YU

This section examines the second non-Buddhist text from MC2. Firstly, the locative prepositions in *Shi Shuo Xin Yu*, ranked in decreasing order of frequency, are as follows: 於/于 *yu* (48.91%), 在 *zai* (31.52%), 从 *cong* (16.31%), 自 *zi* (2.72%), and 诸 *zhu* (0.54%). Table 6.10 presents an overview of the locative PP word order in *Shi Shuo Xin Yu*:

Table 6.10: An overview of locative PP word order in *Shi Shuo Xin Yu*

Locative preposition	VPP	VOPP	Post-V sub-total	Ratio	PPV	PPVO	Pre-V sub-total	Ratio	Post-V + Pre-V
於/于 ***yu***	34	18	52	57.78%	13	25	38	42.22%	90
在 ***zai***	4	2	6	10.34%	34	18	52	89.66%	58
从 ***cong***	0	0	0	0%	24	6	30	100%	30
自 ***zi***	0	0	0	0%	2	3	5	100%	5
诸 ***zhu***	1	0	1	100%	0	0	0	0%	1
Total	39	20	59	32.07%	73	52	125	67.93%	184

The locative PP distribution in *Shi Shuo Xin Yu* differs from that of *Sou Shen Ji*, despite both being non-Buddhist works of MC2. Instead, it aligns more closely with the locative PP placement in Buddhist scripture translations from the preceding MC1 period. Specifically, preverbal locative PPs dominate (67.93%), while postverbal locative PPs comprise only 32.07%, significantly lower than the 87.37% in *Lun Heng* from MC1 and the 62.15% in *Sou*

Shen Ji from the concurrent MC2 period. The function and distribution of individual locative prepositions in *Shi Shuo Xin Yu* are presented below:

Firstly, though 於/于 *yu* is still the most frequently used and versatile locative preposition, its share has markedly decreased to 48.91%. Additionally, while locative PPs tend to precede the verb in general in *Shi Shuo Xin Yu*, the postverbal placement of 於/于 *yu* remains slightly more dominant (57.78%). It is observed to introduce all four locative subclasses again:

Location

VPP

(121) 酣宴 **於** 桓子野 家
hanyan ***yu*** *Huan Ziye* *jia*
feast in Huan Ziye house
'Feasted in Huan Ziye's house.'
(《世说新语・任诞》The Free and Unrestrained; mid-5th c.)[94]

VOPP

(122) 太守 王胡之 避 司马无忌 之 难, 置 郡
taishou *Wang Huzhi* *bi* *Sima Wuji* *zhi* *nan* *zhi* *jun*
governor Wang Huzhi evade Sima Wuji GEN grudge set.up commandery
于 酆阴
yu *Fengyin*
in Fengyin
'Governor Wang Huzhi established the commandery office in Fengyin to evade Sima Wuji's grudge.'
(《世说新语・识鉴》Insight and Judgment; mid-5th c.)

PPV

(123) 周 侯 **於** 荆州 败绩
Zhou *hou* ***yu*** *Jingzhou* *baiji*
Zhou marquis in Jingzhou be.utterly.defeated
'Marquis Zhou was utterly defeated in Jingzhou.'
(《世说新语・赏誉》Appreciation and Praise; mid-5th c.)

PPVO

(124) 魏 明 帝 **於** 宣武 场 上 断 虎 爪 牙
Wei *Ming* *di* ***yu*** *Xuanwu* *chang* *shang* *duan* *hu* *zhao* *ya*
Wei Ming emperor on Xuanwu field top cut.off tiger claw tooth
'Emperor Ming of Wei cut off the claws and teeth of the tiger on the Xuanwu Field.'
(《世说新语・雅量》Cultivated Tolerance; mid-5th c.)

[94] The English translations of the chapter titles are based on Mather (1976).

As with *Sou Shen Ji*, there is a scarcity of source-encoding 於/于 *yu* PPs, likely still due to competition from 从 *cong*. However, unlike *Sou Shen Ji*, where such PPs solely exist in VPP constructions, they only precede the verb in *Shi Shuo Xin Yu*:

Source

PPV

(125) **於** 户 外 遥 掷， 便 回 急 走
yu *hu* *wai* *yao* *zhi* *bian* *hui* *ji* *zou*
from door outside far throw then turn.around quickly run
'From outside the door, he threw (the manuscript) in from far away, then turned around and quickly ran away.'
(《世说新语・文学》Letters and Scholarship; mid-5th c.)

PPVO

(126) 便 **於** 手巾 函 中 出 之
bian ***yu*** *shoujin* *han* *zhong* *chu* *zhi*
thereupon from handkerchief wrapping inside take.out 3SG
'Following that, he took it out from inside the handkerchief wrapping.'
(《世说新语・雅量》Cultivated Tolerance; mid-5th c.)

Goal-encoding 於/于 *yu* PPs, conversely, still consistently occur after the verb. However, likely caused by the omission of 於/于 *yu*, the common VPP construction employed to indicate a goal event is absent in *Shi Shuo Xin Yu*. Instead, the meaning of arriving at a place is directly conveyed through a verb denoting arrival alongside a destination noun, such as 入蜀 (enter Shu). Consequently, goal-encoding 於/于 *yu* PPs are only present in VOPP constructions:[95]

Goal

VOPP

(127) 昔 武 王 伐 纣， 迁 顽 民 **於** 洛邑
xi *Wu* *wang* *fa* *Zhou* *qian* *wan* *min* ***yu*** *Luoyi*
former.times Wu king attack Zhou move stubborn people to Luoyi
'In the past, King Wu attacked Zhou and moved the disobedient people to Luoyi.'
(《世说新语・言语》Speech and Conversation; mid-5th c.)

[95] One locative VPP instance appears in 薄伐猃狁，**至于太原** (To undertake a punitive expedition against the Xianyun tribe, we have arrived at Taiyuan), but it is directly cited from《诗・小雅・六月》. Another instance 时贤并送於征虏亭 features the PP 於征虏亭 that resembles a goal PP, as the verb *song* 送 (to send) is commonly associated with goal PPs. However, the VPP 送於征虏亭 does not denote sending (Zhi Daolin) to Zhenglu Pavilion in this context; rather, it describes virtuous and talented individuals of that era all seeing Zhi Daolin off at Zhenglu Pavilion. Thus, it serves as a location PP rather than a goal PP.

Additionally, there are sporadic occurrences of 於/于 *yu* introducing path, with a strict preverbal placement:

Path

PPV

(128) 遇 桓 **於** 岸 上 过
yu *Huan* ***yu*** *an* *shang* *guo*
chance.upon Huan along bank top pass
'It so occurred that Huan was passing by along the riverbank.'
(《世说新语・任诞》The Free and Unrestrained; mid-5th c.)

在 *zai* overtakes 从 *cong* to become the second most frequently utilised locative preposition in *Shi Shuo Xin Yu*. It only introduces location in this text and is distributed both before and after the verb, although the majority of 在 *zai* PPs are preverbal (89.66%):

Location

VPP

(129) 许玄度 隐 **在** 永兴 南 幽 穴 中
Xu Xuandu *yin* ***zai*** *Yongxing* *nan* *you* *xue* *zhong*
Xu Xuandu live.in.seclusion in Yongxing south hidden cave inside
'Xu Xuandu lived in seclusion in a hidden cave in the south of Yongxing.'
(《世说新语・栖逸》Reclusion and Disengagement; mid-5th c.)

VOPP

(130) 法师 今日 如 著 弊 絮 **在** 荆棘 中, 触地 挂阂
fashi *jinri* *ru* *zhuo* *bi* *xu* ***zai*** *jingji* *zhong* *chudi* *guahe*
master today be.like put.on torn cotton in thorn inside everywhere hinder
'Today the master is akin to someone who puts on torn cotton in the thorns, encountering obstruction everywhere.'
(《世说新语・排调》Taunting and Teasing; mid-5th c.)

PPV

(131) 顾 先 **在** 帐 中 眠
Gu *xian* ***zai*** *zhang* *zhong* *mian*
Gu previously in bed.curtain inside sleep
'Gu was sleeping inside the bed curtains previously.'
(《世说新语・排调》Taunting and Teasing; mid-5th c.)

PPVO

(132) 母 王 夫人 **在** 壁 后 听 之
*mu Wang furen **zai** bi hou ting zhi*
mother Wang lady at wall behind listen 3PL
'His mother, Lady Wang, had been listening to them behind the wall.'
(《世说新语・文学》Letters and Scholarship; mid-5th c.)

从 *cong* follows a strict preverbal placement and introduces source and path:

Source

PPV

(133) 顾长康 **从** 会稽 还
*Gu Changkang **cong** Kuaiji huan*
Gu Changkang from Kuaiji return
'Gu Changkang returned from Kuaiji.'
(《世说新语・言语》Speech and Conversation; mid-5th c.)

PPVO

(134) 卫玠 避 乱， **从** 洛 投 敦
*Wei Jie bi luan **cong** Luo tou Dun*
Wei Jie escape chaos from Luoyang go.to.for.shelter Dun
'To escape the chaos, Wei Jie went from Luoyang to seek shelter with Dun.'
(《世说新语・赏誉》Appreciation and Praise; mid-5th c.)

Path

PPV

(135) 见 武子 **从** 庭 过
*jian Wuzi **cong** ting guo*
see Wuzi through yard pass
'Saw Wuzi passing through the yard.'
(《世说新语・排调》Taunting and Teasing; mid-5th c.)

The remaining locative prepositions 自 *zi* and 诸 *zhu* make up less than 4% in *Shi Shuo Xin Yu*. Like 从 *cong*, 自 *zi* introduces source and it is strictly preverbal:

Source

PPV

(136) 陶 公 **自** 上流 来
*Tao gong **zi** shangliu lai*
Tao honourable.Mr. from upstream come
'Honourable Mr. Tao came from the upstream (of Yangtze River).'
(《世说新语・假谲》Guile and Chicanery; mid-5th c.)

PPVO

(137) 王子敬　　**自**　会稽　经　吴

Wang Zijing ***zi*** *Kuaiji jing Wu*

Wang Zijing from Kuaiji pass Wu

'Wang Zijing came out of Kuaiji and passed through Wu County.'

(《世说新语・简傲》Rudeness and Arrogance; mid-5th c.)

Lastly, only one occurrence of locative 诸 *zhu* exists in this text.[96] It occurs in its typical VPP construction, featuring the placement verb 置 *zhi*, followed by the goal PP:

Goal

VPP

(138) 文　帝　以　毒　置　**诸**　枣　蒂　中

Wen di yi du zhi ***zhu*** *zao di zhong*

Wen emperor with poison put into jujube stem inside

'Emperor Wen put poison into stems of the jujubes.'

(《世说新语・尤悔》Blameworthiness and Remorse; mid-5th c.)

Tables 6.11 and 6.12 summarise the distribution of locative VPP/PPV and VOPP/PPVO in *Shi Shuo Xin Yu* respectively:

Table 6.11: The distribution of locative VPP and PPV in *Shi Shuo Xin Yu*

Locative preposition	VPP	Ratio	PPV	Ratio	VPP + PPV
於/于 ***yu***	34	72.34%	13	27.66%	47
在 ***zai***	4	10.53%	34	89.47%	38
从 ***cong***	0	0%	24	100%	24
自 ***zi***	0	0%	2	100%	2
诸 ***zhu***	1	100%	0	0%	1
Total	39	34.82%	73	65.18%	112

Table 6.12: The distribution of locative VOPP and PPVO in *Shi Shuo Xin Yu*

Locative preposition	VOPP	Ratio	PPVO	Ratio	VOPP + PPVO
於/于 ***yu***	18	41.86%	25	58.14%	43
在 ***zai***	2	10%	18	90%	20
从 ***cong***	0	0%	6	100%	6
自 ***zi***	0	0%	3	100%	3
Total	20	27.78%	52	72.22%	72

[96] Two more VPP instances are observed in "进人若将**加诸膝**，退人若将**坠诸渊**" (When a gentleman recommends someone, it is as if he is holding him in his lap; and when he demotes someone, he is as ruthless as if he is pushing someone into the abyss). However, these are quoted from the earlier work《礼记・檀弓下》and are thus excluded from the count.

Earlier, it was observed that the locative PP distribution in *Shi Shuo Xin Yu* resembles that of the Buddhist scripture translations during the preceding MC1 period, with preverbal PPs as the dominant word order. The tables above indicate that this preference for preverbal PPs becomes slightly more apparent when the verb takes an object, as the proportion of preverbal PPs for VOPP/PPVO (72.22%) surpasses both the overall preverbal proportion (67.93%) and the preverbal proportion for VPP/PPV (65.18%). Following the analysis of the two non-Buddhist texts from the MC2 period, the next two sections will examine two translated Buddhist scriptures from the same period.

6.2.3 MIAOFA LIANHUA JING

Firstly, the locative prepositions in *Miaofa Lianhua Jing*, listed in decreasing frequency of usage, are as follows: 於/于 *yu* (79.08%), 从 *cong* (15.69%), and 在 *zai* (5.23%). Table 6.13 presents an overview of the locative PP word order in *Miaofa Lianhua Jing*:

Table 6.13: An overview of locative PP word order in *Miaofa Lianhua Jing*

Locative preposition	VPP	VOPP	Post-V sub-total	Ratio	PPV	PPVO	Pre-V sub-total	Ratio	Post-V + Pre-V
於/于 ***yu***	101	0	101	41.74%	38	103	141	58.26%	242
从 ***cong***	0	0	0	0%	43	5	48	100%	48
在 ***zai***	9	1	10	62.50%	3	3	6	37.50%	16
Total	110	1	111	36.27%	84	111	195	63.73%	306

Some observations can be made here. *Miaofa Lianhua Jing* maintains a similar pattern of locative PP distribution as seen in the *Compilation of Eastern Han Buddhist Scripture Translations*, its predecessor from the previous MC1 period, with preverbal PPs accounting for the majority. However, the percentage of preverbal locative PPs in *Miaofa Lianhua Jing* (63.73%) is lower than that of its predecessor (77.62%). Furthermore, this preverbal proportion is even lower than that of *Shi Shuo Xin Yu* (67.93%), a non-Buddhist work from roughly the same period. This comparison suggests that the change in the dominant locative PP word order in Buddhist works may not necessarily occur at a faster rate than in non-Buddhist works. Still, it is worth noting that *Miaofa Lianhua Jing* was translated in the early 5th century, while the non-Buddhist work *Shi Shuo Xin Yu* was composed in the mid-5th century. This minor discrepancy in timeline between these two roughly contemporaneous works suggests that the discussion here involves not only genre but also the chronological context, and it could imply that the evolution of locative PP word order may not adhere to a linear, straightforward

trajectory. Naturally, an examination of the remaining materials from the MC period is essential to reach a more conclusive answer.

Among the texts studied thus far, *Miaofa Lianhua Jing* features the least variety of locative prepositions. The function and distribution of individual locative prepositions are outlined below:

於/于 *yu* leads in usage frequency and functional scope. Its share rebounds to 79.08%, potentially owing to the reduced variety of locative prepositions in this text. 於/于 *yu* introduces all four locative subclasses. It is distributed before and after the verb, with preverbal placement being slightly more prevalent (58.26%). Notably, when the verb takes an object, locative 於/于 *yu* PPs invariably precede the verb, leading to the absence of VOPP constructions:

Location

VPP

(139) 药 发 闷乱， 宛转 **于** 地
yao *fa* *menluan* *wanzhuan* ***yu*** *di*
drug take.effect deranged roll on ground
'After the drug took effect, they became deranged and rolled around on the ground.'
(《卷第五・如来寿量品第十六》Volume 5, Chapter 16: The Lifespan of the Tathāgata; early 5th c.)[97]

PPV

(140) 于时 妙音 菩萨 **於** 彼 国 没
yushi *miaoyin* *pusa* ***yu*** *bi* *guo* *mo*
at.that.time wonderful.sound Bodhisattva in that land disappear
'At that time, Bodhisattva Wonderful Sound (Bodhisattva Gadgadasvara) disappeared in that land.'
(《卷第七・妙音菩萨品第廿四》Volume 7, Chapter 24: Bodhisattva Gadgadasvara; early 5th c.)

PPVO

(141) a.千 劫 **於** 阿鼻 地狱 受 大 苦恼
qian *jie* ***yu*** *Abi* *diyu* *shou* *da* *kunao*
thousand kalpa in Avīci hell suffer great trouble
'For one thousand kalpas, they suffered great troubles in the Avīci Hell.'
(《卷第六・常不轻菩萨品第二十》Volume 6, Chapter 20: Sadāparibhūta Bodhisattva; early 5th c.)

[97] The English translations of the chapter titles are based on Kubo and Yuyama (2007).

b.谁　能　**於**此　娑婆　国土　广　　说　　妙法华经？
*shei neng **yu** ci suopo guotu guang shuo Miaofahuajing*
who can in this sahā land extensively expound Lotus.Sutra
'Who can extensively expound the Lotus Sutra in this sahā land?'
(《卷第四・见宝塔品第十一》Volume 4, Chapter 11: The Appearance of a Jeweled Stupa; early 5th c.)

(141b) presents the PPVO within an interrogative sentence. Correspondingly, this text also has its counterpart in declarative form as 我等亦当於他国土广说此经 (We should also extensively expound this sutra in other lands).[98]

Source-encoding 於/于 *yu* can occur in both preverbal and postverbal positions:

Source

VPP

(142) a.世尊　令　我等　出　**於**　三界
*shizun ling wodeng chu **yu** sanjie*
Bhagavat make 1PL escape from Three.Realms
'The Bhagavat made us escape from the Three Realms.'
(《卷第二・信解品第四》Volume 2, Chapter 4: Willing Acceptance; early 5th c.)

b.满　六十　小　劫，　不　起　**於**　此　座
*man liushi xiao jie bu qi **yu** ci zuo*
full sixty minor kalpa NEG rise from this seat
'Throughout sixty minor kalpas, he did not rise from this seat.'
(《卷第一・序品第一》Volume 1, Chapter 1: Introduction; early 5th c.)

PPVO

(143) **於**　三界　　火宅　　拔济　众生
***yu** sanjie huozhai baji zhongsheng*
from Three.Realms burning.house rescue sentient.beings
'He rescues sentient beings from the burning house of the Three Realms.'
(《卷第二・譬喻品第三》Volume 2, Chapter 3: A Parable; early 5th c.)

The VPP in (142b) deserves more attention, as it not only appears in negation form but also originates from the verse portion of *Miaofa Lianhua Jing*, which comprises verses ranging from four to five characters. It is crucial to highlight that when compared to examples from prose texts, instances extracted from verses are not as indicative of actual language usage. This

[98] To achieve a more robust comparison and determine whether locative PP word order varies across different sentence types, it is beneficial to have an interrogative sentence pertaining to location. Nevertheless, within *Miaofa Lianhua Jing*, locative interrogative words are only employed for preposition 从 *cong*, with none for the rest.

distinction arises as there are times when the word order has to be adjusted to meet the rhetorical requirements of verses.

When introducing goal and path, 於/于 *yu* only occurs in VPP constructions:

Goal

VPP

(144) 为 求 金、 银、 琉璃、 砗磲、 玛瑙、 珊瑚、 琥珀、真珠
wei qiu jin yin liuli chequ manao shanhu hupo zhenzhu
for seek gold silver lapis.lazuli tridacna agate coral amber pearl
等 宝， 入 **於** 大海
*deng bao ru **yu** dahai*
etc. treasure enter into sea
'To seek gold, silver, lapis lazuli, tridacna, agate, coral, amber, pearl and other treasures, they entered into the sea.'
(《卷第七・观世音菩萨普门品第廿五》Volume 7, Chapter 25: The Gateway to Every Direction; early 5th c.)

Path

VPP

(145) 过 **於** 东方 五 百 千万亿 那由他 阿僧祇 国
*guo **yu** dongfang wu bai qianwanyi nayouta asengqi guo*
pass through east five hundred quadrillion nayuta infinite land
'He passed through five hundred quadrillion nayutas of infinite lands in the east.'
(《卷第五・如来寿量品第十六》Volume 5, Chapter 16: The Lifespan of the Tathāgata; early 5th c.)

The VPP in (145) contains a lengthy prepositional object. Comparable instances have already been found in OC texts. Based on the MC texts examined thus far, regardless of whether they are Buddhist or non-Buddhist works, such cases have not markedly increased.

从 *cong* introduces source and maintains a strict preverbal distribution:

Source

PPV

(146) a.於是 二 子 **从** 空中 下， 到 其 母 所
*yushi er zi **cong** kongzhong xia dao qi mu suo*
then two son from sky descend reach 3.POSS mother place
'Then the two sons descended from the sky and reached their mother's place.'
(《卷第七・妙庄严王本事品第廿七》Volume 7, Chapter 27: Ancient Accounts of King Śubhavyūha; early 5th c.)

b.是 无智 比丘 **从** 何 所 来?
*shi wuzhi biqiu **cong** he suo lai*
this ignorant monk from what place come
'From what place did this ignorant monk come?'
(《卷第六・常不轻菩萨品第二十》Volume 6, Chapter 20: Sadāparibhūta Bodhisattva; early 5th c.)

PPVO

(147) 当 以 衣裓，若 以 几案， **从** 舍 出 之
*dang yi yige ruo yi ji'an **cong** she chu zhi*
ought with cloth CONJ with table from house take.out 3PL
'I ought to take them out of the house under the cover of cloth or tables.'
(《卷第二・譬喻品第三》Volume 2, Chapter 3: A Parable; early 5th c.)

The PPV in (146b) is composed of the source-encoding preposition 从 *cong* and the interrogative term *hesuo* 何所 (where, literally 'what place'). This suggests that even when forming interrogative sentences about locatives, the locative PP word order here remains consistent with that of declarative sentences.

Lastly, 在 *zai* introduces location and goal. It can be found in both preverbal and postverbal positions, with a preference for postverbal PPs (62.50%):

Location

VPP

(148) 见 大 宝塔 住 **在** 空中
*jian da baota zhu **zai** kongzhong*
see big stupa hover in sky
'Saw the big stupa hovering in the sky.'
(《卷第四・见宝塔品第十一》Volume 4, Chapter 11: The Appearance of a Jeweled Stupa; early 5th c.)

VOPP

(149) 合 掌 **在** 我 前， 以 无数 偈 赞
*he zhang **zai** wo qian yi wushu ji zan*
press palm in 1SG front with countless verse praise
'(There are people who) press palms together in front of me and praise with countless verses.'
(《卷第四・法师品第十》Volume 4, Chapter 10: The Expounder of the Dharma; early 5th c.)

PPV

(150) 今 **在** 七宝 菩提树 下 法座 上 坐
jin ***zai*** *qibao* *putishu* *xia* *fazuo* *shang* *zuo*
now in seven.treasures bodhi.tree under Dharma.seat top sit
'Now sitting on the Dharma seat under the seven-treasure bodhi tree.'
(《卷第七・妙庄严王本事品第廿七》Volume 7, Chapter 27: Ancient Accounts of King Śubhavyūha; early 5th c.)

PPVO

(151) 本 声闻 人， **在** 虚空 中 说 声闻 行
ben *shengwen* *ren* ***zai*** *xukong* *zhong* *shuo* *shengwen* *xing*
originally śrāvaka people in air inside expound śrāvaka practice
'People who were originally śrāvakas expounded the practices of śrāvaka in the air.'
(《卷第四・提婆达多品第十二》Volume 4, Chapter 12: Devadatta; early 5th c.)

The VOPP 合掌在我前, as observed in (149) , is the singular occurrence of VOPP, not only for 在 *zai* but for all locative PP usage in *Miaofa Lianhua Jing*. Nonetheless, it is taken from the verse segment and may not be faithfully representative.

When introducing goal, 在 *zai* only occurs in VPP constructions:

Goal

VPP

(152) 涌 **在** 虚空， 高 七 多罗树
yong ***zai*** *xukong* *gao* *qi* *duoluoshu*
leap.up into air height seven tāla.tree
'Leapt up into the air, reaching a height comparable to seven tāla trees.'
(《卷第七・妙庄严王本事品第廿七》Volume 7, Chapter 27: Ancient Accounts of King Śubhavyūha; early 5th c.)

Tables 6.14 and 6.15 summarise the distribution of locative VPP/PPV and VOPP/PPVO in *Miaofa Lianhua Jing* respectively:

Table 6.14: The distribution of locative VPP and PPV in *Miaofa Lianhua Jing*

Locative preposition	**VPP**	**Ratio**	**PPV**	**Ratio**	**VPP + PPV**
於/于 *yu*	101	72.66%	38	27.34%	139
从 *cong*	0	0%	43	100%	43
在 *zai*	9	75%	3	25%	12
Total	110	56.70%	84	43.30%	194

Table 6.15: The distribution of locative VOPP and PPVO in *Miaofa Lianhua Jing*

Locative preposition	VOPP	Ratio	PPVO	Ratio	VOPP + PPVO
於/于 ***yu***	0	0%	103	100%	103
从 ***cong***	0	0%	5	100%	5
在 ***zai***	1	25%	3	75%	4
Total	1	0.89%	111	99.11%	112

Previously, Table 6.13 indicated that in terms of the overall usage, the majority of locative PPs precede the verb in *Miaofa Lianhua Jing* (63.73%). However, a comparison between the two tables above reveals starkly different distributions of locative PPs depending on whether the verb is accompanied by an object or not. When the verb lacks an object, locative PPs tend to occur slightly more frequently after the verb, with the preverbal proportion for VPP/PPV only accounting for 43.30%. In contrast, when the verb is followed by an object, the proportion of preverbal PPs for VOPP/PPVO demonstrates an astonishing peak of 99.11%, surpassing all previously examined texts in this parameter. Thus, although the prevalence of preverbal PPs may not be that prominent regarding the total occurrences of locative PPs in the text, this preverbal predominance becomes highly remarkable when focusing solely on instances where the verb takes an object. The comparison between locative PPs with verbs featuring objects versus those lacking them further strengthens the earlier conjecture that VOPP constructions are more prone to word order changes compared to VPP constructions, and the developmental paths of these two constructions regarding locative PP placement vary in pace.

6.2.4 WEIMOJIE SUOSHUO JING

This section will discuss another translated Buddhist scripture from MC2, *Weimojie Suoshuo Jing*, which is the final text under scrutiny from this period. Firstly, the locative prepositions in this text, ranked in order of decreasing frequency, are as follows: 於/于 *yu* (80.77%), 从 *cong* (9.61%), 在 *zai* (5.77%), and 诸 *zhu* (3.85%). Table 6.16 presents an overview of the locative PP word order in *Weimojie Suoshuo Jing*:

Table 6.16: An overview of locative PP word order in *Weimojie Suoshuo Jing*

Locative preposition	VPP	VOPP	Post-V sub-total	Ratio	PPV	PPVO	Pre-V sub-total	Ratio	Post-V + Pre-V
於/于 ***yu***	30	4	34	40.48%	25	25	50	59.52%	84
从 ***cong***	0	0	0	0%	7	3	10	100%	10
在 ***zai***	1	0	1	16.67%	3	2	5	83.33%	6
诸 ***zhu***	4	0	4	100%	0	0	0	0%	4
Total	35	4	39	37.50%	35	30	65	62.50%	104

The overall distribution of locative PPs in *Weimojie Suoshuo Jing* closes matches that in *Miaofa Lianhua Jing*, both favouring preverbal placement. The preverbal proportions in these texts are 62.50% and 63.73% respectively.

於/于 *yu* holds a significant share at 80.77% out of the four locative prepositions in *Weimojie Suoshuo Jing.* It introduces location, source, and goal, and leans slightly towards preverbal distribution (59.52%):

Location

VPP

(153) 悉 现 **於** 宝盖 中
xi *xian* ***yu*** *baogai* *zhong*
all appear in ceremonial.canopy inside
'All appeared within the ceremonial canopy.'
(《卷上・佛国品第一》Volume 1, Chapter 1: Buddha Lands; early 5th c.)[99]

VOPP

(154) 是时 佛 说 法 **於** 庵罗树 园
shishi *fo* *shuo* *fa* ***yu*** *anluoshu* *yuan*
at.that.time Buddha expound Dharma in āmra.trees garden
'At that time, the Buddha expounded the Dharma in the garden of āmra trees.'
(《卷下・菩萨行品第十一》Volume 3, Chapter 11: Actions of the Bodhisattvas; early 5th c.)

PPV

(155) 忆念 我 昔 **於** 一 处 经行
yinian *wo* *xi* ***yu*** *yi* *chu* *jingxing*
recall 1SG former.times in one place walk.around
'I recall once I was walking around in one place.'
(《卷上・弟子品第三》Volume 1, Chapter 3: The Disciples; early 5th c.)

PPVO

(156) 忆念 我 昔 自 **於** 父 舍 设 大
yinian *wo* *xi* *zi* ***yu*** *fu* *she* *she* *da*
recall 1SG former.times personally at father house set.up great
施会
shihui
gathering.for.almsgiving
'I recall that I personally organised a great gathering for almsgiving at my father's house in the past.'
(《卷上・菩萨品第四》Volume 1, Chapter 4: The Bodhisattvas; early 5th c.)

[99] The English translations of the chapter titles are based on Watson (1997).

While location-encoding 於 / 于 *yu* can be both preverbal and postverbal, when introducing source and goal, it is restricted to VPP constructions:

Source

VPP

(157) 於是 维摩诘 不 起 **于** 座
*yushi Weimojie bu qi **yu** zuo*
then Vimalakirti NEG rise from seat
'Then Vimalakirti did not get up from his seat.'
(《卷下・香积佛品第十》Volume 3, Chapter 10: Fragrance Accumulated; early 5th c.)

Goal

VPP

(158) 以 其 右 手 断取 妙喜 世界，置 **於** 此 土
*yi qi you shou duanqu miaoxi shijie zhi **yu** ci tu*
with 3.POSS right hand intercept Abhirati world put onto this ground
'With his right hand, he intercepted the world of the Abhirati and put it onto this ground.'
(《卷下・见阿閦佛品第十二》Volume 3, Chapter 12: Seeing Akshobhya Buddha; early 5th c.)

从 *cong* introduces source and adheres strictly to a preverbal placement:

Source

PPV

(159) 吾 **从** 道场 来
*wu **cong** daochang lai*
1SG from place.of.practice come
'I came from the place of practice.'
(《卷上・菩萨品第四》Volume 1, Chapter 4: The Bodhisattvas; early 5th c.)

PPVO

(160) 三 道 宝阶 **从** 阎浮提 至 忉利天
*san dao baojie **cong** Yanfuti zhi Daolitian*
three flight jewelled.stair from Jambudvīpa reach Trāyastriṃśa.heaven
'I will reach the Trāyastriṃśa heaven from Jambudvīpa using three flights of jewelled stairs.'
(《卷下・见阿閦佛品第十二》Volume 3, Chapter 12: Seeing Akshobhya Buddha; early 5th c.)

在 *zai* introduces location and occurs predominantly before the verb:

Location

VPP

(161) 以 一切 佛土 严饰 之 事， 集 **在** 一 国
yi *yiqie* *fotu* *yanshi* *zhi* *shi* *ji* ***zai*** *yi* *guo*
with all Buddha.land grandly.adorned GEN thing gather in one land
'Gather the grandly adorned ornaments of all the Buddha lands in one land.'
(《卷中・不思议品第六》Volume 2, Chapter 6: Beyond Comprehension; early 5th c.)

PPV

(162) 一心 合 掌， **在** 一面 立
yixin *he* *zhang* ***zai*** *yimian* *li*
wholeheartedly press palm on one.side stand
'Pressing palms wholeheartedly, he stood on one side.'
(《卷下・菩萨行品第十一》Volume 3, Chapter 11: Actions of the Bodhisattvas; early 5th c.)

PPVO

(163) 又 见 珠璎 **在** 彼 佛 上 变成 四柱 宝台
you *jian* *zhuying* ***zai*** *bi* *fo* *shang* *biancheng* *sizhu* *baotai*
also see necklace on that Buddha above turn.into four-pillar jewelled.platform
'Also saw the necklace turned into a four-pillar jewelled platform on the Buddha.'
(《卷上・菩萨品第四》Volume 1, Chapter 4: The Bodhisattvas; early 5th c.)

Lastly, 诸 *zhu* introduces location and goal, and appears solely in VPP constructions:

Location

VPP

(164) 游 **诸** 四衢， 饶益 众生
you ***zhu*** *siqu* *raoyi* *zhongsheng*
wander in thoroughfare benefit sentient.beings
'He wandered in thoroughfares to benefit sentient beings.'
(《卷上・方便品第二》Volume 1, Chapter 2: Expedient Means; early 5th c.)

Goal

VPP

(165) 入 **诸** 酒肆， 能 立 其 志
ru ***zhu*** *jiusi* *neng* *li* *qi* *zhi*
enter into wine.shop can establish 3.POSS ambition
'He entered into wine shops to foster the ambition of the inebriated.'
(《卷上・方便品第二》Volume 1, Chapter 2: Expedient Means; early 5th c.)

Tables 6.17 and 6.18 summarise the distribution of locative VPP/PPV and VOPP/PPVO in *Weimojie Suoshuo Jing* respectively:

Table 6.17: The distribution of locative VPP and PPV in *Weimojie Suoshuo Jing*

Locative preposition	VPP	Ratio	PPV	Ratio	VPP + PPV
於/于 ***yu***	30	54.55%	25	45.45%	55
从 ***cong***	0	0%	7	100%	7
在 ***zai***	1	25%	3	75%	4
诸 ***zhu***	4	100%	0	0%	4
Total	35	50%	35	50%	70

Table 6.18: The distribution of locative VOPP and PPVO in *Weimojie Suoshuo Jing*

Locative preposition	VOPP	Ratio	PPVO	Ratio	VOPP + PPVO
於/于 ***yu***	4	13.79%	25	86.21%	29
从 ***cong***	0	0%	3	100%	3
在 ***zai***	0	0%	2	100%	2
Total	4	11.76%	30	88.24%	34

Like the observations made in *Miaofa Lianhua Jing*, comparable trends emerge here. In *Weimojie Suoshuo Jing*, the dominance of preverbal locative PPs is most prominent when the verb is followed by an object. Specifically, the proportion of preverbal PPs for VOPP/PPVO (88.24%) considerably exceeds both the overall preverbal proportion (62.50%) and the preverbal proportion for VPP/PPV (50%). In addition, in the absence of a verbal object, 於/于 *yu* PPs slightly favour postverbal positioning. However, this tendency is significantly reversed in the presence of a verbal object, with 於/于 *yu* PPs occurring predominantly before the verb.

Before moving on to analyse texts from the MC3 period, here is a brief interim summary. Section 6.2 has investigated four texts from the MC2 period. Out of the four texts, the locative PP distribution is quite consistent across the two translated Buddhist scriptures, whereas the two non-Buddhist works, both novels from the Six Dynasties, exhibit differing patterns in contrast to each other. *Sou Shen Ji*, composed in the 4th century, maintains the trend seen in the non-Buddhist text *Lun Heng* from the MC1 period, with a preference for postverbal distribution. However, the postverbal percentage has reduced from 87.37% in *Lun Heng* to 62.15% in *Sou Shen Ji*. Additionally, when the verb is accompanied by an object, the postverbal proportion decreases even further to 52.17%.

Conversely, *Shi Shuo Xin Yu*, another non-Buddhist text dating to the mid-5th century, resembles the locative PP placement observed in the two translated Buddhist scriptures from the MC2 period. Specifically, preverbal locative PPs have clearly dominated the overall usage. Thus, this begs the question of whether these two non-Buddhist texts capture distinct dimensions of the indigenous texts from this era. *Shi Shuo Xin Yu* appears more aligned with the usage found in Buddhist texts, possibly under their immediate and substantial influence. In contrast, the slightly earlier work of *Sou Shen Ji* seems to be less impacted and more entrenched in the native tradition of locative PP placement. Nonetheless, in comparison to its predecessors, it is already undergoing the transition to another phase. Lastly, even though the overall proportion of preverbal PPs in the two translated Buddhist scriptures is slightly lower than that of the non-Buddhist text *Shi Shuo Xin Yu*, the preverbal locative PPs of the Buddhist texts demonstrate an overwhelming predominance when the verb is followed by an object.

6.3 MC3

The examination of locative PP usage during the final phase of the MC period, MC3, relies on two primary sources. The first is the non-Buddhist work *Qimin Yaoshu* 齐民要术 (Essential Techniques for the Welfare of the People), a comprehensive agricultural encyclopaedia from the mid-6th century detailing ancient farming and husbandry in accessible language. The second text is *Foben Xingji Jing* 佛本行集经 (Abhiniṣkramaṇa Sutra), a Buddhist scripture translated by the Gandhara monk Jñānagupta (阇那崛多) in the late 6th century.

6.3.1 QIMIN YAOSHU

Firstly, the locative prepositions in *Qimin Yaoshu*, ranked in order of decreasing frequency, are as follows: 於/于 *yu* (89.56%), 从 *cong* (6.02%), 在 *zai* (2.81%), and 向 *xiang* (1.61%).[100] Table 6.19 presents an overview of the locative PP word order in *Qimin Yaoshu*:

[100] *Qimin Yaoshu* features excerpts from a variety of works, ranging from earlier classics to contemporary writings, and even texts that have since been lost. One strength of this text is its clear indication of quoted content. There are locative PP instances from these excerpts that are not insignificant in number, but they are excluded from the count.

Table 6.19: An overview of locative PP word order in *Qimin Yaoshu*

Locative preposition	VPP	VOPP	Post-V sub-total	Ratio	PPV	PPVO	Pre-V sub-total	Ratio	Post-V + Pre-V
於/于 *yu*	22	62	84	37.67%	34	105	139	62.33%	223
从 *cong*	0	0	0	0%	5	10	15	100%	15
在 *zai*	6	0	6	85.71%	0	1	1	14.29%	7
向 *xiang*	0	0	0	0%	2	2	4	100%	4
Total	28	62	90	36.14%	41	118	159	63.86%	249

Qimin Yaoshu follows a similar trend in the overall locative PP distribution observed in the non-Buddhist text *Shi Shuo Xin Yu* and the two translated Buddhist scriptures from the preceding MC2 period, all showing a preference for preverbal locative PPs. The proportion of the preverbal placement in this non-Buddhist, agricultural text (63.86%) closely matches that of the two translated Buddhist scriptures from MC2. The function and distribution of individual locative prepositions are outlined below:

於/于 *yu* still holds a substantial portion, making up 89.56% of all four locative prepositions. Although abundant in occurrence, the functional scope of 於/于 *yu* has diminished, as *Qimin Yaoshu* restricts its usage to introducing location and goal only, which marks its most limited functional range among all the texts examined thus far. Its distribution leans towards preverbal (62.33%):

Location

VPP

(166) a.乃 隐 **於** 介休 县 绵上 山 中
nai yin ***yu*** *Jiexiu xian Mianshang shan zhong*
thus live.in.seclusion in Jiexiu county Mianshang mountain inside
'Thus he lived in seclusion in Mount Mianshang of Jiexiu County.'
(《卷九・醴酪第八十五》Volume 9, Chapter 85: Wheat Porridge; mid-6th c.)

b.乃 融 好 胶清, 和 **於** 铁 杵臼 中
nai rong hao jiaoqing huo ***yu*** *tie chujiu zhong*
then melt finished glue mix in iron mortar inside
'Then melt the glue and mix in an iron mortar.'
(《卷三・杂说第三十》Volume 3, Chapter 30: Miscellaneous Talk; mid-6th c.)

VOPP

(167) 生 炭火 **於** 坑 中
sheng tanhuo ***yu*** *keng zhong*
make charcoal.fire in pit inside
'Make a charcoal fire in the pit.'
(《卷七・涂瓮第六十三》Volume 7, Chapter 63: Greasing Earthen Jars; mid-6th c.)

PPV

(168) 更 **於** 清水 中 净洗
geng ***yu*** *qingshui* *zhong* *jingxi*
again in clean.water inside rinse
'Rinse again in clean water.'
(《卷八・作鱼鮓第七十四》Volume 8, Chapter 74: Making Salted Fish; mid-6th c.)

PPVO

(169) a.**於** 树 旁 数 尺 许 掘 坑
yu *shu* *pang* *shu* *chi* *xu* *jue* *keng*
in tree beside several Chinese.foot about dig hole
'Dig a hole about several Chinese feet beside the tree.'
(《卷四・柰、林檎第三十九》Volume 4, Chapter 39: Chinese Pearleaf Crabapple; mid-6th c.)

b.慎 勿 **於** 大豆 地 中 杂种 麻子
shen *wu* ***yu*** *dadou* *di* *zhong* *zazhong* *mazi*
be.sure NEG in soybean field inside mix.plant hemp.seed
'Be sure not to plant hemp seeds in soybean fields.'
(《卷二・种麻子第九》Volume 2, Chapter 9: Planting Hemp Seeds; mid-6th c.)

Due to *Qimin Yaoshu*'s focus on instructional content, locative PPs frequently appear in imperative sentences. Among the location 於/于 *yu* PP examples above, only (166a) has an indicative mood. Regarding the PPVOs in (169a-b), the former is a positive imperative giving instruction, while the latter expresses a negative imperative concerning prohibition.

When introducing goal, 於/于 *yu* adheres to a strict postverbal placement:

Goal

VPP

(170) 明年 三月 中, 移植 **於** 厅 斋 之 前
mingnian *sanyue* *zhong* *yizhi* ***yu*** *ting* *zhai* *zhi* *qian*
next.year March mid transplant to living.room study.room GEN front
'In mid-March next year, transplant it to the front of the living room or study room.'
(《卷五・种槐柳楸梓梧柞第五十》Volume 5, Chapter 50: Planting Locust Tree, Willow, Catalpa, Chinese Parasol and Oak; mid-6th c.)

VOPP

(171) 泻 热 脂 **於** 瓮 中
xie *re* *zhi* ***yu*** *weng* *zhong*
pour.down hot grease into earthen.jar inside
'Pour down the hot grease into the earthen jar.'
(《卷七・涂瓮第六十三》Volume 7, Chapter 63: Greasing Earthen Jars; mid-6th c.)

从 *cong* introduces source and appears solely in preverbal position:

Source

PPV

(172) 使 汁 出—— **从** 指歧 间 出—— 为 佳
shi zhi chu ***cong*** *zhiqi jian chu wei jia*
make juice come.out from finger between come.out be good
'Make the juice come out, and it is better if it comes out from between the fingers.'
(《卷八・作豉法第七十二》Volume 8, Chapter 72: Guide to Making Soy Sauce; mid-6th c.)

PPVO

(173) 令 人 牵 之 起， **从** 后 笞 之
ling ren qian zhi qi ***cong*** *hou chi zhi*
make person pull 3SG rise from behind whip 3SG
'Ask someone to pull it up and whip it from behind.'
(《卷六・养牛马驴骡第五十六》Volume 6, Chapter 56: Raising Cattle, Horses, Donkeys and Mules; mid-6th c.)

在 *zai* and 向 *xiang* collectively represent less than 5% of the total locative preposition usage in *Qimin Yaoshu*. 在 *zai* introduces location and goal, with a preference for postverbal distribution. Location-encoding 在 *zai* can appear in both preverbal and postverbal positions, while goal-encoding 在 *zai* is confined to VPP constructions:

Location

VPP

(174) 其 瓜， 都 聚 **在** 十字 巷 中
qi gua dou ju ***zai*** *shizi xiang zhong*
PRON melon all gather in cross alley inside
'The melons are all gathered in the cross alleys.'
(《卷二・种瓜第十四》Volume 2, Chapter 14: Planting Melons; mid-6th c.)

PPVO

(175) **在** 步道 上 引 手 而 取
zai *budao shang yin shou er qu*
on trail top stretch.out hand CONJ pick
'Stretch out the hand to pick on the trail.'
(《卷二・种瓜第十四》Volume 2, Chapter 14: Planting Melons; mid-6th c.)

Goal

VPP

(176) 安 **在** 瓮 底
an ***zai*** *weng* *di*
place at earthen.jar bottom
'Place (fried wheat) at the bottom of the earthen jar.'
(《卷七・法酒第六十七》Volume 7, Chapter 67: Guide to Alcohol; mid-6th c.)

Lastly, 向 *xiang* introduces path that concerns the direction of movement. It is only found in preverbal position:

Path

PPV

(177) 竹 性 爱 **向** 西南 引， 故 於 园 东北 角 种 之
zhu *xing* *ai* ***xiang*** *xinan* *yin* *gu* *yu* *yuan* *dongbei* *jiao* *zhong* *zhi*
bamboo nature love towards southwest extend so in garden northeast corner plant 3SG
'Bamboo naturally loves to extend towards the southwest, so plant it in the northeast corner of the garden.'
(《卷五・种竹第五十一》Volume 5, Chapter 51: Planting Bamboo; mid-6th c.)

PPVO

(178) 手 捉 甲 上 长 鬃， **向** 上 提 之
shou *zhuo* *jia* *shang* *chang* *zong* ***xiang*** *shang* *ti* *zhi*
hand grasp shoulder.blade top long bristle towards up lift 3PL
'Grasp the long bristles on the shoulder blade with the hand and lift them upwards.'
(《卷六・养牛马驴骡第五十六》Volume 6, Chapter 56: Raising Cattle, Horses, Donkeys and Mules; mid-6th c.)

Tables 6.20 and 6.21 summarise the distribution of locative VPP/PPV and VOPP/PPVO in *Qimin Yaoshu* respectively:

Table 6.20: The distribution of locative VPP and PPV in *Qimin Yaoshu*

Locative preposition	VPP	Ratio	PPV	Ratio	VPP + PPV
於/于 ***yu***	22	39.29%	34	60.71%	56
在 ***zai***	6	100%	0	0%	6
从 ***cong***	0	0%	5	100%	5
向 ***xiang***	0	0%	2	100%	2
Total	28	40.58%	41	59.42%	69

Table 6.21: The distribution of locative VOPP and PPVO in *Qimin Yaoshu*

Locative preposition	VOPP	Ratio	PPVO	Ratio	VOPP + PPVO
於/于 ***yu***	62	37.13%	105	62.87%	167
从 ***cong***	0	0%	10	100%	10
向 ***xiang***	0	0%	2	100%	2
在 ***zai***	0	0%	1	100%	1
Total	62	34.44%	118	65.56%	180

Qimin Yaoshu features a greater occurrence of locative VOPP/PPVO constructions over VPP/PPV constructions, a deviation from the typical pattern. Nonetheless, it upholds the ongoing trend wherein the proportion of preverbal PPs for VOPP/PPVO (65.56%) exceeds both the overall preverbal proportion (63.86%) and the preverbal proportion for VPP/PPV (59.42%). This indicates that the preverbal prominence is more apparent when the verb is followed by an object.

6.3.2 FOBEN XINGJI JING

This section examines the Buddhist work of MC3, *Foben Xingji Jing*, which is also the last text under scrutiny from the entire Middle Chinese period. Firstly, the locative prepositions in this text, ranked in decreasing order of frequency, are as follows: 於/于 *yu* (49.68%), 从 *cong* (27.45%), 在 *zai* (12.78%), and 向 *xiang* (10.09%). Table 6.22 presents an overview of the locative PP word order in *Foben Xingji Jing*:

Table 6.22: An overview of locative PP word order in *Foben Xingji Jing*

Locative preposition	VPP	VOPP	Post-V sub-total	Ratio	PPV	PPVO	Pre-V sub-total	Ratio	Post-V + Pre-V
於/于 ***yu***	569	7	576	60.95%	108	261	369	39.05%	945
从 ***cong***	0	0	0	0%	295	227	522	100%	522
在 ***zai***	95	2	97	39.92%	82	64	146	60.08%	243
向 ***xiang***	151	3	154	80.21%	30	8	38	19.79%	192
Total	815	12	827	43.48%	515	560	1075	56.52%	1902

Table 6.22 indicates that the general distribution of locative PPs in *Foben Xingji Jing* aligns with the typical pattern of Buddhist works in Middle Chinese, with a greater occurrence of preverbal PPs. However, its overall preverbal proportion (56.52%) is the lowest among these translated Buddhist scriptures. This text also shows a rise in the usage of locative preposition 向 *xiang*. The function and distribution of individual locative prepositions are presented below:

The usage of 於/于 *yu* in *Foben Xingji Jing* closely resembles that in the MC2 non-Buddhist work *Shi Shuo Xin Yu* in terms of the following patterns. Firstly, while retaining its position as the most common and versatile locative preposition among the four in this text, its share has notably declined to 49.68%. Secondly, despite the general tendency for locative PPs to appear before the verb in *Foben Xingji Jing*, the postverbal placement of 於/于 *yu* still prevails (60.95%). Finally, there is a revival in its functional scope, as it introduces all four locative subclasses again. When introducing location and source, 於/于 *yu* can appear in both preverbal and postverbal positions:

Location

VPP

(179) 犹如 有 人 行 **於** 旷野
*youru you ren xing **yu** kuangye*
be.like have person walk in wilderness
'It is akin to someone walking in the wilderness.'
(《卷二十一・问阿罗逻品第二十六》Volume 21, Chapter 26: The Discussion with Alara; late 6th c.)[101]

VOPP

(180) 诸人 相 传 詺 **於** 此 处
*zhuren xiang chuan ming **yu** ci chu*
everyone each.other convey truth in this place
'Everyone conveyed the truth to each other in this place.'
(《卷十三・掍术争婚品第十三》Volume 13, Chapter 13: The Competition in Martial Exercises; late 6th c.)

PPV

(181) 尔时 菩萨 **於** 河 澡浴
*ershi pusa **yu** he zaoyu*
that.time Bodhisattva in river bathe
'At that time the Bodhisattva was bathing in the river.'
(《卷二十六・向菩提树品第三十》Volume 26, Chapter 30: The Advance to the Bodhi Tree; late 6th c.)

PPVO

(182) 往昔 曾 **於** 林 见 死 妇女 尸
*wangxi ceng **yu** lin jian si funü shi*
past once in forest see dead woman corpse
'He once saw the body of a dead woman in the forest.'
(《卷三十六・耶输陀宿缘品第三十九》Volume 36, Chapter 39: The Previous History of Yasada; late 6th c.)

[101] The English translations of the chapter titles are based on Beal (1875).

Source

VPP

(183) 譬如　　鱼　鳖　　出　　**於**　水　中　　居　在　陆地
piru　　*yu*　*bie*　*chu*　　***yu***　*shui*　*zhong*　*ju*　*zai*　*ludi*
for.instance fish turtle emerge from water inside live on land
'For instance, fish and turtles come out of the water and live on land.'
(《卷十九・车匿等还品第二十三》Volume 19, Chapter 23: Respecting Chandaka's Return; late 6th c.)

VOPP

(184) 今　欲　　度脱　　无量　　众生　　**於**　　烦恼海
jin　*yu*　　*dutuo*　　*wuliang*　*zhongsheng*　　***yu***　　*fannaohai*
now want liberate countless sentient.beings from sea.of.affliction
'He now wants to liberate countless sentient beings from the sea of affliction.'
(《卷十七・舍宫出家品第二十一》Volume 17, Chapter 21: On Leaving the Palace to Become a Recluse; late 6th c.)

PPVO

(185) **於**　　诸　　毛孔　　出　　种种　　光
yu　　*zhu*　　*maokong*　*chu*　*zhongzhong*　*guang*
from various pore emit all.kinds.of light
'All kinds of light emitted from various pores.'
(《卷五十三・优陀夷因缘品第五十四》Volume 53, Chapter 54: The History of Udayi; late 6th c.)

In contrast, when introducing goal and path, 於/于 *yu* is only found in postverbal placement:

Goal

VPP

(186) 犹如　　堕　**於**　最　　极　　深水
youru　　*duo*　***yu***　*zui*　　*ji*　　*shenshui*
be.like fall into most extremely deep.water
'Just like falling into the deepest water.'
(《卷二十一・王使往还品第二十五》Volume 21, Chapter 25: The King's Messengers Return Home; late 6th c.)

VOPP

(187) 吐变　此　食，　弃　　之　　**於**　地
tubian　*ci*　*shi*　　*qi*　　*zhi*　　***yu***　*di*
vomit this food discard 3SG to ground
'(If one) vomits this food and discards it to the ground.'
(《卷二十一・王使往还品第二十五》Volume 21, Chapter 25: The King's Messengers Return Home; late 6th c.)

Path

VPP

(188) 我 先 经 **於** 喜乐殿， 复 入 金城
wo *xian* *jing* ***yu*** *Xiledian* *fu* *ru* *Jincheng*
1SG first pass through Ramma.Palace then enter Golden.City
常醉宫
Changzuigong
Palace.of.Constant.Inebriation
'I first passed through the Ramma Palace and then entered the Palace of Constant Inebriation in the Golden City.'
(《卷五十・说法仪式品第五十二》Volume 50, Chapter 52: Dharma Ceremony; late 6th c.)

VOPP

(189) 时 罗刹女, 渡 诸 商人 **於** 大海 中
shi *luochanü* *du* *zhu* *shangren* ***yu*** *dahai* *zhong*
that.time Rakshasi ferry various merchant across sea inside
'At that time, the Rakshasi ferried the various merchants across the sea.'
(《卷四十九・五百比丘因缘品第五十》Volume 49, Chapter 50: The Story of the Five Hundred Merchants; late 6th c.)

从 *cong* is the next frequently utilised locative preposition. It introduces source and maintains its strict preverbal placement:

Source

PPV

(190) 是时 彼等 诸 苦行人， **从** 其 窟 出
shishi *bideng* *zhu* *kuxingren* ***cong*** *qi* *ku* *chu*
that.time 3PL various ascetic from 3.POSS grotto come.out
'At that time, those ascetics came out of the grotto.'
(《卷四十四・布施竹园品第四十六》Volume 44, Chapter 46: The Gift of the Bamboo Garden; late 6th c.)

PPVO

(191) **从** 优波离 童子 手 中 即 取 刀 也
cong *Youboli* *tongzi* *shou* *zhong* *ji* *qu* *dao* *ye*
from Upali boy hand inside at.once take knife PTCL
'Took the knife from the hand of the boy Upali at once.'
(《卷五十三・优波离因缘品第五十五》Volume 53, Chapter 55: The History of Upali; late 6th c.)

在 *zai* shows a preference for preverbal PPs (60.08%). It introduces location and goal. When indicating location, it can be positioned before or after the verb. However, location-encoding 在 *zai* is confined to preverbal placement when the verb is followed by an object:

Location

VPP

(192) 汝 今 何故 独 坐 **在** 此 兰若 树 下?
ru *jin* *hegu* *du* *zuo* ***zai*** *ci* *lanre* *shu* *xia*
2SG now what.reason alone sit in this forest.retreat tree under
'Why are you sitting alone under this tree in the forest retreat now?'
(《卷二十八・魔怖菩萨品第三十一》Volume 28, Chapter 31: Māra's Fear of the Bodhisattva; late 6th c.)

PPV

(193) 其 那罗陀 侍者 童子, **在** 仙人 后 侍立
qi *Naluotuo* *shizhe* *tongzi* ***zai*** *xianren* *hou* *shili*
PRON Narada attendant boy in Rishi behind stand.by.in.attendance
'The attendant boy, Narada, stood by in attendance behind the Rishi.'
(《卷七・俯降王宫品第五》Volume 7, Chapter 5: The Descent into the Royal Palace; late 6th c.)

PPVO

(194) 于时 那提 螺髻 迦葉 **在** 尼连禅 河水
yushi *Nati* *luoji* *Jiaye* ***zai*** *Nilianchan* *heshui*
at.that.time Nadi spiral.headdress Kasyapa on Nairanjana river
下流 岸边 修 道
xialiu *anbian* *xiu* *dao*
downstream bank practice way
'At that time, Nadi Kasyapa, with a spiral headdress, was practicing the way of Buddha on the downstream banks of the Nairanjana River.'
(《卷四十二・迦葉三兄弟品第四十四》Volume 42, Chapter 44: The History of the Three Kasyapas; late 6th c.)

When introducing goal, 在 *zai* only occurs in postverbal position:

Goal

VPP

(195) 犹如 老 牛 入 **在** 深 泥
youru *lao* *niu* *ru* ***zai*** *shen* *ni*
be.like old cow enter into deep mud
'It is akin to an old cow entering into deep mud.'
(《卷十六・耶输陀罗梦品第二十》Volume 16, Chapter 20: The Dreams of Yasodhara; late 6th c.)

VOPP

(196) 犹如　攒　酥　**在**　大　瓮　里
*youru cuan su **zai** da weng li*
be.like gather pastry into big earthen.jar inside
'It is like gathering pastries into a big earthen jar.'
(《卷二十四・精进苦行品第二十九》Volume 24, Chapter 29: Diligence and Asceticism; late 6th c.)

向 *xiang* introduces path and has a preference for postverbal placement. As this marks the first occurrence of introducing the locative subclass of path through a preposition in a moderate scale and systematic manner among the texts under investigation, its context merits more analysis. Firstly, it must be pointed out that 向 *xiang* can pair with non-motion verbs that lack spatial movement implications, and in such instances, 向 *xiang* merely denotes the direction towards which the agent is facing while executing the action (Lin 2019: 185). This specific usage has already surfaced in the MC1 text *Lun Heng*, exemplified by 妻向城哭 (His wife cried, facing the city wall). However, these instances are not subsumed under path-encoding 向 *xiang*, as the actions described are devoid of spatial movement connotations.

The next point for consideration is why some of the 向 *xiang* PPs are not grouped under the goal subclass. Aside from taking purely directional prepositional objects without pinpointing where the motion ends (e.g., 向西南引 (extend towards the southwest) and 向上提之 (lift them upwards), as found in the MC3 non-Buddhist work *Qimin Yaoshu*), the prepositional object of 向 *xiang* may also suggest the anticipated endpoint (e.g., 走向自家 (go towards one's own house), as seen in Volume 45 of *Foben Xingji Jing*). However, this thesis maintains that it is preferable to classify all instances under the path subclass. As demonstrated by Lin (2019) using examples from the BLCU Chinese Corpus, 向 *xiang* and 往 *wang* PPs in Modern Chinese do not necessitate reaching the endpoint. Such PPs either designate a direction without specifying the destination of the movement, or even when they involve a place noun that could serve as the potential endpoint, there are instances where the moving entity ceases its motion, implying no arrival.[102] A similar pattern can be observed in Middle Chinese, as seen in *Foben Xingji Jing*:

[102] A similar observation is found with the English preposition *towards*. Taylor (1993) argues that the preposition *towards* does not engage in the semantic extension from denoting the path to also indicating the place perceived as the endpoint of that path. Instead, it merely portrays an imperfective path. Jackendoff (1983) distinguishes between bounded paths, which include source-paths (typically introduced by the preposition *from*) and goal-paths (typically introduced by *to*), and unbounded paths (directions). The imperfective path in Taylor (1993) can be

Path

VPP

(197) a.行 **向** 何 方， 今 至 何 所
xing ***xiang*** *he* *fang* *jin* *zhi* *he* *suo*
walk towards what direction now reach what place
'Where to walk towards? What place have you reached now?'
(《卷十九・车匿等还品第二十三》Volume 19, Chapter 23: Respecting Chandaka's Return; late 6th c.)

b.渐渐 行 **向** 伽耶城 边
jianjian *xing* ***xiang*** *Jiayecheng* *bian*
gradually walk towards Gaya.City side
'Gradually walked towards the edge of Gaya City.'
(《卷四十二・迦葉三兄弟品第四十四》Volume 42, Chapter 44: The History of the Three Kasyapas; late 6th c.)

VOPP

(198) 推 我 **向** 下， 夺 我 利养
tui *wo* ***xiang*** *xia* *duo* *wo* *liyang*
push 1SG towards down take.away 1SG profit
'Pushed me downwards and took away my profits.'
(《卷三・受决定记品第二》Volume 3, Chapter 2: Exciting to Religious Sentiment; late 6th c.)

PPV

(199) **向** 彼 优娄频螺 所 去
xiang *bi* *Youloupinluo* *suo* *qu*
towards that Uruvilva place go
'Went towards Uruvilva.'
(《卷四十・教化兵将品第四十三》Volume 40, Chapter 43: The Story of the Chief Soldier (Senapati); late 6th c.)

PPVO

(200) 皆 **向** 菩提树 屈 身
jie ***xiang*** *putishu* *qu* *shen*
all towards bodhi.tree bend body
'All bent their bodies towards the bodhi tree.'
(《卷二十七・魔怖菩萨品第三十一》Volume 27, Chapter 31: Māra's Fear of the Bodhisattva; late 6th c.)

The 向 *xiang* PPs in (197a) and (198) only convey directional information, whereas the other instances, despite referencing a specific place, merely imply movement along a designated

regarded as a type of unbounded path. Within the locative subclass classification of the present thesis, 'path' specifically refers to unbounded or imperfective paths, while 'source' and 'goal' correspond to Jackendoff's source-paths and goal-paths.

trajectory. Yet, this allows for the possibility that the mentioned place acts simply as a landmark along the way, with the ultimate destination being elsewhere.

Tables 6.23 and 6.24 summarise the distribution of locative VPP/PPV and VOPP/PPVO in *Foben Xingji Jing* respectively:

Table 6.23: The distribution of locative VPP and PPV in *Foben Xingji Jing*

Locative preposition	VPP	Ratio	PPV	Ratio	VPP + PPV
於/于 ***yu***	569	84.05%	108	15.95%	677
从 ***cong***	0	0%	295	100%	295
向 ***xiang***	151	83.43%	30	16.57%	181
在 ***zai***	95	53.67%	82	46.33%	177
Total	815	61.28%	515	38.72%	1330

Table 6.24: The distribution of locative VOPP and PPVO in *Foben Xingji Jing*

Locative preposition	VOPP	Ratio	PPVO	Ratio	VOPP + PPVO
於/于 ***yu***	7	2.61%	261	97.39%	268
从 ***cong***	0	0%	227	100%	227
在 ***zai***	2	3.03%	64	96.97%	66
向 ***xiang***	3	27.27%	8	72.73%	11
Total	12	2.10%	560	97.90%	572

The patterns revealed in the two tables closely parallel the MC2 Buddhist work *Miaofa Lianhua Jing*. Preverbal PPs are the preferred choice for both *Miaofa Lianhua Jing* and the present text of *Foben Xingji Jing* in their overall usage of locative PPs, yet the locative PP distribution varies significantly depending on whether the verb is followed by an object. *Foben Xingji Jing* demonstrates that when the verb is without an object, postverbal locative PPs prevail, with VPP/PPV presenting a preverbal proportion of only 38.72%. Conversely, when the verb takes an object, the percentage of preverbal PPs for VOPP/PPVO escalates to 97.90%, the second highest in this parameter among the texts examined thus far, falling just below that in *Miaofa Lianhua Jing*. In addition, even though 於/于 *yu* and 向 *xiang* PPs exhibit a preference for postverbal placement in the overall usage within *Foben Xingji Jing*, the trend reverses notably when the verb is accompanied by an object, leading to a substantial proportion of preverbal occurrences. Therefore, while the preverbal prevalence of locative PPs may not be readily apparent in terms of their total instances in this text (56.52%), it becomes strikingly prominent

when the verb takes an object. This reaffirms the previous speculation that the developmental paths of VOPP/PPVO and VPP/PVV regarding locative PP distribution progress at different rates.

6.4 An interim summary of MC1 to MC3

Before proceeding to examine locative PP usage in Early Mandarin Chinese, here is a summary. Sections 6.1 – 6.3 have studied locative PP usage across three sub-stages of Middle Chinese, based on eight texts from two broad genres: non-Buddhist and Buddhist works. Overall, the observations substantiate previous studies, indicating that the Eastern Han – Six Dynasties period constitutes a critical phase in the development of locative PP word order, witnessing notable changes. Below are the main findings.

At a broad level, there is a visible trend signalling a shift in the dominant locative PP word order. Commencing from MC1 (Eastern Han), although the non-Buddhist text *Lun Heng* appears somewhat conservative and mostly adheres to the prevailing locative PP word order in *Shi Ji* from OC3, the MC1 compilation of translated Buddhist scriptures stands in sharp contrast to native non-Buddhist works. The dominant locative PP placement has been entirely reversed in its overall distribution. Furthermore, this transition appears to have happened abruptly and drastically. As mentioned earlier, this compilation contains contributions by various translators. Consequently, the use of locative PPs in this context may not necessarily reflect the stylistic choices of any individual translator, instead, it might offer a glimpse into the broader landscape and overarching trends in the initial phase of Buddhist scripture translations.

Despite their extensive disparities, the two genres of MC1 also exhibit some degree of convergence. Firstly, as C. Zhang (2002: 76) rightfully points out, preverbal PPs are no longer primarily found in contexts of contrast or emphasis, a feature observed in both genres. This observation is expected for the MC1 compilation of translated Buddhist scriptures, where preverbal locative PPs have become commonplace. As for *Lun Heng*, this tendency is also quite natural, as we have already witnessed in Old Chinese that by OC3 in *Shi Ji*, despite the ongoing scarcity of preverbal locative 於/于 *yu* PPs, not every occurrence is marked, and some may emerge in fairly neutral contexts. Put differently, the MC1 *Lun Heng* is simply carrying on the trend seen in OC3, with the environment surrounding preverbal PP usage appearing less constrained. A second point of convergence is that the presence or absence of a verbal object affects locative PP placement. There is a discernible reduction in the postverbal proportion for VOPP/PPVO; and in the MC1 compilation of translated Buddhist scriptures, the emerging

preference for preverbal placement becomes even more striking when the verb is accompanied by an object.

From MC2 through MC3 (together forming the Six Dynasties period), the locative PP placement in the two genres gradually converges. Buddhist works from MC2 and MC3 maintain the trend in the MC1 compilation of translated Buddhist scriptures, which favours preverbal locative PPs. Regarding non-Buddhist works from these two sub-stages, apart from the MC2 *Sou Shen Ji*, both the MC2 *Shi Shuo Xin Yu* and the MC3 *Qimin Yaoshu* show a preference for preverbal locative PPs in their overall usage, even demonstrating a slightly higher preverbal proportion compared to their contemporaneous Buddhist scriptures. The interim summary at the end of Section 6.2 highlights that *Sou Shen Ji* and *Shi Shuo Xin Yu* might shed light on different aspects of indigenous texts from MC2. *Sou Shen Ji* appears more resistant to change and maintains a stronger connection to the native locative PP placement conventions, although it already displays signs of undergoing a transition. In contrast, *Shi Shuo Xin Yu* exhibits similarities to the usage seen in Buddhist texts, possibly owing to the direct and considerable impact from the latter. Additionally, in comparison to the MC1 Buddhist scriptures, the subsequent scriptures from MC2 and MC3 show less dramatic and radical changes. This is evident in their relatively less significant preverbal proportions concerning the overall locative PP usage, regardless of whether a verbal object is present. Could this be the outcome of attempts to harmonise with the native tradition and mutual assimilation during later phases of scripture translation? Nevertheless, it is clear that the dominant locative PP word order has already shifted from postverbal to preverbal in Middle Chinese.

Above is a general summary of locative PP word order across texts from MC1 to MC3. Following this, there are additional noteworthy observations. Firstly, it is apparent that the distribution of locative PPs varies depending on whether the verb takes an object or not, a point already made but deserving further elaboration. With the presence of a verbal object, the preverbal locative PP percentage for VOPP/PPVO is consistently higher than both the overall preverbal proportion and the preverbal proportion for VPP/PPV across all texts. In the context of Buddhist works, the disparity between the preverbal proportion for VOPP/PPVO and that for VPP/PPV is even more pronounced. Thus, although the overall preverbal locative PP proportions in MC2 and MC3 Buddhist scriptures are slightly lower compared to the MC2 *Shi Shuo Xin Yu* and the MC3 *Qimin Yaoshu*, the preverbal proportion for VOPP/PPVO in all the Buddhist texts is remarkably high, ranging from 88.24% to 99.11%. This underscores an overwhelming dominance for preverbal locative PPs in Buddhist works when the verb is followed by an object. The interim summary of Section 5.4 of Chapter 5 has prompted inquiry

into whether VOPP constructions exhibit a greater susceptibility to word order variation and undergo a faster shift in word order compared to VPP constructions. The findings suggest an affirmative stance, with different rates of developmental progression in locative PP placement observed between VOPP/PPVO and VPP/PVV.

On a related note, here is another remark regarding structural issues. Old Chinese already features examples of lengthy verbal objects and prepositional objects, as well as showcases the capacity of locative PPs in managing structural complexities. However, from the MC texts examined thus far, both Buddhist and non-Buddhist, such instances have not shown significant growth. In other words, it seems that locative PPs from the MC period are not demonstrating any higher capability or advancement beyond what they could already handle during the OC period. Thus, while acknowledging C. Zhang's (2002) observation about the rise in the complication of grammatical structures during the Six Dynasties period, including the multi-syllabification of VP and the increase in verbal objects, this thesis leans towards Peck's (2008) assertion. Peck (2008: 79) argues that the changes identified by C. Zhang can fit into existing syntactic structures without introducing additional complexity to the syntax, a point previously discussed in Chapter 2. That said, the impact of verbal objects remains a pertinent aspect that should not be overlooked.

Secondly, there is a fluctuation in locative preposition usage in Middle Chinese. 从 *cong*, 在 *zai*, and 向 *xiang* are experiencing an increase, whereas 於/于 *yu*, despite maintaining its status as the leading locative preposition in terms of usage frequency and functional range, has seen its share drop to below 80% in over half of the eight texts. In two texts, it even dips to slightly less than 50%, a significant decline from its consistent presence of more than 80% from OC1 to OC3. Regarding functionality, it appears to cease introducing path in some texts, and in *Qimin Yaoshu*, it is only observed to introduce location and goal. This contrasts with its constant introduction of all four locative subclasses during Old Chinese, and it seems to imply that some of its functions are being assumed by the growing presence of competing locative prepositions. However, the data offer limited support for the hypothesis that the decline of 於/于 *yu* led to the shift in the dominant locative PP word order. As highlighted in Chapter 2, there is a discrepancy in chronology. The change in dominant locative PP word order is already evident from as early as MC1 in the compilation of translated Buddhist scriptures, whereas the competition from other prepositions has not yet formed a considerable threat to the status of 於/于 *yu*.

Thirdly, there is an increase in the use of localizers following a prepositional NP. Some of these localizers carry more explicit content meaning and contribute directly to spatial interpretation. Without them, the intended meaning often undergoes a change, as exemplified by *xia* 下 (under) and *qian* 前 (front). Other localizers may hold less concrete content meaning. For instance, *zhong* 中 (inside/within) might, in some instances of P + NP + 中, explicitly denote the space inside or within the preceding NP (e.g., 於瓮中 inside the earthen jar). However, in other cases, it lacks such a specific spatial reference. For example, 渡诸商人於大海中 (ferry the various merchants across the sea), the VOPP from *Foben Xingji Jing*, would logically be more appropriate with the localizer *shang* 上 (above), as it more aptly conveys the sense of people moving across the surface of the sea rather than being immersed within the sea itself. This observation echoes Chappell and Peyraube (2008), who note a growing inclination in Early Medieval Chinese for some localizers to move away from precise pinpointing of positions as a precise localizer towards a generic, undifferentiated localizer that merely conveys a vague, blurry position. They single out *shang* 上 (above) and *zhong* 中 (inside/within) as remarkably salient examples in this regard, while other localizers such as *xia* 下 (under) and *qian* 前 (front) are also implicated. Likewise, C. Zhao (2019) further proposes that in instances where the NP takes the form of either a pronoun or a noun chiefly denoting the identify of an individual, the localizers *suo* 所 (place) and *bian* 边 (side) in the Medieval Chinese translations of Buddhist sutras have transformed into postpositions and acquired case-marking capability, shifting from marking locations to marking objects. C. Zhao (2019) suggests that such a transformation can be attributed in part to the impact of linguistic features found in the original sutras.

Lastly, despite the prevailing preference for preverbal locative PP placement, goal PPs persistently appear after the verb, a pattern observed from OC1 to MC3, regardless of whether introduced by 於/于 *yu* or the emerging 在 *zai*. For the remaining three subclasses, it is challenging to make a similar definitive judgement about their distribution. The only exception might be source PPs introduced by 从 *cong*, which are consistently preverbal in all the eight MC2 texts. However, this consistency does not extend to all source PPs, as those introduced by 於/于 *yu* can occupy both preverbal and postverbal positions.

CHAPTER SEVEN
THE DIACHRONIC DEVELOPMENT OF LOCATIVE PP WORD ORDER IN EARLY MANDARIN CHINESE

We now proceed to the final phase of the investigation into the development of locative PP word order. The examination of the three sub-stages in Early Mandarin Chinese is based on three vernacular narratives drawn from the domain of folk literature, comprising one transformation text and two vernacular novels.

7.1 EMC1

The text under scrutiny for EMC1 is *Dunhuang Bianwen Ji* 敦煌变文集 (A Collection of Dunhuang Transformation Texts), composed in the Tang to Five Dynasties period (7th to 10th c.) and often acknowledged as among the earliest manifestations of vernacular literature within Chinese literary tradition. Firstly, the locative prepositions in this text, ranked in descending order of frequency, are as follows: 於/于 *yu* (47.30%), 在 *zai* (20.82%), 向 *xiang* (19.05%), 从 *cong* (11.34%), 往 *wang* (0.93%), and 自 *zi* (0.56%). Table 7.1 presents an overview of the locative PP word order in *Dunhuang Bianwen Ji*:

Table 7.1: An overview of locative PP word order in *Dunhuang Bianwen Ji*

Locative preposition	VPP	VOPP	Post-V sub-total	Ratio	PPV	PPVO	Pre-V sub-total	Ratio	Post-V + Pre-V
於/于 ***yu***	173	84	257	50.49%	89	163	252	49.51%	509
在 ***zai***	127	16	143	63.84%	40	41	81	36.16%	224
向 ***xiang***	38	7	45	21.95%	82	78	160	78.05%	205
从 ***cong***	0	0	0	0%	81	41	122	100%	122
往 ***wang***	0	0	0	0%	10	0	10	100%	10
自 ***zi***	3	0	3	50%	2	1	3	50%	6
Total	341	107	448	41.64%	304	324	628	58.36%	1076

The general distribution of locative PPs in *Dunhuang Bianwen Ji* maintains the trend established in Middle Chinese, showing a preference for preverbal PPs. Its overall preverbal proportion (58.36%) has sightly risen compared to the MC3 *Foben Xingji Jing*, but it still lags behind the relatively higher preverbal proportions in most other MC texts. Additionally, the usage frequency of 向 *xiang* has seen a further increase in this text. The function and distribution of individual locative prepositions are outlined below:

Firstly, the dominant status of 於/于 *yu* has diminished. Although it remains the most frequently used locative preposition, the usage share (47.30%) is at its lowest across all texts reviewed so far. Moreover, while 於/于 *yu* still introduces all four locative subclasses in *Dunhuang Bianwen Ji*, this feature is no longer exclusive to it. Subsequent discussions show that 在 *zai* also covers the four subclasses in this text. 於/于 *yu* is almost equally distributed before and after the verb, with a marginally higher ratio in the postverbal position (50.49%). When introducing location, 於/于 *yu* appears in both preverbal and postverbal positions:

Location

VPP

(201) 每 至 夏日， 则 伏 **於** 父母 床 下
*mei zhi xiari ze fu **yu** fumu chuang xia*
whenever reach summertime then lie on parents bed under
'Whenever summer came, he would lie under his parents' bed.'
(《敦煌变文集・孝子传》Biographies of Filial Sons)

VOPP

(202) a.女子 拍 纱 **於** 水
*nüzi pai sha **yu** shui*
woman beat thin.silk on water
'The woman beat the thin silk on the water.'
(《敦煌变文集・伍子胥变文》Transformation Text on Wu Zixu)

b.奏 笙歌 **於** 三 殿 之 中，
*zou shengge **yu** san dian zhi zhong*
perform music-and-singing in three hall GEN inside
动 丝竹 **於** 九 宫 之 内
*dong sizhu **yu** jiu gong zhi nei*
play string-and-wind.instruments in nine palace GEN inside
'Perform music and singing in the three halls, play string-and-wind instruments in the nine palaces.'
(《敦煌变文集・维摩碎金》Precious Fragments from Vimalakirti)

PPV

(203) 田章 年 始 五岁， 乃 **於** 家 啼哭
*Tian Zhang nian shi wusui nai **yu** jia tiku*
Tian Zhang age only five.years.old then at home cry
'When Tian Zhang was only five years old, he cried at home.'
(《敦煌变文集・搜神记》Anecdotes about Spirits and Immortals)[103]

[103] While the text here bears the same name as the MC2 text 搜神记 *Sou Shen Ji*, the authors differ. The fame of the MC2 *Sou Shen Ji* has led several works in later periods to adopt its title.

PPVO

(204) a.今 **於** 水 上 拍 纱
jin ***yu*** *shui* *shang* *pai* *sha*
now on water above beat thin.silk
'Now I am beating the thin silk on the water.'
(《敦煌变文集·伍子胥变文》Transformation Text on Wu Zixu)

b.拟 **於** 大殿 内 杀 净能
ni ***yu*** *dadian* *nei* *sha* *Jingneng*
plan in main.hall inside kill Jingneng
'(The emperor) planned to kill Jingneng in the main hall.'
(《敦煌变文集·叶净能诗》Poem of Ye Jingneng)

The examples above demonstrate that when 於/于 *yu* introduces location, there is considerable flexibility in its placement. C. Zhang (2002) observes that during the Tang and Five Dynasties, preverbal 於/于 *yu* PPs denote the location of occurrence, staying and existence (termed collectively as 'location' in this thesis), passage (classified under the path subclass in this thesis), or the starting point of an action. In contrast, when placed after the verb, they mainly convey the location of staying or the endpoint of an action. The pattern reflects the correspondence rule put forth by C. Zhang, as reviewed in Chapter 2. She states that by the Tang and Five Dynasties period, the relocation of locative PPs to the preverbal position was generally completed, with the sentential positioning of a locative PP typically corresponding to its meaning. Exceptions to this alignment predominantly arose in special contexts or expressions, like constructions employing contrast or parallelism.

However, as evident from the examples presented, the postverbal location 於/于 *yu* PPs, apart from denoting the location of staying (as seen in example (201)), can also convey the location of event occurrence (202a-b). The flexibility in the placement of location 於/于 *yu* PPs is particularly apparent when examining the VOPP 拍纱於水 in (202a) and the PPVO 於水上拍纱 in (204a), both sourced from the same passage. The two constructions carry virtually identical meanings and lack discernible pragmatic differences, making them essentially interchangeable. Nonetheless, C. Zhang does not view this as invalidating her correspondence rule. She proceeds to assert that *Dunhuang Bianwen Ji* contains more "irregular" sentences due to its genre. *Bianwen* embodies oral performing literature with deep roots in oral tradition. It is characterised by a higher presence of rhymed verses. Even within its prose segments, it tends to adopt symmetrical sentence structures to facilitate oral delivery. C. Zhang therefore posits that more "irregular" sentences are employed to serve rhetorical purposes. The symmetry

noted by C. Zhang in the prose portion is exemplified by (202b), where the two VOPPs form a highly neat antithesis structure.

C. Zhang further points out that this trait may extend beyond the genre of *bianwen*, as it reflects a broad trend across the entire Tang and Five Dynasties. This era was profoundly influenced by the style of *pianwen* 骈文 (parallel prose), which showcases extensive parallelism in a neat and ornate style. While this thesis does not dispute that *Dunhuang Bianwen Ji* has its distinctiveness as a prosimetric narrative, it is pertinent to mention that the examples above are extracted solely from its free prose section, not its verse. Except for the antithesis in (202b), the remaining instances do not deliberately pursue rhetorical effect, and the contexts in which they appear are not more marked compared to the rest. This seems to suggest that the correspondence rule might not be as apparent or straightforward.[104]

Source 於/于 *yu* PPs can appear in both preverbal and postverbal positions, which also violates the correspondence rule:

Source

VPP

(205) 劳 君 暂 起 **於** 花台
*lao jun zan qi **yu** huatai*
Trouble 2SG.HON temporarily rise from flower.pedestal
'Could you please get up from the flower pedestal temporarily?'
(《敦煌变文集・维摩诘经讲经文》Explanation of the Vimalakirti Sutra)

PPVO

(206) 张令 遂 **於** 笼 中 取 绢 廿 疋 上 尊師
*Zhang Ling sui **yu** long zhong qu juan nian pi shang zunshi*
Zhang Ling then from box inside take silk twenty roll present revered.master
'Zhang Ling then took twenty rolls of silk from the box and presented them to the revered master.'
(《敦煌变文集・叶净能诗》Poem of Ye Jingneng)

[104] C. Zhang (2002: 156) recognises this issue and conducts further analysis to address it. She eliminates all postverbal locative 於/于 *yu* PPs found within what she deems as special sentence structures and recalculates the data. After isolating postverbal locative 於/于 *yu* PPs that do not denote the location of staying or the endpoint of an action, she finds such instances constitute only 8% of all locative 於/于 *yu* PPs. This leads her to conclude that the semantics of 於/于 *yu* PPs already exhibits a clear division of labour during the Tang and Five Dynasties period. This approach, however, raises concerns. The exclusion of problematic examples from the data to strengthen the rule likely reflects a formalist insistence on a generalisation being 100% applicable without exceptions. In contrast, functionalists recognise that language is not governed by 'rules' but rather it is better understood as habits of use that evolve little by little over time. A generalisation that holds 80-90% of the time is still valuable. Removing challenging examples and concentrating on straightforward instances compromises the integrity of the analysis, as it overlooks the variability of language.

Goal 於/于 *yu* PPs maintain their distribution pattern from OC1 and remain confined to postverbal constructions. This is in line with the correspondence rule:

Goal

VPP

(207) 魂魄　归　**於**　蒿里
hunpo　*gui*　***yu***　*Haoli*
soul　return　to　Mt.Haoli
'The soul returned to Mount Haoli.'
(《敦煌变文集・孟姜女变文》Transformation Text on Meng Jiangnü)

VOPP

(208) 遂　掷　剑　**於**　江　中
sui　*zhi*　*jian*　***yu***　*jiang*　*zhong*
so　throw　sword　into　river　inside
'So he threw the sword into the river.'
(《敦煌变文集・伍子胥变文》Transformation Text on Wu Zixu)

There is only one occurrence of 於/于 *yu* introducing path, or passage in C. Zhang's term. It is the first instance of 於/于 *yu* preceding a verb when introducing path. This preverbal placement is in accordance with the correspondence rule:

Path

PPV

(209) 有　常州　无锡　县令　张令　将　妻　及　男女
you　*Changzhou*　*Wuxi*　*xianling*　*Zhang Ling*　*jiang*　*qi*　*ji*　*nannü*
have　Changzhou　Wuxi　magistrate　Zhang Ling　bring　wife　and　sons.and.daughters
於　华岳　神　前　过
yu　*Huayue*　*shen*　*qian*　*guo*
along　Mt.Hua　deity　front　pass
'Zhang Ling, the magistrate of Wuxi County in Changzhou, brought his wife and children and they passed by in front of the deity of Mount Hua.'
(《敦煌变文集・叶净能诗》Poem of Ye Jingneng)

在 *zai* not only increases in usage share but also expands its functional scope within *Dunhuang Bianwen Ji.* Previously associated mainly with location and sometimes with goal, it now parallels the versatility of 於/于 *yu* in introducing all four locative subclasses. Regarding the distribution pattern of 在 *zai* PPs during this period, C. Zhang (2002) asserts the correspondence rule again, highlighting a general semantic division across positions. Preverbal 在 *zai* PPs represent the location of occurrence and staying as well as the starting point of an

action. Postverbal 在 *zai* PPs denote the endpoint of an action or the location of staying. As we will see in the forthcoming examples, exceptions to this correspondence rule persist, although C. Zhang contends that these instances constitute a minority.

Overall, 在 *zai* tends to favour a postverbal placement (63.84%) in *Dunhuang Bianwen Ji*. When encoding location, 在 *zai* PPs can either precede or follow the verb:

Location

VPP

(210) 女人 住 **在** 阴山 乡
*nüren zhu **zai** Yinshan xiang*
woman live in Yinshan township
'The woman lives in the township of Yinshan.'
(《敦煌变文集・董永变文》Transformation Text on Dong Yong)

VOPP

(211) 尝 见 一 鼠 作 窟 **在** 社 树 之 下
*chang jian yi shu zuo ku **zai** she shu zhi xia*
once see one rat make hole in shrine tree GEN under
'He once saw a rat making a hole under the shrine tree.'
(《敦煌变文集・前汉刘家太子传》Biography of the Crown Prince of the Liu Family from the Former Han Dynasty)

PPV

(212) 此 怒 蛙 **在** 道 努 鸣
*ci nu wa **zai** dao nu ming*
this angry frog on road hard croak
'This angry frog croaked hard on the road.'
(《敦煌变文集・伍子胥变文》Transformation Text on Wu Zixu)

PPVO

(213) 其 鸟 常 **在** 蚊子 角 上 养 七 子
*qi niao chang **zai** wenzi jiao shang yang qi zi*
that bird often on mosquito antenna above nurture seven offspring
'That bird often nurtures its seven fledglings on the antenna of a mosquito.'
(《敦煌变文集・搜神记》Anecdotes about Spirits and Immortals)

When introducing source, 在 *zai* behaves the same as 於/于 *yu*, appearing in VPP and PPVO constructions only:[105]

[105] Among C. Zhang's (2002: 159) examples of preverbal 在 *zai* PPs indicating source, the instance 童谣歌出在小厮儿 (The nursery rhyme originates from the servant boy) appears to be entirely contradictory. Putting aside the discussion on 小厮儿 being a non-locative source, the example itself showcases a VPP construction 出在小厮儿, contradicting the preverbal assertion.

Source

VPP

(214) 莲花 出 **在** 污泥 中
lianhua *chu* ***zai*** *wuni* *zhong*
lotus.flower emerge from sludge inside
'The lotus flower emerged from the sludge.'
(《敦煌变文集・佛说阿弥陀经讲经文》Explanation on the Shorter Sukhāvatīvyūha Sutra)

PPVO

(215) **在** 冢 中 发出 棺木 里 得 金钗 无数
zai *zhong* *zhong* *fachu* *guanmu* *li* *de* *jinchai* *wushu*
from tomb inside open coffin inside obtain gold.hairpin countless
'…obtained countless gold hairpins from the coffin that was opened in the tomb.'
(《敦煌变文集・搜神记》Anecdotes about Spirits and Immortals)

Similar to 於/于 *yu*, goal-encoding 在 *zai* never occurs before the verb:

Goal

VPP

(216) 直 至 王宫 空中， 坠 **在** 大王 案 上
zhi *zhi* *wanggong* *kongzhong* *zhui* ***zai*** *dawang* *an* *shang*
directly reach palace sky fall onto king table top
'It went direct to the palace sky and fell onto the king's table.'
(《敦煌变文集・悉达太子修道因缘》The Story of Prince Siddhartha Practicing the Way of Buddha)

VOPP

(217) 抛 问头 **在** 地
pao *wentou* ***zai*** *di*
throw question to ground
'(Emperor Taizong) threw the question to the ground.'
(《敦煌变文集・唐太宗入冥记》Emperor Taizong of Tang Entering the Underworld)

Lastly, the path-encoding 在 *zai* is restricted to VPP constructions. Just like 於/于 *yu*, when introducing path, only a highly limited set of verbs can be used, all of which must express the act of passing through:

Path

VPP

(218) 遂 有 一 童子，过 **在** 街坊
*sui you yi tongzi guo **zai** jiefang*
then have one boy pass through neighbourhood
'Then there was a boy passing through the neighbourhood.'
(《敦煌变文集・前汉刘家太子传》Biography of the Crown Prince of the Liu Family from the Former Han Dynasty)

In contrast to its prior usage in earlier texts, 向 *xiang* now enjoys not only an increased usage frequency but also a broader functional scope in *Dunhuang Bianwen Ji.* It continues to introduce path, which remains its principal locative function. As described in Section 6.3.2 of Chapter 6, the path category includes prepositions that take purely directional prepositional objects without indicating the final destination, as well as those taking explicitly specified place names that might be construed as endpoints but are not necessarily so. As both subcategories pertain to the direction of movement, they are classified under the path subclass. Apart from its path function, 向 *xiang* is also observed to introduce location and source within this text.[106]

The overall distribution of 向 *xiang* shows a clear preference for preverbal placement (78.05%). When introducing location and source, 向 *xiang* exclusively precedes the verb:

Location

PPV

(219) 恰 **向** 城门 前 逢遇
*qia **xiang** chengmen qian fengyu*
by.chance in city.gate front meet.unexpectedly
'We happened to meet in front of the city gate.'
(《敦煌变文集・维摩诘经讲经文》Explanation of the Vimalakirti Sutra)

PPVO

(220) 遂即 抛 船 而 走，遂 **向** 芦 中 藏 身
*suiji pao chuan er zou sui **xiang** lu zhong cang shen*
immediately abandon boat CONJ run then in reed inside hide body
'He immediately abandoned the boat and ran away, then hid his body in the reeds.'
(《敦煌变文集・伍子胥变文》Transformation Text on Wu Zixu)

[106] As pointed out in Section 6.3.2 of Chapter 6, 向 *xiang* additionally serves the function of indicating the direction towards which the agent faces during an action (Lin 2019: 185). However, given the absence of spatial movement in such actions, these instances do not fit into the classification of path. This thesis primarily focuses on analysing the four major locative subclasses. Since these instances cannot be subsumed under any of them, they are not addressed in this study. Furthermore, this text features an emerging preposition 对 *dui*, serving the same purpose of encoding 'facing/directed at'. Its occurrences are sporadic, and they all precede the verb.

Source

PPVO

(221) 遂 **向** 腰 间 取 刃
sui ***xiang*** *yao* *jian* *qu* *ren*
then from waist between take blade
'Then he took the blade from his waist.'
(《敦煌变文集·苏武李陵执别词》Farewell of Su Wu and Li Ling)

Path 向 *xiang* PPs can occur in both preverbal and postverbal positions:

Path

VPP

(222) 又 取 朱笔 书 符, 吹 **向** 空中
you *qu* *zhubi* *shu* *fu* *chui* ***xiang*** *kongzhong*
also take brush-pen.dipped.in.red.ink inscribe talisman blow towards sky
'He also took the brush-pen, dipped in red ink, to inscribe a talisman and blew it towards the sky.'
(《敦煌变文集·叶净能诗》Poem of Ye Jingneng)

VOPP

(223) 目连 承 佛 威力, 腾 身 **向** 下
Mulian *cheng* *fo* *weili* *teng* *shen* ***xiang*** *xia*
Maudgalyayana receive Buddha power jump body towards down
'Maudgalyayana, empowered by the Buddha, leapt downward.'
(《敦煌变文集·大目乾连冥间救母变文》Transformation Text on Maudgalyayana Rescuing His Mother from the Underworld)

PPV

(224) 至 禾 熟 之 时, 昆仑 **向** 田 行
zhi he *shu* *zhi* *shi* *Kunlun* ***xiang*** *tian* *xing*
till crop ripe GEN time Kunlun towards field walk
'When the crops were ripe, Kunlun walked towards the field.'
(《敦煌变文集·搜神记》Anecdotes about Spirits and Immortals)

PPVO

(225) 只 **向** 云 中 抛 宝玩
zhi ***xiang*** *yun* *zhong* *pao* *baowan*
just towards cloud inside throw treasures.and.antiques
'Just throw treasures and antiques towards the clouds.'
(《敦煌变文集·欢喜国王缘》Fate of the Happy King)

Among the remaining locative prepositions, 从 *cong* and 自 *zi* introduce source, and 往 *wang* introduces path. In terms of distribution, 从 *cong* maintains the preverbal placement

rigorously without exception, while 自 *zi* accommodates both preverbal and postverbal positions. Below are examples of 从 *cong* PPs:

Source

PPV

(226) 所以 玄宗 皇帝 **从** 蜀地 回
*suoyi Xuanzong huangdi **cong** Shudi hui*
so Xuanzong emperor from Shu.region return
'So Emperor Xuanzong returned from the Shu region.'
(《敦煌变文集・维摩诘经讲经文》Explanation of the Vimalakirti Sutra)

PPVO

(227) 其 二 童子， 还 化作 二 虫， **从** 景 公 口
*qi er tongzi hai huazuo er chong **cong** Jing gong kou*
those two boy also turn.into two insect from Jing duke mouth
入 肠 中
ru chang zhong
enter intestine inside
'Those two boys also turned into two insects and entered the intestines from Duke Jing's mouth.'
(《敦煌变文集・搜神记》Anecdotes about Spirits and Immortals)

自 *zi* has an equal distribution before and after the verb, but no postverbal instances are found in the presence of a verbal object:

Source

VPP

(228) 元弘 等 出 **自** 京华
*Yuan Hong deng chu **zi** jinghua*
Yuan Hong et.cetera come from capital
'Yuan Hong and others came from the capital.'
(《敦煌变文集・张议潮变文》Transformation Text on Zhang Yichao)

PPV

(229) 万法 而 皆 **自** 心 生
*wanfa er jie **zi** xin sheng*
all.phenomena CONJ all from mind arise
'All phenomena arise from the mind.'
(《敦煌变文集・维摩诘经讲经文》Explanation of the Vimalakirti Sutra)

PPVO

(230) 净能　　**自**　会稽山　　适　长安
Jingneng ***zi*** *Kuaijishan* *shi* *Chang'an*
Jingneng from Mt.Kuaiji go Chang'an
'Jingneng went to Chang'an from Mount Kuaiji.'
(《敦煌变文集・叶净能诗》Poem of Ye Jingneng)

Lastly, 往 *wang* is only present in PPV constructions:

Path

PPV

(231) 目连　　闻　语，　更　**往**　前　行
Mulian *wen* *yu* *geng* ***wang*** *qian* *xing*
Maudgalyayana hear speech further towards front walk
'Maudgalyayana heard the words and walked further forward.'
(《敦煌变文集・大目乾连冥间救母变文》Transformation Text on Maudgalyayana Rescuing His Mother from the Underworld)

Tables 7.2 and 7.3 summarise the distribution of locative VPP/PPV and VOPP/PPVO in *Dunhuang Bianwen Ji* respectively:

Table 7.2: The distribution of locative VPP and PPV in *Dunhuang Bianwen Ji*

Locative preposition	VPP	Ratio	PPV	Ratio	VPP + PPV
於/于 ***yu***	173	66.03%	89	33.97%	262
在 ***zai***	127	76.05%	40	23.95%	167
向 ***xiang***	38	31.67%	82	68.33%	120
从 ***cong***	0	0%	81	100%	81
往 ***wang***	0	0%	10	100%	10
自 ***zi***	3	60%	2	40%	5
Total	341	52.87%	304	47.13%	645

Table 7.3: The distribution of locative VOPP and PPVO in *Dunhuang Bianwen Ji*

Locative preposition	VOPP	Ratio	PPVO	Ratio	VOPP + PPVO
於/于 ***yu***	84	34.01%	163	65.99%	247
向 ***xiang***	7	8.24%	78	91.76%	85
在 ***zai***	16	28.07%	41	71.93%	57
从 ***cong***	0	0%	41	100%	41
自 ***zi***	0	0%	1	100%	1
Total	107	24.83%	324	75.17%	431

An analysis of the two tables reveals that the EMC1 text *Dunhuang Bianwen Ji* demonstrates similar behaviour to the immediately preceding MC3 text *Foben Xingji Jing*. Both texts display an overall inclination towards preverbal locative PPs, albeit not to a significant level. Another similarity is the remarkable variation in locative PP distribution depending on whether a verbal object is present. In the absence of a verbal object, postverbal locative PPs maintain a slight lead in *Dunhuang Bianwen Ji*, where the preverbal proportion for VPP/PPV amounts to only 47.13%. In contrast, when the verb is followed by an object, the proportion of preverbal PPs for VOPP/PPVO climbs to 75.17%. Moreover, while 在 *zai* PPs favour postverbal placement in their overall usage, there is a noticeable reversal of this pattern in the presence of a verbal object. Thus, even though the dominance of preverbal locative PPs may not be immediately evident based on their total occurrences in *Dunhuang Bianwen Ji* (58.36%), potentially due to its prosimetric nature, their prominence becomes much more apparent when the verb takes an object.

7.2 EMC2

The text under analysis for EMC2 is the vernacular novel *Shui Hu Zhuan* 水浒传 (The Water Margin), composed from late Yuan to early Ming (14th c.). It is regarded as one of China's Four Great Masterpieces. Firstly, its locative prepositions, ranked in descending order of frequency, are as follows: 在 *zai* (67.37%), 望 *wang* (8.95%), 从 *cong* (8.75%), 於/于 *yu* (7.85%), 向 *xiang* (4.96%), 往 *wang* (1.75%), and 自 *zi* (0.37%). Table 7.4 presents an overview of the locative PP word order in *Shui Hu Zhuan*:

Table 7.4: An overview of locative PP word order in *Shui Hu Zhuan*

Locative preposition	VPP	VOPP	Post-V sub-total	Ratio	PPV	PPVO	Pre-V sub-total	Ratio	Post-V + Pre-V
在 ***zai***	1387	206	1593	48.10%	975	744	1719	51.90%	3312
望 ***wang***	0	1	1	0.23%	411	28	439	99.77%	440
从 ***cong***	0	0	0	0%	296	134	430	100%	430
於/于 ***yu***	180	30	210	54.40%	58	118	176	45.60%	386
向 ***xiang***	29	2	31	12.70%	117	96	213	87.30%	244
往 ***wang***	24	1	25	29.07%	43	18	61	70.93%	86
自 ***zi***	3	0	3	16.67%	3	12	15	83.33%	18
Total	1623	240	1863	37.90%	1903	1150	3053	62.10%	4916

The overall locative PP distribution pattern in *Shui Hu Zhuan* follows a trend similar to earlier texts, with preverbal PPs still comprising the majority in total occurrences. Its preverbal proportion (62.10%) has shown a slight rise from the EMC1 *Dunhuang Bianwen Ji*, now resembling the distribution found in the MC2 Buddhist scriptures and nearing the percentage in the MC3 non-Buddhist work *Qimin Yaoshu*. While the overall locative PP distribution remains largely unchanged, considerable shifts have taken place in the use of locative prepositions. The most apparent change is the decline of 於/于 *yu* from its longstanding prominence. It experiences a remarkable drop and loses its status as the most utilised locative preposition for the first time, accounting for just 7.85% and ranking fourth among the seven locative prepositions in this text. Correspondingly, 在 *zai* has seen a surge and now leads with the highest usage rate (67.37%). In addition, a new path locative preposition 望 *wang* emerges in this text, primarily expressing the direction of movement, with functions akin to 向 *xiang* and 往 *wang*. The function and distribution of individual locative prepositions are presented below:

To begin with, 在 *zai* displays a marginal preference for preverbal placement on the whole (51.90%). It introduces location and goal. The distribution of goal-encoding 在 *zai* is straightforward, still maintaining a uniform postverbal position without exception. This pattern holds true for both VPP and VOPP constructions, regardless of whether a verbal object is present. Verbs involved in its goal subclass primarily consist of displacement verbs and placement verbs.[107] In contrast, the distribution of location-encoding 在 *zai* is less clear-cut, allowing for both preverbal and postverbal positions. When the verb does not take an object, 在 *zai* PPs that express the location of occurrence (as termed by C. Zhang (2002)) tend to precede the verb. In other words, they are mostly observed within PPV constructions. Conversely, 在 *zai* PPs that express the location of staying (also in accordance with C. Zhang's terminology) may occur in either VPP or PPV constructions.

Examples of 在 *zai* PPs from *Shui Hu Zhuan* reveal that a very significant portion of the verbs within VPP constructions fall into two categories. The first category comprises

[107] In their discussion of directional resultative verb compounds in Mandarin Chinese, Li and Thompson (1989: 58) identify three types of displacement verbs. The first type, also the most apparent, consists of prototypical motion verbs such as *pao* 跑 (to run) and *fei* 飞 (to fly). The second type pertains to action verbs that naturally indicate a relocation of the direct object, like *reng* 扔 (to throw) and *song* 送 (to send). The last type involves action verbs that could potentially induce movement in the direct object. They illustrate this category with the verb *da* 打 (to hit). While it does not innately suggest movement of the direct object as seen in the second type, the act of hitting could still lead to displacement in the direct object.

posture verbs, such as *li* 立 (to stand) and *gui* 跪 (to kneel). The second category consists of verbs characterised by a comparable lack of dynamism, which, according to C. Zhang (2002: 8), implies that the state formed after the action can be sustained, as exemplified by *duo* 躲 (to hide) and *liu* 留 (to stay). Consequently, the 在 *zai* PPs in these VPP constructions naturally convey the location of staying. However, such a division of labour is less evident for location-encoding 在 *zai* when the verb is followed by an object. For instance, some location-encoding 在 *zai* PPs in VOPP constructions are observed to express the location of occurrence. Put differently, the verbs within the postverbal VOPP constructions are not confined to verbs of staying.[108] In general, C. Zhang's (2002) correspondence rule and Tai's (1975) semantic principle characterising the use of 在 *zai*, both reviewed in Chapter 2, operate quite effectively for 在 *zai* PPs during this period, at least when the verb is not followed by an object.[109]

The following examples illustrate the usage of 在 *zai* in *Shui Hu Zhuan*:

Location

VPP

(232) a.林冲 立 **在** 胡梯 上
*Lin Chong li **zai** huti shang*
Lin Chong stand on staircase above
'Lin Chong stood on the staircase.'
(《水浒传·第七回》Chapter 7; 14th c.)

b.躲 **在** 他 原 养 的 娼妓 王娇娇 家
*duo **zai** ta yuan yang de changji Wang Jiaojiao jia*
hide in 3SG former keep NMLZ prostitute Wang Jiaojiao house
'(Du Wei) hid in the house of his former prostitute Wang Jiaojiao.'
(《水浒传·第一百十八回》Chapter 118; 14th c.)

VOPP

(233) 煮 你 **在** 锅 里, 也 没 气
*zhu ni **zai** guo li ye mei qi*
boil 2SG in pot inside also no temper
'Even cooking you in a pot won't make you angry.'
(《水浒传·第二十五回》Chapter 25; 14th c.)

[108] The rarity of posture verbs in VOPP constructions is logical since many of these verbs are intransitive and hence incapable of having a direct object.
[109] Tai's semantic principle characterising the use of 在 *zai* is established based on the behaviour of 在 *zai* in Modern Chinese. Modern Chinese typically disfavours VOX (as indicated by WALS Feature 84A, where X is an oblique). Therefore, it follows that this semantic principle primarily applies to the semantic contrast of 在 *zai* between VPP and PPV constructions.

PPV

(234) a.宋公明 哥哥 见今 **在** 高唐 州 界首 厮杀
*Song Gongming gege jianjin **zai** Gaotang zhou jieshou sisha*
Song Gongming brother now at Gaotang prefecture frontier fight
'Brother Song Gongming is now fighting at the frontier of Gaotang Prefecture.'
(《水浒传·第五十四回》Chapter 54; 14th c.)

b.他 自 **在** 城 外 村 里 住
*ta zi **zai** cheng wai cun li zhu*
3SG self in city outside village inside live
'He lived in a village outside the city by himself.'
(《水浒传·第三十九回》Chapter 39; 14th c.)

PPVO

(235) 婆子 一头 寻思, 一面 自 **在** 灶 前 吃 了 三
*pozi yitou xunsi yimian zi **zai** zao qian chi le san*
old.woman while ponder while self in stove front drink ASP three
大 钟 酒
da zhong jiu
big cup wine
'The old woman, while pondering, drank three big cups of wine in front of the stove by herself.'
(《水浒传·第二十一回》Chapter 21; 14th c.)

Goal

VPP

(236) 逃 **在** 前 村 爹娘 家 里
*tao **zai** qian cun dieniang jia li*
escape to front village parents house inside
'(The wife) escaped to her parents' house in the front village.'
(《水浒传·第四十三回》Chapter 43; 14th c.)

VOPP

(237) 掷 笔 **在** 桌 上
*zhi bi **zai** zhuo shang*
throw pen onto table top
'(Song Jiang) threw the pen onto the table.'
(《水浒传·第三十九回》Chapter 39; 14th c.)

The emerging locative preposition 望 *wang* introduces path that pertains to the direction of movement. It almost exclusively occurs before the verb, with just one exception:

Path

VOPP

(238) 拨 马 **望** 东
bo *ma* ***wang*** *dong*
turn.around horse towards east
'(Geng Gong) turned the horse towards the east.'
(《水浒传·第九十五回》Chapter 95; 14th c.)

PPV

(239) 率领 军兵， **望** 东 便 走
shuailing *junbing* ***wang*** *dong* *bian* *zou*
lead troop towards east then leave
'They led the troops and headed towards the east.'
(《水浒传·第一百九回》Chapter 109; 14th c.)

PPVO

(240) **望** 后 心 再 射 一 箭
wang *hou* *xin* *zai* *she* *yi* *jian*
towards back heart again shoot one arrow
'(Zhou Jin) shot another arrow towards the centre of his back.'
(《水浒传·第十三回》Chapter 13; 14th c.)

从 *cong* introduces source and remains consistent in adhering to the preverbal placement:

Source

PPV

(241) 这 几个 大汉 都 **从** 后 门 走 了
zhe *jige* *dahan* *dou* ***cong*** *hou* *men* *zou* *le*
DEM a.few strong-built.man all from back door leave ASP
'These strong-built men all left from the back door.'
(《水浒传·第四十六回》Chapter 46; 14th c.)

PPVO

(242) **从** 肉案 上 抢 了 一 把 剔骨 尖 刀
cong *rou'an* *shang* *qiang* *le* *yi* *ba* *tigu* *jian* *dao*
from butcher.block top snatch ASP one CLF debone sharp knife
'He snatched a sharp boning knife from the butcher block.'
(《水浒传·第三回》Chapter 3; 14th c.)

Despite the substantial decrease in the use of 於/于 *yu* in this text, it retains its multifunctionality as a locative preposition, capable of introducing location, source, and goal. Its overall distribution tends to favour postverbal PPs (54.40%). Consistent with previous

trends, its goal PPs appear solely after the verb, as anticipated by C. Zhang's (2002) correspondence rule. As for its source PPs, only one instance is observed in the PPVO construction. While it precedes the verb and thus conforms to the correspondence rule, it remains an isolated occurrence and cannot be regarded as substantial evidence to firmly establish that the source PPs of 於/于 *yu* uniformly abide by this rule. Lastly, the distribution of location-encoding 於/于 *yu* appears highly similar to location-encoding 在 *zai*. In the absence of a verbal object, PPs that express the location of occurrence are mostly preverbal, while those expressing the location of staying can be positioned before or after the verb, with no fixed pattern. As with the location-encoding 在 *zai*, many verbs within the location 於/于 *yu* VPP constructions belong to posture verbs. Another parallel finding is that, when the verb takes an object, the distribution of location 於/于 *yu* PPs appears to deviate further from the prediction of the correspondence rule. A considerable number of its VOPP constructions carry verbs that fall outside verbs of staying, thus allowing their PPs to convey the location of occurrence. In general, the deviation in 於/于 *yu*'s placement from C. Zhang's correspondence rule might be due to 於/于 *yu* holding on to some of its more archaic usages. Below are examples that exemplify the usage of 於/于 *yu* in *Shui Hu Zhuan*:

Location

VPP

(243) 伏 **於** 武乡县 城 外 石盘山 侧
fu ***yu*** *Wuxiangxian* *cheng wai* *Shipanshan* *ce*
lie.down on Wuxiang.County city outside Mt.Shipan side
'They lay down on the side of Mount Shipan outside Wuxiang County.'
(《水浒传・第一百回》Chapter 100; 14th c.)

VOPP

(244) 宋江 已 破 李天锡 等 **于** 铜鞮山
Song Jiang *yi* *po* *Li Tianxi* *deng* ***yu*** *Tongdishan*
Song Jiang already defeat Li Tianxi et.cetera in Mt.Tongdi
'Song Jiang had defeated Li Tianxi and others in Mount Tongdi.'
(《水浒传・第一百回》Chapter 100; 14th c.)

PPV

(245) 将 杨志 **於** 死囚牢 里 监收
jiang Yang Zhi ***yu*** *siqiulao* *li* *jianshou*
DISP Yang Zhi in death.row.cell inside imprison
'Yang Zhi was imprisoned in the death row cell.'
(《水浒传・第十二回》Chapter 12; 14th c.)

PPVO

(246) 王庆　　又　**于**　云安　　建造　　行宫
Wang Qing you ***yu*** *Yun'an* *jianzao* *xinggong*
Wang Qing also in Yun'an build travelling.palace
'Wang Qing also built a travelling palace in Yun'an.'
(《水浒传・第一百五回》Chapter 105; 14th c.)

Source

PPVO

(247) 陈　太尉　　**於**　诏书　　匣　内　　取出　　诏书
Chen taiwei ***yu*** *zhaoshu* *xia* *nei* *quchu* *zhaoshu*
Chen grand.commandant from imperial.edict box inside take.out imperial.edict
'Grand Commandant Chen took out the imperial edict from the edict box.'
(《水浒传・第七十五回》Chapter 75; 14th c.)

Goal

VPP

(248)a.尸骸　落　**于**　马　　前
shihai *luo* ***yu*** *ma* *qian*
corpse fall to horse front
'The corpse fell to the front of the horse.'
(《水浒传・第八十七回》Chapter 87; 14th c.)

b.将　卓茂　　一剑　　斩　**于**　马　下
jiang *Zhuo Mao* *yijian* *zhan* ***yu*** *ma* *xia*
DISP Zhuo Mao one.sword.stroke slash to horse under
'With a single sword stroke, (Sun An) slashed Zhuo Mao down to under the horse.'
(《水浒传・第一百八回》Chapter 108; 14th c.)

The verbs in (248a-b) both belong to verbs of displacement: *luo* 落 (to fall) in (248a) falls under Li and Thompson's (1989) first and also the most apparent type, which comprises conventional motion verbs; *zhan* 斩 (to slash) in (248b) is considered the third type. Although slashing itself does not inherently suggest a relocation in the patient, the act can still lead to displacement, as demonstrated by the patient falling off and ending up under the horse in this example.

The three remaining locative prepositions 向 *xiang*, 往 *wang*, and 自 *zi* collectively constitute less than 8% of the total locative preposition usage in *Shui Hu Zhuan*. The preverbal PPs hold the predominant majority for all of them. While the locative functions of 往 *wang* and 自 *zi* are generally singular, 向 *xiang* enjoys a broader functional range, capable of introducing location, source, and path, with path being its primary function. Its functions and distributions

closely match those of its counterpart in the EMC1 *Dunhuang Bianwen Ji*. When introducing location and source, 向 *xiang* is solely confined to the preverbal position. When introducing path, it can either precede or follow the verb:

Location

PPV

(249) 当晚 两个 且 **向** 山 边 一 个 古
dangwan liangge qie ***xiang*** *shan bian yi ge gu*
that.night two for.the.time.being in mountain side one CLF ancient
庙 中 供床 上 宿歇
miao zhong gongchuang shang suxie
temple inside offering.table top lodge
'That night, the two just rested on the offering table in an ancient temple on the side of the mountain.'
(《水浒传·第七十三回》Chapter 73; 14th c.)

PPVO

(250) 且 **向** 城 中 屯驻 军马
qie ***xiang*** *cheng zhong tunzhu junma*
for.the.time.being in city inside station troop
'(Grand Commandant Gao) stationed troops in the city for the time being.'
(《水浒传·第七十九回》Chapter 79; 14th c.)

Source

PPV

(251) 便 怒 从 心 上 起, 恶 **向** 胆 边 生
bian nu cong xin shang qi e ***xiang*** *dan bian sheng*
then anger from heart top arise hatred from bile side arise
'Then anger rises up from the heart while hatred explodes from the bile.'[110]
(《水浒传·第三十四回》Chapter 34; 14th c.)

PPVO

(252) 右手 **向** 走兽壶 中 拔 箭
youshou ***xiang*** *zoushouhu zhong ba jian*
right.hand from pot.for.arrows inside pull.out arrow
'With the right hand, (Hua Rong) pulled out an arrow from the pot-shaped arrow container.'
(《水浒传·第三十五回》Chapter 35; 14th c.)

[110] This idiomatic expression conveys extreme anger. It uses two source PPs in a parallel form. The free translation is adapted from Santangelo (1995). 胆 *dan* carries meanings like gallbladder, bile, and the notion of having the guts. Thus, an alternative reading of this expression is being emboldened by anger and fostering evil thoughts. The metaphoric association extends to the English translation, as *bile* signifies feelings of anger or bitterness.

Path

VPP

(253) 将 写 下 的 数 张 字纸， 抛 **向**
*jiang xie xia de shu zhang zizhi pao **xiang***
DISP write down NMLZ several piece wastepaper toss towards
帅府 前 左 右 街市 闹 处
shuaifu qian zuo you jieshi nao chu
commander's.mansion front left right market bustling place
'He tossed several written pieces of paper towards the bustling areas of the left and right markets, located in front of the commander's mansion.'
(《水浒传·第一百八回》Chapter 108; 14th c.)

VOPP

(254) 明日 尽数 驱 马军 **向** 前
*mingri jinshu qu majun **xiang** qian*
tomorrow all drive cavalry towards front
'Tomorrow, we will drive all the cavalry forward.'
(《水浒传·第五十五回》Chapter 55; 14th c.)

PPV

(255) 只有 刘敏 同 三 四 百 败残 军卒, **向** 前 逃奔
*zhiyou Liu Min tong san si bai baican junzu **xiang** qian taoben*
only Liu Min with three four hundred defeated soldier towards front flee
'Only Liu Min and the remaining three to four hundred defeated soldiers fled ahead.'
(《水浒传·第一百五回》Chapter 105; 14th c.)

PPVO

(256) 先 **向** 水亭 上 放 一 枝 响箭
*xian **xiang** shuiting shang fang yi zhi xiangjian*
first towards waterside.pavilion above shoot one CLF whistling.arrow
'He first shot a whistling arrow towards the waterside pavilion.'
(《水浒传·第三十五回》Chapter 35; 14th c.)

往 *wang* introduces path and occurs predominantly before the verb:

Path

VPP

(257) 钮文忠 驰 **往** 北 门
*Niu Wenzhong chi **wang** bei men*
Niu Wenzhong rush towards north gate
'Niu Wenzhong rushed towards the north gate.'
(《水浒传·第九十二回》Chapter 92; 14th c.)

VOPP

(258) 一边　差　　薛永　　赍　书　**往**　　蒲东
yibian chai　*Xue Yong*　*ji*　*shu*　***wang***　*Pudong*
while dispatch Xue Yong send letter towards Pudong
'While Xue Yong was dispatched to bring a letter to Pudong.'
(《水浒传・第六十四回》Chapter 64; 14th c.)

PPV

(259) 一路　　直　　**往**　　幽州　　进发
yilu　*zhi*　***wang***　*Youzhou*　*jinfa*
all.the.way straight towards Youzhou proceed
'Proceeded straight towards Youzhou all the way.'
(《水浒传・第八十六回》Chapter 86; 14th c.)

PPVO

(260) 各　**往**　　陈、颍　二　州　　起　　军
ge　***wang***　*Chen Ying*　*er*　*zhou*　*qi*　*jun*
each towards Chen Ying two prefecture dispatch troop
'They each dispatched troops towards the two prefectures of Chen and Ying.'
(《水浒传・第五十五回》Chapter 55; 14th c.)

Lastly, 自 *zi* introduces source and also prefers a preverbal placement:

Source

VPP

(261) 又　见　一　缕　五色　　天子　　之　气，起　**自**　睦州
you　*jian*　*yi*　*lü*　*wuse*　*tianzi*　*zhi*　*qi*　*qi*　***zi***　*Muzhou*
again see one wisp five-colour son.of.heaven GEN aura rise from Muzhou
'Once again, I saw a wisp of the five-colour aura of the Son of Heaven rising from Muzhou.'
(《水浒传・第一百十六回》Chapter 116; 14th c.)

PPV

(262) 忽　　报　神行太保　　戴宗　**自**　晋宁　回
hu　*bao*　*shenxingtaibao*　*Dai Zong*　***zi***　*Jinning*　*hui*
suddenly report Magic.Traveller Dai Zong from Jinning return
'Suddenly, it was reported that Dai Zong, the Magic Traveller, had returned from Jinning.'
(《水浒传・第九十七回》Chapter 97; 14th c.)

PPVO

(263) 薛永 **自** 东京 取到 凌振 老小
Xue Yong ***zi*** *Dongjing* *qudao* *Ling Zhen* *laoxiao*
Xue Yong from Eastern.Capital pick.up Ling Zhen old.and.young
'Xue Yong picked up Ling Zhen's entire family from the Eastern Capital.'
(《水浒传·第五十六回》Chapter 56; 14th c.)

Tables 7.5 and 7.6 summarise the distribution of locative VPP/PPV and VOPP/PPVO in *Shui Hu Zhuan* respectively:

Table 7.5: The distribution of locative VPP and PPV in *Shui Hu Zhuan*

Locative preposition	VPP	Ratio	PPV	Ratio	VPP + PPV
在 ***zai***	1387	58.72%	975	41.28%	2362
望 ***wang***	0	0%	411	100%	411
从 ***cong***	0	0%	296	100%	296
於/于 ***yu***	180	75.63%	58	24.37%	238
向 ***xiang***	29	19.86%	117	80.14%	146
往 ***wang***	24	35.82%	43	64.18%	67
自 ***zi***	3	50%	3	50%	6
Total	1623	46.03%	1903	53.97%	3526

Table 7.6: The distribution of locative VOPP and PPVO in *Shui Hu Zhuan*

Locative preposition	VOPP	Ratio	PPVO	Ratio	VOPP + PPVO
在 ***zai***	206	21.68%	744	78.32%	950
於/于 ***yu***	30	20.27%	118	79.73%	148
从 ***cong***	0	0%	134	100%	134
向 ***xiang***	2	2.04%	96	97.96%	98
望 ***wang***	1	3.45%	28	96.55%	29
往 ***wang***	1	5.26%	18	94.74%	19
自 ***zi***	0	0%	12	100%	12
Total	240	17.27%	1150	82.73%	1390

A recurring pattern is evident here. While the overall preference for preverbal locative PPs is not particularly pronounced in *Shui Hu Zhuan* (62.10%), the percentage of preverbal PPs for VOPP/PPVO substantially increases to 82.73% when the verb is followed by an object. This markedly exceeds the proportion of preverbal PPs when the verb lacks an object (53.97%). In addition, with the presence of a verbal object, all seven locative prepositions in this text exhibit

a clear preference for preverbal PPs as the predominant word order. Once again, it reaffirms that the presence of a verbal object enhances the preverbal predominance of locative PPs.

7.3 EMC3

This section investigates the locative PP usage during EMC3, drawing from *Ru Lin Wai Shi* 儒林外史 (The Scholars), a mid-18th century vernacular novel from the Qing dynasty. This novel marks the final piece among the 14 texts under examination within this thesis. Firstly, its locative prepositions, ranked in order of decreasing frequency, are as follows: 在 *zai* (85.13%), 从 *cong* (6.80%), 往 *wang* (5.09%), 向 *xiang* (1.32%), 於/于 *yu* (1.03%), 望 *wang* (0.25%), 自 *zi* (0.19%), and 由 *you* (0.19%). Table 7.7 presents an overview of the locative PP word order in *Ru Lin Wai Shi*:

Table 7.7: An overview of locative PP word order in *Ru Lin Wai Shi*

Locative preposition	VPP	VOPP	Post-V sub-total	Ratio	PPV	PPVO	Pre-V sub-total	Ratio	Post-V + Pre-V
在 ***zai***	709	46	755	43.39%	449	536	985	56.61%	1740
从 ***cong***	0	0	0	0%	97	42	139	100%	139
往 ***wang***	10	0	10	9.62%	91	3	94	90.38%	104
向 ***xiang***	2	0	2	7.41%	8	17	25	92.59%	27
於/于 ***yu***	16	0	16	76.19%	2	3	5	23.81%	21
望 ***wang***	0	0	0	0%	5	0	5	100%	5
自 ***zi***	1	0	1	25%	2	1	3	75%	4
由 ***you***	0	0	0	0%	0	4	4	100%	4
Total	738	46	784	38.36%	654	606	1260	61.64%	2044

The table shows that the preverbal percentage of locative PPs in *Ru Lin Wai Shi* (61.64%) closely mirrors that of the EMC2 *Shui Hu Zhuan* (62.10%). Instead of perpetuating an ongoing upward trajectory, the figures depict an approximately consistent proportion with a marginal drop of 0.46%. This may suggest a potential plateau in the overall distribution of locative PPs across the two sub-stages of EMC2 and EMC3. In other words, a roughly stable trend is established, essentially sustaining a preverbal proportion slightly above 60%. Furthermore, the dominant status of 在 *zai* has further strengthened, commanding a significant presence with a share of 85.13% among all occurrences of locative prepositional usages. In contrast, 於/于 *yu*, previously the foremost in frequency all along until the EMC1 *Dunhuang Bianwen Ji*, has experienced additional demotion, now comprising merely 1.03%. Below is an examination of the function and distribution of individual locative prepositions:

Firstly, regarding the overall distribution, 在 *zai* shows a modest tendency towards preverbal placement (56.61%). Among all eight locative prepositions, 在 *zai* is the only one that can occur in the VOPP construction. Furthermore, this text has further showcased its versatility, as it is capable of introducing location, source, and goal. In general, the placement of 在 *zai* adheres to C. Zhang's (2002) correspondence rule, which is evident in the distribution patterns of its subclasses. Its source PPs exclusively precede the verb, while its goal PPs are consistently postverbal. Moreover, when indicating location, 在 *zai* PPs have the flexibility to occur either before or after the verb. Specifically, PPs expressing the location of occurrence primarily appear before the verb, whereas those conveying the location of staying can occur in either position.

The previous section has outlined two main types of staying verbs: the first type comprises posture verbs, and the second type includes verbs that suggest the resulting state after the action can persist over time. 在 *zai* PPs that co-occur with these staying verbs are flexible in their positioning, with almost no semantic distinction. In the context of non-staying verbs, the contrast in meaning between preverbal and postverbal 在 *zai* locative adverbials, as delineated by Tai's (1975) semantic principle, is clearly apparent in *Ru Lin Wai Shi*. As reviewed in Chapter 2, Tai's principle asserts that a preverbal 在 *zai* locative adverbial designates "the location of the action itself", while a postverbal one indicates "the location of the participant 'affected' by the action" (Tai 1975: 160). In this text, 在 *zai* PPs expressing where an event occurs are predominantly preverbal, with few exceptions. In contrast, postverbal 在 *zai* PPs convey the eventual position of the 'affected' participant resulting from the action's execution. This falls under the goal subclass within the classification of this thesis, and just like other goal PPs, it is no surprise that these 在 *zai* PPs also conform to the postverbal placement.

As for 在 *zai* PPs that collocate with staying verbs and flexibly occupy both preverbal and postverbal positions with minimal semantic discrepancy, Chapter 2 has cited Tai's (1985: 66) justification. Despite his earlier semantic principle not satisfactorily accounting for this free variation, Tai suggests that an explanation rooted in temporal sequence might offer insight. He argues that the verbs involved are often durative verbs that convey states instead of momentary actions. This causes the chronological order between 在 *zai* PPs and such verbs to be indistinct,

rendering the Principle of Temporal Sequence (PTS) irrelevant.[111] Consequently, both positions are equally viable with negligible difference in meaning. Finally, recall that in the EMC2 *Shui Hu Zhuan*, C. Zhang's (2002) correspondence rule proves less effective in governing the distribution of location-encoding 在 *zai* PPs when the verb is followed by an object, as some of the VOPP constructions feature non-staying verbs, thereby enabling their PPs to express the location of occurrence. This phenomenon appears to continue in *Ru Lin Wai Shi*, where there remains a moderate fraction of 在 *zai* PPs in VOPP constructions that express the location of occurrence and deviate from the correspondence rule.

The following examples illustrate the usage of 在 *zai* in *Ru Lin Wai Shi*:

Location

VPP

(264) 鲍文卿 同 儿子 坐 **在** 板凳 上
*Bao Wenqing tong erzi zuo **zai** bandeng shang*
Bao Wenqing with son sit on bench top
'Bao Wenqing sat on the bench with his son.'
(《儒林外史・第二十五回》Chapter 25; mid-18th c.)

VOPP

(265) 每 班 立 一 座 石碑 **在** 老郎庵 里
*mei ban li yi zuo shibei **zai** laolang'an li*
each troupe erect one CLF stele in Temple.of.Theatre.God inside
'Each troupe erected a stele in the Temple of Theatre God.'
(《儒林外史・第二十四回》Chapter 24; mid-18th c.)

PPV

(266) a.那 元宝 **在** 桌 上 乱 滚
*na yuanbao **zai** zhuo shang luan gun*
DEM ingot on table top disorderly roll
'That ingot rolled around on the table.'
(《儒林外史・第四十七回》Chapter 47; mid-18th c.)

b.方 敢 **在** 底下 一 个 凳子 上 坐 了
*fang gan **zai** dixia yi ge dengzi shang zuo le*
only.then dare on underneath one CLF stool top sit SFP
'Only then he dared to sit on a stool underneath.'
(《儒林外史・第二十五回》Chapter 25; mid-18th c.)

[111] As highlighted in Section 2.3.3 of Chapter 2, adhering to temporal sequence is not exclusive to Chinese. It is a general Gricean principle.

PPVO

(267) **在** 墙 上 画 了 一 个 马
zai *qiang shang hua le yi ge ma*
on wall top draw ASP one CLF horse
'He drew a horse on the wall.'
(《儒林外史・第四十回》Chapter 40; mid-18th c.)

The VOPP in (265), PPV in (266a), and PPVO in (267) all have PPs that denote the location of occurrence, while the VPP in (264) and PPV in (266b) have PPs that denote the location of staying. The flexibility of staying verbs to allow PPs to occupy either preverbal or postverbal positions with minimal semantic contrast is evidenced by the latter two instances. Both involve the posture verb *zuo* 坐 (to sit), and the places of sitting are highly similar (a bench and a stool). Thus, it appears to indicate some level of interchangeability between the two word orders.

Source

PPVO

(268) 六 老爷 **在** 腰 里 摸出 一 封 低 银子
liu laoye ***zai*** *yao li mochu yi feng di yinzi*
sixth master from waist inside fish.out one CLF low-purity silver
'Sixth Master fished out one pouch of low-purity silver from around his waist.'
(《儒林外史・第四十二回》Chapter 42; mid-18th c.)

Goal

VPP

(269) 把 他 送 **在** 班房
ba ta song ***zai*** *banfang*
DISP 3SG send to duty.office.of.a.yamen
'He was sent to the duty office of a *yamen*.'
(《儒林外史・第十九回》Chapter 19; mid-18th c.)

VOPP

(270) 发 了 两 班 戏箱 **在** 莫愁湖
fa le liang ban xixiang ***zai*** *Mochouhu*
send ASP two CLF costume.trunk to Mochou.Lake
'Two costume trunks were sent to Mochou Lake.'
(《儒林外史・第三十回》Chapter 30; mid-18th c.)

Both (269) and (270) depict the act of sending someone or something to a destination. The former employs a disposal BA construction, which compels the semantic verbal object *ta* 他 (him) to occupy the preverbal slot. Alternatively, without using the disposal construction, it could have taken the form of a VOPP construction like 送他在班房.

从 *cong*, which is second in frequency of use, introduces source and upholds its strict preverbal placement:

Source

PPV

(271) 近日 才 **从** 淮扬 来
jinri *cai* ***cong*** *Huaiyang* *lai*
recently just from Huaiyang come
'I have only recently come from Huaiyang.'
(《儒林外史・第四十一回》Chapter 41; mid-18th c.)

PPVO

(272) **从** 石屏山 直 抵 九曲岗
cong *Shipingshan* *zhi* *di* *Jiuqugang*
from Mt.Shiping directly reach Jiuqu.Hill
'They reached Jiuqu Hill directly from Mount Shiping.'
(《儒林外史・第四十三回》Chapter 43; mid-18th c.)

往 *wang* and 向 *xiang* strongly favour the preverbal placement, with the preverbal PPs exceeding 90% for each. They both introduce path, with 向 *xiang* additionally introducing source:

Path

VPP

(273) 连夜 逃 **往** 会稽山 中
lianye *tao* ***wang*** *Kuaijishan* *zhong*
that.very.night flee towards Mt.Kuaiji inside
'(Wang Mian) fled to Mount Kuaiji that very night.'
(《儒林外史・第一回》Chapter 1; mid-18th c.)

(274) 说 贼人 已 投 **向** 东 小路 而 去 了
shuo *zeiren* *yi* *tou* ***xiang*** *dong* *xiaolu* *er* *qu* *le*
say bandit already head towards east lane CONJ leave ASP
'It was said that the bandits had already headed towards the east lane and left.'
(《儒林外史・第三十四回》Chapter 34; mid-18th c.)

PPV

(275) 一个一个 的 火团子 **往** 天井 里 滚
yigeyige *de* *huotuanzi* ***wang*** *tianjing* *li* *gun*
each.one NMLZ fireball towards courtyard inside roll
'One by one, the fireballs rolled towards the courtyard.'
(《儒林外史・第十六回》Chapter 16; mid-18th c.)

(276) 把 盘子 **向** 地下 一 掀
ba *panzi* ***xiang*** *dixia* *yi* *xian*
DISP plate towards ground one flip
'The plate was flipped towards the ground.'
(《儒林外史・第十回》Chapter 10; mid-18th c.)

PPVO

(277) **往** 前 走过 了 六 桥
wang *qian* *zouguo* *le* *liu* *qiao*
towards front walk-pass ASP six bridge
'He walked forward, passing six bridges.' [112]
(《儒林外史・第十四回》Chapter 14; mid-18th c.)

(278) 一 个 十一二岁 的 小厮 又 **向**
yi *ge* *shiyi'ersui* *de* *xiaosi* *you* ***xiang***
one CLF eleven.or.twelve.years.old NMLZ servant.boy again towards
炉 内 添上 些 香
lu *nei* *tianshang* *xie* *xiang*
burner inside add some incense
'A servant boy, aged eleven or twelve, added some incense to the burner again.'
(《儒林外史・第四十九回》Chapter 49; mid-18th c.)

Source

PPVO

(279) **向** 腰 间 锦袋 中 取出 两 个 弹丸
xiang *yao* *jian* *jindai* *zhong* *quchu* *liang ge* *danwan*
from waist between brocade.pouch inside take.out two CLF pellet
'He took out two pellets from the brocade pouch around his waist.'
(《儒林外史・第三十四回》Chapter 34; mid-18th c.)

Not only has the share of 於/于 *yu* been reduced to a mere 1.03%, but its function has also been narrowed down to introducing only location.[113] Overall, there is a strong preference for postverbal placement, although in the presence of a verbal object, its PPs only appear

[112] Chapter 1 of the text contains an expression 往他家放牛. The surface form resembles a path PPVO construction, with a possible interpretation of 'herd the cattle towards his house' when viewed in isolation. However, the context indicates that Wang Mian considered it more appealing to go to the Qin family for cattle herding in exchange for meals rather than being in school. Thus, despite being tagged as a preposition in this instance by the corpus, it could be more fitting to regard 往 *wang* here as a verb denoting 'go to' in its original function.

[113] There are different possibilities. Either its function has considerably diminished, or there are only a limited number of locative 於/于 *yu* PPs in this text, thus it is understandable that only the ones denoting location, which is the most common function, are observed.

preverbally. As for its VPP constructions, nearly all the verbs employed belong to verbs of staying, with just one exception (as shown in (280b)):

Location

VPP

(280) a.庄征君　　跪　　**於**　香案　　前
Zhuang Zhengjun　*gui*　***yu***　*xiang'an*　*qian*
Zhuang Zhengjun　kneel　in　incense.table　front
'Zhuang Zhengjun knelt in front of the incense table.'
(《儒林外史・第三十七回》Chapter 37; mid-18th c.)

b.这　人　朝服　斩　**於**　市
zhe　*ren*　*chaofu*　*zhan*　***yu***　*shi*
DEM　person　court.attire　execute　in　market
'This person was executed in court attire in the market.'
(《儒林外史・第二十九回》Chapter 29; mid-18th c.)

PPV

(281) **於**　此　发卖
yu　*ci*　*famai*
in　here　sell
'(The book) will be sold here.'
(《儒林外史・第十四回》Chapter 14; mid-18th c.)

PPVO

(282) **于**　冯琢庵　年兄　处　得　读　大作
yu　*Feng Zhuo'an*　*nianxiong*　*chu*　*de*　*du*　*dazuo*
in　Feng Zhuo'an　older.brother　place　be.able.to　read　masterpiece
'I was able to read your masterpiece in the house of Brother Feng Zhuo'an.'
(《儒林外史・第二十二回》Chapter 22; mid-18th c.)

The remaining three locative prepositions 望 *wang*, 自 *zi*, and 由 *you* are sporadically found in the text. 望 *wang* and 由 *you* are strictly preverbal, while 自 *zi* strongly prefers the preverbal placement. Both 望 *wang* and 由 *you* introduce path:

Path

PPV

(283) **望**　滚　汤锅　里　一　掼
wang　*gun*　*tangguo*　*li*　*yi*　*guan*
towards　boiling　soup.pot　inside　one　throw
'(Madame Wang) threw (the fish) towards the boiling soup pot.'
(《儒林外史・第二十七回》Chapter 27; mid-18th c.)

PPVO

(284) 渡 洞庭湖， **由** 长江 一路 回 仪征
du *Dongtinghu* ***you*** *Changjiang* *yilu* *hui* *Yizheng*
cross Dongting.Lake via Yangtze.River all.the.way return Yizheng
'They crossed Dongting Lake and returned all the way to Yizheng via the Yangtze River.'
(《儒林外史·第四十四回》Chapter 44; mid-18th c.)

Both 自 *zi* and 由 *you* introduce source:

Source

VPP

(285) 所以 特 将 先生 起 **自** 田间
suoyi *te* *jiang* *xiansheng* *qi* ***zi*** *tianjian*
thus specially DISP sir summon from countryside
'Thus, I have specially summoned you, sir, from the countryside.'
(《儒林外史·第三十五回》Chapter 35; mid-18th c.)

PPV

(286) 想必 **自** 京师 部选 的 了?
xiangbi ***zi*** *jingshi* *buxuan* *de* *le*
presumably from capital appoint.and.post PTCL SFP
'Was it from the capital that you were appointed and posted here, I presume?'
(《儒林外史·第四十回》Chapter 40; mid-18th c.)

PPVO

(287) **自** 文德桥 至 利涉桥、 东水关
zi *Wendeqiao* *zhi* *Lisheqiao* *Dongshuiguan*
from Wende.Bridge reach Lishe.Bridge Dongshui.Pass
'From Wende Bridge, one arrives at Lishe Bridge and Dongshui Pass.'
(《儒林外史·第四十一回》Chapter 41; mid-18th c.)

(288) **由** 南京 回 五河 本籍
you *Nanjing* *hui* *Wuhe* *benji*
from Nanjing return Wuhe native.place
'He returned to his native place in Wuhe from Nanjing.'
(《儒林外史·第四十五回》Chapter 45; mid-18th c.)

Tables 7.8 and 7.9 summarise the distribution of locative VPP/PPV and VOPP/PPVO in *Ru Lin Wai Shi* respectively:

Table 7.8: The distribution of locative VPP and PPV in *Ru Lin Wai Shi*

Locative preposition	VPP	Ratio	PPV	Ratio	VPP + PPV
在 ***zai***	709	61.23%	449	38.77%	1158
往 ***wang***	10	9.90%	91	90.10%	101
从 ***cong***	0	0%	97	100%	97
於/于 ***yu***	16	88.89%	2	11.11%	18
向 ***xiang***	2	20%	8	80%	10
望 ***wang***	0	0%	5	100%	5
自 ***zi***	1	33.33%	2	66.67%	3
Total	738	53.02%	654	46.98%	1392

Table 7.9: The distribution of locative VOPP and PPVO in *Ru Lin Wai Shi*

Locative preposition	VOPP	Ratio	PPVO	Ratio	VOPP + PPVO
在 ***zai***	46	7.90%	536	92.10%	582
从 ***cong***	0	0%	42	100%	42
向 ***xiang***	0	0%	17	100%	17
由 ***you***	0	0%	4	100%	4
往 ***wang***	0	0%	3	100%	3
於/于 ***yu***	0	0%	3	100%	3
自 ***zi***	0	0%	1	100%	1
Total	46	7.06%	606	92.94%	652

As previously noted, the overall preverbal proportion of locative PPs in *Ru Lin Wai Shi* (61.64%) could indicate a possible levelling-off in the locative PP distribution, maintaining a relatively steady trend with a preverbal proportion slightly higher than 60% across EMC2 and EMC3. While this overall inclination towards preverbal locative PPs is not remarkably strong, in the presence of a verbal object, the proportion of preverbal PPs for VOPP/PPVO surges to 92.94%. This figure not only greatly exceeds both the overall preverbal proportion and the proportion of preverbal PPs for VPP/PPV when the verb does not take an object (46.98%), but it also ranks as the fourth highest in this aspect among all 14 texts assessed and holds the top position among non-Buddhist works. Furthermore, in the presence of a verbal object, postverbal PPs are exclusive to 在 *zai*, as other prepositions are not found in VOPP constructions. Could this decline in the percentage of locative VOPP constructions be partially attributed to the Postverbal Constraint (PVC), which is a tendency in Chinese to disallow more

than one postverbal constituent? To comply with PVC, there could be an increased adoption of the disposal construction via the marker 把 *ba* or 将 *jiang*, which converts a VOPP construction into a structure of '把/将 O VPP', thereby upholding the limitation of only one postverbal constituent. If so, does this also clarify why there is a rise in the proportion of VPP in this text? Specifically, why do postverbal locative PPs hold a slight lead for VPP/PPV, while the corresponding preverbal proportion only amounts to 46.98%? These points call for further discussion.

7.4 AN INTERIM SUMMARY OF EMC1 TO EMC3

Sections 7.1 – 7.3 have examined the distribution of locative PPs across the three sub-stages of Early Mandarin Chinese, drawing from the transformation text *Dunhuang Bianwen Ji* and vernacular novels *Shui Hu Zhuan* and *Ru Lin Wai Shi*. In contrast with the drastic transformations of the Middle Chinese period, the locative PP development in Early Mandarin Chinese has displayed a growing stability, as reflected in its overall distribution. Despite maintaining the preference for preverbal PPs, this dominance is relatively less conspicuous, with the overall preverbal proportion being 58.36%, 62.10%, and 61.64% for EMC1, EMC2, and EMC3 respectively. Particularly in EMC2 and ECM3, there appears to be no continuation of an upward trend, suggesting that the distribution has likely reached a state of relative stability. In a sense, even though the dominant locative PP word order differs between Old Chinese and Early Mandarin Chinese, the stable states presented by both periods are similar. That said, there are still aspects that merit attention during this period:

Firstly, here are some of the more notable observations. Regarding the usage of locative prepositions, 於/于 *yu* ceases to be the most utilised locative preposition for the first time in the EMC2 *Shui Hu Zhuan*, with 在 *zai* taking over the lead thereafter. In addition, while the overall preverbal proportion stays relatively consistent around 60% from EMC1 to EMC3, there exists variation within the preverbal proportion for VOPP/PPVO, demonstrating a rising trend. Unlike the plateau observed in the overall preverbal proportion, the preverbal proportion for VOPP/PPVO progressively increases from 75.17% to 82.73% and then to 92.94%, approaching the peak found in the Buddhist works during the Middle Chinese period. Moreover, these figures consistently and markedly surpass both their respective overall preverbal proportions and the preverbal proportions for VPP/PPV. Aside from this, when a verbal object is present, preverbal PPs prevail as the dominant placement for all locative prepositions. Some

locative prepositions prefer postverbal PPs in terms of overall occurrences or in the absence of a verbal object. However, when the verb is followed by an object, a noticeable reversal often occurs for these prepositions, with preverbal PPs now prevailing as the majority for VOPP/PPVO. Hence, although the prevalence of preverbal locative PPs may not be immediately apparent from their total occurrences, their prominence becomes significantly more evident when the verb is accompanied by an object.

Sections 7.1 – 7.3 also explored the suitability of C. Zhang's (2002) correspondence rule and Tai's (1975) semantic principle for explaining the word order of locative PPs in this period, and the degree to which they are applicable. While the two proposals were reviewed in Chapter 2, the earlier examination was mainly theoretical and did not incorporate sufficient linguistic materials, particularly historical ones, for further validation. The primary investigation of EMC1 concerns the distribution of 於/于 *yu* PPs, as 於/于 *yu* remains the leading locative preposition during this sub-stage, both in terms of frequency and functional scope. EMC1 represents the Tang and Five Dynasties period. According to C. Zhang, by this time, the movement of locative PPs to the preverbal slot was largely concluded, aligning the positioning of a locative PP in a sentence with its intended meaning. Exceptions to this rule mainly occurred in special contexts or constructions.

The analysis of *Dunhuang Bianwen Ji* reveals that goal 於/于 *yu* PPs uphold their distribution pattern from OC1 and remain exclusively within postverbal constructions, which aligns with the correspondence rule. There is just one instance of 於/于 *yu* introducing path PPs, which also marks the first occurrence of a preverbal path 於/于 *yu* PP. This preverbal positioning follows the correspondence rule, yet a single instance does not offer compelling evidence. Source 於/于 *yu* PPs are found in both preverbal and postverbal positions, contradicting the correspondence rule's expectation of them being exclusively preverbal. As for the location subclass, the correspondence rule posits that preverbal 於/于 *yu* PPs denote the location of occurrence and staying, and postverbal 於/于 *yu* PPs mainly denote the location of staying. However, the examples show that the postverbal location 於/于 *yu* PPs, in addition to denoting the location of staying as predicted by the correspondence rule, can also convey the location of event occurrence, thereby challenging the rule.

C. Zhang attributes this issue to the genre of *bianwen*, characterised by oral performance elements and a higher presence of rhymed verses. Symmetrical sentence structures may even be utilised in its prose segments for oral impact, a practice C. Zhang suggests that transcends the genre of *bianwen* and echoes a wider trend throughout the Tang

and Five Dynasties, which was influenced by the style of *pianwen* 骈文 (parallel prose). C. Zhang therefore contends that more "irregular" sentences are employed for rhetorical intent. While acknowledging the uniqueness of the prosimetric *bianwen*, Section 7.1 has clarified that the cited examples are derived solely from the free prose section of the text, not its verse. This seems to indicate that the correspondence rule might not be as immediately apparent as presumed for locative PPs in EMC1.

The main focus of EMC2 and EMC3 has shifted to the distribution of 在 *zai*, which has supplanted 於/于 *yu* as the primary locative preposition. Across both sub-stages, C. Zhang's (2002) correspondence rule and Tai's (1975) semantic principle characterising the use of 在 *zai* are generally effective, as demonstrated by the distribution patterns of its subclasses. Goal 在 *zai* PPs maintain a uniform postverbal distribution without exceptions. Verbs associated with the goal subclass mainly belong to displacement and placement verbs. Likewise, following the correspondence rule, its source PPs (not observed in EMC2 but present in EMC3) consistently precede the verb. When indicating location, 在 *zai* PPs are flexible in their placement relative to the verb. Specifically, PPs expressing the location of occurrence primarily precede the verb, whereas those conveying the location of staying can appear in either position. The latter mainly involves two types of staying verbs: posture verbs, and verbs with a similar lack of dynamism, which suggest that the resulting state after the action may endure over time. 在 *zai* PPs that co-occur with these staying verbs display little semantic distinction regardless of their placement before or after the verb. As for non-staying verbs, the distinction in meaning between preverbal and postverbal 在 *zai* locative adverbials, as outlined by Tai's (1975) semantic principle, is especially observable in the EMC3 *Ru Lin Wai Shi*. Here, 在 *zai* PPs conveying where an event occurs are predominantly preverbal, while postverbal 在 *zai* PPs indicate the 'affected' participant's eventual position resulting from the action. The latter 在 *zai* PPs, as part of the goal subclass within the classification of this thesis, naturally align with the distribution of other goal PPs and adhere to the postverbal placement.

Moreover, Section 7.3 has cited Tai's (1985) rationale to justify why 在 *zai* PPs collocating with staying verbs can adopt either preverbal or postverbal position with minimal semantic variance. Broadly speaking, the usage pattern of locative 在 *zai* PPs during this period resembles that in Modern Chinese to a large extent. This observation is generally consistent with the findings of Li and Thompson (1989: 398-406) presented in Chapter 1, which indicate that the use of postverbal locative phrases in Mandarin Chinese is restricted to verb classes of

displacement, posture, appearing, and placement. Lastly, for both EMC2 and EMC3, the effectiveness of C. Zhang's correspondence rule diminishes in governing the distribution of location-encoding 在 *zai* PPs when the verb takes an object. This is due to the presence of non-staying verbs in some of the VOPP constructions, thus allowing their PPs to convey the location of occurrence. The same observation holds for the distribution of location 於/于 *yu* PPs during EMC2. This observation highlights the increasing departure of the locative PP distribution from the correspondence rule in the presence of a verbal object. Once again, it underscores the necessity to separately analyse and compare the developmental paths of VOPP/PPVO and VPP/PVV. Considering their differing behaviour across various aspects, it is vital to distinguish between occurrences of locative PPs with and without a verbal object.

CHAPTER EIGHT
DISCUSSION ON THE DIACHRONIC DEVELOPMENT OF LOCATIVE PP WORD ORDER IN CHINESE

This chapter addresses the three research objectives and the related research questions of this thesis. Section 8.1 presents an overview of locative PP word order from OC1 to EMC3. Sections 8.2 and 8.3 tackle the second research objective by investigating potential internal and external factors behind the diachronic development of locative PP word order. The last research objective is addressed in Section 8.4, which discusses whether the findings from the study of locative PPs can shed light on other PP categories.

8.1 AN OVERVIEW OF LOCATIVE PP WORD ORDER FROM OC1 TO EMC3

Chapters 5 to 7 have focused on the word order of locative PPs in Old Chinese, Middle Chinese, and Early Mandarin Chinese respectively. While each chapter concludes with a summary, a comprehensive overview spanning OC1 to EMC3 is yet to be compiled. Section 3.3 of Chapter 3 has outlined the first research objective alongside its corresponding research question, which involves uncovering the evolution of Chinese locative PP word order across different phases. Thus, presenting an overview is essential to address these inquiries. Specifically, this research question comprises three sub-questions: 1) How does the distribution of locative VPP/PPV and VOPP/PPVO evolve over time? 2) What does the distribution reveal about the diachronic placement of each locative subclass? 3) Is there evidence indicating a transition in locative PP word order from predominantly postverbal to preverbal? If so, when did the transition occur? Only after solving these problems can we proceed to discuss the motivations and mechanisms behind the evolution of locative PP placement.

Prior to examining the respective distribution of locative VPP/PPV and VOPP/PPVO, it is essential to first summarise the overall distribution of locative PPs without considering the presence or absence of a verbal object. Table 8.1 presents an overview of the locative PP word order from OC1 to EMC3:[114]

[114] Please note the sequence of the four MC2 texts here differs from the order presented in Section 6.2 of Chapter 6. While Section 6.2 grouped the works based on the genre distinction between non-Buddhist and Buddhist works, they are now strictly arranged by their composition date, even though the two Buddhist scriptures *Miaofa Lianhua Jing* and *Weimojie Suoshuo Jing* (early 5th century) and the non-Buddhist *Shi Shuo Xin Yu* (mid-5th century) were composed in the same century with only a few decades apart. This sequence extends to the subsequent tables and figures.

Table 8.1: An overview of locative PP word order from OC1 to EMC3

	Postverbal	**Preverbal**
OC1 *Zuo Zhuan* (4th c. BCE)	94.94%	5.06%
OC2 *Han Feizi* (3rd c. BCE)	95.71%	4.29%
OC3 *Shi Ji* (early 1st c. BCE)	87.24%	12.76%
MC1a *Lun Heng* (1st c.)	87.37%	12.63%
MC1b *Compilation* (late 2nd c.)	22.38%	77.62%
MC2a *Sou Shen Ji* (4th c.)	62.15%	37.85%
MC2b *Miaofa Lianhua Jing* (early 5th c.)	36.27%	63.73%
MC2c *Weimojie Suoshuo Jing* (early 5th c.)	37.50%	62.50%
MC2d *Shi Shuo Xin Yu* (mid-5th c.)	32.07%	67.93%
MC3a *Qimin Yaoshu* (mid-6th c.)	36.14%	63.86%
MC3b *Foben Xingji Jing* (late 6th c.)	43.48%	56.52%
EMC1 *Dunhuang Bianwen Ji* (7th to 10th c.)	41.64%	58.36%
EMC2 *Shui Hu Zhuan* (14th c.)	37.90%	62.10%
EMC3 *Ru Lin Wai Shi* (mid-18th c.)	38.36%	61.64%

The following line graph in Figure 8.1 depicts Table 8.1, serving as a visual aid for easier trend identification:

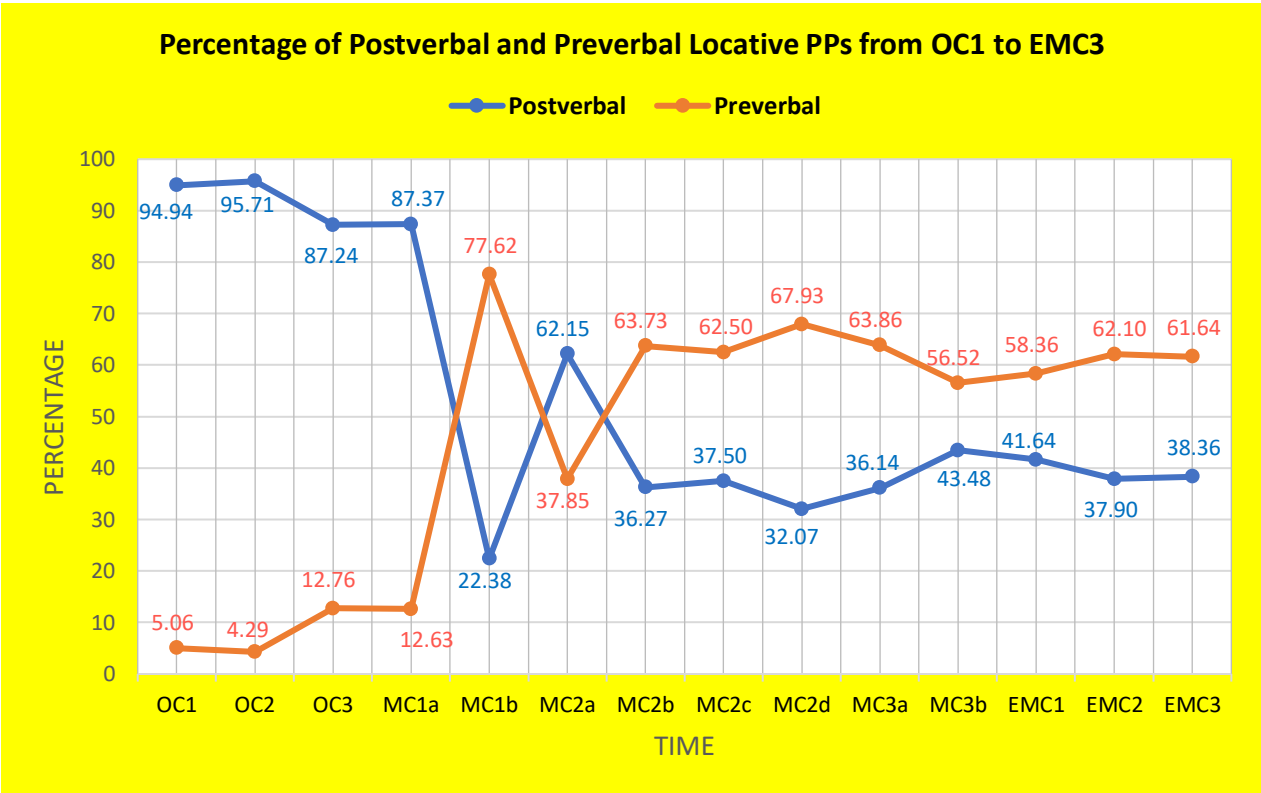


Figure 8.1 Percentage of postverbal and preverbal locative PPs from OC1 to EMC3

Figure 8.1 portrays the evolution in preverbal and postverbal locative PP percentages from OC1 to EMC3. Starting from OC1 (*Zuo Zhuan*, 4th c. BCE, pre-Qin) to MC1a (*Lun Heng*, 1st c., Eastern Han), postverbal locative PPs consistently dominated, constituting no less than 87.24% of all locative PP occurrences across this span. Conversely, preverbal PPs remained marginal, never exceeding 12.76% even at their highest. However, the transition from MC1a (*Lun Heng*, 1st c., Eastern Han) to MC1b (*Compilation of Eastern Han Buddhist Scripture Translations*, late 2nd c., Eastern Han) brought about a significant and abrupt transformation, with no sign of gradual progression. The percentage of postverbal locative PPs plummeted from 87.37% to 22.38%, while that of preverbal locative PPs surged from 12.63% to 77.62%, almost 3.5 times greater than its postverbal counterpart. This sudden and striking shift underscores a remarkable change in relationship between postverbal and preverbal locative PPs, as it diverges sharply from the prior trajectory. Yet, this alone does not conclusively indicate a lasting reversal of trends, as the data soon reveal a return to the initial state. From MC1b (*Compilation of Eastern Han Buddhist Scripture Translations*, late 2nd c., Eastern Han) to MC2a (*Sou Shen Ji*, 4th c., Six Dynasties), the postverbal proportion regained its dominance at 62.15%, while the preverbal proportion dropped back to 37.85%. Only from MC2b (*Miaofa Lianhua Jing*, early 5th c., Six Dynasties) onwards did the development stabilise, with preverbal locative PPs consistently holding dominance over postverbal PPs from MC2b straight through to EMC3 (*Ru Lin Wai Shi*, mid-18th c., Qing dynasty). This marks a definite shift in the dominant word order of locative PPs from predominantly postverbal to preverbal.

Comparing to both Old Chinese and Early Mandarin Chinese, the graph shows Middle Chinese as a period of turbulence, especially evident during the transition from MC1a (*Lun Heng*, 1st c., Eastern Han) to MC2b (*Miaofa Lianhua Jing*, early 5th c., Six Dynasties). The fluctuations diminished beyond MC2b, indicating relative stability. Despite the predominance of preverbal locative PPs, their overall proportion remained moderate from MC2b onwards, ranging from 56.52% to 67.93%. This trend is particularly noticeable towards the later phases, as depicted by the levelling-off during EMC2 (*Shui Hu Zhuan*, 14th c., late Yuan to early Ming) and EMC3 (*Ru Lin Wai Shi*, mid-18th c., Qing dynasty). Figure 8.1 corroborates earlier research, showing that the dominant word order for locative PPs in Old Chinese was postverbal. Eastern Han marked the onset of a shift towards preverbal, with the changes in dominant word order becoming more confirmed during the Six Dynasties.

Having completed the review of the overall distribution of locative PPs, it is time to investigate the distribution of locative VPP/PPV and VOPP/PPVO respectively. Firstly, Table 8.2 summarises the percentage of locative VPP and PPV constructions from OC1 to EMC3:

Table 8.2: An overview of locative VPP and PPV from OC1 to EMC3

	VPP	PPV
OC1 *Zuo Zhuan* (4th c. BCE)	95.45%	4.55%
OC2 *Han Feizi* (3rd c. BCE)	96.74%	3.26%
OC3 *Shi Ji* (early 1st c. BCE)	88.43%	11.57%
MC1a *Lun Heng* (1st c.)	90.87%	9.13%
MC1b *Compilation* (late 2nd c.)	30.39%	69.61%
MC2a *Sou Shen Ji* (4th c.)	66.84%	33.16%
MC2b *Miaofa Lianhua Jing* (early 5th c.)	56.70%	43.30%
MC2c *Weimojie Suoshuo Jing* (early 5th c.)	50%	50%
MC2d *Shi Shuo Xin Yu* (mid-5th c.)	34.82%	65.18%
MC3a *Qimin Yaoshu* (mid-6th c.)	40.58%	59.42%
MC3b *Foben Xingji Jing* (late 6th c.)	61.28%	38.72%
EMC1 *Dunhuang Bianwen Ji* (7th to 10th c.)	52.87%	47.13%
EMC2 *Shui Hu Zhuan* (14th c.)	46.03%	53.97%
EMC3 *Ru Lin Wai Shi* (mid-18th c.)	53.02%	46.98%

Figure 8.2 is the graphical depiction corresponding to Table 8.2:

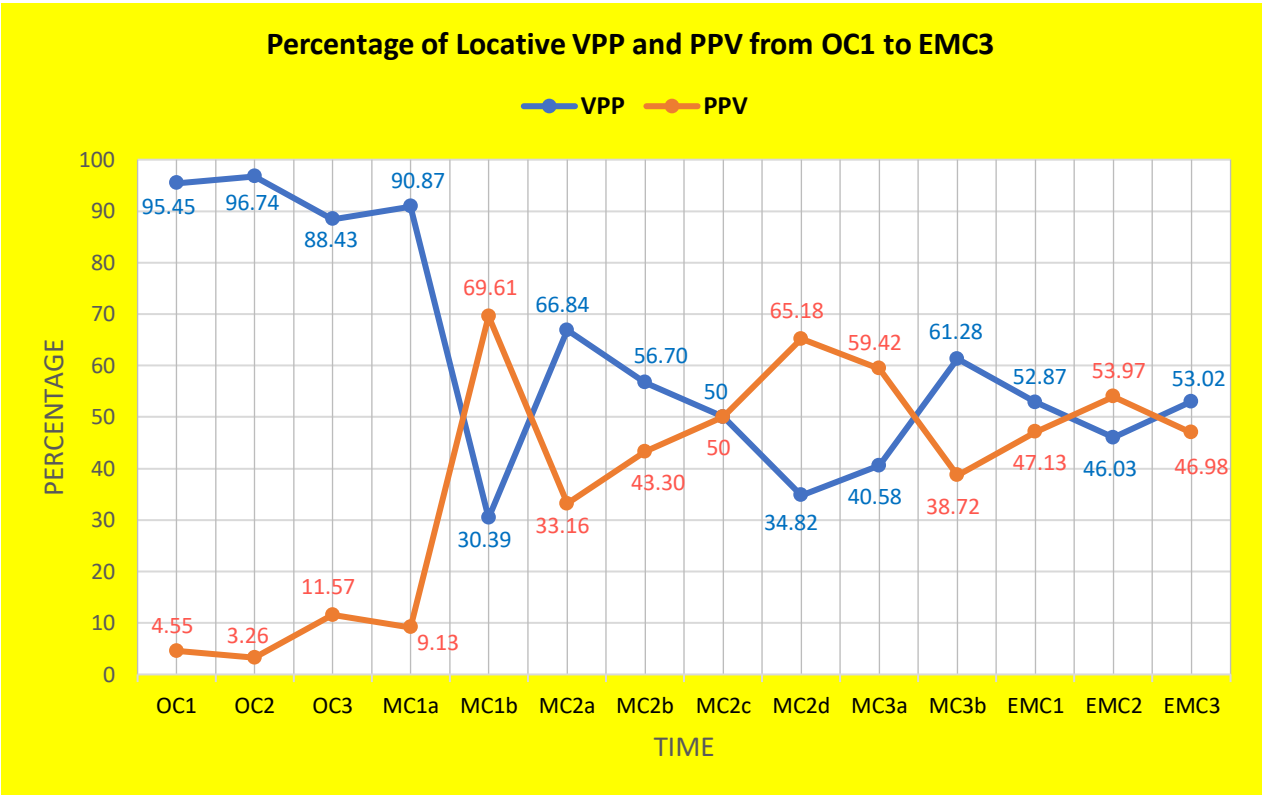


Figure 8.2 Percentage of locative VPP and PPV from OC1 to EMC3

Figure 8.2 suggests that the development of locative VPP and PPV presents a more intricate pattern compared to the overall distribution trend illustrated in Figure 8.1. The initial phases were similar, with postverbal locative PPs asserting dominance as the absolute majority from OC1 (4th c. BCE, pre-Qin) to MC1a (1st c., Eastern Han). Locative VPP constructions made up a minimum of 88.43% over this timeframe. Likewise, their proportion suffered a drastic and sudden loss to locative PPV constructions when transitioning from MC1a (1st c., Eastern Han) to MC1b (late 2nd c., Eastern Han). However, the ensuing trend reversed a few times, as indicated by the erratic fluctuations on the graph, with locative VPP and PPV alternating in dominance. The fluctuations appeared milder in Early Mandarin Chinese, as the percentage gap between locative VPP and PPV narrowed, with the two alternating up and down within a range close to 50%. Unlike the relatively straightforward trends in the overall distribution of postverbal versus preverbal locative PPs in Figure 8.1, the dataset here makes it challenging to conclusively establish whether there has been a shift in dominance. Considering the entirety of the observation period from OC1 to EMC3, locative VPP constructions experienced an overall decline, whereas locative PPV constructions displayed an overall upward trend. Yet, the multiple reversals and fluctuations obscure any simple interpretation, thus demonstrating a comparatively complex interplay between locative VPP and PPV constructions over time.

Below is an overview of locative VOPP and PPVO constructions from OC1 to EMC3:

Table 8.3: An overview of locative VOPP and PPVO from OC1 to EMC3

	VOPP	**PPVO**
OC1 *Zuo Zhuan* (4th c. BCE)	93.85%	6.15%
OC2 *Han Feizi* (3rd c. BCE)	94.07%	5.93%
OC3 *Shi Ji* (early 1st c. BCE)	85.79%	14.21%
MC1a *Lun Heng* (1st c.)	77.03%	22.97%
MC1b *Compilation* (late 2nd c.)	2.44%	97.56%
MC2a *Sou Shen Ji* (4th c.)	52.17%	47.83%
MC2b *Miaofa Lianhua Jing* (early 5th c.)	0.89%	99.11%
MC2c *Weimojie Suoshuo Jing* (early 5th c.)	11.76%	88.24%
MC2d *Shi Shuo Xin Yu* (mid-5th c.)	27.78%	72.22%
MC3a *Qimin Yaoshu* (mid-6th c.)	34.44%	65.56%
MC3b *Foben Xingji Jing* (late 6th c.)	2.10%	97.90%
EMC1 *Dunhuang Bianwen Ji* (7th to 10th c.)	24.83%	75.17%
EMC2 *Shui Hu Zhuan* (14th c.)	17.27%	82.73%
EMC3 *Ru Lin Wai Shi* (mid-18th c.)	7.06%	92.94%

Figure 8.3 is the graphical depiction corresponding to Table 8.3:

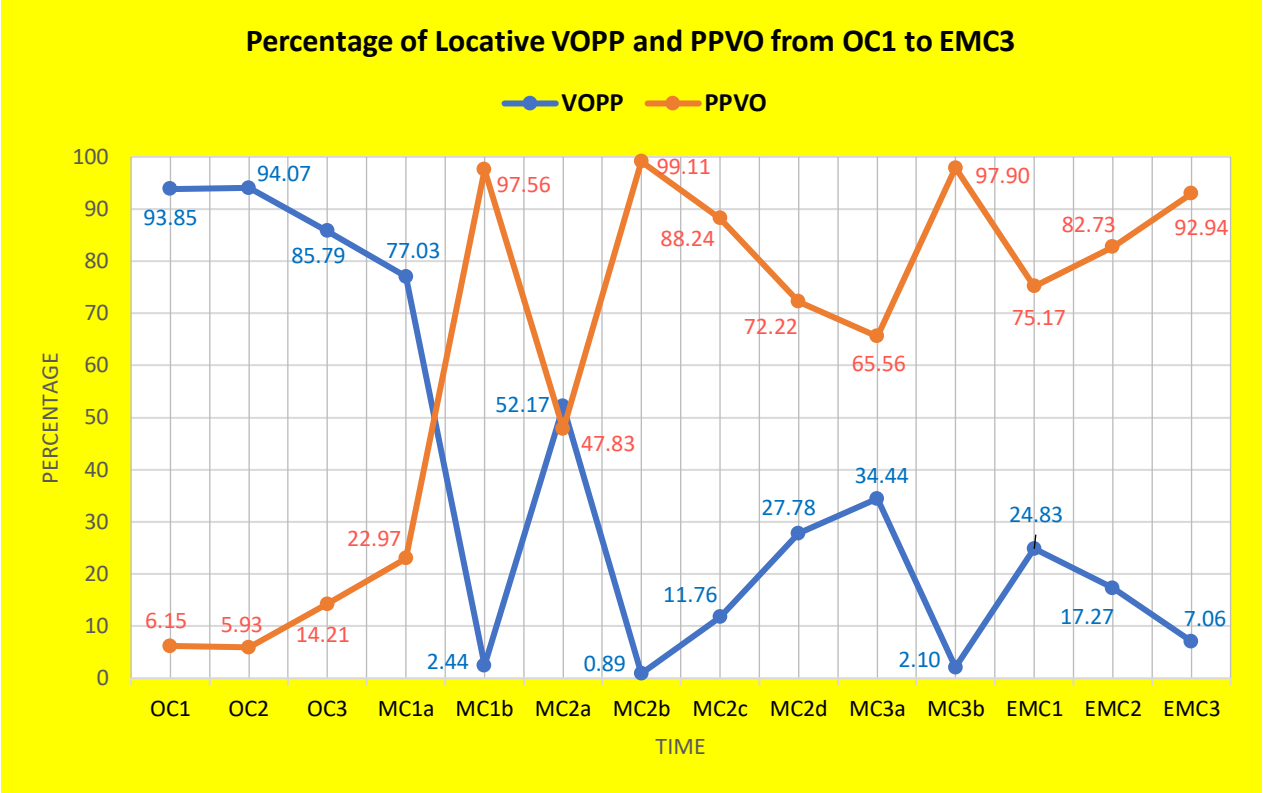


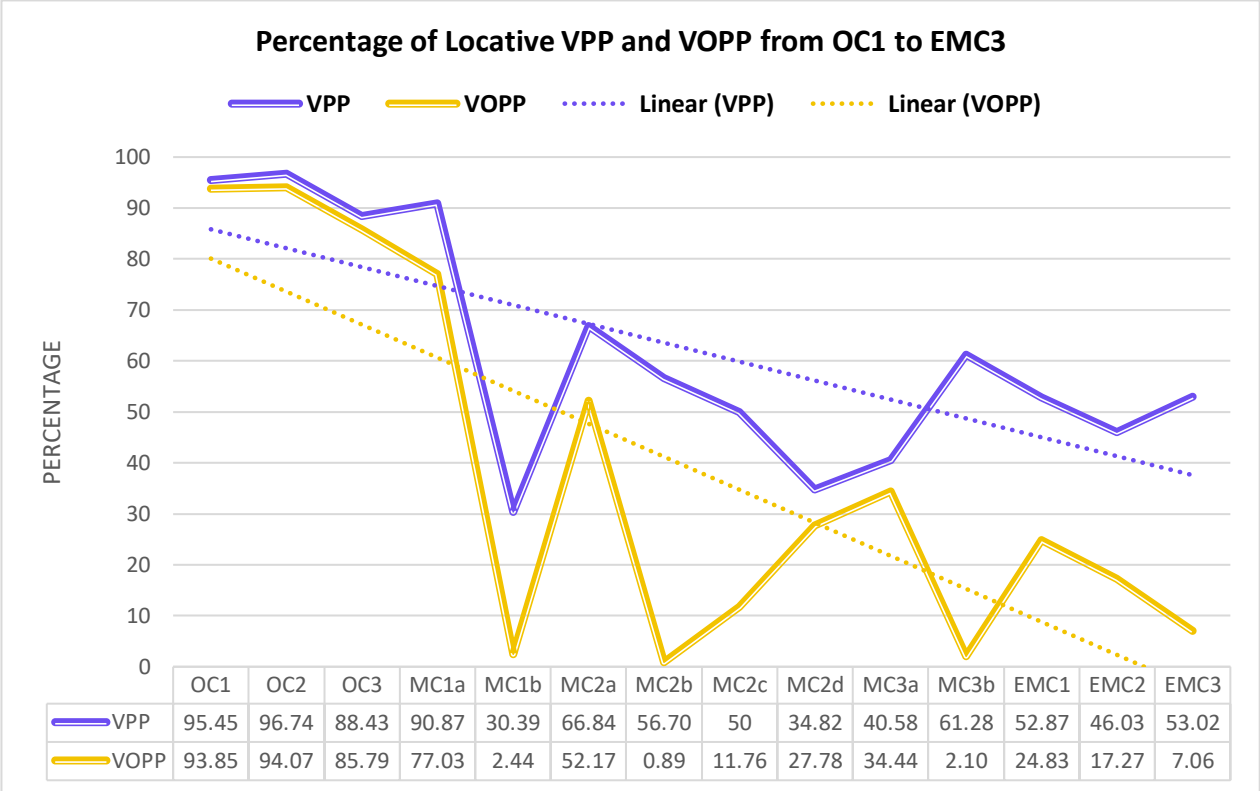
Figure 8.3 Percentage of locative VOPP and PPVO from OC1 to EMC3

The broader trajectory of locative VOPP and PPVO constructions diverges notably from that of locative VPP and PPV constructions depicted in Figure 8.2. Instead, it mirrors the overall distribution of postverbal and preverbal locative PPs in Figure 8.1, although variations may exist in the upward and downward trends within each phase. Their parallels are apparent in the overarching patterns, particularly through identical key turning points. Specifically, locative VOPP constructions dominated throughout OC1 (4th c. BCE, pre-Qin) to MC1a (1st c., Eastern Han) but plunged abruptly in MC1b (late 2nd c., Eastern Han), allowing PPVO constructions to take over. VOPP constructions rebounded in MC2a (4th c., Six Dynasties), only to relinquish their lead once more to PPVO constructions from MC2b (early 5th c., Six Dynasties) all the way to EMC3 (mid-18th c., Qing dynasty).

The line graph in Figure 8.3 possesses unique features. Firstly, it shows a decrease in locative VOPP constructions from 85.79% in OC3 (early 1st c. BCE, Western Han) to 77.03% in MC1a (1st c., Eastern Han), contrary to the marginal increase observed in the postverbal proportion in Figures 8.1 and 8.2 during the same period. This suggests that the postverbal decline could have commenced earlier in the presence of a verbal object. Furthermore, once PPVO took precedence over VOPP as the new dominant word order, its dominant presence became remarkably pronounced. The PPVO percentage remained higher than 75% across most

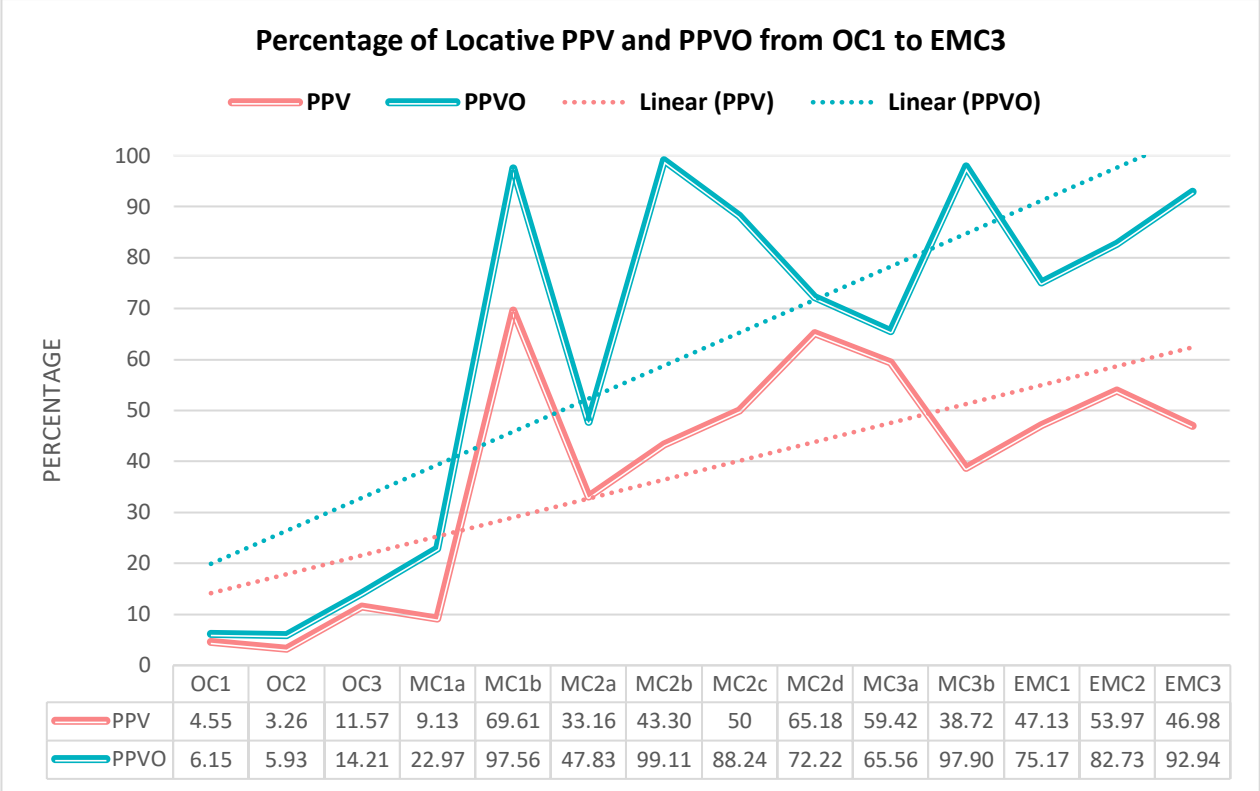
time periods and even surpassed 90% on several occasions, leading to a substantial percentage gap between VOPP and PPVO constructions. This differs from the situation in Figure 8.1, where preverbal locative PPs were dominant from MC2b (early 5th c., Six Dynasties) onwards, yet their overall proportion was not particularly outstanding. Likewise, it contrasts with Figure 8.2 where VPP and PPV constructions took turns in dominance. In other words, as PPVO supplanted VOPP to establish itself as the new dominant word order, its prevalence was far more salient compared to its preverbal counterpart in both Figure 8.1 and Figure 8.2.

The discussion above implies that whether a verbal object is present or absent mattered and could have an impact on the development of locative PP word order. Thus, it is essential to not only compare VPP with PPV and VOPP with PPVO, but also to juxtapose VPP against VOPP and PPV against PPVO. Recall that in Chapters 5 to 7, the analysis of locative PP usage in each text always concluded with two tables presenting the respective proportions of locative VPP/PPV and VOPP/PPVO. Again, a more intuitive approach would be to place related pairs on the same line graph for a clearer visual representation of comparison. Figures 8.4 and 8.5 illustrate the comparison between the developmental paths of locative VPP and VOPP, as well as PPV and PPVO, respectively:



	OC1	OC2	OC3	MC1a	MC1b	MC2a	MC2b	MC2c	MC2d	MC3a	MC3b	EMC1	EMC2	EMC3
VPP	95.45	96.74	88.43	90.87	30.39	66.84	56.70	50	34.82	40.58	61.28	52.87	46.03	53.02
VOPP	93.85	94.07	85.79	77.03	2.44	52.17	0.89	11.76	27.78	34.44	2.10	24.83	17.27	7.06

Figure 8.4 Percentage of locative VPP and VOPP from OC1 to EMC3



	OC1	OC2	OC3	MC1a	MC1b	MC2a	MC2b	MC2c	MC2d	MC3a	MC3b	EMC1	EMC2	EMC3
PPV	4.55	3.26	11.57	9.13	69.61	33.16	43.30	50	65.18	59.42	38.72	47.13	53.97	46.98
PPVO	6.15	5.93	14.21	22.97	97.56	47.83	99.11	88.24	72.22	65.56	97.90	75.17	82.73	92.94

Figure 8.5 Percentage of locative PPV and PPVO from OC1 to EMC3

Let us first compare locative VPP and VOPP in Figure 8.4. The analysis in the previous three chapters noted that the locative VOPP percentage consistently lagged behind the corresponding VPP percentage at every time point, hinting at a faster rate of change for VOPP. With the aid of linear trendlines plotted for VPP and VOPP, it is apparent that both feature a downward slope, signalling a diminishing trend over time for each. Nevertheless, the linear trendline for VOPP, depicted by the yellow dotted line, exhibits a steeper slope than the purple trendline for VPP. This points towards a more rapid decline for VOPP in comparison to VPP. Likewise, the trendlines for both locative PPV and PPVO in Figure 8.5 show an upward slope, indicating an increasing trend for each. However, the blue linear trendline for PPVO exhibits a steeper slope than the red trendline for PPV, indicating a quicker rate of increase for PPVO relative to PPV.

The earlier discussion suggested that the postverbal decline could have commenced earlier in the presence of a verbal object. However, it must be noted that if we use the initial shift in dominant word order from postverbal to preverbal as the reference point, there is no notable difference in the timeline for this change in locative PPs, regardless of whether a verbal object is present. Specifically, the initial shift from predominantly VOPP to PPVO occurred concurrently with the initial shift from predominantly VPP to PPV, both during MC1b (late 2nd c., Eastern Han).

A remaining task is to determine the diachronic placement of each locative subclass. Drawing upon data from the preceding three chapters, the table below provides an overview of the distribution of the four locative subclasses over time:

Table 8.4: The distribution of locative subclasses from OC1 to EMC3[115]

	Location	**Source**	**Goal**	**Path**
OC1 *Zuo Zhuan* (4th c. BCE)	predominantly postverbal	predominantly postverbal	strictly postverbal	strictly postverbal
OC2 *Han Feizi* (3rd c. BCE)	strictly postverbal	predominantly preverbal	strictly postverbal	strictly postverbal
OC3 *Shi Ji* (early 1st c. BCE)	predominantly postverbal	predominantly preverbal	strictly postverbal	predominantly postverbal
MC1a *Lun Heng* (1st c.)	predominantly postverbal	predominantly preverbal	strictly postverbal	NIL
MC1b *Compilation* (late 2nd c.)	predominantly preverbal	predominantly preverbal	strictly postverbal	NIL
MC2a *Sou Shen Ji* (4th c.)	predominantly postverbal	predominantly preverbal	strictly postverbal	strictly preverbal
MC2b *Miaofa Lianhua Jing* (early 5th c.)	predominantly preverbal	predominantly preverbal	strictly postverbal	strictly postverbal
MC2c *Weimojie Suoshuo Jing* (early 5th c.)	predominantly preverbal	predominantly preverbal	strictly postverbal	NIL
MC2d *Shi Shuo Xin Yu* (mid-5th c.)	predominantly preverbal	strictly preverbal	strictly postverbal	strictly preverbal
MC3a *Qimin Yaoshu* (mid-6th c.)	predominantly preverbal	strictly preverbal	strictly postverbal	strictly preverbal
MC3b *Foben Xingji Jing* (late 6th c.)	predominantly preverbal	predominantly preverbal	strictly postverbal	predominantly postverbal
EMC1 *Dunhuang Bianwen Ji* (7th to 10th c.)	predominantly preverbal	predominantly preverbal	strictly postverbal	predominantly preverbal
EMC2 *Shui Hu Zhuan* (14th c.)	predominantly preverbal	predominantly preverbal	strictly postverbal	predominantly preverbal
EMC3 *Ru Lin Wai Shi* (mid-18th c.)	predominantly preverbal	predominantly preverbal	strictly postverbal	predominantly preverbal

Table 8.4 presents the distribution of the four locative subclasses from OC1 to EMC3. All four locative subclasses started as either predominantly postverbal (location and source) or strictly postverbal (goal and path) at OC1 (4th c. BCE, pre-Qin). Among them, goal PPs exhibit the highest diachronic stability, staying strictly postverbal consistently until EMC3 (mid-18th c.,

[115] Here, the distribution of locative subclasses is analysed without differentiating whether the verb has an object. Instead, the focus is on determining the overall distribution tendency of each locative subclass. A more detailed analysis reveals that in some periods, the distribution patterns can differ depending on whether a verbal object is present.

Qing dynasty). In contrast, the other three subclasses have undergone a general shift in dominant word order from postverbal to preverbal, though the timing of their transitions varies. This reveals the asymmetry between goal PPs and non-goal locative PPs.

Source PPs were the earliest to change. From OC2 (3rd c. BCE, pre-Qin) onwards, they remained either predominantly preverbal or strictly preverbal. Moreover, source PPs have experienced the most thorough transformation among the three, with no reversals in the dominant word order along the way, unlike location PPs and path PPs. Location PPs maintained the dominant postverbal word order from OC1 (4th c. BCE, pre-Qin) to MC1a (1st c., Eastern Han). This dominance briefly shifted to preverbal in MC1b (late 2nd c., Eastern Han), only to revert to postverbal in MC2a (4th c., Six Dynasties). Starting from MC2b (early 5th c., Six Dynasties), location PPs consistently predominated in the preverbal position. It is evident that the distribution pattern of location PPs closely parallels the overall distribution of locative PPs (refer to Figure 8.1). Lastly, data gaps exist in the distribution of path PPs, with no relevant records for three texts (MC1a, MC1b, and MC2c). Thus, it is challenging to confidently pinpoint the timepoint at which the dominant word order shifted from postverbal to preverbal. Nevertheless, like source PPs and location PPs, path PPs also demonstrated an overall transition in dominant word order from postverbal to preverbal. Based on the limited data, the preverbal dominant order first appeared in MC2a (4th c., Six Dynasties). However, this new trend quickly shifted back to postverbal in MC2b (early 5th c., Six Dynasties), then reverted to preverbal in MC2d (mid-5th c., Six Dynasties), and again to postverbal in MC3b (late 6th c., Six Dynasties). It was only during Early Mandarin Chinese that the preverbal order consistently prevailed from EMC1 (7th to 10th c., Tang and Five Dynasties) to EMC3 (mid-18th c., Qing dynasty).

The discussion thus far has addressed all three sub-questions associated with the first research question. Specifically, this section has examined the placement of locative VPP/PPV and VOPP/PPVO from OC1 to EMC3, summarised the distribution of each locative subclass over time, as well as assessed whether the dominant word order of locative PPs underwent a shift from postverbal to preverbal, including pinpointing the timeframe of this transition. The next part will explore the second research question, which seeks to understand the motivations and mechanisms behind the diachronic development of locative PP word order. This will be discussed in terms of potential internal and external factors.

8.2 POSSIBLE INTERNAL FACTORS

This section examines the potential internal factors, starting with those suggested by previous research. While Chapter 2 has reviewed some of the earlier proposals, the objective now is to incorporate the data from Chapters 5 to 7 and the overview from the first section of this chapter, thereby re-evaluating the effectiveness of previously suggested solutions to achieve a more robust empirical analysis.

8.2.1 PREPOSITION DECLINE AND REPLACEMENT

The first possible internal factor to consider is preposition decline and replacement, which is reviewed in Section 2.2 of Chapter 2. As mentioned earlier, locative PPs introduced by 於/于 *yu* were almost always postverbal in Old Chinese, regardless of the locative subclass. Some researchers suggest that the decline of 於/于 *yu* , beginning in the later phases of Old Chinese, which involved its omissibility as well as its substitution by competing preverbal prepositions, led to a reduction in postverbal PPs and a corresponding rise in preverbal PPs.[116] However, based on the findings of C. Zhang (2002) and L. Jiang (2018), the change in locative PP word order likely occurred before the significant decline or replacement of 於/于 *yu.* It appears doubtful, therefore, that preposition decline and replacement was the primary factor behind the shift in locative PP word order, despite possibly having some impact. It is worth highlighting that C. Zhang's (2002) conclusion is drawn from examining the overall PP word order and the rise and fall of prepositions, without a specific focus on locative PP word order. For L. Jiang (2018), while the study targets locative PP word order, the investigation is restricted to the usage of locative prepositions in VOPP and PPVO constructions. Having obtained a more comprehensive set of data, I intend to re-evaluate this conclusion. In what follows, I will adopt M. Zhang's (1995) approach by focusing on two aspects of 於/于 *yu*'s decline, namely contraction in function and reduction in frequency of usage.

[116] I opted to review preposition decline and replacement as the first possible internal factor, partly because it is the first proposal discussed in the literature review and also because it presents an interesting scenario. Mei (1978) identifies two types of innovations in the historical development of Chinese grammar. The first type, 'lexical innovation', refers to the substitution of old particles with new ones within established structural frames. The second type, 'structural innovation', refers to the formation of new grammatical structures. Here, substituting the postverbal 於/于 *yu* with preverbal prepositions seems to be more than a straightforward lexical innovation. While this process involves lexical replacement, 於/于 *yu* is not substituted in its original syntactic position. The resulting PPV and PPVO constructions are distinct from the original VPP and VOPP constructions. Therefore, it appears that this process involves aspects of both types of innovations and may fall somewhere in between.

Table 8.5 outlines the functions performed by individual locative prepositions from OC1 to EMC3:

Table 8.5: Functions of locative prepositions from OC1 to EMC3

	Location	**Source**	**Goal**	**Path**
OC1 *Zuo Zhuan* (4th c. BCE)	於/于 *yu* 诸 *zhu*	於/于 *yu* 自 *zi* 诸 *zhu* 从 *cong*	於/于 *yu* 诸 *zhu*	於/于 *yu* 诸 *zhu*
OC2 *Han Feizi* (3rd c. BCE)	於/于 *yu* 乎 *hu*	於/于 *yu* 从 *cong* 自 *zi*	於/于 *yu*	於/于 *yu*
OC3 *Shi Ji* (early 1st c. BCE)	於/于 *yu* 乎 *hu* 诸 *zhu*	於/于 *yu* 从 *cong* 自 *zi* 乎 *hu* 由 *you*	於/于 *yu* 乎 *hu*	於/于 *yu* 乎 *hu* 由 *you*
MC1a *Lun Heng* (1st c.)	於/于 *yu* 在 *zai* 乎 *hu* 诸 *zhu*	於/于 *yu* 从 *cong* 自 *zi* 由 *you*	於/于 *yu* 乎 *hu* 诸 *zhu*	NIL
MC1b *Compilation* (late 2nd c.)	於/于 *yu* 在 *zai*	於/于 *yu* 从 *cong* 自 *zi*	於/于 *yu* 在 *zai*	NIL
MC2a *Sou Shen Ji* (4th c.)	於/于 *yu* 在 *zai* 乎 *hu*	於/于 *yu* 从 *cong* 自 *zi*	於/于 *yu* 在 *zai*	自 *zi*
MC2b *Miaofa Lianhua Jing* (early 5th c.)	於/于 *yu* 在 *zai*	於/于 *yu* 从 *cong*	於/于 *yu* 在 *zai*	於/于 *yu*
MC2c *Weimojie Suoshuo Jing* (early 5th c.)	於/于 *yu* 在 *zai* 诸 *zhu*	於/于 *yu* 从 *cong*	於/于 *yu* 诸 *zhu*	NIL
MC2d *Shi Shuo Xin Yu* (mid-5th c.)	於/于 *yu* 在 *zai*	於/于 *yu* 从 *cong* 自 *zi*	於/于 *yu*	於/于 *yu* 从 *cong* 诸 *zhu*
MC3a *Qimin Yaoshu* (mid-6th c.)	於/于 *yu* 在 *zai*	从 *cong*	於/于 *yu* 在 *zai*	向 *xiang*
MC3b *Foben Xingji Jing* (late 6th c.)	於/于 *yu* 在 *zai*	於/于 *yu* 从 *cong*	於/于 *yu* 在 *zai*	於/于 *yu* 向 *xiang*
EMC1 *Dunhuang Bianwen Ji* (7th to 10th c.)	於/于 *yu* 在 *zai* 向 *xiang*	於/于 *yu* 在 *zai* 向 *xiang* 从 *cong* 自 *zi*	於/于 *yu* 在 *zai*	於/于 *yu* 在 *zai* 向 *xiang* 往 *wang*
EMC2 *Shui Hu Zhuan* (14th c.)	在 *zai* 於/于 *yu* 向 *xiang*	从 *cong* 於/于 *yu* 向 *xiang* 自 *zi*	在 *zai* 於/于 *yu*	望 *wang* 向 *xiang* 往 *wang*
EMC3 *Ru Lin Wai Shi* (mid-18th c.)	在 *zai* 於/于 *yu*	在 *zai* 从 *cong* 向 *xiang* 自 *zi* 由 *you*	在 *zai*	往 *wang* 向 *xiang* 望 *wang* 由 *you*

Table 8.5 demonstrates the high versatility of 於/于 *yu* as a locative preposition, with its functional range spanning at least three of the four locative subclasses in 12 out of the 14 texts.

Specifically, 於/于 *yu* assumed roles in all four locative subclasses in 7 texts and in three locative subclasses in 5 texts. While 於/于 *yu* faced competition from other locative prepositions since OC1 (4th c. BCE, pre-Qin), its first substantial reduction in functional range occurred only in MC3a (mid-6th c., Six Dynasties), when it was restricted to introducing location and goal.[117] Following this, its scope rebounded, and ultimately narrowed down again to introducing only location by EMC3 (mid-18th c., Qing dynasty).

Additionally, L. Jiang (2018: 49) highlights that the adoption of 於/于 *yu*'s functions by other locative prepositions and the narrowing of its functional scope do not directly imply its decline. The frequency of locative preposition usage must also be taken into account. Table 8.6 presents the usage frequency of locative prepositions from OC1 to EMC3:

Table 8.6: Usage frequency (%) of locative prepositions from OC1 to EMC3

	於/于 *yu*	自 *zi*	诸 *zhu*	从 *cong*	乎 *hu*	由 *you*	在 *zai*	向 *xiang*	往 *wang*	望 *wang*
OC1	82.74%	10.08%	6.94%	0.24%	0%	0%	0%	0%	0%	0%
OC2	94.57%	1.14%	0%	3.15%	1.14%	0%	0%	0%	0%	0%
OC3	86.31%	5.45%	0.23%	6.98%	0.89%	0.14%	0%	0%	0%	0%
MC1a	81.23%	1.59%	0.45%	9.56%	1.37%	0.45%	5.35%	0%	0%	0%
MC1b	62.70%	0.47%	0%	25.87%	0%	0%	10.96%	0%	0%	0%
MC2a	71.18%	3.47%	0%	15.63%	1.04%	0%	8.68%	0%	0%	0%
MC2b	79.08%	0%	0%	15.69%	0%	0%	5.23%	0%	0%	0%
MC2c	80.77%	0%	3.85%	9.61%	0%	0%	5.77%	0%	0%	0%
MC2d	48.91%	2.72%	0.54%	16.31%	0%	0%	31.52%	0%	0%	0%
MC3a	89.56%	0%	0%	6.02%	0%	0%	2.81%	1.61%	0%	0%
MC3b	49.68%	0%	0%	27.45%	0%	0%	12.78%	10.09%	0%	0%
EMC1	47.30%	0.56%	0%	11.34%	0%	0%	20.82%	19.05%	0.93%	0%
EMC2	7.85%	0.37%	0%	8.75%	0%	0%	67.37%	4.96%	1.75%	8.95%
EMC3	1.03%	0.19%	0%	6.80%	0%	0.19%	85.13%	1.32%	5.09%	0.25%

[117] Chapter 6 has highlighted the distinctive style of the MC3a text *Qimin Yaoshu*. While the text contains a small portion of narrative passages, it is chiefly expository. Thus, despite the use of plain and vernacular language, the limited functional range of 於/于 *yu* here could be related to the style of the text, rather than solely reflecting the development of 於/于 *yu*'s usage during that period. This is particularly evident given that in the next two texts from later timepoints, its functional range reverted to introducing all four locative subclasses. Whatever the case may be, this only serves to show that the functional decline of 於/于 *yu* occurred quite late, subsequent to the dramatic changes in locative PP word order.

M. Li (1980) posits that since 於/于 *yu* was the only postverbal preposition in Ancient Chinese, there could be a tendency for all PPs to become uniform and move to the preverbal position. This assertion is open to debate. Apart from the empirical evidence that other prepositions, such as 乎 *hu* and 诸 *zhu*, were also postverbal, C. Zhang (2002: 273-274) raises a valid theoretical concern: the influence might, in fact, flow in the opposite direction. PPs led by 於/于 *yu* constituted the vast majority of locative PPs in the pre-Qin period, while the usage of other prepositions was very limited. Thus, even if 於/于 *yu* was the only primarily postverbal preposition, why could it not be that the dominant 於/于 *yu* influenced the minority preverbal PPs, causing them all to shift to the postverbal position? Indeed, Table 8.6 shows that the first substantial decrease in the frequency of 於/于 *yu* did not happen until MC2d (mid-5th c., Six Dynasties), when its share dropped below 50% for the first time. Prior to this period, competing prepositions, particularly those predominantly used before the verb, were infrequent in usage and did not challenge the prominence of 於/于 *yu* yet.

Consequently, when we consider the distribution of locative functions among prepositions as shown in Table 8.5, along with the changes in their usage frequency from Table 8.6, it becomes fairly clear that the change in the dominant word order of locative PPs occurred prior to 於/于 *yu*'s notable decline and replacement. This reaffirms that the change in locative PP word order was unlikely a direct result of preposition decline and replacement.[118]

8.2.2 ICONICITY AND SYNTACTIC PROCESSING

This section addresses the broad category of iconicity principles, with a specific focus on the Principle of Temporal Sequence (PTS), and examines various related proposals on syntactic processing. Before proceeding with the discussion, here are a few clarifications. Firstly, the footnotes in Section 2.3.3 of Chapter 2 state that Aitchison (2013) views iconicity as one of the intrinsic factors behind language transformation. Thus, this thesis includes PTS, which falls under iconicity principles, among the potential internal factors. Secondly, one might question why iconicity and syntactic processing are addressed in conjunction in this section, since the

[118] Recall that Section 3.2 of Chapter 3 cited M. Zhang's (2011: 251) view to stress the crucial role of external factors in explaining language change. M. Zhang posits that if the shift of PPs to the preverbal position is purely a result of internal adaptive adjustment triggered by the omission of 於/于 *yu* in Old Chinese, then why do Northern Chinese varieties keep advancing towards the complete eradication of postverbal PPs, while Sothern Chinese varieties show a much greater tolerance for them? Although M. Zhang's discussion primarily aims to refute the reliance on internal factors alone to explain language evolution, his argument touches on the decline of 於/于 *yu*, including its omissibility. Thus, this observation not only challenges approaches that focus entirely on internal causes but also indirectly questions the factor of preposition decline and replacement.

two do not belong to the same theoretical framework, aside from both being internal factors. The rationale for this joint discussion is that, as we will see shortly, some previous studies have noted that relying solely on one of these two factors cannot comprehensively explain the evolution of PP word order in Chinese, thus prompting the integration of both factors in their analysis.

Section 8.1 has examined the placement of the four locative subclasses across OC1 to EMC3 and noted an asymmetry between goal PPs and non-goal PPs. Goal PPs remained strictly postverbal throughout, while non-goal PPs generally shifted from postverbal to preverbal in their dominant word order, as shown in Table 8.4. This aligns closely with Hong's (2010a) findings on the placement of the six locative categories under his classification, which were reviewed in Section 2.3.2.1 of Chapter 2. Hong explains the development in locative word order using PTS, asserting that Chinese locatives have evolved from an overall non-motivated distribution (i.e., generally disobeying PTS in Old Chinese) to an overall motivated distribution (i.e., generally obeying PTS in Modern Chinese). Section 2.3.2.1 has already covered Hong's account on how PTS influences the distribution of his six locative categories, with additional insights from L. Jiang (2018) regarding the three categories not fully elaborated by Hong. Thus, Hong's discussion will not be repeated here. Instead, I seek to examine whether the data on the placement of the four locative subclasses in Table 8.4 can also be effectively explained by PTS.

Firstly, under PTS, it is natural for goal PPs to be consistently postverbal, as this order mirrors the real-world sequence in which people logically need to perform the action before arriving at the destination. When discussing the distribution of locative subclasses in Table 8.4, it was observed that among the three non-goal subclasses transitioning from predominantly postverbal to preverbal, source PPs were the first to shift their word order and underwent the most complete transformation. The remaining two subclasses — location PPs and path PPs — underwent the shift at a later stage and also experienced reversals in their dominant order. This distinction may arise because conceptually, source PPs are more straightforward under PTS, whereas location PPs and path PPs are more nuanced. In contrast to goal PPs, source PPs mark where an action starts and inherently occur before the action. Thus, the shift in their dominant word order from postverbal to preverbal is anticipated.

Location PPs were the next subclass to shift their dominant word order from postverbal to preverbal. Ideally, like source PPs, the preferred word order for location PPs should also be preverbal, as it is typically necessary to be at the site of the activity before engaging in the action. Hence, the observed shift to a predominantly preverbal placement could be a result of the expanding impact of PTS. However, their initial transition to predominantly preverbal

occurred later than that of source PPs, and the word order briefly reverted to predominantly postverbal. Moreover, even after the preverbal placement stabilised as their dominant word order, Chapter 7 has shown that some location PPs were still flexible in their placement, appearing freely in both preverbal and postverbal positions with negligible difference in meaning. These location PPs are mostly used with staying verbs. As highlighted in Section 2.3.2.1 of Chapter 2, both Tai (1985) and Hong (2010a) maintain that no clear chronological sequence exists between the state expressed by such verbs and the location. Consequently, PTS is not applicable in this context. From this perspective, they do not amount to violations of PTS but instead specify the range and restrictions of its application.

Lastly, as Table 8.4 illustrates, path PPs were the last to shift their dominant word order from postverbal to preverbal and experienced multiple reversals before firmly establishing a preverbal preference in Early Mandarin Chinese. Thus, the development of their placement appears to be the most convoluted among the four locative subclasses. Nonetheless, path PPs still demonstrated a general shift from predominantly postverbal to preverbal. This transition is consistent with PTS, as it is logical for sentences with directional PPs[119] to first establish a direction before proceeding with the action along that direction, and ideally, such PPs should precede the verb (C. Zhang 2002: 275). Although the overall trend in the word order development of path PPs aligns with the prediction of PTS, C. Zhang (2002) questions its explanatory scope. She observes that directional PPs can appear both before and after the verb, with a stronger tendency for preverbal placement. However, postverbal directional PPs such as 开往北京 (heading towards Beijing) remain in use in Modern Chinese, which PTS cannot explain. Thus, she contends that PTS does not fully capture the word order patterns of PPs and suggests that her correspondence rule, another iconicity principle reviewed in Section 2.3.2.2 of Chapter 2, offers a more precise account.

Further addressing the positioning of directional PPs in Modern Chinese, Lin (2019) applies the Scalar Iconicity Constraint. According to this constraint, motion morphemes containing more precise details about the motion path are inclined to appear after those with less specific details (Lin 2019: 184). Lin observes that this constraint extends to the placement of locative PPs. Specifically, PPs that provide more precise information about the motion path are more likely to follow the verb. Directional PPs can be classified into two types based on the nature of the prepositional object. Lin (2019: 186) notes that the prepositional object of 向

[119] Some studies, including C. Zhang (2002), use the term ‘directional PPs’, which essentially corresponds to path PPs in this thesis.

xiang and 往 *wang* can either denote a general direction (such as *beifang* 北方 'north') or a specific location (such as *Beijing* 北京). The latter type conveys more details about the motion by pinpointing the targeted destination, although such PPs do not necessarily imply reaching the destination.

Lin's corpus analysis reveals a predominance of the former type before the verb and a higher frequency of the latter type after the verb. This distributional pattern is substantiated by statistical tests. Hence, the placement of directional PPs adheres to the Scalar Iconicity Constraint, with postverbal PPs often conveying more precise details about the potential endpoint compared to their preverbal counterparts. Lin acknowledges that temporal iconicity like PTS can account for a wide range of language use in Chinese and concurs that the Scalar Iconicity Constraint aligns well with temporal iconicity for motion events made up of sub-events that unfold in sequential order.[120] However, the Scalar Iconicity Principle offers a more integrated explanation and sheds light on data that temporal iconicity cannot address.

To recap, the discussion thus far has used data from Table 8.4 on the distribution of locative subclasses to re-examine the explanatory power of PTS. The placement of the four locative subclasses shows the following relationship with PTS: goal PPs follow PTS consistently throughout, while the overall transition from postverbal to preverbal in the dominant word order of source PPs, location PPs, and path PPs similarly complies with PTS. It is evident upon closer inspection that some components of location PPs and path PPs remain inadequately explained by PTS, and consequently, alternative iconicity principles are proposed in several studies. Nonetheless, the general trend corroborates Hong's (2010a) assertion that Chinese locatives have progressed from an overall non-motivated distribution to a motivated one — from generally not following PTS in Old Chinese to generally conforming to it in Modern Chinese. However, PPs denoting source, location, and path experienced the shift in dominant word order at different phases: source PPs were the earliest, followed by location PPs, and path PPs were the last. Does this suggest that individual locative subclasses adhere to PTS at different stages, and is this related to the gradual spread pattern of PTS? In essence, assuming Hong (2010a) and L. Jiang (2018) are correct about PTS gaining influence over time, then why does PTS extend its applicability in this directionality: starting with goal PPs, then

[120] Lin (2019: 149) classifies composite motion events into two groups: one featuring 'sequential sub-events', and the other featuring 'simultaneous sub-events'. For the former, the Scalar Iconicity Constraint is in harmony with temporal iconicity, given that motion morphemes that contain more precise scalar details commonly indicate the subsequent chronological sub-event.

source PPs, followed by location PPs, and finally path PPs? This remains a topic that is underexplored in previous studies.

Apart from the present inquiry into why the influence of PTS expands in this specific sequence, Section 2.3.3 of Chapter 2 has already raised several fundamental questions about iconicity principles, particularly PTS, from both empirical and theoretical perspectives. Firstly, empirical evidence shows that such iconicity principles are only effective from a certain point in time onwards, as the predicted pattern is not evident in the linguistic records prior to this period. From our recent discussion, it is clear that except for goal PPs, which have consistently followed PTS from the start, the other three locative subclasses only gradually adhered to PTS at later stages. Moreover, among these three, both location PPs and path PPs began to obey PTS only after the Old Chinese period. Thus, the influence of PTS on the placement of locative PPs in Old Chinese appears to be modest. As highlighted in Chapter 2, PTS originates from the analysis of Modern Chinese.[121] Researchers applying iconicity principles to interpret diachronic shifts also report their limited impact on the placement of PPs and often maintain that these principles only come into play after a certain period. This inevitably prompts the first theoretical concern about why iconicity principles like PTS became relevant or gained prominence only at a particular time, and how did they emerge? If PTS and other iconicity principles are generally regarded as mapping and reflecting the way people encode their cognitive understanding of the real world, why then did early Chinese speakers not follow PTS significantly, with the degree of adherence only rising in the subsequent stages of language evolution?

The second theoretical issue, which this thesis has raised several times, is that PTS is essentially a manifestation of Grice's (1975) maxim 'Be orderly', making it a general Gricean principle rather than one unique to Chinese. This brings into question the relevance and necessity of proposing such iconicity principles as independent motivations for Chinese, instead of directly appealing to the Gricean maxims (Newmeyer 2000:121). Principles that are more general and fundamental often possess stronger explanatory power, addressing a broader range of phenomena while reducing unnecessary theoretical redundancy and complexity.

I will now elaborate on the first theoretical issue of why PTS gained prominence only after a certain point in history. M. Zhang (1995) provides an explanation for this phenomenon, linking it with the potential internal factor that was discussed in Section 8.2.1: preposition

[121] In fact, Tai (1985: 66) explicitly mentions in the footnotes that PTS is a general restriction that governs Modern Chinese word order and classical Chinese clearly does not conform to PTS. Consequently, he argues that there is no need to view classical forms found in contemporary literary Chinese as exceptions that invalidate PTS.

decline and replacement. As highlighted at the end of Section 2.3.2.2, M. Zhang posits that 於/于 *yu*, noted for its versatile functions, is a more abstract preposition compared to other prepositions that are perceived as more verb-like. PPs introduced by abstract prepositions tend to portray a singular, unified activity, thereby rendering iconicity principles such as PTS significantly less effective. Conversely, PPs introduced by more verb-like prepositions tend to be construed as depicting a series of actions, akin to serial verb constructions, thus greatly boosting their conformity to PTS. As a result, the reduction in the usage of the more abstract 於/于 *yu* and its replacement by more verb-like prepositions could cause an increase in constructions that demonstrate iconicity, which in turn clarifies the increased effectiveness of PTS over time.

Although theoretically plausible, this explanation is undermined by the findings in Section 8.2.1, which indicate that the substantial decline and replacement of 於/于 *yu* occurred fairly late. Specifically, the first notable decrease in its frequency was in MC2d (mid-5th c., Six Dynasties), and its functional range did not undergo a significant reduction until MC3a (mid-6th c., Six Dynasties). Yet, the initial compliance of individual locative subclasses with PTS all occurred earlier.[122] Hence, this explanation may not fully hold, as the timelines suggest that PTS likely began gaining prominence before 於/于 *yu* underwent significant decline and replacement. Additionally, the question remains unanswered as to why the influence of PTS unfolds from goal PPs to source PPs, then to location PPs, and finally to path PPs.

As highlighted in Section 2.3.2.2, M. Zhang's reasoning reflects his recognition and implementation of Hsieh's (1994) perspective on the co-existence of two types of principles: the abstract principle, which relates to the internal and autonomous rules of language, and the iconicity principle. One concrete piece of M. Zhang's argument asserts that since prepositions that substituted 於/于 *yu* derive from clear verbal origins, 於/于 *yu*'s decline appears not incidental but rather indicative of an overall trend towards the erosion of abstract grammatical apparatus in Archaic Chinese. M. Zhang's approach suggests that two forces interact and compete throughout the diachronic development of Chinese word order. This strategy is quite typical in previous analyses of PP word order evolution in Chinese.[123] For instance, in addition

[122] If we focus on the initial adherence of different locative subclasses to PTS and disregard the subsequent reversals in dominant word order for location PPs and path PPs, their first compliance times are as follows: goal PPs: OC1 (4th c. BCE, pre-Qin); source PPs: OC2 (3rd c. BCE, pre-Qin); location PPs: MC1b (late 2nd c., Eastern Han); path PPs: MC2a (4th c., Six Dynasties).

[123] This is the rationale behind jointly discussing iconicity and syntactic processing here despite their different theoretical frameworks, as explained at the beginning of this section.

to M. Zhang (1995), Section 2.3.2.2 also references C. Zhang (2002), who similarly supports and applies Hsieh's view. C. Zhang (2002: 262) classifies her correspondence rule under the iconicity principle and considers the complication of grammatical structures, which pertains to syntax, as belonging to the abstract principle. During the pre-Qin era, the abstract principle is influential, causing locative PPs to be primarily introduced by 於/于 *yu* and positioned after the predicate. Conversely, the iconicity principle plays a minor role, impacting only goal PPs by preventing them from appearing before the predicate. Starting from Six Dynasties, the abstract principle experiences a relative decline as the iconicity principle gains strength. The enhancement of the iconicity principle leads to a constraint against positioning PPs that denote source, location of occurrence and passage after the predicate. Still, the abstract principle remains relevant, as seen in the restriction that PPs and objects of VP cannot co-occur after the VP from the Yuan and Ming dynasties onwards.

As pointed out in the footnotes of Section 2.3.2.2, C. Zhang's use of the term 'abstract principle' in her argument refers to different concepts depending on the specific historical period, despite her opening remark that the complication of grammatical structures falls within Hsieh's abstract principle, which is based on logico-mathematical foundations. Specifically, the abstract principle that governs PP word order in Old Chinese is evidently not related to the complication of grammatical structures, as C. Zhang observes that this growing complexity, which involves the multi-syllabification and complication of the VP as well as the development of post-VP constituents, only starts to manifest from the Six Dynasties period. C. Zhang contends that this factor drove the shift of both locative and non-locative PPs to the preverbal position. The rising complexity of grammatical structures leads to more frequent occurrences of verbal objects and other postverbal constituents. A PP in the postverbal position typically follows these postverbal constituents and is further away from the VP, because postverbal constituents like verbal objects, complements, or aspectual function words generally maintain a closer and more direct relationship with the VP. In contrast, a PP in the preverbal position is nearer to the VP, thus establishing a clearer connection with the VP and preventing the overloading of the postverbal structure.[124]

Thus, from Six Dynasties onwards, the abstract principle responsible for the preverbal shift of PPs is the complication of grammatical structures. Then, what is the abstract principle at work during the earlier pre-Qin period if it is not the complication of grammatical structures?

[124] C. Zhang's logic here appears to stem from the aim of facilitating ease of processing. Although she does not explicitly clarify the theoretical basis that supports her argument, this perspective is implied. The upcoming discussion will examine the specific mechanisms of syntactic processing.

C. Zhang (2002) does not appear to explicitly clarify or elaborate on this point, as her focus regarding the abstract principle revolves around the complication of grammatical structures. C. Zhang (2010: 292-293) briefly states in her subsequent research that the syntactic requirements in Old Chinese are the determining factors for the word order between locative PPs and the head they modify, without providing further details on what these syntactic requirements entail. Thus, this aspect remains unclear.

Phua and Jiang (2013), on the other hand, provide a more in-depth discussion on the potential syntactic factors at play during the pre-Qin period. Like C. Zhang, their analysis extends beyond locative PPs to include all PP categories, and they similarly propose two complementary yet competing motivations to study the development of PP word order.[125] They maintain that combining syntactic processing with the iconicity principle allows for a plausible explanation for the distribution of PPs in Archaic Chinese. VOPP, as the dominant word order, is primarily driven by syntactic processing, whereas the less dominant PPVO is mainly governed by the iconicity principle.

Their examination of syntactic processing includes proposals such as right branching direction in VO languages, the Relator Principle (Dik 1997), and the principle of Early Immediate Constituents (Hawkins 1994). Syntactic processing accounts for the predominantly postverbal word order of locative PPs in Archaic Chinese. Furthermore, Phua and Jiang note that the prepositional objects of preverbal PPs, which mostly pertain to instrumental PPs and object-PPs,[126] share specific interrelated semantic roles. These semantic roles belong to participants of the energy source within cognitive grammar (Langacker 1987, 1991). They assert that participants of the energy source, located at the upstream end of the energy stream, precede the verb; and this iconicity principle is reflected in the encoding of PP word order in Archaic Chinese, manifesting as the PPVO order. The PPVO order is primarily observed in instrumental PPs led by 以 *yi* and object-PPs introduced by 与 *yu* and 以 *yi*. Taking into consideration the semantic roles assumed by these PPs, Phua and Jiang further reference Croft's (1991) Causal Order Hypothesis and observe that nearly all these semantic roles fall

[125] However, their research mainly concerns PP word order in Old Chinese, with no empirical analysis beyond this period. Furthermore, their examination of Old Chinese relies solely on data from *Zuo Zhuan*, which corresponds to OC1 (4th c. BCE, pre-Qin) in the periodisation of this thesis. Consequently, the motivations proposed in Phua and Jiang (2013) could be more hypothetical in nature compared to C. Zhang (2002), who has conducted a diachronic study spanning from pre-Qin to Ming.

[126] Object-PPs (对象类介词词组) are PPs introduced by object prepositions (对象介词), which D. Zhao (2007: 28) defines as prepositions that bring into the syntactic structure objects that are associated with the action or state conveyed by the predicate head. Object-PPs typically carry semantic roles such as comitative, co-agent, comparative, and beneficiary.

under antecedent roles in Croft's analysis.[127] As antecedent roles, they should ideally occupy an intermediate position between the agent-subject and the patient-object. Hence, the PPVO order better satisfies the requirement for antecedent roles to precede the verbal object.

Seeking to link Croft's Causal Order Hypothesis to PTS, Phua and Jiang suggest that it is due to the influence of PTS that the order in the causal chain is reflected in the surface linear structure of Archaic Chinese. They refer to Croft's analysis of a declarative active sentence with an instrumental PP, which asserts that the agent-subject must first engage with the instrument before using it to act upon the verbal object. This process has distinct phases that follow a clear chronological sequence, and it is reflected in the encoding of the surface structure of Archaic Chinese, forming the non-dominant PPVO order.[128] After outlining the roles of syntactic processing and the iconicity principle, Phua and Jiang proceed to propose how these two forces interact in the diachronic development of PP word order. Syntactic processing serves as the dominant principle governing the distribution of PPs in the pre-Qin era. Starting from Late Archaic Chinese, PPVO progressively supplanted VOPP as the preferred word order. This shift is likely due to the diminishing impact of syntactic processing and the growing effectiveness of PTS.

Having grasped the overall approach of Phua and Jiang (2013) in applying two broad principles to account for the distribution of PPs, I intend to further elaborate on their proposal of the syntactic processing mechanism in Old Chinese. Several factors drive the considerable attention given to syntactic processing. Firstly, as noted above, researchers studying the evolution of PP placement in Chinese often adopt the strategy of integrating syntactic analysis with the iconicity principle (or semantic factors), thus presenting two complementary yet competing motivations. This might be attributed to the challenge when attempting to

[127] The semantic roles introduced by the instrumental preposition 以 *yi* in *Zuo Zhuan* include instrument, manner, and means, while those introduced by the object preposition 与 *yu* include comitative, co-agent, comparative, and beneficiary. Within Croft's framework, instrument, manner, means, and comitative are all classified as antecedent roles. As for the rest, Phua and Jiang point out that the last three of the four subcategories of semantic roles introduced by 与 *yu* — co-agent, comparative, and beneficiary — are derived from the first subcategory of comitative. Thus, from this perspective, all these semantic roles can essentially be viewed as antecedent roles. Nonetheless, Phua and Jiang acknowledge that their analysis of the extension here, which mainly draws from Liu (2003a) regarding the developmental relationship between beneficiary prepositions and comitative prepositions, presents unresolved issues. Specifically, although comitative falls under antecedent roles, beneficiary is classified as a subsequent role in Croft (1991).

[128] It is not only Croft's Causal Order Hypothesis that relates to PTS. Langacker (1991: 292), in discussing the concept of 'action chain', states explicitly that the direction in which energy flows from the energy source to the energy sink predominantly aligns with the chronological order of occurrences. Similarly, DeLancey (1981) uses the notion of 'attention flow' to posit that the natural direction of attention flow in an event is rooted in the chronological sequencing of its stages. Typically, this inherent progression of attention is mirrored in the surface order, placing the initial point of the attention flow at the forefront. It is thus more intuitive to position the source before the goal, whereas reversing this order needs special motivation.

adequately explain or capture the intricacies in the development of PP word order with one factor alone. However, both M. Zhang (1995) and C. Zhang (2002, 2010) appear to have left the abstract principle at work during the pre-Qin era largely unexplained. Hence, Phua and Jiang's examination of syntactic processing serves to clarify this aspect. Secondly, the discussion above indicates that PTS or iconicity principles in general offer limited insight into the word order of locative PPs in Old Chinese.[129] Then, what governs their distribution and establishes VOPP as the dominant order? Perhaps, exploring syntactic processing could lead to fresh perspectives. Indeed, syntactic processing serves as a framework researchers use to understand the constraints in PP placement and potential typological tendencies, thus extending beyond historical Chinese linguistics. Finally, another reason for focusing on syntactic processing is that the literature review in Chapter 2 did not cover this aspect, thus prompting a detailed analysis and discussion here.

Phua and Jiang contend that syntactic processing explains the prevalent postverbal locative PPs in pre-Qin era. Their examination of syntactic processing includes three proposals: right branching direction in VO languages, the Relator Principle (Dik 1997), and the principle of Early Immediate Constituents (Hawkins 1994). Let us start with right branching direction in VO languages. Phua and Jiang highlight that VO languages tend to exhibit right-branching, making it natural for a PP to follow the predicate head it modifies. Although not explicitly stated, their proposition is theoretically grounded in Dryer's (1992) Branching Direction Theory. Phua and Jiang (2013: 106) refer to Carnie's (2002: 155) tree diagram illustrating the placement of PPs in VO languages. This thesis cites the figure from Carnie's latest edition:

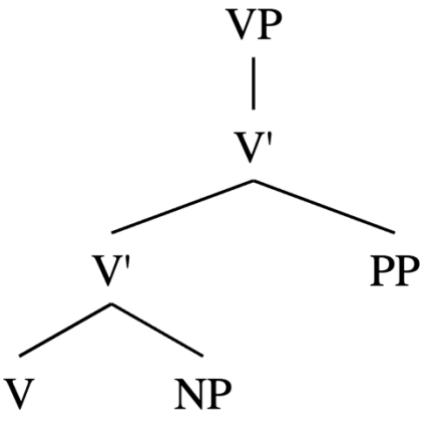


Figure 8.6 PP placement in VO languages (Carnie 2021: 165)

[129] PTS or ionicity in general functions more effectively in predicting the word order of non-locative PPs like instrumental and object-PPs. As for locative PPs, while PTS has a stronger impact on goal PPs and source PPs, its control over location PPs and path PPs only gradually strengthened after Old Chinese.

According to Phua and Jiang, the tree diagram in Figure 8.6 explains why approximately 98% of VO languages have VOPP as the dominant word order in WALS Feature 84A, and since Old Chinese is a VO language,[130] adopting VOPP as the dominant order is consistent with this pattern.

The second proposal in Phua and Jiang's discussion of syntactic processing is the Relator Principle by Dik (1997). According to Dik (1997: 398), adpositions are part of the relator class, which functions to establish a linkage between two constituents. As non-coordinating relators, adpositions mark a dependency relationship and connect a dependent component with a head. Dik (1997: 406) proposes that the ideal placement for a relator is between its two relata, with the Relator Principle specifying the preferred sequence for non-coordinating relators as:

(289) [[dependent] R] ... [head]
[head] ... [R [dependent]]

(Dik 1997: 406)

Liu (2003b: 326) concludes that his study of adpositions in Chinese, particularly the Wu variety, demonstrates the Relator Principle as the most powerful factor constraining the adposition type and the positioning of PPs. Phua and Jiang argue that Archaic Chinese is an SVO language and its predominant adposition type is prepositions. When prepositions are used, the preferred position for PPs is after the verb, resulting in the VP + Prep + NP structure and forming the VOPP word order. The preposition thereby occupies an intermediate position between the VP and NP. As an illustration, they cite 迁九鼎于洛邑 (moved the nine cauldrons to Luoyi) from *Zuo Zhuan*, where the preposition 于 *yu* serves to link the VP 迁九鼎 and the NP 洛邑.[131]

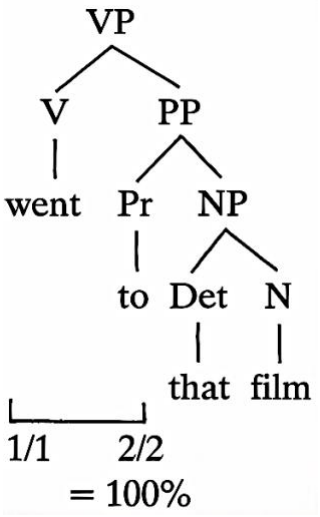
Phua and Jiang further suggest that the Relator Principle can be better understood alongside Hawkins' (1994) principle of Early Immediate Constituents (EIC), which is also the final proposal in their analysis of syntactic processing. The EIC principle posits that people favour a surface linear order that optimises the swift and efficient recognition and production

[130] Some scholars posit that the basic word order of Old Chinese is SVO, consistent with Modern Chinese (Aldridge 2016). Peyraube (1997) also notes that SVO is the more basic order in Classical Chinese, which spans Early Archaic Chinese (11th – 6th c. BCE) and Late Archaic Chinese (5th – 2nd c. BCE). While Peyraube maintains that it is unnecessary to acknowledge an OV word order to understand and generalise the key patterns and rules of Classic Chinese syntax, he highlights the widely held view that historically Chinese is considered to have been an OV language. This perspective is supported by the observation that nearly all Tibeto-Burman languages are verb-final except Karen and Bai, making it reasonable to assume that Proto-Chinese and Proto-Sino-Tibetan were SOV.

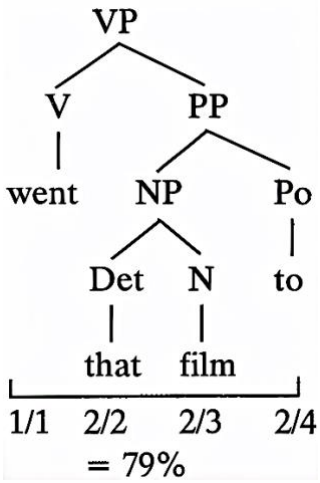
[131] The way the Relator Principle impacts the adposition type and the placement of PPs is more complex than presented here. Please refer to Liu (2003b) for a detailed analysis.

of the immediate constituents (ICs). The optimal sequence yields the highest 'IC-to-word ratio'. When the aggregate ratio is calculated, a greater value indicates a more efficient sequence for processing.[132] Examples from Hawkins (1990: 112) illustrate how the EIC principle impacts the placement of PPs relative to the verb. These examples showcase the various arrangements when a PP is embedded inside a VP, listed as (290) to (293) below:

(290) **verb-initial in VP, preposition:**

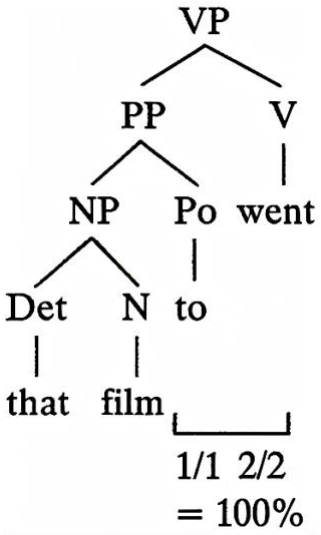


(291) **verb-initial in VP, postposition:**

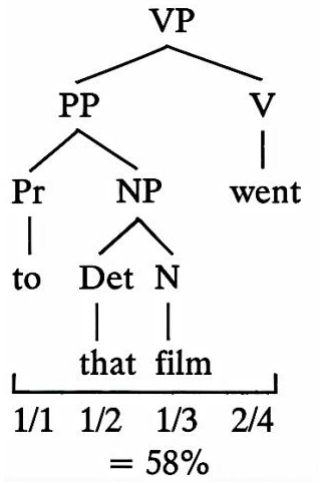


[132] According to Hawkins (1990: 108-109), a higher aggregate percentage indicates that the constituency information gets "more loaded and informative". Thus, the same number of words in the sequence now carries a richer amount of information, thereby increasing the information density.

(292) **verb-final in VP, postposition:**



(293) **verb-final in VP, preposition:**



(Hawkins 1990: 112)

Two ICs are present in the VP domain: V and PP. The bottom square bracket in each example denotes the Constituent Recognition Domain (CRD) for each arrangement, and the percentage is the respective aggregate IC-to-word ratio. The orders in (290) and (292) exhibit the shortest CRD, requiring just two words to recognise the two ICs of the VP.[133] In contrast, (291) and (293) feature a longer CRD, as each requires four words to identify the two ICs. Two types of metrics can be used. The first is to calculate the simple IC-to-word ratio. (290) and (292) show a ratio of 2/2 (100%), while (291) and (293) show a ratio of 2/4 (50%). Although this metric is adequate for distinguishing optimal sequences from non-optimal ones, it might not capture finer distinctions. This necessitates a more precise measure, which is the aggregate IC-to-word ratio. For instance, the two non-optimal sequences in (291) and (293) share the same simple

[133] According to Hawkins (1994: 96), verb-final languages with postpositions undergo a bottom-up parse.

IC-to-word ratio of 50%. However, when considering the aggregate IC-to-word ratio, the arrangement in (291) with an aggregate ratio of 79% outweighs (293), which yields a lower ratio of 58%. Hawkins (1990: 113) adds that the preference for (291) over (293) is reflected in frequency data, with the former type occurring more than three times as frequently as the latter type.

Regardless of the type of metric used, the orders in (290) and (292) are more optimal than (291) and (293). (290) exemplifies typical VO languages that use prepositions and place the PP after the verb, while (292) showcases typical OV languages with postpositions and preverbal PPs. Thus, although Phua and Jiang do not directly state it, based on their classification of Old Chinese as a VO language and the prediction of the EIC principle, the ideal structure for Old Chinese, in their opinion, is to use prepositions and place PPs in the postverbal position. Phua and Jiang (2013: 107) further cite Liu (2003b: 127) to summarise the impact of EIC on the placement of adpositions and PPs and demonstrate the correlation with the Relator Principle: Adpositions occupy an intermediate position, allowing the PP to be in closest proximity to the core V or core N that governs it. It also facilitates the quickest recognition of ICs within the VP or NP by clearly delineating the boundaries between the PP and the head it modifies.

Section 5.4 of Chapter 5 questioned whether constituent length affects word order preference. Hawkins (2014: 13) states that the EIC principle essentially translates to a tendency to place short phrases before long ones in head-initial constructions. Opting for a 'short-before-long' sequence increases the IC-to-word ratio, allowing the recognition of more ICs with fewer words. However, Chapter 5 presents instances from OC1 that appear to contradict this preference, and these are not isolated occurrences in *Zuo Zhuan*.[134] Example (19b) from Chapter 5 is reproduced below as (294):

[134] Meetings are a crucial event type in *Zuo Zhuan*, and one key role of location PPs is to document these meetings. Thus, *Zuo Zhuan* features abundant examples of such records. The text goes beyond providing spatial information when recording meeting locations. It also reflects ceremonial norms and political implications. For instance,《左传・桓公二年》states: "特相会, 往来称地, 让事也。自参以上, 则往称地, 来称会, 成事也" (When our lord meets with a single state, whether travelling there or having the other party come here, the location is recorded to show mutual humility without designating a leader. For meetings with three or more states, the location is recorded if our lord goes to them, while only the meeting itself is noted if others visit, indicating that the leader is already decided). This statement reveals the subtlety in recording meeting locations. Thus, (294) likely describes a meeting in which the duke travels to attend.

(294) 公 会 齐 侯、 宋 公、 陈 侯、 卫 侯、 郑 伯、
gong hui Qi hou Song gong Chen hou Wei hou Zheng bo
duke meet Qi marquis Song duke Chen marquis Wei marquis Zheng earl
许 男、 曹 伯 **于** 咸
*Xu nan Cao bo **yu** Xian*
Xu baron Cao earl in Xian
'The duke met the Marquis of Qi, the Duke of Song, the Marquis of Chen, the Marquis of Wei, the Earl of Zheng, the Baron of Xu, and the Earl of Cao in Xian.'
(《左传・僖公十三年》Zuo Commentary, Duke Xi, Year 13; circa 4th c. BCE)

The VOPP order in (294) features a lengthy verbal object, leading to a long CRD that necessitates nine words to recognise all ICs of the VP domain. However, the alternative PPVO sequence has a much shorter CRD and requires just four words for the same recognition.[135] In principle, the VOPP order, with its lower IC-to-word ratio, is less efficient than the alternative PPVO order. It demands greater production effort and results in slower parsing. Consequently, despite its use of prepositions and postverbal PPs, which aligns with EIC's prediction for optimal sequencing in VO languages, the VOPP order here diverges from the typical 'short-before-long' preference.

The discussion above has provided an overview of the three syntactic processing proposals examined by Phua and Jiang (2013). These proposals include right branching direction in VO languages, the Relator Principle (Dik 1997), and the principle of Early Immediate Constituents (Hawkins 1994). Collectively, they all lead to the conclusion that a VO language like Old Chinese naturally adopts VOPP as its dominant word order. While these proposals appear well-founded, a closer scrutiny reveals a few issues that merit further analysis.

Firstly, empirical evidence shows that Old Chinese features instances that violate the short-before-long preference, as demonstrated in (294). While the VOPP order in such cases conforms to syntactic processing's prediction for the optimal position of PPs in VO languages, which is postverbal, it still contradicts the short-before-long preference. Since this preference, according to Hawkins (2014: 13), is essentially a manifestation of the EIC principle in head-initial constructions, the existence of such a contradiction is rather puzzling.

Moreover, this is not the only contradiction. As previously discussed, C. Zhang (2002) argues that the rise of preverbal PPs was caused by the complication of grammatical structures.

[135] The VP domain consists of three ICs: V, NP, and PP. The CRD for the VOPP sequence spans from 会 to 于 in (294), while the PPVO sequence has a much shorter CRD of 于咸会齐侯, requiring significantly fewer words to recognise the three ICs. Titles like 齐侯 and 宋公 are treated as single words, as they are established historical titles that function as proper nouns.

She suggests that with the growing occurrences of postverbal constituents, moving PPs to the preverbal position not only avoids overloading the postverbal structure but also keeps the PP nearer to the VP, thereby creating a clearer connection between the two. As mentioned in the footnotes following her argument, it appears that her logic is rooted in the perspective of processing, as it implicitly addresses the fast recognition of constituents and the ease of processing. Thus, the theoretical basis of her reasoning on this matter is also syntactic processing, although she does not directly state this. However, it is apparent that the PPVO order, which C. Zhang attributes to processing motivations, defies the predictions of all three syntactic processing proposals. Specifically, the PPVO order does not adhere to right branching, the preposition does not occupy the expected intermediate relator position, and it results in a longer CRD, thus reducing efficiency in recognising and parsing all the ICs. It is quite perplexing when researchers, presumably applying the same broad theoretical principles, arrive at such inconsistent conclusions. This adds another layer of contradiction.

The third issue is that all the syntactic processing explanations in Phua and Jiang (2013), which argue for the preference of postverbal PPs in Old Chinese, are based on the premise that Old Chinese is a VO language. Given this, if Modern Chinese remains a VO language[136] but adopts PPVO as the dominant order for PPs (as indicated by WALS Feature 84A), will it not then create processing difficulties? Still, we must ask: Is there genuinely an issue with the current dominant order in Modern Chinese? Is there evidence that the preverbal placement of PPs causes processing challenges for speakers? On a related note, C. Zhang (2002) and Phua and Jiang (2013) contend that with the strengthening of the iconicity principle over time, the influence of syntactic motivations, be it the abstract principle in C. Zhang's analysis or syntactic processing in Phua and Jiang's discussion, diminishes. However, why is this the case? If syntactic processing is intended to enhance parsing and production efficiency, why would its impact wane over time? Moreover, as just argued, given the prevalence of the PPVO order in Modern Chinese, could this change in PP placement cause processing difficulties?

Before discussing the next potential internal factor, here is an interim summary. This section has examined iconicity principles, particularly PTS, alongside syntactic processing. Firstly, the explanatory power of PTS was assessed using data from Table 8.4 on the diachronic

[136] Li and Thompson (1974b) propose that there has been a shift in Chinese word order from SVO to SOV, based on the change in PP placement from S + V + PP in Archaic Chinese to S + PP + V in Modern Chinese. However, the corpus study by Sun and Givón (1985) indicates that OV usage is very low in Mandarin Chinese. The OV order functions chiefly as a means of providing contrast or emphasis, with a limited occurrence across texts (Sun and Givon 1985: 330). In contrast, the VO order is far more prevalent, making up 94% of written data and 92% of spoken data. Thus, Modern Chinese remains fundamentally a VO language.

distribution of the four locative subclasses. Goal PPs follow PTS consistently throughout, while the dominant word order transition from postverbal to preverbal for source PPs, location PPs, and path PPs similarly complies with PTS. Some components of location PPs and path PPs cannot be fully explained by PTS, prompting the proposal of alternative iconicity principles in various studies. Nonetheless, the general trend supports Hong's (2010a) assertion that Chinese locatives have progressed from an overall non-motivated distribution (generally not following PTS in Old Chinese) to a motivated distribution (generally following PTS in Modern Chinese). The observed sequence in which locative subclasses conformed to PTS raises the question of why its influence expands in this directionality: goal PPs first, then source PPs, followed by location PPs, and finally path PPs. Additionally, I have revisited the questions from Section 2.3.3 of Chapter 2. Empirically, PTS only had a modest influence on locative PP word order in Old Chinese. This leads to the first theoretical concern about why iconicity principles like PTS became prominent only at a certain time, and if such principles reflect cognitive understanding, why did early Chinese speakers not strongly follow PTS, with adherence becoming evident only in later stages? The second theoretical concern questions the necessity of proposing PTS as independent motivations for Chinese, instead of directly appealing to the Gricean maxims (Newmeyer 2000:121).

The first theoretical concern of why PTS became prominent only in later stages was addressed by referencing M. Zhang (1995), who links this phenomenon to the internal factor of preposition decline and replacement. M. Zhang argues that PPs led by the more abstract 於/于 *yu* often portray a singular, unified activity, thus reducing the relevance of PTS. Conversely, PPs introduced by more verb-like prepositions are construed as depicting a series of actions. Thus, the decline and replacement of 於/于 *yu* by more verb-like prepositions could explain the rise in constructions that demonstrate iconicity and the growing impact of PTS. However, the findings in Section 8.2.1 suggest that PTS likely gained prominence before 於/于 *yu* underwent significant decline and replacement, thereby undermining M. Zhang's explanation.

M. Zhang's reasoning reflects Hsieh's (1994) perspective on the co-existence of two types of principles: the abstract principle and the iconicity principle. M. Zhang's approach suggests an interaction and competition between these two forces in the development of Chinese word order. This strategy is not uncommon in earlier studies of PP word order evolution. C. Zhang (2002), for instance, proposes two competing yet complementary principles: the complication of grammatical structures, which is the abstract principle, and the correspondence rule, which is the iconicity principle. I then highlighted that C. Zhang does not

specify what exactly the abstract principle entails during the earlier pre-Qin period and instead focuses on another abstract principle (the complication of grammatical structures), which only begins to manifest from the Six Dynasties period. Similarly, M. Zhang (1995) also leaves the abstract principle at work during the pre-Qin era largely unexplained.

To bridge this gap, I referenced Phua and Jiang's (2013) discussion on syntactic processing, which clarifies what the abstract principle might be during the pre-Qin period. I first introduced their overall approach, which combines syntactic processing with the iconicity principle to explain the distribution of PPs in Archaic Chinese. The dominant order VOPP is primarily driven by syntactic processing, whereas the less dominant PPVO is mainly governed by the iconicity principle. Their examination of syntactic processing includes right branching direction in VO languages, the Relator Principle (Dik 1997), and the principle of Early Immediate Constituents (Hawkins 1994). They also discuss iconicity-related concepts like the energy source within cognitive grammar (Langacker 1987, 1991) and Croft's (1991) Causal Order Hypothesis. Relating Croft's Causal Order Hypothesis to PTS, they suggest that PTS influences the way the order in the causal chain is reflected in the surface structure of Archaic Chinese. Phua and Jiang then outline how the two forces interact. Syntactic processing serves as the dominant principle governing the distribution of PPs in the pre-Qin era. From Late Archaic Chinese onwards, PPVO progressively replaced VOPP as the preferred order, likely due to the waning impact of syntactic processing and the rising effectiveness of PTS.

After introducing Phua and Jiang's overall approach, I further explored how the three syntactic processing proposals account for PP placement in Old Chinese. They collectively indicate that Old Chinese, as a VO language, naturally prefers VOPP. Lastly, I highlighted a few issues with syntactic processing that need further attention. These include contradictions such as the VOPP example in (294), which fits the prediction of syntactic processing but clashes with the short-before-long preference, as well as the inconsistent conclusions reached by researchers applying similar processing principles. Additionally, there is the concern of whether Modern Chinese, still classified as a VO language but with the PPVO dominant order, presents processing difficulties for its speakers.

The discussion in this section highlights the intricate and multifaceted nature of the diachronic development of PPs, which a single factor may fail to capture adequately. In view of this, researchers have incorporated two competing yet complementary motivations. Such a strategy is undoubtedly natural and insightful. It not only acknowledges the complexity of language change but also encourages exploring the underlying mechanisms from different angles.

8.2.3 THE POSTVERBAL CONSTRAINT

The potential internal factor to be addressed in this section is the Postverbal Constraint (PVC). While there is ongoing debate, PVC offers an alternative explanation that may account for certain aspects of the data. Support from some of the previous studies suggests that it deserves consideration alongside other internal factors. Hence, despite the contentious nature of PVC, its inclusion here is a deliberate choice.

A term first coined by Light (1979), PVC denotes a notable inclination in Chinese to avoid having more than one constituent in the postverbal position (C.N. Li 1975; Light 1979; J. Huang 1982; S. Huang 1984; Sybesma 1999; M. Zhang 2016, inter alia). For instance:

(295) a.*他 打 球 在 香港
ta da qiu zai Xianggang
3SG hit ball in Hong Kong

b.*他 打 球 得 很 快
ta da qiu de hen kuai
3SG hit ball VCM very fast

(adapted from Light (1979: 171) with glosses modified)

Both (295a) and (295b) are not well-formed as they each place two constituents after the verb. Sybesma (1999) and M. Zhang (2016) highlight common practices to avoid breaching PVC. These include topicalization, verb reduplication, preposing the object with the disposal BA construction, and merging two postverbal constituents into one unit. However, exceptions to PVC are not rare. In addition to the commonly noted ditransitive constructions, several other instances are evident. Here are two examples involving postverbal PPs:

(296) 我们 住 在 香港 三年 了
women zhu zai Xianggang sannian le
1PL reside in Hong Kong three-year SFP
'We have lived in Hong Kong for three years.'

(adapted from Light (1979: 171) with glosses and translation modified)

(297) 我 放 了 一些 书 在 桌子 上
wo fang le yixie shu zai zuozi shang
1SG put ASP some book on table top
'I put some books on the table.'

(adapted from Sybesma (1999: 1) with glosses modified)

Sybesma (1999: 2) notes that PVC, despite these exceptions, stayed largely accepted owing to the 'repair strategies' introduced, such as those by J. Huang (1982). This has led to continued interest in its potential impact on sentence structures. Research addressing the potential implication of PVC on PP placement includes C. Zhang (2002), Kwan (2010), M.

Zhang (2011, 2016), and L. Jiang (2018). Recall that the previous section discussed C. Zhang's abstract principle and highlighted her claim that the abstract principle continues to be relevant even as the iconicity principle becomes more influential in later stages. The relevance of the abstract principle is demonstrated by the restriction against PPs and objects of VP co-occurring after the verb starting from the Yuan and Ming dynasties. Again, C. Zhang does not specify what the abstract principle involved in this period entails, though it implies a close connection to PVC. Indeed, she refers to Light's (1979) PVC and S. Huang's (1984) Surface Structure Condition (SSC) towards the end of her book. SSC is essentially a reinterpretation of PVC, with both sharing the core concept. C. Zhang (2002:283) suggests that SSC was progressively established in Chinese during the Song, Yuan, and Ming dynasties. It now serves as a key principle for Modern Chinese word order. However, she also notes exceptions and has revised the principle. Rather than treating the restriction on postverbal constituents as an absolute rule like SSC does, it is proposed that sentences in Chinese have constraints on postverbal constituents that not only consider the number of constituents but also their length and structural aspects. C. Zhang suggests that this trait already existed in Ancient Chinese, but it was not prominent as the diverse postverbal elements seen today had yet to develop. However, it becomes more pronounced in Modern Chinese due to the presence of numerous and complex postverbal elements.

C. Zhang (2002: 284) explains the impact of this constraint on the positioning of PPs. Complements exert an even stronger exclusionary effect on PPs than true objects do. In other words, when a complement follows the verb, PPs become restricted in their placement and cannot be freely positioned after the verb. C. Zhang provides considerable endorsement of this constraint in the final concluding paragraph. She states that postverbal constituents are significantly more constrained than preverbal ones. This feature of sentence structure is prominent in Chinese, particularly in contrast to languages like English, which often use clauses to place longer and more complex constituents at the end. This could reflect a fundamental tendency in Chinese word order principles towards extending constituents to the front of the verb, a pattern that has persisted over time. C. Zhang concludes her book by suggesting that this could point to a deeper cause for the changes in PP word order in Chinese. Although C. Zhang holds this fundamental tendency in high regard and considers it a deep-seated constraint responsible for the shift in PP placement, it must be noted that she does not assert that PVC directly caused the change. She argues that the influence of PVC manifests mainly during the Song, Yuan, and Ming dynasties, which is considerably later than the drastic

change in PP word order. Hence, from a chronological perspective, it may not be the direct instigator of the change.

L. Jiang (2018), however, proposes that PVC could have already been influential in the earlier phases. As stated in Section 3.1 of Chapter 3, L. Jiang (2018) observes that the transition in dominant word order from locative VOPP to PPVO preceded the shift from locative VPP to PPV. To account for the timeline discrepancy, L. Jiang proposes the following hypothesis. Starting from Late Old Chinese, PTS and PVC operated in tandem. PTS influenced both the order between PP and VO and the order between PP and V. To enforce iconicity, PTS caused location PPs, source PPs, and path PPs to be predominantly preverbal gradually and goal PPs to be consistently postverbal. In contrast, PVC, which generally does not tolerate more than one postverbal constituent, solely impacted VOPP constructions by driving the shift from VOPP to PPVO, while leaving VPP constructions untouched. In essence, PTS and PVC both influenced the order between locative PP and VO, while only PTS was relevant to the order between locative PP and V. Consequently, it appears sensible to find that the shift in locative PP word order from predominantly VOPP to PPVO occurred earlier than the shift from predominantly VPP to PPV, given that the combined effect of two forces likely accelerated the change for the former.

Unlike L. Jiang (2018), the present thesis reveals no notable difference in the timeline of the initial dominant order change for locative PPs from postverbal to preverbal between the two sets. Essentially, the initial shift from predominantly VOPP to PPVO occurred concurrently with the initial shift from predominantly VPP to PPV, both during MC1b (late 2nd c., Eastern Han).[137] Nonetheless, Figure 8.4 has shown that the liner trendline for VOPP is steeper than that for VPP, indicating a faster decline rate for VOPP in comparison to VPP. The reasoning from L. Jiang (2018) might also apply here. The concurrent timing of changes in both sets does not invalidate the combined influence of PTS and PVC compared to the impact of PTS alone, as two principles could be more substantial than one. This time, however, the combined effect is reflected in the rate of decline rather than in the timing of the transitions.

[137] This thesis differs from L. Jiang (2018) on this point, possibly due to the richer linguistic materials used here and the division of Middle Chinese data into Buddhist and non-Buddhist texts. Moreover, L. Jiang (2018) lacks first-hand data on locative VPP/PPV and obtains the results from C. Zhang (2002) instead. Additionally, it should be noted that the reference point for this comparison is the initial shift in dominant word order. When considering the entire trajectory of their changes, recall that the earlier discussion reveals that the two sets both underwent reversals in dominant order. Specifically, the second instance in which VOPP was overtaken by PPVO began in MC2b (early 5th c., Six Dynasties), with no further reversals in dominant order afterward. The situation with VPP and PPV is more complex. The second instance in which VPP was overtaken by PPV occurred in MC2d (mid-5th c., Six Dynasties). However, as shown by Figure 8.2, this was followed by further reversals, with locative VPP and PPV constructions alternating in dominance.

PVC is primarily a constraint based on Modern Chinese word order, yet L. Jiang (2018) attempts to apply it to explain diachronic changes. To substantiate the proposal and gain a better understanding of PVC's historical impact, L. Jiang further explores its origin. In short, if PVC is assumed to have a role in the evolution of PP placement, then how did this constraint itself arise? L. Jiang cites M. Zhang (2011, 2016), who postulates that PVC was likely a product of contact-induced change, stemming from the interaction between Sinitic and non-Sinitic OV languages in the north. This is partly due to his observation of a PVC continuum that exhibits growing adherence from south to north geographically, and partly due to the temporal overlap between the fronting of constituents and the major phases of interaction between Sinitic and non-Sinitic communities. Additionally, to better argue that PVC's influence might date back to an earlier period, L. Jiang adds M. Zhang's (2011: 236-238) view that the early contact history between Chinese and northern non-Sinitic languages has not received adequate attention. This is especially true regarding the integration between Han and northern non-Han groups such as Xiongnu and Di-Qiang before the Six Dynasties period. M. Zhang refers to historian Yao Congwu, who designates the Qin to Han period as the first of the Four Major Phases of Ethnic Integration (Yao 1959). Thus, the timeline for large-scale ethnic interaction and integration could be earlier than generally assumed, especially when considering interactions with non-Sinitic ethic groups beyond just the Altaic.

L. Jiang (2018) then builds on M. Zhang's (2016) 'interactive compromise' proposal to explain the shift from predominantly VOPP to PPVO. Old Chinese permits two constituents after the verb, as reflected in VOPP constructions. Conversely, the most rigid OV non-Sinitic languages forbid any constituents from occurring after the verb.[138] As a plausible consequence of the interactive compromise, PVC enforced the repositioning of postverbal PPs in VOPP constructions to the preverbal slot. At the same time, the resulting PPVO constructions upheld the basic VO order in Chinese. This probably made the transition in locative PP placement more tolerable for Chinese speakers of that era, thereby maintaining their comfort level despite the adjustment.

Nonetheless, L. Jiang (2018) overlooks a crucial assertion made by M. Zhang (2011: 244), who clearly states that PVC developed after the changes in PP placement were approximately completed. L. Jiang's reasoning on PVC is largely constructed on M. Zhang's key ideas. With M. Zhang positing that PVC emerged later than the major shift in PP placement,

[138] As noted in Section 3.2.2 of Chapter 3, narrative texts contain instances that dispute this assumption. While pauses often occur after the verb, speakers do produce postverbal arguments and other elements in natural language.

this directly challenges the claim that PVC impacted PP word order in the early stages. Therefore, L. Jiang's use of PVC to explain the changes in PP word order is significantly undermined. Indeed, as highlighted in the footnotes of Section 3.1, some scholars dispute the assertion regarding the impact of PVC on PP movement. Peyraube (1994: 373), for instance, references Wei (1993), who argues that the movement of 於/于 *yu* to the preverbal slot may not be related to the constraints concerning the permissible number of postverbal PPs.

The problems with PVC go well beyond this. As illustrated by (296) and (297), exceptions to PVC remain evident even in Modern Chinese, which is expected to follow PVC more strictly. The persistence of PVC as a subject of scholarly interest can be partially attributed to the various repair strategies proposed by its proponents. Yet, PVC's reliance on ad hoc repair strategies casts doubts on its validity, particularly when these repair strategies struggle with counterexamples or incorrect predictions. Another issue is the methodological circularity in the formulation of PVC. It appears to derive from the observation that Chinese tends to have no more than one postverbal constituent. This observation is then formalised as a rule, which is subsequently used to explain the observed limitation on postverbal constituents. This circular approach does not provide a substantive explanation, but merely reiterates the observed pattern. However, M. Zhang's investigation into the potential origins of PVC addresses this concern in a way. He attributes the formation of PVC to interaction between Sinitic and non-Sinitic OV languages in northern China, noting the lower tolerance for postverbal constituents in northern Sinitic varieties compared to southern ones, as well as the temporal overlap between constituent fronting and the key phases of interaction between Sinitic and non-Sinitic populations. By tracing PVC's origins to contact-induced change, this external explanation moves beyond simple observation and rule formulation. Linking PVC to historical interactions between VO and OV languages indicates that PVC can be rooted in real-world linguistic developments, and it is not merely an abstract rule. This perspective places PVC within the broader linguistic evolution and seeks to demonstrate that it results from dynamic linguistic processes rather than static observations.

If PVC is treated as a tendency instead of an absolute rule (Kwan 2010) and the conditions for its exceptions can be clearly defined, then PVC is not without merit. It does capture the word order pattern in Chinese in a principled way. While the applicability of PVC is still subject to debate, it offers an alternative perspective for interpreting specific data on PP word order changes. Specifically, it might shed light on why the placement of locative PPs is more affected when the verb takes an object compared to when it does not. The differences

between the two scenarios, whether in the timing of dominant order changes or in the rate of change, could be accounted for through the lens of PVC in a reasonably plausible manner.

Lastly, M. Zhang's investigation into the origins of PVC and his examination of the PVC continuum have been instrumental in shaping how this thesis approaches the diachronic development of locative PP word order. Section 3.2 of Chapter 3 has highlighted M. Zhang's inquiry into why there is a notable difference in PVC enforcement between northern and southern Sinitic varieties, as the northern varieties move towards the complete elimination of postverbal PPs, while the southern varieties show a greater tolerance for postverbal PPs. He further argues that even if we attribute this disparity to the prosodic features of the southern varieties, it still does not address why internal variations in PVC enforcement are observed within the northern varieties as well. In essence, there is a gradual geographical transition in the level of tolerance towards PVC exceptions. This transition happens not only between northern and southern Sinitic varieties but also within the northern varieties. Internal factors alone struggle to explain this phenomenon. To address this issue, M. Zhang (2011: 251) recommends incorporating external factors that can account for such latitudinal geographical transitions, into the examination of longitudinal historical changes.[139] M. Zhang maintains that this approach provides plausible explanations to the questions raised, without compromising insights derived from internal factor analysis. Such an integrated methodology, which investigates internal factors in depth while not overlooking external causes, is very enlightening. Despite the ongoing debate about PVC, a major takeaway from the discussion in this section is the necessity of probing further and asking why, instead of just settling for descriptive observations. Often, we need to consider external factors to uncover deeper causes.

8.2.4 COMPETITION BETWEEN CONSTRUCTIONS

The change in the dominant word order of locative PPs, specifically the growing prominence of preverbal PPs, has often been framed as a fronting movement of PPs from their original postverbal position. This section seeks to present an alternative perspective through a preliminary exploration of how competition between constructions might shed light on the change in locative PP placement.

Phua (2012) demonstrates the existence of Goldberg's (1995) caused-motion construction in Old Chinese, which has the meaning of 'X causes Y to go Z' and takes the form

[139] The notions of longitudinal change and latitudinal transition are proposed by Hashimoto (1978).

of 'V+DO+*yu*+IO$_{LOC}$'.[140] He notes a key difference between this construction and the English caused-motion construction: the caused-motion construction in Old Chinese is restricted to verbs of motion and location. For instance:

(298) 王　　迁　　盟、　向　　之　民　　于　郑
*wang qian Meng Xiang zhi min **yu** Jia*
king move Meng Xiang GEN people to Jia
'The king moved the people of Meng and Xiang to Jia.'
(《左传・桓公七年》Zuo Commentary, Duke Huan, Year 7; Phua (2012: 19))

(299) 先王　　居　　椒杌　于　四　　裔
*xianwang ju Tao Wu **yu** si yi*
ancient.king reside Tao Wu to four region
'The ancient kings located Tao Wu to (one of) the four regions.'
(《左传・昭公九年》Zuo Commentary, Duke Zhao, Year 9; Phua (2012: 21))

Example (298) depicts a caused-motion event with the use of the motion verb *qian* 迁 (to move), while (299) demonstrates that location verbs such as *ju* 居 (to reside), which are generally not associated with caused-motion interpretations, can appear in the same construction to express caused-motion meaning.

The typical function of the verb 居 indicates residing in a place, which falls under 'verbs of staying' in C. Zhang (2002). Phua observes that the usage of 居 in *Zuo Zhuan* indicates that an overt causative marker *shi* 使 (to make) is required to convey causative meaning in structures with a direct object (V$_{LOC}$ + DO), as illustrated by *shi ju Yang* 使居养 (meaning 'made (them) reside at Yang', from Duke Zhao, Year 30) .[141] Hence, the causative meaning in (299) cannot be ascribed to the verb 居. Likewise, the caused-motion meaning expressed by this construction is not a result of adding up the meaning of its components but should be attributed to the construction as a whole. Phua therefore advocates for a constructional approach instead of a compositional perspective. This approach avoids the need of proposing different senses for the verb, as the construction can supply the verb with additional semantic content that goes beyond the verb's inherent meaning.[142]

[140] Phua (2012: 49) clarifies that the indirect object (IO) here is equivalent to the prepositional object introduced by 於/于 *yu*. Thus, this thesis treats this construction as a locative VOPP construction featuring 於/于 *yu*.
[141] Phua (2012: 24) presents a different example 使居之 from *Zuo Zhuan*, where 之 is a pronoun referring to the place Jing mentioned earlier. Here I am using an alternative example in which the DO is a place name, as it is likely more transparent.
[142] Goldberg (1995: 9-10) argues against the lexicosemantic approach of introducing implausible verb senses to explain the usage of *sneeze* in examples like "Frank sneezed the tissue off the table" (Goldberg 1995: 152).

Thus, Phua (2012) substantiates the existence of a caused-motion construction 'V+DO+*yu*+IO_{LOC}' in Old Chinese. Given that Phua (2012: 49) states that the IO here corresponds to the prepositional object introduced by 於/于 *yu*, this construction may also be viewed as a locative VOPP construction featuring 於/于 *yu*. According to the data in Chapter 5, there are 1687 instances of locative VOPP constructions across the three sub-stages of Old Chinese. Among these, 1685 instances involve 於/于 *yu*, making up 99.88% of the total.[143] Consequently, the Old Chinese caused-motion construction 'V+DO+*yu*+IO_{LOC}' in Phua (2012) can be regarded as effectively equivalent in form to the Old Chinese locative VOPP construction in this thesis. As the locative VOPP construction can encode caused-motion events whereas the locative PPVO cannot, it is evident that locative VOPP and PPVO are not functionally interchangeable. In addition, locative PPVO involves different verbs and prepositions. Therefore, they represent two distinct constructions.[144] Under this premise, the observed increase in preverbal PPs cannot be viewed as a simple fronting movement of PPs to the preverbal position. It may be beneficial to revisit this issue through the lens of competition between constructions.

The discussion thus far indicates the co-existence of two different locative constructions in Old Chinese: locative VOPP and PPVO, although the latter occurs infrequently.[145] Before examining the potential competition between locative VOPP and PPVO, particularly why the previously infrequent locative PPVO construction gained dominance subsequently, a key question needs to be considered. The form 'V+DO+*yu*+IO_{LOC}' (or locative VOPP as used in this thesis) can encode different types of events. The discussion so far pertains to its use in encoding the caused-motion event, which involves a causer causing a theme to move to a goal. This basically reflects the subclass of goal PPs within the VOPP construction, with the goal PPs typically perceived as arguments or complements. At the same time, 於/于 *yu* is a highly versatile preposition, capable of introducing all four locative subclasses within its locative roles alone. When PPs of the three non-goal locative subclasses enter this construction, it does not convey a caused-motion meaning, and these PPs are generally regarded as adjuncts.

[143] There are only two locative VOPP instances that use prepositions other than 於/于 *yu*: one from OC2 with 乎 *hu* and another from OC3 with 从 *cong*. The latter is 抵蜀从故道 from *Shi Ji*. Yet, as explained in Section 5.3, 抵蜀 could also be interpreted as a scene-setting topic, thus this instance may not necessarily be considered a VOPP.

[144] Similarly, the relationship between locative VOPP and VPP is more intricate than mere object omission. Phua (2012: 20) highlights that removing DO from the surface form of 'V+DO+*yu*+IO_{LOC}' directly leads to the loss of causative meaning, thereby revealing a significant semantic distinction between locative VOPP and VPP.

[145] The rarity of PPVO constructions applies only to the locative category. Instrumental PPs led by 以 *yi* predominantly occur in the PPVO construction (Phua and Jiang 2013).

One approach to understanding this phenomenon involves examining the grammaticalization process of 於/于 *yu*. Scholars widely concur that 于 *yu*[146] originally was a motion verb with the meaning of 'to go' (Pulleyblank 1986; Xie and Hong 1988; Wei 1993; Guo 1997; Mei 2004, inter alia). Over time, its meaning became more abstract and extended into different functional domains. This development established 於/于 *yu* as a multifunctional preposition capable of introducing a range of semantic roles. Alternatively, we can follow the perspective that grammaticalization should be understood as a process affecting specific constructions rather than individual, isolated words (Bybee 2003; Himmelmann 2004; Gisborne and Patten 2011, inter alia). Following this view, I propose that the entire locative VOPP construction may have undergone a grammaticalization process, evolving from (a) a form primarily used to express caused-motion events, wherein the PP functions as an obligatory argument specifying the goal role, to (b) a form capable of expressing a broader range of spatial events, wherein the PP serves as a non-obligatory adjunct providing supplementary spatial details like location or source.[147]

Fundamentally, the process involves constructional polysemy (Goldberg 1995), which expands the semantic and functional scope of the locative VOPP construction.[148] Considering the origin of 于 *yu* as a verb denoting 'to go' in oracle bone inscriptions, it is plausible that the locative VOPP construction initially encoded a caused-motion event involving movement to a destination, whereby the PP served as a goal argument. If we accept this premise, then the development of the PP within the locative VOPP construction from an obligatory to a non-

[146] The footnote section of Section 2.1 has discussed the relationship between 於 *yu* and 于 *yu*. Although 于 *yu* is older than 於 *yu*, their differences as prepositions are subtle and they are often used interchangeably. Consequently, many scholars do not strictly differentiate between the two, and this thesis follows that convention. However, the discussion of the preposition's verbal origin here is restricted to 于 *yu*, as the verbal connections of 於 *yu* are less apparent (Pulleyblank 1986: 4).

[147] Chapter 5 highlights the scarcity of path PPs in Old Chinese, which could further support the view that Old Chinese largely conforms to Talmy's (1991) verb-framed language, with path encoded by the main verb (Peyraube 2006). Path PPs are predominantly postverbal in Old Chinese but only appear when there is no verbal object (i.e., they are not found in VOPP). The interim summary of Chapter 5 also questions whether the introduction of path as a prepositional function might be a later development and thus not as essential as introducing other locative subclasses.

[148] Toh (2012) discusses the relationship among three spatial domain events encoded by the 'V+DO+*yu*+IO_{LOC}' construction in *Zuo Zhuan*: caused-motion, caused-position, and location. Drawing upon Rohde's (2001) observation that caused-motion and caused-position are related constructions, Toh establishes a connection between the first two events. She further ties all three events together by referencing Croft's (2001) view that arguments and adjuncts exist on a continuum. Through an analysis of verb collocations in 'V+DO+*yu*+IO_{LOC}', Toh notes that the spatial information encoded by location PPs that are used with verbs of military actions should be seen as the 'substructure' of these verbs' semantic structure. She therefore considers this group of location PPs to be closer to complements than adjuncts. The capacity of the same form 'V+DO+*yu*+IO_{LOC}' to encode the three spatial domain events demonstrates constructional polysemy, where the same syntactic form carries related meanings, with the events connected through extensions.

essential role represents a plausible trajectory. Additionally, in line with Hopper's (1991) principle of persistence, locative $VOPP_{ARG}$ and $VOPP_{ADJ}$ co-existed.

The locative constructions VOPP and PPVO co-existed in Old Chinese. Combining the tokens of the three sub-stages, locative VOPP (1687 instances) accounts for 89.73%, while locative PPVO (193 instances) accounts for 10.27%. There is some functional overlap between the two, as both can encode non-goal locative events, while locative VOPP additionally encodes caused-motion (goal) events. Diessel (2019: 133) explains that constructions, while never entirely identical, may have overlapping areas where both can describe the same event. Thus, speakers usually have the flexibility to select from these alternatives based on their communicative needs. This availability of choices leads to competition. Thus, the competition between locative VOPP and PPVO arises when they encode non-goal locative events, with PPs functioning as adjuncts. Essentially, it is the competition between locative $VOPP_{ADJ}$ and PPVO. PPs functioning as arguments do not participate in this competition, as only the locative VOPP construction can encode the caused-motion event with the PP as the goal argument. In other words, argument PPs only appear in the postverbal position as $VOPP_{ARG}$ and have remained in this position throughout.

Let us explore the possible reasons why locative PPVO eventually prevailed over VOPP. These factors may well be applicable to the broader competition between VOPP and PPVO in general, including instances where non-locative PP categories occur in these constructions. This helps shed light on why PPVO is the dominant word order in modern Sinitic varieties (Cantonese, Hakka, and Mandarin), as indicated by WALS Feature 84A.

Firstly, it is observed that the distribution of PPs is related to serial verb constructions (SVCs). As summarised by C. Zhang (2002) and Aldridge (2016), the grammaticalization of V_1 in $V_1O_1V_2O_2$ into a preposition will result in a new form with the modifying PP positioned before the VP. In addition, Section 2.4 has discussed Peck's (2008) proposal on the potential impact of SVCs. Under her delimitedness constraint (DELIM), the postverbal structure prefers PPs that delimit the temporal extent of events (PP_{+del}), while DELIM aligns the non-delimiting PPs (PP_{-del}) in the preverbal position. Peck hypothesises a correlation between SVC and the rise in preverbal PPs. V_1V_{2+del}, with V_2 indicating delimitedness, functioned as an analogical model for VPP_{+del} and contributed to the prominence of PP_{+del} in the postverbal position.

Another angle to consider is how information structure impacts word order. LaPolla (2015) notes that over the long period of Old Chinese, there was a shift in the unmarked focus position from immediately preverbal to postverbal. Here is my preliminary analysis on how the change in focus position could have influenced PP placement. With the shift of focus to the

postverbal position, information conveyed by constituents after the verb becomes more prominent in unmarked contexts. To accommodate this shift, a construction with adjunct PPs positioned before the verb would be more favourable. As these adjunct PPs are typically non-obligatory, this arrangement can avoid direct competition with the postverbal focal information, thereby maintaining the prominence and clarity of the focus. Moreover, placing these non-essential PPs before the verb may set up a contextual or background setting for the unfolding event.

This is just one possible explanation for the increasing prevalence of the PPVO construction. The adjunct PPs may flexibly occur after the verb when speakers intend to highlight the information these PPs express. Section 2.3.3 has extensively discussed the contrast between the PPVO construction 以羊易之 *yi yang yi zhi* and the VOPP 易之以羊 *yi zhi yi yang*, both describing the event of 'replacing it (the ox) with a sheep'. According to Norman (1988) and Pulleyblank (1995), the VOPP 易之以羊 directs the listener's focus to the instrument or means, whereas the PPVO 以羊易之 places more emphasis on the act itself. S. Wu (2008) explains that in 易之以羊, the king clarified that it was not out of begrudging the cost of the ox that he substituted it with a sheep. Here, the focus shifts to the sheep, highlighting what replaced the ox instead of just the act of substitution.

This section seeks to present a preliminary account of the change in PP placement via a constructional perspective. It adopts a Construction Grammar (CG) framework rooted in Goldberg's (1995) seminal and foundational work, complemented by insights from more recent developments in usage-based CG, particularly Diessel (2019). This framework situates the analysis within both the classical and contemporary strands of CG. By considering speakers' choices, this approach highlights the role of language use in driving change. The prolonged co-existence and competition between alternative, functionally overlapping constructions, and the influence of other constructions as analogical templates, underscore the interactive nature of constructions within the network. Naturally, multiple factors could have contributed to why one construction became dominant over the other. External influences are a significant aspect, particularly as this thesis indicates a temporal coincidence between the initial prevalence of preverbal locative PPs and the earliest phase of Buddhist text translations. These external factors will be discussed in the next section.

8.3 POSSIBLE EXTERNAL FACTORS

Section 8.2 has explored the potential internal causes from four aspects: preposition decline and replacement, iconicity and syntactic processing, the Postverbal Constraint (PVC), and competition between constructions. This section will focus on external factors, particularly the possible impact of religious text translations.

This thesis consistently argues for the importance of considering external factors. Several related questions have surfaced during the analysis of internal factors: What gives rise to a particular principle or constraint? Why is it activated or strengthened at specific points in time but not at others? Why do dialects show varying levels of adherence to the same principle in correlation with geographical regions? These issues highlight the necessity to investigate external influences. Moreover, chronologically, some major historical events overlap with the periods of PP word order changes. According to M. Zhang (2011: 237), when we set aside the more speculative ancient histories, like the claims that Xia and Zhou dynasties originated from the former lands of Western Qiang, or that the Di and Qiang people descended from the Yan Emperor, it is crucial to consider the well-documented historical events between the 1st and 4th centuries. Several key events, including the split of Xiongnu into northern and southern factions, Southern Xiongnu's submission to Han, the division of Qiang into eastern and western groups and the migration of Eastern Qiang, all happened during the Eastern Han period, when PPs began to shift to the preverbal position as claimed by C. Zhang (2002). M. Zhang refers to Wong (2006), who concludes that the large-scale settlement of the Hu people in China and their gradual Sinicization already began in the 1st century and peaked during the 4th to 6th centuries.

However, the contact scenarios described in the literature are largely conjectural, owing to the scarcity of historical linguistic records. Yet, there exists another form of contact that is supported by relatively detailed and reliable historical texts. Chapter 1 has highlighted that this thesis seeks to offer a fresh line of inquiry by investigating the possible impact of Buddhist scripture translations on the development of PP word order in Chinese. There is indeed a strong correlation between the major changes in locative PP word order and the era of Buddhist translations. It could be just a coincidence, but nevertheless, a remarkable one. While this approach may not fully capture the detailed process of contact influence and might instead lead to broad generalisations, the use of comparative materials (对勘材料) can still provide meaningful insights into the nature of contact by studying specific examples.

Section 3.2.2 of Chapter 3 points out that Buddhist scripture translation, as a form of 'non-natural contact' distinct from direct personal interactions, is regarded by N. Jiang (2011) as the first large-scale and traceable instance of contact in the development of Chinese. Yu (2019: 10) echoes this perspective, stating that the contact between Chinese and Sanskrit in the Medieval Period constituted the first substantial contact. Q. Zhu (2001) reports that between Eastern Han and the Sui dynasty alone, a total of 46 million characters were translated, amounting to 1482 texts and 5702 scrolls. Drawing on these figures, N. Jiang (2011) argues that although only a limited number of individuals were directly involved in the translation of Buddhist texts, the ongoing indirect contact, spanning almost a millennium, formed a strong foundation for extensive interaction between Chinese and languages like Sanskrit.[149]

Thus, the translation of Buddhist scriptures is a pivotal and far-reaching contact, with verifiable linguistic materials available for study. Furthermore, the data in this thesis indicate that the first significant change in locative PP word order occurred in the Buddhist scripture translations of the Eastern Han period, transitioning from a predominantly postverbal placement in Old Chinese to a largely preverbal arrangement. Additionally, based on the overall distribution of locative PPs in the texts examined, preverbal locative PPs are dominant in all Buddhist texts and most non-Buddhist documents from the Six Dynasties period. These factors motivate me to explore whether Buddhist scripture translation is indeed a driving force behind the change. Following the comparative approach by N. Jiang (2011), I will focus on a few examples to compare the syntactic patterns of the original Buddhist text and the parallel Chinese translation.

However, this thesis is constrained by the availability of materials. Systematic and comprehensive comparative materials are already limited, with the bulk pertaining to scriptures translated during the Six Dynasties and subsequent periods. For instance, 汉译佛经梵汉对比分析语料库 (A Database of Chinese Buddhist Translations and their Sanskrit Parallels for Buddhist Chinese Studies, available at https://bcbs.eduhk.hk/) is a highly useful diachronic parallel corpus with detailed segmentation and annotation. It lists different versions of translations alongside their shared Sanskrit source. However, at present, the corpus features three Buddhist scriptures, all translated from the Six Dynasties period and beyond. Similar comparative materials for earlier periods seem to be unavailable. Even with access to the

[149] While the translators directly engaged may be limited, the high regard for the written language of religious texts within the speech community can lead to its influence reaching beyond the scribes. Another noteworthy aspect is the composition of translators. Zhu and Li (2018), in their examination of the hybrid nature of Chinese used in Buddhist text, cite Gu (1955), who reports that out of the 134 chief translators from Eastern Han to Northern Song, 95.5% were non-Chinese. This suggests a strong foreign influence on the translation process.

corresponding original scriptures, conducting independent comparative research would remain challenging due to my lack of formal training in Sanskrit and Pali. The scarcity of earlier comparative resources, particularly those from Eastern Han, is problematic. This period not only represents the initial phase of Buddhist scripture translations but also marks the first significant change in the dominant order of locative PPs, according to the findings in Section 8.1. Consequently, it is difficult to directly trace the detailed process by which the original Buddhist texts influenced early Chinese translations and measure the extent of the impact. Nevertheless, comparative materials from the Six Dynasties period remain valuable. Analysing these resources in detail allows us to assess the role and impact of Buddhist translations during this time. It could potentially provide empirical evidence by revealing how the new dominant word order emerged and became entrenched through the translation process. Hopefully, this could also provide indirect insights into the effects of earlier translations, given that the patterns observed in later translations are likely rooted in early translation practices and thus reflect similar underlying mechanisms.

N. Jiang's (2011) detailed analysis of the parallel texts of the Lotus Sutra serves as a valuable reference. While her study does not focus on PP word order, it explores how case markers from the Sanskrit text are rendered in the Chinese translations by Dharmarakṣa (竺法护) and Kumārajīva (鸠摩罗什). N. Jiang (2011: 71) concludes that the referencing and summarising of the original noun case endings led to the establishment of a case marking system in the Buddhist translation, thus creating a systematic correspondence between Sanskrit and Chinese case categories. Furthermore, she asserts that the translation process not only enhanced the original function of Chinese prepositions in marking the semantic cases of nouns, but also introduced a variety of postpositions and circumpositions, thereby expanding the repertoire of adpositions in translated Buddhist texts. Most importantly, N. Jiang argues that the word order features of the original text prompted some case markers to undergo syntactic movement along with their marked nominals, thus influencing and propelling the PP word order transformation in Middle Chinese.

N. Jiang (2011) does not elaborate further on this observation. Additionally, her analysis of syntactic movement still frames the change in PP word order as due to the fronting movement of PPs. While I agree with her view that the word order patterns of the original text played a role in driving the change, I would like to reframe the issue. Specifically, the dominance of PPV(O) over V(O)PP may not be a straightforward case of PP movement but rather reflects competition between the PPV(O) and V(O)PP constructions. Below are a few

examples. Each pair consists of (a) the Sanskrit original and (b) its Chinese translation. The glosses for the Sanskrit texts are primarily derived from N. Jiang (2011) and are supplemented by annotations from the parallel corpus referenced earlier:

(300) a.*dvārasmi* *asthāsi*
door.N.SG.LOC stand.3SG.AOR
'He stood at the door.'

b.在 门 外 立
zai *men* *wai* *li*
at door outside stand
'(The master of the house) stood outside the door.'

(Adapted from N. Jiang (2011: 70))

(301) a.*bhagavato* *'ntikād* *imam* *evaṃ-rūpam*
Bhagavat.M.SG.GEN vicinity.N.SG.ABL this.M.SG.ACC thus-form.M.SG.ACC
aśruta-pūrvaṃ *dharmaṃ* *śrutvā*
unheard.of-before.M.SG.ACC Dharma.M.SG.ACC hear.GER
'Having heard the Dharma that had never been heard before in the vicinity of the Bhagavat.'

b.於 世尊 前 闻 所 未 闻
yu *shizun* *qian* *wen* *suo* *wei* *wen*
in Bhagavat front hear PTCL not.yet hear
'Listening to what had never been heard before in front of the Bhagavat.'

(Adapted from N. Jiang (2011: 64))

(302) a.*ujjaṅgale* *pṛthivī-pradeśe* *udapānaṃ* *khānayet*
barren.LOC earth-place.M.SG.LOC well.M.SG.ACC excavate.CAUS.OPT.3SG
'(For the sake of water) causes a well to be excavated in a barren spot of land.'[150]

b.於 彼 高原 穿凿 求 之
yu *bi* *gaoyuan* *chuanzao* *qiu* *zhi*
on that plateau excavate seek 3SG
'Excavate (a well) on that plateau to seek (water).'

(Adapted from N. Jiang (2011: 66))

[150] N. Jiang (2011: 66) glosses *ujjaṅgale* as 高原 (plateau), despite it being the locative form of an adjective meaning barren or sandy. Her interpretation might have been influenced by Kumārajīva's Chinese translation.

(303) a.*parṣāya* *madhye* *pravadanti* *dharmaṃ*
assembly.F.SG.GEN middle.M.SG.LOC speak.PRES.3PL Dharma.M.SG.ACC
'They speak the Dharma in the middle of the assembly.'

b.世尊 在 大众 敷演 深 法义
shizun *zai* *dazhong* *fuyan* *shen* *fayi*
Bhagavat in assembly expound profound teachings.of.the.Dharma
'The Bhagavats expound the profound teachings of the Dharma in the assembly.'
(Adapted from N. Jiang (2011: 66-67))

The Sanskrit examples in (300) to (302) illustrate the typical verb-final order of the language, while (303) shows its word order flexibility by placing the direct object after the verb. Nominals that denote spatial concepts appear in their locative or ablative form in all examples. Translators might have adopted the 'locative preposition + NP' structure in Chinese to mirror the Sanskrit locative/ablative nominal forms while keeping them in the original preverbal position. This likely led to the dominance of locative PPV/PPVO constructions in the Chinese translation.

Nevertheless, the word order in some translations differs from the Sanskrit original. For instance:

(304) a.*ākāśi* *tiṣṭhanti*
space.M.SG.LOC dwell.PRES.3PL
'They dwell in the space.'

b.到 於 空地
dao *yu* *kongdi*
arrive at space
'(The boys) arrive at the space.'
(Adapted from N. Jiang (2011: 30))

The static location event in Sanskrit is rendered as a motion event that profiles the endpoint in the Chinese translation. This might explain the use of VPP construction in (304b), as the usage of postverbal PPs aligns with the earlier analysis, which proposes that goal PPs serve as arguments and are placed after the verb. It is also supported by PTS, as chronologically, a goal can only be reached after the completion of a motion event.

It is important to note that the materials in N. Jiang (2011) do not constitute a complete dataset, as the examples are provided solely to illustrate the points discussed. Similarly, the Lotus Sutra in the parallel corpus is not a full version. Consequently, performing an exhaustive quantitative analysis is challenging. This adds to the difficulty of verifying and measuring the extent of the impact from Buddhist text translations. Nonetheless, the available excerpts and the comparative analysis of these examples still outline a possible pathway of influence. The translators' adoption of specific constructions likely reflects their effort to stay

faithful to the original scripture by capturing its syntactic features. Beyond historical Chinese linguistics, Okell (1965) illustrates the value of Nissaya Burmese in studying Burmese grammar, showing how Burmese was methodically adjusted to reflect the Pali syntax.

A subsequent question concerns how the new dominant construction spread. Shi (2015) suggests that the Sanskrit-influenced variant of Chinese went beyond translated scriptures and first permeated into Buddhist literature authored by native monks and scholars. Yu (2019) adds that the transition towards a more natural usage occurred through sustained exposure to the Buddhist doctrines and recitation of the scriptures. Over time, these features could be progressively accepted and internalised by Chinese speakers. Moreover, accommodation works both ways. Chapter 6 shows that the shift in the dominant order of locative PPs from postverbal to preverbal, in terms of the overall distribution, is particularly striking in the Eastern Han compiled translations, even more so than in later Buddhist translations. This is likely because early translators, such as An Shigao (安世高, of Parthian origin) and Lokakṣema (支娄迦谶, of 月氏 *Yuezhi* origin), did not have established translation conventions to follow and were thus more influenced by the original texts or their native languages.[151] In contrast, later translators likely conformed more to Chinese conventions. This would demonstrate another instance of 'interactive compromise'.

According to Kranich (2014: 97), 'language contact through translation' involves bilingual translators activating their proficiency in both the source and target languages, which can manifest in the target text bearing features of the source language. Yu (2019) similarly highlights the role of translators' language backgrounds on translated Buddhist scriptures of the Medieval Period, noting that these texts were often translated by Central Asian monks who were learning Chinese as a second language. Yu associates some unique features in the translations with Sanskrit influence and links them to these foreign monks' imperfect learning of Chinese, which is caused by interference from their native languages. As a result, patterns from their mother tongues were replicated and introduced into the Chinese translations.

To further illustrate this hypothesis, we can consider the origins and linguistic backgrounds of the early translators. Many of these translators originated from regions where verb-final languages were predominant. For instance, An Shigao (安世高) and An Xuan (安玄) hailed from Parthian-speaking regions, with Parthian being part of the western group of Middle Iranian languages. Similarly, Lokakṣema (支娄迦谶) and Dharmarakṣa (竺法护),

[151] Zhu and Li (2018: 7) highlight that the translation of Buddhist texts likely marks the earliest major translation endeavour between the two types of languages, with no prior models to guide translators.

who were of 月氏 *Yuezhi* origin, likely spoke Bactrian, while Kang Mengxiang (康孟详), with Sogdian roots, was likely a native speaker of Sogdian. Both Bactrian and Sogdian are part of the Eastern Middle Iranian group. According to Jügel (2022), Parthian, Bactrian, and Sogdian are all verb-final languages with a basic SOV word order. Another noteworthy example is Kumārajīva (鸠摩罗什), originally from Kucha, a region where Tocharian B was spoken. This language, too, is verb-final and exhibits a basic SOV order (Winter 1998). From a typological perspective, verb-final languages tend to place PPs in preverbal positions. Given this typological tendency and the shared feature of the native languages of these translators, it is plausible to hypothesise that their linguistic backgrounds may have influenced the placement of PPs in their Chinese translations.[152]

While Yu's reference to Thomason and Kaufman's (1988) concept of imperfect learning is a common approach, LaPolla (2022b:75) points out that language is not an entity but a behavioural manifestation of the physical, perceptual, and cognitive routines of its speakers. Each language reflects unique ways in which people conceptualise and interpret realities. Thus, there could be more profound factors at play. For instance, Coupe (2023) finds that language interactions and cognitive schema replication may act as viable catalysts for grammatical shifts, as both aid in the transfer of morphosyntactic features and structures across languages in the bilingual's mental framework.

Before we proceed to the last section of this chapter, there is one more issue to highlight. The original scriptures referenced by translators differed by period, including the Sanskrit version and texts in the Western Regions languages (i.e., 胡本 *hu ben*). According to N. Jiang (2011:13), it was only from Eastern Jin to Sui that translators had better access to the Sanskrit texts, resorting to *hu ben* only when facing challenges. Furthermore, there could be notable differences in Chinese proficiency between early and later translators. Future studies need to factor in these aspects.

[152] Ideally, specific examples from the relevant languages illustrating the position of PPs should be included to better substantiate this hypothesis. However, due to the scarcity of data on these historical languages, this thesis currently relies on broader typological inferences. While this approach may not be ideal, it is the most feasible given the limitations of the available data. Future research could focus on gathering relevant historical data, particularly by exploring more comprehensive sources of information on the languages spoken by early Buddhist translators. This could involve examining inscriptions, texts, and other historical records from the regions where these translators were from. Such research would provide deeper insights into the syntactic structures of the languages in question, especially with respect to PP placement. Future work could also compare translations of a common source by both Chinese and non-Chinese translators to test the hypothesis that features of the translators' native languages may have influenced the Chinese translations. This point was briefly mentioned in Section 4.3 of Chapter 4 but has yet to be fully explored.

8.4 EXPLORING THE ARGUMENT–ADJUNCT DISTINCTION AND ITS BROADER IMPLICATIONS FOR ALL PP CATEGORIES

The previous sections have tackled the first two research objectives by tracing the development of locative PP word order with empirical data and investigating the possible motivations and mechanisms behind this development. This section will focus on the final research objective, which is to explore the broader implications of this study and consider whether the insights gained thus far can shed light on the behaviour of other PP categories.

The earlier discussions, regardless of whether they address internal or external factors, all feature parts that pertain to all PP categories, not just locative PPs. Specifically, I intend to briefly examine whether the distinction between arguments and non-arguments (adjuncts) can enhance our understanding of PP placement. The discussion of competition between constructions in Section 8.2.4 proposes that the grammaticalization of locative VOPP led to the co-existence of locative VOPP_{ARG} and VOPP_{ADJ}. The competition between locative VOPP and PPVO emerges when both constructions encode non-goal locative events, with adjunct PPs engaging in this competition, while argument PPs do not. Although the focus is on how constructions interact within a network, the discussion essentially touches on the role of the argument–adjunct distinction in shaping the development of PP word order.

This point is also briefly addressed in the literature review in Section 2.4 of Chapter 2. We have questioned whether the more fundamental argument–non-argument (adjunct) distinction presented by Djamouri and Paul (1997) might offer a viable alternative to Peck's (2008) theoretically complex DELIM constraint. Despite DELIM constraint's unified framework, it became evident that aspectuality, a central aspect of Peck's theory, fundamentally relies on the classification of PPs as either arguments or adjuncts.

Djamouri and Paul (1997) observe that in Old Chinese, argument PPs are predominantly postverbal with only a few exceptions, while adjunct PPs can occur in both preverbal and postverbal positions. Building on the argument–adjunct asymmetry, Djamouri, Paul and Whitman (2013) further propose a structural analysis. With reference to Larson (1988), they argue that until the 2nd century, the verb could select precisely one VP shell. Starting around the 3rd century, a noticeable trend emerged where postverbal adjuncts were increasingly avoided. This change is attributed to the loss of the VP shell structure, which restricts the verb's capacity to combine with non-arguments. While their proposal differs from the constructional competition perspective this thesis aims to adopt, together, these discussions suggest that the argument and non-argument status of PPs, or the argument–adjunct distinction,

is a topic worth exploring. This is supported by psycholinguistic findings, which justify the distinction between arguments and adjuncts as they are processed differently (Tutunjian and Boland 2008). Speakers' argument knowledge is stored and specified in the mental lexicon, but their adjunct knowledge is not.

The PPVO construction, with adjunct PPs in the preverbal slot, can be seen as part of the more abstract schema of 'modifying constructions'.[153] This higher-level schema generally features modifiers preceding their heads. A concrete, lower-level instantiation involves the use of adverbs, which often precede the verb in Old Chinese. Diessel (2019) argues that analogy depends on how similar the constructions are, and analogy often explains why speakers favour parallel word orders. The perception of similarity between two constructions can foster a tendency to position them in parallel. For instance, speakers might consider manner adverbs and manner PPs as comparable adverbials. The modifying construction with preverbal manner adverbs in Old Chinese, like 强问之 (to firmly ask him), could function as an analogical template for manner PPs. Accordingly, to maintain consistency, it is not unreasonable for adjunct PPs, which modify the predicate or the whole event, to adopt the preverbal adverbial position that is established by adverbs. As a result, it is a natural progression for adjunct PPs to ultimately favour the PPVO construction.

Having proposed that PPVO is an instantiation of the modifying construction with adjunct PPs in the preverbal position, it is crucial to acknowledge that, despite evidence supporting a formal distinction, drawing a clear and categorical line between arguments and adjuncts remains difficult. Returning to Croft's (2001) view that arguments and adjuncts exist on a semantic continuum, we can think of their distinction in terms of degree. Some PPs are more argument-like, while others are more adjunct-like. When this gradience is manifested in the linear structure, the more argument-like PPs tend to appear after the verb, while those that are more adjunct-like tend to precede it.

This perspective might help clarify the diachronic distribution of the four locative subclasses as presented in Table 8.4. Section 8.2.2 questioned why PTS impacts locative subclasses in the observed sequence: goal PPs first, then source PPs, followed by location PPs, and finally path PPs. Considering the argument–adjunct distinction as a semantic continuum might provide us with better insights. Goal PPs have remained postverbal throughout due to their strong argument-like nature. In contrast, the cross-linguistic phenomenon of 'source–goal

[153] Langacker (2009: 288) briefly mentions the concept of 'adverbial modifying constructions'. This thesis thus posits a higher-level schema of 'modifying constructions' that encompasses various types, such as noun-modifying, adverbial-modifying, and adjectival-modifying constructions.

asymmetry' indicates that while goal locatives typically serve to delimit an event and contribute to the formation of event structure, source locatives generally do not assume this role (Lin 2019: 192). Hence, source PPs are highly adjunct-like, making them the first among the three non-goal locative subclasses to favour the PPV/PPVO construction.

Location PPs are more argument-like than source PPs. Croft (2001: 274) argues that certain activities are inherently 'localizable'. For instance, the event of chasing brings to mind a location. On the other hand, events like 'inheriting a million' do not imply a location. Building on this contrast, Croft (2001: 274) posits that the location where chasing occurs, denoted by a location PP like *in the park*, forms "a substructure of the semantic structure" of the verb *chase*. This implies that some location PPs are more argument-like, while others are more adjunct-like. Thus, location PPs adopted the PPV/PPVO construction as the dominant form later than source PPs.

Lastly, path PPs were the last among the three non-goal locative subclasses to favour the preverbal construction due to their even more argument-like nature compared to location PPs. Section 8.2.2 highlights Lin's (2019) classification of path PPs (or directional PPs) in Mandarin Chinese into two types, based on the prepositional object. Prepositional objects of 向 *xiang* and 往 *wang* can either denote a general direction or a precise location. By pinpointing the targeted destination, the latter type provides more details about the motion, even though it does not necessarily imply that the destination is reached. Thus, this type closely resembles goal PPs and is more argument-like. This likely explains why Lin's corpus analysis reveals that the former type appears more often before the verb, while the more argument-like latter type is found more frequently after the verb.

After examining locative PPs, let us consider other PP categories. Dative PPs denoting recipients, which are related to goal PPs cross-linguistically, always stay postverbal as they are the argument of the 'give' construction. How about PPs traditionally labelled as adjuncts, like the instrumental, manner, and comitative categories? Do they adopt PPV/PPVO as the preferred construction in a sequence determined by how argument-like or adjunct-like they are, just like the non-goal locative PPs? That is, are the PPs that favour PPV/PPVO earlier more adjunct-like? Alternatively, if only a single period of data is available, do PP categories with a higher preverbal percentage tend to be more adjunct-like? For instance, Phua and Jiang (2013) observe, using data compiled from D. Zhao (2007), that the percentage of preverbal comitative PPs in *Zuo Zhuan* is higher than that of preverbal instrumental and manner PPs. This difference is understandable, as instrumental and manner PPs elaborate on the method or means of an

action, whereas comitative PPs provide less essential information about the accompanying participants. Consequently, the adjunct-like nature of comitative PPs accounts for their preference for the preverbal construction. Nevertheless, additional studies spanning various periods are required to confirm this pattern and substantiate the claim.

The discussion above provides an initial analysis of the argument–adjunct distinction and its potential impact on the development of PP placement. Here is a summary of Chapter 8. Based on the data gathered in Chapters 5 to 7, this chapter has addressed the three research objectives of this thesis and their related research questions. Section 8.1 provided an overview of locative PP word order from OC1 to EMC3. It examined the placement of locative VPP/PPV and VOPP/PPVO, outlined the distribution of the four locative subclasses over time, and confirmed that there was a shift in the dominant word order from postverbal to preverbal, pinpointing the timeframe of this transition. Sections 8.2 and 8.3 addressed the second research objective by examining potential internal and external factors that could have shaped the diachronic development of locative PP word order. Section 8.2 concentrated on internal factors, including preposition decline and replacement, iconicity and syntactic processing, the Postverbal Constraint (PVC), and competition between constructions. While preposition decline and replacement and iconicity were reviewed in Chapter 2, this section reassessed these factors with reference to data from the preceding three chapters. Additionally, this thesis proposed a reframing of the issue in the discussion of the final internal factor. The shift was from a perspective of PP fronting movement to one focused on constructional competition. Furthermore, the analysis of internal factors revealed recurring issues that underscored the necessity of examining external influences. These were discussed in Section 8.3, which leveraged relevant comparative studies to investigate how the translation of Buddhist scriptures might have affected PP word order in Chinese. Lastly, Section 8.4 addressed the third research objective by discussing how the findings derived from the study of locative PPs might shed light on other PP categories. It presented a preliminary investigation of whether the argument–adjunct distinction and its continuum could offer a useful framework for analysing the distribution of PPs.

The discussions of this chapter suggest that no single factor can fully explain the observed phenomena; rather, it is likely that multiple factors are at play. Moreover, it is challenging to clearly delineate which aspects of the changes are driven by internal causes and which are attributable to external ones. Consequently, further research is needed to untangle the interplay between the two. With these challenges in mind, the next chapter will consolidate the key findings of this thesis and propose potential areas for future inquiry.

CHAPTER NINE
CONCLUSION

This study has revisited the diachronic development of the word order of locative PPs in Chinese, a captivating topic with significant implications for both typological studies and Chinese historical linguistics. Adopting a diachronic corpus-based approach, this thesis has addressed three research objectives: (1) to examine the evolution of locative PP word order across various stages of Old Chinese, Middle Chinese, and Early Mandarin Chinese through historical text analysis; (2) to identify the motivations and mechanisms underlying this evolution; and (3) to explore the broader implications of the theoretical analyses proposed. This chapter concludes the study by summarising the key findings, discussing the contributions and limitations, and proposing avenues for future research.

9.1 SUMMARY OF KEY FINDINGS

Below is a summary of the key findings, organised according to the three research objectives of this thesis.

9.1.1 THE EVOLUTION OF LOCATIVE PP WORD ORDER

The first research objective focused on the diachronic development of locative PP word order. Three sets of data were analysed in Section 8.1: the overall distribution of locative PPs regardless of the presence of a verbal object, and the respective distributions of locative VPP/PPV and VOPP/PPVO. Results from the three sets collectively support earlier findings that the predominant word order for locative PPs in Old Chinese was clearly postverbal. Eastern Han marked the onset of a transition towards the preverbal order, with the changes in dominant word order becoming more firmly entrenched during the Six Dynasties.

Nevertheless, distinctions exist among the three sets. The trajectory of locative VOPP and PPVO constructions diverges markedly from that of locative VPP and PPV constructions. Instead, it aligns more closely with the overall distribution of postverbal and preverbal locative PPs, with similarities in their overarching patterns and key turning points. The postverbal order dominated both sets from OC1 (4th c. BCE, pre-Qin) to MC1a (1st c., Eastern Han) but plunged abruptly in MC1b (late 2nd c., Eastern Han), giving way to the preverbal order. This was followed by a rebound of the postverbal order in MC2a (4th c., Six Dynasties), which lost its

lead again from MC2b (early 5th c., Six Dynasties) all the way to EMC3 (mid-18th c., Qing dynasty).

Unlike these two sets, locative VPP and PPV constructions exhibit a more intricate development pattern. The initial phases were similar, with postverbal locative PPs dominating from OC1 (4th c. BCE, pre-Qin) to MC1a (1st c., Eastern Han). Their proportion also sharply decreased in MC1b (late 2nd c., Eastern Han), allowing locative PPV to take over. However, the trend reversed a few times, with locative VPP and PPV constructions alternating in dominance, though the fluctuations became milder in Early Mandarin Chinese. Overall, from OC1 to EMC3, locative VPP constructions experienced a decline. Yet, the reversals and fluctuations highlighted a comparatively complex interaction between locative VPP and PPV over time.

Additionally, the comparison of locative VPP with VOPP and locative PPV with PPVO demonstrates that the rate of change accelerates when the verb takes an object. Specifically, the linear trendline for VOPP has a steeper slope than that for VPP, indicating a more rapid decline for VOPP compared to VPP. Likewise, the trendline for PPVO is steeper, reflecting a faster rate of increase for PPVO relative to PPV.

Lastly, the distribution of the four locative subclasses from OC1 to EMC3 was outlined. All locative subclasses began as either predominantly postverbal (location and source) or strictly postverbal (goal and path) at OC1 (4th c. BCE, pre-Qin). Goal PPs were the most stable, remaining strictly postverbal until EMC3 (mid-18th c., Qing dynasty). In contrast, the other three subclasses experienced a general shift in dominant word order from postverbal to preverbal. This highlights the asymmetry between goal and non-goal locative PPs. Furthermore, PPs denoting source, location, and path changed their dominant word order at different phases. Source PPs were the first to transition, remaining predominantly or strictly preverbal from OC2 (3rd c. BCE, pre-Qin) onwards. Location PPs briefly adopted the preverbal order in MC1b (late 2nd c., Eastern Han), reverted to postverbal in MC2a (4th c., Six Dynasties), and then remained predominantly preverbal from MC2b (early 5th c., Six Dynasties) onwards. Finally, path PPs first exhibited preverbal dominance in MC2a (4th c., Six Dynasties) but subsequently fluctuated between preverbal and postverbal. Their consistent preverbal dominance was only established from EMC1 (7th to 10th c., Tang and Five Dynasties) onwards.

9.1.2 MOTIVATIONS AND MECHANISMS UNDERLYING THE EVOLUTION

The second research objective examined the motivations and mechanisms driving the development of locative PP word order by assessing internal and external factors. The investigation into internal causes covered four aspects: preposition decline and replacement, iconicity and syntactic processing, the Postverbal Constraint (PVC), and competition between constructions.

The first internal factor was the decline and replacement of 於/于 *yu* (see Section 8.2.1). The distribution of locative functions among prepositions and their usage frequency trends both revealed that the change in the dominant word order of locative PPs preceded 於/于 *yu*'s notable decline and replacement. This reaffirms that the change in locative PP word order was unlikely directly attributable to preposition decline and replacement due to chronological incongruity, though the latter may have exerted some influence.

The second internal aspect was the role of iconicity principles, particularly the Principle of Temporal Sequence (PTS), in conjunction with syntactic processing (see Section 8.2.2). Firstly, the explanatory power of PTS was evaluated using data on the diachronic distribution of the locative subclasses. Goal PPs adhered to PTS throughout, and the shift from postverbal to preverbal dominance for PPs denoting source, location, and path also generally followed PTS. Some components of location and path PPs did not fully fit PTS, leading to alternative iconicity principles. Still, the overall trend corroborates Hong's (2010a) view that Chinese locatives have progressed from a non-motivated to a motivated distribution, reflecting increased conformity to PTS.

Several issues with PTS were identified. Firstly, why did PTS influence locative PP placement in this sequence: goal PPs first, followed by source PPs, location PPs, and finally path PPs? Additionally, data showed that PTS only had a modest impact on locative PP placement in Old Chinese. This raised the first theoretical concern: Why did iconicity principles like PTS gain prominence only at a certain time? If these principles reflect cognitive understanding, one would expect them to influence language use consistently. Why, then, did early Chinese speakers not strongly conform to PTS, with notable adherence emerging only later? Another theoretical concern questioned the need to propose PTS as an independent motivation for Chinese, instead of directly appealing to the Gricean maxims (Newmeyer 2000).

Studies integrating competing yet complementary principles were then examined, particularly Phua and Jiang (2013), who combine syntactic processing and iconicity principles. Syntactic processing was the dominant principle in the pre-Qin era. Starting from Late Archaic

Chinese, the progressive transition in dominance from VOPP to PPVO likely reflects the diminishing role of syntactic processing and the growing effectiveness of PTS. Phua and Jiang's discussion of syntactic processing includes right branching direction in VO languages, the Relator Principle (Dik 1997), and the principle of Early Immediate Constituents (Hawkins 1994). These proposals collectively suggest that Old Chinese, as a VO language, naturally prefers VOPP. However, contradictions arise when an order matches the prediction of syntactic processing but conflicts with the short-before-long preference, or when researchers arrive at different conclusions despite applying similar processing principles. Moreover, it is uncertain whether Modern Chinese, still classified as a VO language yet primarily using the PPVO order, poses processing difficulties for its speakers.

The Postverbal Constraint (PVC) was the third internal factor under review (see Section 8.2.3). The evaluation revealed issues like its exceptions and the methodological circularity in its formulation that merely reiterates observed patterns. M. Zhang's (2011, 2016) study on PVC's origin partially addresses the latter concern, suggesting that PVC may stem from the interaction between Sinitic and non-Sinitic OV languages in northern China. Building on M. Zhang (2016), L. Jiang (2018) argues that the interactive compromise between Old Chinese and the OV non-Sinitic languages led to PVC, which enforced the shift of postverbal PPs in VOPP to the preverbal slot. The resulting PPVO retained the basic VO order, which likely facilitated a smoother adjustment in PP placement for Chinese speakers and made the transition more comfortable.

Despite the debate surrounding PVC, it provides a different angle for interpreting specific aspects of the data. PVC helps elucidate why locative PP placement is more affected when the verb has an object. The differences between the two scenarios, whether in the timing of dominant order changes (i.e., the earlier transition from locative VOPP to PPVO compared to the transition from locative VPP to PPV (L. Jiang 2018)) or in the rate of change (i.e., the more rapid decline of VOPP compared to VPP observed in this thesis), can be understood through PVC. The rationale is that the joint effect of PTS and PVC could be more substantial than the impact of a single principle. Both PTS and PVC shaped the order between locative PP and VO, but only PTS was pertinent to the order between locative PP and V.

The shift in the dominant order of locative PPs, specifically the rising predominance of preverbal PPs, has often been framed as a fronting movement of PPs from the postverbal position. This thesis introduced an alternative perspective by exploring the role of competition between constructions, which was the final internal factor (see Section 8.2.4). The discussion first established the co-existence of two distinct locative constructions in Old Chinese.

Following Phua (2012), a caused-motion construction 'V+DO+*yu*+IO_{LOC}' was identified, which corresponds to locative VOPP in this thesis. Since the locative VOPP construction can encode caused-motion events whereas locative PPVO cannot, they are not functionally interchangeable and represent distinct constructions. Consequently, the increase in preverbal PPs cannot be interpreted simply as a fronting movement of PPs to the preverbal position.

Goal PPs within the VOPP construction are usually perceived as arguments when the construction encodes the caused-motion event. However, PPs from the three non-goal locative subclasses can also enter this construction without indicating caused motion and they are generally considered adjuncts. One explanation involves examining the grammaticalization process of 於/于 *yu*. Alternatively, this thesis posits that the entire locative VOPP construction may have undergone grammaticalization. Initially, it expressed caused-motion events with the PP as an obligatory goal argument. Over time, it evolved to encompass various spatial events with the PP as a non-obligatory adjunct providing details like location or source. The process involves constructional polysemy (Goldberg 1995), expanding the semantic and functional scope of locative VOPP. Given 于 *yu*'s origin as a verb denoting 'to go', locative VOPP likely started by encoding caused-motion events involving movement to a destination, with the PP as a goal argument. The development of PP in the locative VOPP construction from obligatory to non-essential thus follows a plausible trajectory. Additionally, following Hopper's (1991) principle of persistence, locative $VOPP_{ARG}$ and $VOPP_{ADJ}$ co-existed.

The overlapping functionality and speakers' flexibility to choose between constructions create competition. Specifically, locative VOPP and PPVO compete when encoding non-goal locative events, with PPs serving as adjuncts. Argument PPs are not part of this competition, as only locative VOPP can encode caused-motion events with the PP as the goal argument. Two explanations for the eventual dominance of locative PPVO over VOPP were examined, which are relevant to the broader competition between VOPP and PPVO. Firstly, the distribution of PPs is linked to serial verb constructions (SVCs). The grammaticalization of V_1 in $V_1O_1V_2O_2$ into a preposition creates a new form, with the modifying PP preceding the VP. Peck (2008) also contends that the SVC V_1V_{2+del} served as an analogical model for VPP_{+del} and contributed to the prominence of PP_{+del} in the postverbal position.

The second explanation explored the role of information structure in shaping word order. LaPolla (2015) notes a shift in the unmarked focus position from immediately preverbal to postverbal in Old Chinese. This thesis analysed how this shift in focus position might have influenced PP placement. The shift of focus to the postverbal position enhanced the prominence

of information conveyed by postverbal constituents in unmarked contexts. Constructions with preverbal non-obligatory adjunct PPs became more favourable, as this arrangement avoided direct competition with the postverbal focal information, thus preserving the prominence and clarity of the focus. Placing non-essential PPs before the verb could also establish a contextual or background environment for the event.

The analysis of internal factors uncovered recurring issues that highlighted the necessity of examining external influences. Additionally, according to the data, the first significant change in locative PP word order coincided with Buddhist scripture translations during Eastern Han. To address this, this thesis leveraged comparative studies to explore how the translation of Buddhist scriptures could have impacted PP word order in Chinese (see Section 8.3). Comparing the syntactic patterns between the original Buddhist texts and the parallel Chinese translation suggests that translators might have used the 'locative preposition + NP' structure in Chinese to mirror the Sanskrit locative/ablative nominal forms, while keeping them in the original preverbal position. This likely contributed to the rise of locative PPV/PPVO constructions in the Chinese translation. The comparative analysis highlights a potential pathway of influence, showing how translators' choice of constructions represents their effort to stay true to the original scripture by capturing its syntactic features.

The discussion then addressed how the new dominant construction could have been disseminated and gradually adopted by Chinese speakers. It was also observed that the shift in the dominant order of locative PPs from postverbal to preverbal, in terms of the overall distribution, was notably more drastic in the Eastern Han translations compared to later ones. This likely resulted from early translators lacking established translation conventions, while later translators adhered more to Chinese norms. Lastly, this thesis examined the influence of translators' language backgrounds and foreign monks' imperfect learning of Chinese (Yu 2019). It is suggested in this thesis that more profound underlying factors, like cognitive schema replication (Coupe 2023), could have been at play.

9.1.3 Broader implications of the theoretical analyses

The last research objective focused on the broader implications of this study, particularly whether the distinction between arguments and adjuncts can enhance our understanding of the distribution across all PP categories (see Section 8.4).

The earlier discussion on constructional competition proposed that the rivalry between locative VOPP and PPVO mainly involves adjunct PPs in non-goal locative events, rather than argument PPs. This highlights the significance of the argument–adjunct distinction, which this

thesis contends merits further investigation, given its support from psycholinguistic findings. It becomes particularly relevant considering Djamouri and Paul's (1997) finding that Old Chinese showed an argument–adjunct asymmetry, with argument PPs mostly postverbal and adjunct PPs appearing in both preverbal and postverbal positions. This asymmetry could offer a viable alternative to Peck's (2008) theoretically complex DELIM constraint, which fundamentally depends on classifying PPs as either arguments or adjuncts.

This study argued that PPVO, featuring preverbal adjunct PPs, is an instantiation of the more abstract schema of 'modifying constructions'. A related lower-level instantiation of modifying constructions involves the use of adverbs, which often precede the verb in Old Chinese. Speakers may treat adverbs and PPs as comparable adverbials given their shared modifying function, with preverbal adverbs serving as an analogical template for adjunct PPs. To maintain consistency in the structure of modifying constructions, adjunct PPs, which modify the predicate or event, align with the preverbal position established by adverbs. This leads to a natural preference for adjunct PPs to adopt the preverbal position in constructions such as PPVO over time.

Following Croft's (2001) view of arguments and adjuncts existing on a semantic continuum, this thesis treats their distinction as a matter of degree. It further posits that when this gradience is reflected in the linear structure, the more argument-like PPs tend to follow the verb, whereas the more adjunct-like PPs tend to precede it. Considering the argument–adjunct distinction as a semantic continuum could clarify the historical distribution of the four locative subclasses. How argument-like or adjunct-like each subclass is impacts the sequence in which PTS exerts its influence. Goal PPs consistently remained postverbal due to their strong argument-like nature. Conversely, source PPs, location PPs, and path PPs favoured the PPV/PPVO construction sequentially, from earliest to latest, due to their progressively reduced adjunct-like characteristics. This reasoning was then extended to other PP categories. Dative PPs denoting recipients, which are related to goal PPs cross-linguistically, consistently remained postverbal due to their role as arguments in the 'give' construction. In addition, a preliminary analysis of PPs traditionally labelled as adjuncts explained why the percentage of preverbal comitative PPs in *Zuo Zhuan* is higher than preverbal instrumental and manner PPs.

9.2 CONTRIBUTIONS AND LIMITATIONS

This thesis has addressed the conflict between synchronic typological features and diachronic development patterns of locative PP placement in Chinese. It adds to the ongoing discussion on locative PP word order evolution, specifically investigating why there was a transition in the dominant order from postverbal to preverbal.

The first major contribution of this thesis lies in its rigorous methodological approach, which fills gaps in existing literature on data collection and handling. By leveraging high-quality diachronic corpora, including the Academia Sinica Ancient Chinese Corpus (ASACC) and the diachronic parallel corpus of Sanskrit Buddhist texts and their Chinese translations, this study significantly improves data analysis quality. This thesis also provides practical insights into working with diachronic corpora. Section 4.4 of Chapter 4 outlined the steps for using the ASACC corpus, illustrating effective data collection and analysis techniques. This process not only familiarises researchers with the corpus but also encourages reflection on best practices and potential pitfalls in data handling.

Another methodological contribution is in the detailed periodisation and the classification of PPs. Inspired by the distinction between 'macro-stories' and 'micro-stories' (Lass 1997), this thesis traces smaller-scale developments and intermediate stages along the path. The analysis spans 14 texts across 9 sub-stages. This fine-grained periodisation, particularly within the Middle Chinese period, captures nuanced developments and non-linear changes in the dominant word order of locative PPs, revealing reversals and variations that a broader periodisation might overlook. Furthermore, differing from studies that treat PPs uniformly, this thesis adopts a refined approach by distinguishing between locative PP subclasses. It presents detailed diachronic data on the placement of each subclass, showcasing how the syntactic behaviour of each subclass varies within the general locative PP category. This examination offers a clearer picture of locative PP word order changes over time.

The second contribution is the exploration of external factors. This thesis contends that analyses based purely on internal factors must tackle the actuation problem posed by Weinreich, Labov and Herzog (1968), which questions why changes occurred at a specific time and not others. This prompts additional questions: What initiates the emergence of specific principles or constraints? Why are they activated or strengthened only at certain times? Why do dialects exhibit varying adherence to the same principle in correlation with geographical regions? Uncovering deeper causes often requires considering external factors like language contact, which many studies have not sufficiently investigated.

To bridge this gap, this thesis investigates the impact of external influences from different angles. It revisited the timelines of key historical events and demonstrated that some coincide with periods of PP word order changes, pointing to potential contact scenarios. As with some previous studies that suggest language contact might have influenced word order, such contact scenarios also remain speculative and lack concrete and convincing methods for verification. Nevertheless, this thesis advances the discussion by examining the influence of Buddhist scripture translations, a form of indirect contact that is traceable and influential. Backed by verifiable comparative materials (对勘材料), this thesis analysed sentence structures in parallel texts to uncover their correlations, demonstrating how the translation process affected the placement of locative PPs. This approach avoids the simplistic assertion that the syntactic patterns in the Chinese translation are due to the influence of the original Buddhist texts. Deeper factors were also explored, including how the translator's bilingual mind functions during translation. Thus, the analysis provides a more comprehensive insight into the role of language contact. Moreover, just because a specific word order already exists in Chinese does not necessarily rule out the potential role of external factors (M. Zhang 2011). This study observes that locative PPVO, initially a marked and non-dominant word order, experienced a rise in frequency and a broadening of usage partly due to the indirect contact from Buddhist translations. This finding supports Heine (2008), who notes that contact effects frequently involve not direct borrowing but the reinforcement of an already established secondary word order in the target language.

The third contribution is the extension of findings on locative PP placement to encompass other PP categories, thereby delivering a more fundamental and unified account that seeks to accommodate both synchronic and diachronic data. By adopting the perspective of constructional competition and viewing the argument–adjunct distinction as a semantic continuum, this thesis not only accounts for the diachronic distribution of the four locative subclasses but also extends this framework to other PP categories. While the predictive power of this approach is still developing, it lays a foundation for further exploration into the syntactic behaviour of PP placement in general. Lastly, reframing the issue through the lens of constructional competition, rather than just as a fronting movement of PPs, underscores the role of speakers. This perspective illustrates how the competition between alternative constructions, along with speakers' choices, contributes to the overall process of grammatical change.

The limitations of this thesis include data constraints and the scope of the study. Firstly, the bulk of the investigation is based on historical texts. The current methodology is mostly concerned about selecting representative texts. Mair (2001: 31) notes that even with vast numbers of speakers and each with their oral traditions, major Sinitic varieties have not formed written traditions of their own, unlike their European and Indian counterparts. The scarcity and underdevelopment of thriving local vernacular literatures may lead to the selected texts not adequately capturing diatopic variation and historical sociolinguistic dynamics. Despite efforts to incorporate a broader range of texts, the scarcity of vernacular writings of this nature is apparent.

Additionally, while high-quality diachronic corpora are available, there is a lack of historical records for the contact languages when considering external factors. Even with the more verifiable linguistic materials from Buddhist scripture translations, we have observed constraints in obtaining systematic and comprehensive comparative materials, particularly for the initial phases of these translations. This limitation makes it challenging to conduct an exhaustive quantitative analysis, thereby complicating the task of verifying and measuring the impact of Buddhist text translations. Consequently, there is an imbalance in the scope of this study, with a more extensive examination of internal factors relative to external factors.

9.3 RECOMMENDATIONS FOR FURTHER RESEARCH

Firstly, future work can further explore the role of the argument–adjunct distinction by investigating the diachronic development of non-locative PP categories. Section 8.4 briefly compared the percentage of preverbal comitative, instrumental, and manner PPs in *Zuo Zhuan*. Additional research spanning various periods is necessary to confirm this pattern and test the hypothesis that PPs favouring PPV/PPVO at earlier times are more adjunct-like.

Secondly, this thesis has primarily focused on the competition between VOPP and PPVO constructions, with less emphasis on VPP and PPV. This is partly because WALS Feature 84A, which inspired this research, only addresses VOPP and PPVO, and partly because the historical distribution of locative VPP and PPV lacks the dramatic shifts found in locative VOPP and PPVO. Thus, this study prioritised VOPP and PPVO within its theoretical framework. Future research should give more attention to the competition between VPP and PPV to achieve a more comprehensive analysis. Additionally, future work can employ Gries and Stefanowitsch's (2004) distinctive-collexeme analysis, a method within collostructional

analysis that measures a lemma's preference for one construction as opposed to another construction that is functionally similar. This technique can better uncover subtle differences in distribution between preverbal and postverbal PP constructions.

Comparative studies among Sinitic languages present another promising research direction. This thesis primarily focuses on the timing of changes in PP placement, but the geographical aspects of the changes deserve attention as well. Future work can combine longitudinal historical changes with latitudinal geographical transitions, showcasing how regional variations influence language change. As Hong (2010b: 83) states, Ancient Chinese is like water that has flowed away, but it can still be examined through both the Sino-Tibetan family and dialects of Modern Chinese. A survey of a synchronic regional overview may shed light on the historical spread of a word order or construction.

Lastly, it would be beneficial for future studies to investigate the precise pathways through which the variant of Buddhist Chinese was disseminated into the everyday vernacular. This thesis has only referenced broad observations about this process, leaving gaps in our understanding of the precise mechanisms of transmission. By examining the stages in detail, we can gain a better understanding of how Buddhist language influenced and became part of the broader linguistic landscape.

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A Database of Chinese Buddhist Translations and their Sanskrit Parallels for Buddhist Chinese Studies
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APPENDICES

Appendix A:
List of scriptures included in the MC1 *Compilation of Eastern Han Buddhist Scripture Translations*

	Scriptures	Translators
1	*Chang Ahan Shi Bao Fa Jing* 长阿含十报法经 (Sutra on the Law of Ten Rewards in the Dirghagama)	An Shigao (安世高) [fl. ca. 148-180 CE, Parthian]
2	*Foshuo Ren Ben Yu Sheng jing* 佛说人本欲生经 (Sutra spoken by Buddha on the Avidyâ, Trishnâ, and Gâti)	An Shigao (安世高) [fl. ca. 148-180 CE, Parthian]
3	*Daoxing Bore Jing* 道行般若经 (Aṣṭasāhasrikā Prajñāpāramitā Sūtra)	Lokakṣema (支娄迦谶) [fl. 147–189 CE, 月氏 *Yuezhi*]
4	*Foshuo Dousha Jing* 佛说兜沙经 (The Scripture on the Tusita Heaven)	Lokakṣema (支娄迦谶) [fl. 147–189 CE, 月氏 *Yuezhi*]
5	*Banzhou Sanmei Jing* 般舟三昧经 (Pratyutpanna Samādhi Sūtra)	Lokakṣema (支娄迦谶) [fl. 147–189 CE, 月氏 *Yuezhi*]
6	*Foshuo Yiri Moni Bao Jing* 佛说遗日摩尼宝经 (Kaśyapaparivrata)	Lokakṣema (支娄迦谶) [fl. 147–189 CE, 月氏 *Yuezhi*]
7	*Wenshushili Wen Pusa Shu Jing* 文殊师利问菩萨署经 (Mañjuśrī Asks How One Should Act as a Bodhisattva)	Lokakṣema (支娄迦谶) [fl. 147–189 CE, 月氏 *Yuezhi*]
8	*Fajing Jing* 法镜经 (Ugra-paripricchā)	An Xuan (安玄) [fl. 167–189 CE, Parthian] Yan Fotiao (严佛调) [fl. late 2nd c., Han Chinese]
9	*Xiuxing Ben Qi Jing* 修行本起经 (Cāryanidāna)	Zhu Dali (竺大力) [fl. late 2nd c., from the Western Regions] Kang Mengxiang (康孟详) [fl. 194-199 CE, of 康居 Sogdian ancestry]
10	*Zhong Ben Qi Jing* 中本起经 (Madhyama-ityukta-Sūtra)	Tan Guo (昙果) [fl. late 2nd c., from the Western Regions] Kang Mengxiang (康孟详) [fl. 194-199 CE, of 康居 Sogdian ancestry]