

# A Study on the Position of Preposition-Objects Structures in *Kongzijiayu*

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**Abstract.** The position of preposition-object structures has changed significantly from ancient to modern Chinese. A comprehensive description and analysis of the positional relationship between preposition-object structures and the predicate components in *Kongzijiayu* (hereinafter, *Jiayu*) and comparisons with the *Zuozhuan*, *Mozi*, and *Shiji* can provide more proof in support of the key question of when the completion of *Jiayu* occurred and contribute to the accurate and in-depth interpretation of its text. We analyzed 15 prepositions in 1634 sentences in *Jiayu*, and the preposition-object structures in *Jiayu* occur mainly after the predicate components, accounting for 58.02%, which is very close to the prevalence in *Mozi*. The prepositions that can appear only before predicate components are Cong (从), Yin (因), Dang (当), Yong (用), Zhi (至), Hou (后) Dui (对) and Jiang (将), the prepositions that can appear only after predicate components are Hu (乎) and Zhu (诸), and the prepositions that can appear both before and after predicate components are Yu (于), Yi (以), Zi (自), Wei (为) and Zai (在). When prepositional-object structures introduce time, tools/methods/conditions/basis/etc., cause/purpose and indirect objects, these are usually located before the predicate components. When prepositional-object structures introduce objects, location or the content of instruction or speech, these structures usually come after the predicate components. Only when the predicate component is monosyllabic are the preposition-object structures usually after the predicate components, accounting for 77.52% of instances. When the predicate component is polysyllabic, the preposition-object structure usually occurs before the predicate component. The proportion of preposition-object structures before the predicate components in *Jiayu* is between that of the *Mozi* and the *Shiji* and very close to that of *Mozi*, which may be related to the time when it was written.

**Keywords:** *Kongzijiayu*, preposition-object structures, predicate components, position

## 1 Introduction

In modern Chinese, preposition-object structures usually occur before the predicate components, but this is not the case in ancient Chinese. Zhao Yuanren [1] and Wang Li [2] suggested that the position of the preposition-object structures in the contemporary age has changed significantly from their position in ancient times. He Leshi found that the predominant placement of preposition-object structures before the predicate components was just beginning to take shape in the *Zuozhuan* and had basically become naturalized by the writing of the *Shiji* [3]. From this, he speculated that the grammatical features of the *Shiji* changed remarkably from the *Zuozhuan*. Wang Hongbin (2003) [4], Liu Xiaojing (2012) [5] and Yang Jiqing (2021) [6] performed a special analysis of the positions of preposition-object structures in the *Zuozhuan*, *Mengzi* and *Mozi*, respectively. Jiang Shaoyu [7] believes that the structure "Yu (于) + L" in pre-Qin Chinese is always after the verb, which reflects that Chinese is not completely dominated by

the "iconic principle" and that the "abstract principle" also plays a role. Zhang Cheng [8] believes that the rise and disappearance of prepositions, the semantics of preposition-object structures, and the development of the VP structure are all reasons for the change in preposition-object structure positions. The positional relationship between preposition-object structures and predicate components can reflect changes in language, so it is an important part of Chinese word order research.

*Jiayu* is an early Confucian classic that records the deeds and words of Confucius and his disciples, and it is valuable material for studying Confucius and early Confucianism. Influenced by the theory of forgery, research on *Jiayu* in successive dynasties has focused on its version and filiation, while most scholars have ignored the document value and linguistic value. A comprehensive description and analysis of the positional relationship between preposition-object structures and predicate components in *Jiayu* is significant on two levels: (1) studies into the vocabulary and grammar of *Jiayu* are still very few, and a small amount of research has been published, such as Song Yanxia [9], Liu Weiyan [10], Miao Chuanmei [11], Jiang Rumeng [12], Lu Qin [13], Chen Jing [14], etc., which focus on special parts of speech and semantic meanings. Research on the prepositions in *Jiayu* is occasionally seen in special research on prepositions. For example, Lin Qi [15] and Deng Tongxiang [16] cited and analyzed the examples in *Jiayu*. We have not seen any special research on the positions of preposition-object structures in *Jiayu*. A special study of the prepositions in *Jiayu* can fully show the relationship between the preposition-object structure and the predicate components in *Jiayu*, which is helpful in advancing the accurate and in-depth interpretation of the text. The study of prepositions in special books is also an important part of the research into the history of Chinese word order and vocabulary development. (2) Although the moment of completion of *Jiayu* is controversial, its existence as an ancient book is an indisputable fact. The positional relationship between the prepositional-object structures and the predicate components has obvious characteristics of the era in which it was composed, and a comprehensive investigation of the positional relationship between prepositional-object structures and predicate components in *Jiayu* can provide more proof for the key issue of when the book was completed. Today, as the importance of *Jiayu* is gradually recognized, studies of its language are undoubtedly increasingly important.

## 2 The position of preposition-object structures in *Jiayu*

The term "preposition-object structures" refers to the preposition and its object. The term "predicate components" include not only predicate verbs or adjectives but also words or phrases with the functions of statement and predication. Wang Li believed that the original meaning of "Yu (于)" could be expressed by both "Yu (于)" and "Yu (於)", while the new meaning and usage of the preposition "Yu (於)" could only be expressed with "Yu (於)" [2]. This paper does not distinguish between "Yu (于)" and "Yu (於)" in the statistics of prepositions; that is, "Yu (于)" in the following is the same as "Yu (于)" and "Yu (於)".

We analyzed 15 prepositions including Yu (于), Yi (以), Zai (在), Zi (自), Wei (为), Zhi (至), Yin (因), Cong (从), Dang (当), Hu (乎), Yong (用), Hou (后), Dui (对), Jiang (将) and Zhu (诸). According to the position of the preposition-object structures, we can classify the prepositions in *Jiayu* into three types: those that can only appear before the predicate components, those that can only appear after the predicate components, and those that appear both before and after the predicate components.

### 2.1 Before the predicate components

There are eight prepositions in *Jiayu* that appear only before the predicate components: Cong (从), Yin (因), Dang (当), Yong (用), Hou (后), Dui (对), Jiang (将) and Zhi (至).

### 1. Cong (从)

The preposition "Cong (从)" has 14 cases in *Jiayu*, all of which are used before the predicate components. For example:

- (1) 请从此辞。《致思》

qǐng cóng cǐ cí。

Please let me die from now on.

- (2) 尝从孔子适卫。《七十二弟子解》

cháng cóng kǒng zǐ shì wèi。

[He] once followed Confucius to Wei State.

### 2. Yin (因)

The preposition "Yin (因)" has 8 instances in *Jiayu*, all of which are used before the predicate components. For example:

- (3) 非敢以为足，请因所闻而学焉。《王言解》

fēi gǎn yǐ wéi zú, qǐng yīn suǒ wén ér xué yān。

I do not think I have enough knowledge to understand your talk about governing the country. I just want to learn by listening to your talk.

- (4) 使大夫因孟懿子问礼于孔子。《冠颂》

shǐ dà fū yīn mèng yì zǐ wèn lǐ yú kǒng zǐ。

[He] sent the official Meng Yizi to ask Confucius about the etiquette of coronation.

### 3. Dang (当)

The preposition "Dang (当)" has 5 instances in *Jiayu*, all of which are used before the predicate components. For example:

- (5) 凡当今之士，聪明深察而近于死者，好讥议人者也。

fán dāng jīn zhī shì, cōng míng shēn chá ér jìn yú sǐ zhě, hǎo jī yì rén zhě yě。

All today's scholars, those who endanger their lives because of their wisdom and insight, are those who like to ridicule others.

- (6) 当今之君，孰为最贤？《贤君》

dāng jīn zhī jūn, shú wéi zuì xián?

Who is the wisest monarch today?

### 4. Yong (用)

The preposition "Yong (用)" has 2 instances in *Jiayu*, all of which are used before the predicate components. For example:

- (7) 用水火财物以生民。《五帝德》

yòng shuǐ huǒ cái wù yǐ shēng mín。

Use water, fire and property to raise people.

- (8) 齐氏用戈击公孟。《子夏问》

qí shì yòng gē jī gōng mèng。

Qi struck Gong Meng with a dagger-axe.

### 5. Zhi (至)

The preposition "Zhi (至)" has 2 instances in *Jiayu*, all of which are used before the predicate components. For example:

(9) 至十九，娶于宋之上官氏。《本姓解》

zhì shí jiǔ, qǔ yú sòng zhī shàng guān shì。

At the age of nineteen, he took the daughter of Shangguan in Song State as his wife.

(10) 及至大王亶甫，敦以德让，其树根置本，备豫远矣。

jí zhì dà wáng dǎn fǔ, dūn yǐ dé ràng, qí shù gēn zhì běn, bèi yù yuǎn yǐ。

When the time came for the Great King Danfu, he exerted benevolence and humility, cultivated the foundation [of virtue], and prepared for the future in advance.

### 6. Hou (后)

The preposition "Hou (后)" has 1 instance in *Jiayu*, which is used before the predicate component.

(11) 后三日，牧来诉之曰……《颜回》

hòu sān rì, mù lái sù zhī yuē……

After three days, the horse breeder came to tell him……

### 7. Dui (对)

The preposition "Dui (对)" has 1 instance in *Jiayu*, which is used before the predicate component.

(12) 子服景伯对使者曰……《辩物》

zǐ fú jǐng bó duì shǐ zhě yuē……

Zi Fu tells the messenger……

### 8. Jiang (将)

The preposition "Jiang (将)" has 1 instance in *Jiayu*, which is used before the predicate component.

(13) 天下百姓皆君之民，将谁攻之？《五仪解》

tiān xià bǎi xìng jiē jūn zhī mǐn, jiāng shuí gōng zhī?

People all over the world have become your people. Who will attack you?

## 2.2 Only after the predicate components

In *Jiayu*, there are two prepositions that appear only after the predicate components: Hu (乎/虞) and Zhu (诸). We have counted "Zhu (诸)" because its function in *Jiayu* is equivalent to the usage of the pronoun "Zhi (之)" + the preposition "Yu (于)".

### 9. Hu (乎)

The preposition "Hu (乎)" has 49 instances in *Jiayu*, all of which are used after the predicate components. For example:

(14) 今孔子之道至矣，乃将施乎无穷。《本姓解》

jīn kǒng zǐ zhī dào zhì yǐ, nǎi jiāng shī hū wú qióng。

Now Confucius' Tao is supreme and will be implemented for a long time.

(15) 好学近乎智，力行近乎仁，知耻近乎勇。《哀公问政》

hǎo xué jìn hū zhì, lì háng jìn hū rén, zhī chǐ jìn hū yǒng。

Those who like learning are close to wisdom, those who strive to achieve virtue are close to benevolence, and those who understand shame are close to courage.

### 10. Zhu (诸)

The function of "Zhu (诸)" is the same as the pronoun "Zhi (之)" plus the preposition "Yu (于)". There are 35 instances in total, all of which are used after predicate components. For example:

(16) 子游以问诸孔子。《公西赤问》

zǐ yóu yǐ wèn zhū kǒng zǐ。

Ziyou asked Confucius about it.

(17) 子路曰：“由也昔者闻诸夫子。”《屈节解》

zǐ lù yuē: “yóu yě xī zhě wén zhū fū zǐ。”

Zilu said, "I heard from the Master before."

## 2.3 Before and after the predicate components

Prepositions that can appear before and after the predicate components are Yu (于), Yi (以), Zi (自), Wei (为) and Zai (在).

### 11. Yu (于)

There are 788 instances of the preposition "Yu (于)" in *Jiayu*, of which 78 instances are used before the predicate components and 710 instances are used after the predicate components.

An example of usages before the predicate components:

(18) 吾穿井于费，而于井中得一狗，何也？《辩物》

wú chuān jǐng yú fèi, ér yú jǐng zhōng dé yī gǒu, hé yě?

I was digging a well in Fei and found a dog in the well. What is the matter?

An example of usages after the predicate components:

(19) 定公与齐侯会于夹谷。《相鲁》

dìng gōng yǔ qí hóu huì yú jiá gǔ。

Duke Ding and Marquis Qi held a league meeting in Jiagu.

### 12. Yi (以)

The preposition "Yi (以)" has 647 instances in *Jiayu*, of which 514 instances are used before the predicate components and 133 instances are used after the predicate components.

An example of usages before the predicate components:

(20) 以贵下贱，无不得也。《贤君》

yǐ guì xià jiàn, wú bú dé yě。

Noble people show modesty to humble people, and nothing can be denied.

An example of usages after the predicate components:

(21) 吾闻富贵者送人以财。《观周》

wú wén fù guì zhě sòng rén yǐ cái。

I heard that rich people give money to people.

### 13. Zi (自)

The preposition "Zi (自)" has 45 instances in *Jiayu*, of which 35 instances are used before the predicate components and 10 instances are used after the predicate components.

An example of usages before the predicate components:

(22) 自南宮敬叔之乘我車也，而道加行。《致思》

zì nán gōng jìng shū zhī chéng wǒ chē yě, ér dào jiā xíng。

Since Nangongjingshu provided me with carriages and horses, my Tao has become more popular.

An example of usages after the predicate components:

(23) 眾之服自此，故听且速焉。《哀公问政》

zhòng zhī fú zì cǐ, gù tīng qiě sù yān。

Since then, the people have submitted to indoctrination, so they have obeyed orders and implemented them quickly.

### 14. Wei(为)

The preposition " Wei(为)" has 28 instances in *Jiayu*, of which 20 instances are used before the predicate components and 8 instances are used after the predicate components.

An example of usages before the predicate components:

(24) 子貢曰：“止，吾將為子問之。”《子貢問》

zǐ gòng yuē: “zhǐ, wú jiāng wéi zǐ wèn zhī。”

Zigong said, "Wait a minute. I will ask for you."

An example of usages after the predicate components:

(25) 古者不祔葬，為不忍先死者之復見也。《公西赤問》

gǔ zhě bú fù zàng, wéi bù rěn xiān sǐ zhě zhī fù jiàn yě。

In ancient times, people did not bury their relatives together because they could not bear to see the relatives who died first.

### 15. Zai (在)

The preposition "Zai(在)" has 8 instances in *Jiayu*, of which 6 instances are used before the predicate components and 2 instances are used after the predicate components.

An example of usages before the predicate components:

(26) 在下位不獲于上，民弗可得而治矣。《哀公問政》

zài xià wèi bú huò yú shàng, mín fú kě dé ér zhì yǐ。

It is impossible to govern the people well when people in lower positions cannot be trusted by people in higher positions.

An example of usages after the predicate components:

(27) 孔子曰：“汝所問苞在五者中矣。”《子路初見》

kǒng zǐ yuē: “rǔ suǒ wèn bāo zài wǔ zhě zhōng yǐ。”

Confucius said, "All the questions you asked are covered in the five aspects I have mentioned."

In the above example, "(bāo) 苞" is the same as "bāo (包)".

The positional relationship between the preposition-object structures and predicate components in *Jiayu* is as follows:

**Table 1.** The distribution of prepositions in *Jiayu*.

Preposition	Before the predicate components	Proportion	After the predicate components	Proportion	Summation
Cong (从)	14	0.86%	0	0.00%	14
Yin (因)	8	0.49%	0	0.00%	8
Yong (用)	2	0.12%	0	0.00%	2
Zhi (至)	2	0.12%	0	0.00%	2
Hou (后)	1	0.06%	0	0.00%	1
Dui (对)	1	0.06%	0	0.00%	1
Jiang (将)	1	0.06%	0	0.00%	1
Zhu (诸)	0	0.00%	35	2.14%	35
Hu (乎)	0	0.00%	49	3.00%	49
Yu (于)	78	4.77%	710	43.45%	788
Yi (以)	514	31.46%	133	8.14%	647
Zi (自)	35	2.14%	10	0.61%	45
Wei (为)	20	1.22%	8	0.49%	28
Zai (在)	6	0.37%	2	0.12%	8
Dang (当)	4	0.24%	1	0.06%	5
Total	686	41.98%	948	58.02%	1634

It can be seen from Table 1 that (1) the use of prepositions is uneven. Of the 1634 instances, "Yu (于)" and "Yi (以)" were the most frequently used, with 788 and 647 instances, accounting for 48.23% and 39.60% of the total, respectively. Other prepositions appear less frequently. (2) There are eight prepositions in *Jiayu* that appear only before the predicate components: Cong (从), Yin (因), Dang (当), Yong (用), Hou (后), Dui (对), Jiang (将) and Zhi (至). The prepositions Hu (乎) and Zhu (诸) can only appear after the predicate components. (3) The prepositions that can appear before and after the predicate components are Yu (于), Yi (以), Zi (自), Wei (为) and Zai (在). The prepositions with a more obvious tendency to appear before the predicate components are Yi (以), Zi (自), Wei (为), and Zai (在), and the prepositions with a more obvious tendency to appear after the predicate components are Yu (于).

The following table shows the use of prepositions in the four books.

**Table 2.** The distribution of prepositions in *Jiayu*, *Zuozhuan*, *Mozi* and *Shiji*.

Book	Prepositions before the predicate components	Prepositions after the predicate components	Prepositions before and after the predicate components
<i>Mozi</i>	Wei (为), Cong (从), Yin (因), You (由), Yong (用), Yu (与) Dang (当),	(Hu) 乎, Zhu (诸)	Yu (於), Yi (以), Zi (自), Yu (于), Zhi (至)
<i>Zuozhuan</i> and <i>Shiji</i>	Yu (与), Wei (为), Cong (从), Yin (因), You (由), Yong (用), Dang (当), Dai (代), Dao (道), Xian (先), Xun (循), Jiang (将), Dai (逮), Xiang (乡/向)	Yu (于), Hu (乎)	Yu (於), Yi (以), Ji (及) Zi (自), Zai (在), Di (抵)
<i>Jiayu</i>	Cong (从), Yin (因), Dang (当), Yong (用), Hou (后), Dui (对), Jiang (将), Zhi (至)	Hu (乎), Zhu (诸)	Yu (于), Yi (以), Zi (自), Wei (为), Zai (在)

Among the prepositions we analyzed, Cong (从), Yin (因), Dang (当), Yong (用), Jiang (将), Yi (以), Zi (自), and Zai (在) appear in the same position in *Zuozhuan*, *Shiji* and *Mozi*, while Zhi (至) and Wei (为) are different in the *Mozi*. Hou (后) and Dui (对) have no statistical significance in the *Zuozhuan*, *Shiji* and *Mozi*.

In *Jiayu*, the prepositional-object structures are mainly after the predicate components. We counted 1634 instances of preposition-object structures, with 686 instances before the predicate components and 948 instances after the predicate components. The proportion of prepositional structures occurring before the predicate components was 41.93%, and the proportion occurring after the predicate components was 58.02%. We compared *Jiayu* with *Zuozhuan*, *Mozi* and *Shiji*:

**Table 3.** Comparison of *Jiayu* with *Zuozhuan*, *Mozi* and *Shiji*.

Book	Proportion of Before	Proportion of After
<i>Zuozhuan</i>	40.22%	59.78%
<i>Mozi</i>	41.30%	58.70%
<b><i>Jiayu</i></b>	<b>41.93%</b>	<b>58.02%</b>
<i>Shiji</i>	75.29%	24.71%

It can be seen from the above table that in *Zuozhuan*, *Mozi* and *Jiayu*, preposition-object structures mainly occur after the predicate components, and in *Shiji*, the preposition-object structures occur mainly before the predicate components. The proportion in *Jiayu* is between that in *Mozi* and *Shiji* and very close to *Mozi*.

### 3 The relationship between the semantic features of preposition-object structures and their position

Referring to Yang Bojun's research [17], we divide the semantics represented by the prepositional object structure into the following categories:

**Table 4.** Categories of preposition-object structures modifying predicate components.

No.	Category
1	Introducing time
2	Introducing objects
3	Introducing locations
4	Introducing tools, methods, conditions, basis, etc.
5	Introducing cause or purpose
6	Introducing the content of instruction or speech
7	Introducing indirect objects

#### 1. Introducing time

(1) 自吾有由，而恶言不入于耳。

zì wú yǒu yóu, ér è yán bù rù yú ěr。

Since I had You, those malicious words can no longer reach my ears.

(2) 后三日，牧来诉之曰……《颜回》

hòu sān rì, mù lái sù zhī yuē……

After three days, the horse breeder came to tell him……

#### 2. Introducing objects

(3) 孔子侍坐于哀公。《大昏解》

kǒng zǐ shì zuò yú āi gōng。

Confucius sat beside Duke Ai of Lu State.

(4) 子服景伯对使者曰……《辩物》

zǐ fú jǐng bó duì shǐ zhě yuē……

Zifujingbo tells the messenger...

#### 3. Introducing locations

(5) 先时，季氏葬昭公于墓道之南。《相鲁》

xiān shí, jì shì zàng zhāo gōng yú mù dào zhī nán。

Earlier, Ji buried Duke Zhao in the southern tomb passage of the former Duke of Lu State.

(6) 三揖至于阶。《观乡射》

sān yī zhì yú jiē。

After bowing down three times, walk to the steps in the front of the hall.

#### 4. Introducing tools, methods, conditions, basis, etc.

(7) 因颜克而问礼于孔子。《曲礼子贡问》

yīn yán kè ér wèn lǐ yú kǒng zǐ。

Ask Confucius for etiquette through Yanke.

(8) 齐氏用戈击公孟。《子贡问》

qí shì yòng gē jī gōng mèng。

Qi struck Gongmeng with a dagger-axe.

### 5. Introducing cause or purpose

(9) 大夫以罪免卒。《公西赤问》

dà fū yǐ zuì miǎn zú 。

Officials were dismissed for a crime.

(10) 凡渔者为得，何以得鱼即舍之？《屈节解》

fán yú zhě wéi dé, hé yǐ dé yú jí shè zhī?

All fishermen want to get fish. Why did you release the fish you caught?

### 6. Introducing the content of instruction or speech

(11) 公曰：“前日寡人问吾子以东野毕之御。”《颜回》

gōng yuē: “qián rì guǎ rén wèn wú zǐ yǐ dōng yě bì zhī yù。”

Gong said, “The day before yesterday, I asked you about Dongyebi's driving.”

(12) 子游以问诸孔子。《公西赤问》

zǐ yóu yǐ wèn zhū kǒng zǐ。

Ziyou asked Confucius about it.

In the above example, "(Zhi) 之" is omitted after "(Yi) 以", and "(Yi) 以" is the same as "(Yi Zhi) 以之".

### 7. Introducing indirect objects

(13) 孔子曰：“古之君子，忠以为质，仁以为卫。”《好生》

kǒng zǐ yuē: “gǔ zhī jūn zǐ, zhōng yǐ wéi zhì, rén yǐ wéi wèi。”

Confucius said, "The ancient gentleman took loyalty as the essence and benevolence as protection."

(14) 穆子反鲁，以牛为内竖，相家。《正论解》

mù zǐ fǎn lǔ, yǐ niú wéi nèi shù, xiāng jiā。

Mu later returned to Lu State. He made Niu a small official and made him a family minister when he grew up.

In the above example, "(Zhi) 之" is omitted after "(Yi) 以", and "(Yi) 以" is the same as "(Yi Zhi) 以之".

We counted the semantic categories of the prepositional-object structures of the 1634 sentences, and the specific distribution of the semantic position is shown in the following table:

**Table 5.** Categories of preposition-object structures modifying predicate components.

Semantic category	Before the predicate components	After the predicate components	Proportion of Before: After	Total	Proportion of Total
Introducing time	45	14	2.75%: 0.86%	59	3.61%
Introducing objects	75	478	4.59%: 29.25%	553	33.84%
Introducing locations	26	311	1.59%: 19.03%	337	20.62%
Introducing tools, methods, conditions, basis, etc.	381	127	23.32%:7.77%	508	31.09%
Introducing cause or purpose	89	12	5.45%: 0.73%	101	6.18%
Introducing the content of instruction or speech	3	4	0.18%: 0.24%	7	0.43%
Introducing indirect objects	67	2	4.10%: 0.12%	69	4.22%

From the above table, the following can be seen: (1) The most common types of prepositions are those that introduce objects, tools/methods/conditions/basis/etc. and places, accounting for 33.84%, 31.09% and 20.62% of the total, respectively; (2) When prepositional-object structures introduce time, tools/methods/conditions/basis/etc., cause/purpose and indirect objects, they usually occur before the predicate components. (3) When prepositional-object structures introduce objects, locations and the content of instruction or speech, they usually occur after the predicate components.

The semantic category of the prepositional-object structure has an impact on its position. Taking the prepositions that introduce locations as an example, the ratio of the quantities before and after the predicate components is 26:311, which has obvious connections with "Yu (于)", which is often used to introduce location. Xie Xinyi (1991) [18] proposed two kinds of principles for the combination and arrangement of language symbols—iconic principles and abstract principles. Jiang Shaoyu [19] noted that using abstract principles to organize sentences generally depends on morphological signs. In ancient Chinese (especially pre-Qin Chinese), the preposition "Yu (于)" is an obvious mark, and "Yu (于) + location" is always placed behind the verb.

## 4 The relationship between the characteristics of predicate components and the position of preposition-object structures

### 4.1 Relationship between grammatical features of predicate components and the position of preposition-object structures

The predicate components modified by the prepositional-object structures in *Jiayu* include words and phrases; words include monosyllabic and polysyllabic words, and phrases include verb-object phrases, subordinate phrases, parallel structures, and serial verb constructions, etc.

#### 1. Words

(1) 定公与齐侯会于夹谷。《相鲁》

dìng gōng yǔ qí hóu huì yú jiá gǔ。

Duke Ding and Marquis Qi held a league meeting in Jiagu.

(2) 逍遙于門而歌曰……《終記解》

xiāo yáo yú mén ér gē yuē……

Confucius strolled at the gate, singing……

In the above examples, "huì (會)" is a monosyllabic, while "xiāo yáo (逍遙)" is a polysyllabic word.

## 2. Verb-object phrases

(3) 鄰敵構兵于郊。《賢君》

lín dí gòu bīng yú jiāo。

The troops of the neighboring countries gathered in the suburbs.

(4) 先時，季氏葬昭公于墓道之南。《相魯》

xiān shí, jì shì zàng zhāo gōng yú mù dào zhī nán。

Earlier, Ji buried Duke Zhao in the southern tomb passage of the former Duke of Lu State.

## 3. Subordinate phrases

(5) 今使祝嘏辭說徒藏于宗祝巫史，非禮也。《禮運》

jīn shǐ zhù gǔ cí shuō tú cáng yú zōng zhù wū shǐ, fēi lǐ yě。

It is against etiquette to keep the words of prayers and blessings only for the lord's sacrificial officials and diviners.

(6) 夫江始出于岷山，其源可以濫觴。《三怨》

fū jiāng shǐ chū yú mín shān, qí yuán kě yǐ làn shāng 。

When the Changjiang River has just exited Minshan Mountain, its current is very small.

## 4. Parallel structure

(7) 以養生送死，以事鬼神。《禮運》

yǐ yǎng shēng sòng sǐ, yǐ shì guǐ shén。

It is used for people to wear in life and when managing funerals, as well as to worship ghosts and gods.

(8) 天子常以季冬考德正法。《執轡》

tiān zǐ cháng yǐ jì dōng kǎo dé zhèng fǎ。

In ancient times, the Emperors often inspected political achievements and adjusted decrees at the end of winter.

## 5. Serial verb construction

(9) 下止于殿前，舒翅而跳。《辯政》

xià zhǐ yú diàn qián, shū chì ér tiào。

(The bird) flew down and landed in front of the palace, stretching its wings and jumping.

(10) 每孺子之執筆記事于夫子。《七十二弟子解》

měi rú zǐ zhī zhí bǐ jì shì yú fū zǐ。

Every time when schoolboys were writing beside Confucius...

## 6. Verb-complement phrase

(11) 季孙于是乎可谓悦人之有能矣。《正论解》

jì sūn yú shì hū kě wèi yuè rén zhī yǒu néng yǐ。

Through this affair, Ji Sun can be called akin to those with talent.

(12) 孔子以公与季孙、仲孙、叔孙，入于费氏之宫。《相鲁》

kǒng zǐ yǐ gōng yǔ jì sūn、zhòng sūn、shū sūn, rù yú fèi shì zhī gōng。

Confucius led Duke Ding, Jisun, Zhongsun, and Shusun into Jishi's palace.

## 7. Omission of the predicate

In ancient Chinese, predicates are sometimes omitted, such as:

(13) 昔黄帝以云纪官，故为云师而云名，炎帝以火，共工以水，太昊以龙。《辩物》

xī huáng dì yǐ yún jì guān, gù wéi yún shī ér yún míng, yán dì yǐ huǒ, gòng gōng yǐ shuǐ, tài hào yǐ lóng。

Once upon a time, Emperor Huang named his official positions after clouds, so all the officials were named after clouds. Emperor Yan named his official positions fire, Gong Gong named his official positions water, and Tai Hao named his official positions dragon.

(14) 子曰：“赠汝以车乎？赠汝以言乎？”子路曰：“请以言。”《子路初见》

zǐ yuē: “zèng rǔ yǐ chē hū? zèng rǔ yǐ yán hū?” zǐ lù yuē: “qǐng yǐ yán。”

Confucius said, "Shall I give you a chariot or some advice?" Zi Lu said, "Please give me some advice."

In the above examples, "yán dì yǐ huǒ (炎帝以火)", "gòng gōng yǐ shuǐ (共工以水)", and "tài hào yǐ long (太昊以龙)" both omit "jì guān (纪官)". The word "zèng (赠)" is omitted after qǐng yǐ yán (请以言)".

We have calculated the statistics on the ways grammatical structure of predicate components and the preposition-object structures relate positionally, as shown in the following table:

**Table 6.** Position of the predicate components and preposition-object structures.

No.	Grammatical Structure of Predicate Components	Preposition-object Structures Before	Preposition-object Structures After	Proportion of Before: After
1	Monosyllabic words	190	646	22.73%: 77.27%
	Polysyllabic words	18	28	39.13%: 60.87%
2	Verb-object phrases	456	251	64.50%: 35.50%
3	Serial verb construction	7	11	38.89%: 61.11%
4	Verb-complement phrase	13	5	72.22%: 27.78%
5	Parallel structure	5	2	71.43%: 28.57%
6	Subordinate phrases	0	7	0.00%: 100.00%
7	Omission of predicate	5	2	71.43%: 28.57%

It can be seen from the above table that (1) the most common predicate components are monosyllabic words and verb-object structures, accounting for 50.73% and 43.02% of the total,

respectively. (2) When the predicate components are monosyllabic words, polysyllabic words, serial verb constructions and verb-complement phrases, the preposition-object structures mainly occur behind the predicate components, with monosyllabic predicate components accounting for 68.04% of the total; and (3) the instances of parallel structures and subordinate phrases in the predicate components are rare and have no significant statistical significance. When the predicate is omitted, the preposition-object structure is usually before the predicate components.

In the above statistics, the largest number of predicate components are monosyllabic words, polysyllabic words and verb-object structures, and the relationships of the preposition-object structures to these three types of predicant components are similar to the statistics for the *Mozi* [6].

#### 4.2 Relationship between the number of syllables in the predicate components and the positions of preposition-object structures

We analyzed the number of syllables in the predicate components and the corresponding position of the preposition-object structures, and the statistical results are as follows:

**Table 7.** Number of syllables in the predicate components and the corresponding position of the preposition-object structures.

Syllable number	Preposition-object structures before	Proportion	Preposition-object structures after	Proportion
1	187	22.48%	645	77.52%
2	335	58.77%	235	41.23%
3	112	70.44%	47	29.56%
4	24	72.73%	9	27.27%
5	16	61.54%	10	38.46%
6	6	60.00%	4	40.00%
7	7	100.00%	0	0.00%
9	1	100.00%	0	0.00%
13	1	100.00%	0	0.00%

It can be seen from the above table that (1) the most common predicate components are monosyllabic, or 2 and 3 syllables, and the proportions of preposition-object structures that occur before the predicate components are 22.48%, 58.77% and 70.44% for each of those predicate types. (2) Only when the predicate components are monosyllabic are the preposition-object structures mainly positioned after, accounting for 77.52% of instances. (3) When the number of syllables in the predicate components is greater than 1, the preposition-object structures usually occur before the predicate components.

In general, the statistics for the positional relationship between the number of syllables in predicate components and the preposition-object structures in *Jiayu* is similar to the statistics in *Mozi*. Why do the preposition-object structures tend to follow the predicate components only in instances of monosyllables? There may be two reasons: (1) Chinese is often composed of two syllables to form a relatively close rhythm unit. When the predicate component is one syllable, the monosyllabic predicate components can be combined with the preposition to form a metric foot. (2) The combination frequency of the preposition "Yu (于)" and monosyllabic predicate components is very high; while "Yu (于)" was used 788 times in *Jiayu*, 710 instances were behind the predicate components. The use characteristics of the preposition "Yu (于)" affect the statistical results.

## 5 Conclusion

We counted 15 prepositions and 1646 sample sentences in *Jiayu*. Prepositions in *Jiayu* that appear only before the predicate components are Cong (从), Yin (因), Dang (当), Yong (用), Hou (后), Dui (对), Jiang (将) and Zhi (至); prepositions that appear only after the predicate components are Hu (乎) and Zhu (诸), and prepositions that can appear before and after the predicate component are Yu (于), Yi (以), Zi (自), Wei (为) and Zai (在). Among the prepositions we analyzed, Cong (从), Yin (因), Dang (当), Yong (用), Jiang (将), Yi (以), Zi (自), Zai (在) tend to appear in the same position in the *Zuozhuan*, *Shiji* and *Mozi*. Zhi (至) and Wei (为) differ in the *Jiayu* from the *Mozi*, while Hou (后) and Dui (对) are not statistically significant in the *Zuozhuan*, *Shiji* and *Mozi*. We also compare the use of these prepositions with the *Mozi*, *Zuozhuan* and *Shiji* from various angles.

Overall, the ratio of prepositions before and after the predicate components in the *Jiayu* is 686:948, in the *Zuozhuan* (2228:3312), in the *Shiji* (1447:175) and in the *Mozi* (481:674). This indicates that the ratio in *Jiayu* is less than that of the *Zuozhuan* and *Mozi* and larger than that of the *Shiji*, which may reflect the grammatical features of the times when the *Jiayu* was composed.

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