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Clitic pronouns in Archaic Chinese

Redouane Djamouri
djamouri@ehess.fr

Waltraud Paul
wpaul@ehess.fr
(responsible for proofreading & correspondence)

Affiliation :
CNRS-EHESS-INALCO, Centre de recherches linguistiques sur l'Asie orientale

Address:
CRLAO, EHESS
105, boulevard Raspail
75006 Paris
France

Clitic pronouns in Archaic Chinese*

Abstract

This article provides evidence for the so far neglected existence of two clitic pronouns, *yǐ* 以 and *yǔ* 與, in Archaic Chinese (10th c. - 3th c. BC) in immediately verb-adjacent position: ‘*yǐ/yǔ*-V’. While *yǔ* only encodes the comitative/associative, *yǐ* encodes all kinds of (argument and adjunct) roles, depending on the semantics of the verb involved. We argue that the clitic pronouns *yǐ* and *yǔ* can neither be analysed as *stranded prepositions* left behind after extraction of their complement (as e.g. in English) nor as *orphan prepositions*, i.e. PPs with an *in situ* null pronoun as complement (as e.g. in French). This ties in with the general ban against prepositions lacking an overt complement, observed throughout the history of Chinese.

1. Introduction

This article provides evidence for the so far unnoticed existence of two clitic pronouns, *yǐ* and *yǔ*, in Archaic Chinese (10th - 3th c. BC).¹

- (1) 南氏生男，則以告於君... (Zuǒzhuan 左傳 12·3·4/3, 5th – 4th c. BC)
Nán shì shēng nán, zé [v_P [v° yǐ gào] [PP yú [jūn]]]
Nán lady give.birth male then YI announce to lordship
‘If Lady Nan gives birth to a male child, then make an announcement about [it]
to the Lordship...’
- (2) 息侯伐鄭，鄭伯與戰于竟。(Zuǒzhuan·1·11·6/1, 5th – 4th c. BC)
Xī hóu fá zhèng, zhèng bó [v_P [v° yǔ zhàn] [PP yú jìng]]
Xī marquis attack Zhèng Zhèng earl YU fight at border
‘The marquis of Xi attacked the state of Zheng; the earl of Zheng fought with,
i.e. against [him] at the borders.’

In (1) the clitic pronoun *yǐ* takes up the event of Lady Nan giving birth. In (2), the clitic pronoun *yǔ* refers to the marquis of Xi in the preceding sentence, encoding the comitative role for the verb *zhàn* ‘fight against sb’.

While personal pronouns in Archaic Chinese such as *wǒ* ‘first person’, *rǔ* ‘second person’ follow the verb when encoding the object, *yǐ* and *yǔ* as clitic pronouns are special, because they need to precede the verb, on a par with e.g. French clitic pronouns. Importantly, clitic *pronouns* need to be distinguished from clitics as prosodically deficient elements (i.e. *phonetic clitics*) which require a host to “lean on” and form a single prosodic word with it.

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¹ The following abbreviations are used for glossing the examples: NEG negation; POSS possessive pronoun (e.g. 1POSS = 1st person possessive pronoun); PR personal pronoun; (e.g. 2PR = 2nd person pronoun); SFP sentence-final particles; SUB subordinator (within the DP); TOP topic marker; 3OBJ 3rd person object pronoun (*zhī*). The clitic pronouns *yǐ* and *yǔ* remain unglossed as YI and YU, respectively.

Importantly, phonetic clitics are not confined to pronouns, but cut across all parts of speech, and the same holds for their host.²

As is well known, there also exist the prepositions *yǐ* and *yǔ*. While the preposition *yǔ* mainly encodes the comitative/associative, the preposition *yǐ* encodes a large variety of (argument and adjunct) roles, depending on the semantics of the verb involved. The clitic pronouns *yǐ* and *yǔ* can express the same roles as the corresponding prepositions. Syntactically speaking however, the clitic pronouns *yǐ* and *yǔ* are clearly different from the prepositions, i.e. they are not PPs in disguise with a null complement. Instead, they will be shown to be on par with the clitic pronouns *y* and *en* in French, which likewise stand for PPs.

One possible reason why the clitic pronouns *yǐ* and *yǔ* have largely gone unnoticed so far is that their special status did not hamper the *comprehension* of the texts. Instead, as with the homophonous preposition *yǐ*, it was sufficient to know the semantics of the verb to determine the thematic role of the clitic pronoun *yǐ*; this also held for the clitic pronoun *yǔ* which indicates the comitative/associative, like the homophonous preposition *yǔ*.

The co-existence of the clitic pronouns *yǐ* and *yǔ* with the prepositions *yǐ* and *yǔ* must be seen against the very common phenomenon of multiple homonymy in Archaic Chinese. The clitic pronoun *yǔ* and the preposition *yǔ* ‘with’ co-exist along with the verb *yǔ* ‘to be associated with’ and the conjunction *yǔ* ‘and, with’; though historically related, these different instances of *yǔ* are clearly separate items in the synchronic grammar of Archaic Chinese. In the case of *yǐ*, the philological tradition has even established as many as 10-15 different “uses” of *yǐ* (which in fact correspond to categorially distinct items).

Given this complex data situation, section 2 presents an exhaustive overview of the different items *yǐ* attested for Archaic Chinese, in addition to the clitic pronoun *yǐ*. Section 3 discusses the syntax and semantics of the PPs headed by *yǐ* and *yǔ*. Section 4 then turns to the clitic pronouns *yǐ* and *yǔ*, capitalizing on observations going back to von der Gabelentz (1881) and Ma Jianzhong (1898) (section 4.1). It provides arguments against *yǐ* and *yǔ* as PPs with a covert complement, be it as stranded prepositions (section 4.2) or as orphan prepositions (section 4.3). Instead, *yǐ* and *yǔ* are shown to be clitic pronouns immediately preceding the verb. On a par with pronouns in general, *yǐ* and *yǔ* can refer to a preceding sentence (as in (1)) or have an implicit discourse antecedent. When the antecedent is overt (as in (2)), it occurs outside the sentence containing *yǐ* and *yǔ*, because their pronominal status requires *yǐ* and *yǔ* to be free within their binding domain (section 4.4). Section 5 concludes the article and briefly discusses general problems for tracing back the origin of personal pronouns in general and of clitic pronouns, in particular.

²The subordinator *de* in Modern Mandarin for example, is a phonetic enclitic (as indicated by the hyphen), the host being any word preceding it: *X-de N* ‘X’s N’, on a par with the English possessive ‘s.

Note that some clitic pronouns may at the same time behave as phonetic clitics. This is the case for the French clitic pronouns *me* ‘1st SG’, *te* ‘2nd SG’, *le* ‘3rd SG masc.’, *la* ‘3rd SG fem.’, *se* ‘3rd reflex.’ which lose their vowel before a verb with an initial vowel (cf. (i)); the remaining clitic pronouns, however, i.e. *les* ‘3rd PL acc.’, *lui* 3rd SG dat.’, *leur* 3rd PL dat.’, *nous* ‘1st PL’, *vous* ‘2nd PL’ show no reduced form and accordingly are not phonetic clitics (cf. (ii) and (iii)):

- (i) Nicolas m’aime /t’aime /l’aime.
Nicolas 1SG.love/2SG.love/3SG.love
‘Nicolas loves me/you/her.’
- (ii) Alceste les / nous/vous aime.
Alceste 3PL/1PL/2PL love
‘Alceste loves them/us/you.’
- (iii) Clotaire lui /leur offre un cadeau.
Clotaire 3SG.DAT/3PL.DAT give a present
‘Clotaire gives her/them a present.’

2. Overview of the numerous different items *yǐ*: How many *yǐ*'s are there?

As mentioned in the introduction, traditional philologists were very well aware of the diversity of *yǐ* and devoted many pages to the numerous entries for *yǐ* in their grammar manuals. Unsurprisingly, the different uses listed for *yǐ* and the choice of labels (when given) were mainly based on the meaning associated with *yǐ* in the context at hand and not motivated any further.

2.1. The treatment of *yǐ* and *yǔ* in the philological tradition

A comprehensive overview and detailed discussion of the treatment of *yǐ* in the long philological tradition would go far beyond the scope of this article. We therefore present the synthesis provided by the eminent scholar Yang Shuda (1928) which takes into account all the philological glosses after the Han (2nd c. AD) as well as the grammatical explanations available at his time. Most modern dictionaries and grammars devoted to Late Archaic Chinese basically adopt the distinctions made by Yang Shuda (1928).³ To be aware of the multiple homonyms for *yǐ* is important, because potential counter-examples against our analysis need first to be checked whether they do not involve one of the many other items *yǐ*, subject to different restrictions than the clitic pronoun *yǐ*.

Below we provide Yang Shuda's (1928) list of twenty-two entries for *yǐ*. While we have respected his order as well as his names for the individual entries, we have divided them into five groups for easier reference:

A. Nominal and verbal items: 1. Abstract noun equivalent to 理由 *lǐyóu* 'reason, cause' in Modern Chinese; 2. Transitive verb equivalent to 用 *yòng* 'use'. 3. Transitive verb equivalent to 爲 *wéi* 'to do, to realize'.

B. Different types of pronouns:

4. Demonstrative pronoun equivalent to 此 *cǐ* 'this'. 5. Interrogative pronoun, used as a graphic variant for 台 *yí* 'which; what'; 6. Demonstrative adjective equivalent to 此 *cǐ* 'this'.

C. Adverbial items: 7. Adverb of degree equivalent to 太 *tài* 'exceedingly' or 甚 *shèn* 'extremely'; 8. Temporal adverb, used as a graphic variant for 已 *yǐ* 'already'.

D. Prepositions: 9. Instrumental preposition equivalent to 用 *yòng* 'with'; 10. Causal preposition equivalent to 因 *yīn* 'due to, owing to'; 11. Preposition equivalent to 'according to'; 12. Preposition equivalent to 于 *yú* 'to' used after an adjective (as in '難以 + V' [*nán yǐ* V] 'difficult to V'); 13. Temporal preposition equivalent to 于 *yú* 'at'; 14. Preposition equivalent to 率領 *shuàilǐng* 'leading'; 15. Preposition equivalent to 'on behalf of; in view of'; 16. Preposition equivalent to 及 *jí* 'to, until'; 17. Comitative preposition equivalent to 與 *yǔ* 'with'; 18. Preposition expressing the goal equivalent to 以至於 *yǐzhìyú* 'for, so that, until'; 19. Preposition indicating the source equivalent to 從 *cóng* 'from'.
E. Conjunctions: 20. Coordinating conjunction equivalent to 與 *yǔ* 'and'; 21. Adversative conjunction equivalent to 而 *ér* 'but'; 22. Subordinating conjunction used with 往 *wǎng* 往, 來 *lái* 來, 下 *xià* 下, 東 *dōng* 東, 西 *xī* 西 etc.⁴

³ To mention just a few: The revised version of the *Ciyuán* 詞源 (1979) Beijing, Shangwu yinshuguan; the *Wáng Lì gǔhànyǔ zìdiǎn* 王力古漢語字典 (2000) Beijing, Zhonghua shuju; the *Gǔdài hànyǔ xūcí cídiǎn* 古代漢語虛詞詞典 (2000) Beijing, Shangwu yinshuguan.

⁴ This is Yang Shuda's (1928) description for the postpositions 以來 *yǐlái* 'since', 以下 *yǐxià* 'below' etc. (For arguments in favour of the category *postposition* in Chinese, cf. Djamouri/Paul/Whitman 2013b and references therein).

For exhaustiveness sake, we add Yang Shuda's 20 entries for 與 *yǔ*. Again we have divided them into five groups, while keeping Yang Shuda's names for the individual:

A. Nominal and verbal items: 1. Name equivalent to 黨與 *dǎngyǔ* 'ally'; 2. Transitive verb equivalent to 許 *xǔ* 'resemble'; 3. Quasi-transitive verb equivalent to 謂 *wèi* 'to be considered as'; 4. transitive verb equivalent to 當 *dāng* 'to take for, render'; 5. Intransitive verb equivalent to 參與 *cānyù* 'to be part of, to participate'.

B. Adverb: 6. Equivalent to 皆 *jiē* 'all'.

C. Prepositions: 7. Comitative preposition equivalent to 和 *hé* 'with'; 8. Benefactive preposition equivalent to 為 *wèi* 'for'; 9. Preposition equivalent to 隨 *suí* 'next to, following'; Preposition equivalent to 以 *yǐ* (before object); 10. Preposition equivalent to 向 *xiàng* 'with respect to; at the place of'; 13. Dative preposition equivalent to 于 *yú* 'to'; 14. Preposition equivalent to 於 *yú* 'with regard to'.

D. Conjunctions: 15. Coordinating conjunction equivalent to 和 *hé* 'and'; 16. Conjunction of comparison equivalent to 與其 *yǔqí* 'in comparison with'.

E. Particles: 17. Expletive particle; 18. Exclamatory sentence-final particle equivalent to 歟 *yǔ*; 19. Sentence final exclamatory particle equivalent to 歟 *yǔ*; 20. Sentence final particle expressing a rhetorical question.

Note that Yang Shuda (1928) did not attempt to establish any diachronic or etymological relationship between the different items *yǐ* nor between the different items *yǔ*.

The *Thesaurus Linguae Serica*, an established online database for Classical Chinese corpora with a grammatical component, is even more prolific than Yang Shuda and lists as many as eighty entries for *yǐ*.

2.2. A comprehensive diachronic study of *yǐ* in Early Archaic Chinese

In the short overview below adopted from the more detailed presentation in Djamouri (2009), the different items *yǐ* are presented in their order of attestation. Note, though, that sometimes new items emerge simultaneously, as in the case of the preposition *yǐ* and the clitic pronoun *yǐ* (cf. 2.3 below). This also shows that the emergence of a new item *yǐ* does not depend on the disappearance of the already existing item(s) *yǐ* (*pace* Longobardi 2001). Again, this overview is important because it documents in detail the emergence of the many different items *yǐ*, which all have to be taken into account when dealing with potential counterexamples

2.2.1. Different types of verbs emerging at different periods: 'to lead, bring along someone'; 'to carry, take along, hold sb. by the hand sb.'; 'to use'

The earliest attestation of *yǐ* is the verb 'lead, bring along someone' in the Shang inscriptions (13th-11th c. BC):

(3) 雀不其以象 (Héjǐ 08984, 13th – 11th c BC)

Què bù qí yǐ xiàng

Què NEG FUT lead elephant

'Què will not bring along elephants.'

In addition, the verb *yǐ* 'carry, take along, hold sb. by the hand' and the verb *yǐ* 'use, utilize' (both derived from the verb *yǐ* 'to lead') are attested for later periods. They allow for both animate and inanimate DPs, unlike the verb 'lead' in (3) above that requires an animate DP complement:

- verb *yǐ* ‘carry, bring, hold sb. by the hand’

- (4) 仲翽臣父肇迨以金用乍仲 窑器 (Zhōng jī chén pán 仲翽臣盤, 9th – 8th c. BC)
Zhōng jī chén fù zhào hé , yǐ jīn yòng zuò zhōng fǒu qì
Zhong Ji Chen Fu first meet bring bronze use make Zhong Fou vessel
‘When Zhong Ji Chen Fu first met [the king], he brought some metal and used it to make this vessel for (his ancestor) Zhong Fou.’

- verb *yǐ* ‘use, utilize’

- (5) 忠不必用兮，賢不必以。(Chǔ Cí 楚辭 4·2/7, 4th – 3rd c. BC)
Zhōng bù bì yòng xī, xián bù bì yǐ
loyal NEG necessarily use SFP wise NEG necessarily use
‘A loyal man is not necessarily used, a wise man is not necessarily employed.’
- (6) 君子...不使大臣怨乎不以。(Lúnyǔ 論語 18, 10/1, 4th c. BC)⁵
Jūnzǐ [...] bù shǐ dàchén yuàn hū bù yǐ
gentleman NEG cause great.minister complain about NEG use
‘The gentleman will not cause the powerful ministers_i to complain about their_i not being employed.’

Both (5) and (6) show the verb *yǐ* ‘use, utilize’ in a middle construction with the subject bearing the patient role. Note that this is the very meaning incorrectly posited by later commentators as the first etymological value for *yǐ*.

2.2.2. The preposition *yǐ*

The preposition *yǐ* is first attested as a comitative preposition: ‘(together) with’ around 11th - 10th c. BC (also cf. Legge (1865: 650) and von der Gabelentz (1881: 285; §719)):

- (7) 王以侯納于寢。(Mài Fāng zūn 麥方尊, 11th – 10th c. BC)
Wáng [PP yǐ hóu] nà yú qǐn
king with marquess enter in bedroom
‘The king entered the bedroom with the marquess.’

Subsequently, the preposition *yǐ* encoded a large array of meanings, as is often the case for prepositions. Note immediately that the *instrumental* preposition *yǐ* ‘with’, often presented as the first attestation of the preposition *yǐ*, in fact appears much later, i.e. only around the 5th c. - 3rd c. BC (cf. section 3.1 below for detailed discussion):

- (8) 富父終甥舂其喉，以戈殺之。(Zuǒzhuàn 6.11.5/2, 5th – 4th c. BC)
Fùfù zhōngshēng chōng qí hóu [PP yǐ gē] shā zhī
Fùfù Zhōngshēng strike his throat with spear kill 3OBJ
‘Fùfù Zhōngshēng struck him in the throat and killed him with his spear.’

⁵ The dating of the *Lúnyǔ*, one of the many transmitted texts of the pre-Han period (i.e. prior to 2nd c. BC), remains a source of debate among philologists. For our purposes here it suffices to point out the necessity to distinguish between the historical period reflected by the language used in this text (in all likelihood dating back to the 4th c. BC) and the actual compilation of the text (which might have been later). For a recent discussion of these issues, cf. the appendix (pp. 143-220) of Levi’s (2018) French translation of the *Lúnyǔ* and its review by Harbsmeier (2019).

2.2.3. The preverbal clitic pronoun: *yǐ*-V

The earliest attestation of the clitic pronoun *yǐ* goes back to the Western Zhou inscriptions (11th-10th c. BC), i.e. the same period which shows the earliest occurrences of the preposition *yǐ*.

- (9) 唯三月丁卯師旂眾僕不從王征于方雷事厥友引以告于白懋父。
 (Shī Qí dǐng 師旂鼎; 11th – 10th c. BC)
Wéi sān yuè dīngmǎo [_{subject DP} [shī lǚ zhòng pú] bù cóng wáng
 be 3 month dīngmǎo commandant Lü mass soldier NEG follow king
zhēng yú fang. Léi shǐ [_{DP} jué yǒu yǐn] [_{VP} [yǐ gào] [yú bó mào fù]]
 fight at Fang Lei send 3POSS comrade Yin YI announce to Bo Mao Fu
 ‘It happened that on the day *Dingmao* of the third month the troops of the Commandant Lü did not follow the king fighting at Fang. Lei charged his companion Yin to inform Bo Mao Fu about [it].’

(For detailed discussion of the clitic pronoun *yǐ* based on a large array of data, cf. section 4 below.)

The simultaneous emergence of the preposition *yǐ* and the clitic pronoun *yǐ* is noteworthy, because it makes it difficult to “derive” the clitic pronoun from the preposition or vice versa. Instead, the chronology of attestation compels us to assume that it was the verb ‘carry, bring sb./sth.’, likewise attested from the Western Zhou (WZ) inscriptions on throughout the entire Archaic period (cf. (4) above), that gave rise to both the preposition and the clitic pronoun.

2.2.4. The coordinating conjunction *yǐ* ‘and’

This coordinating conjunction *yǐ* exclusively occurs in DPs:

- (10) 走父以其子子孫孫寶用 (Shí Zhōng Zǒu Fù xǔ 食仲走父盥 End WZ inscriptions, 9th – 8th c. BC)
[DP Zǒufù yǐ [qí zǐ zǐ sūn sūn]] *baǒ yòng*
 Zoufu and 3POSS son son grandson grandson precious use
 ‘May Zoufu and his descendants precious use [this vessel].’

2.2.5. The infinitival T-head *yǐ* ‘to’

This *yǐ* heads the non-finite clausal complement of verbs such as ‘to order sb. to do sth., to lead sb. to do sth.’ in object control constructions, and is thus comparable to the English infinitival Tense head *to* (cf. Radford 1997: 54 among others):

- (11) 唯女率我友以事 (Jìn Fù dǐng 廕父鼎, Middle WZ bronze inscr., 10th – 9th c. BC)
Wéi nǚ [_{VP} *shuài* [_{DP} wǒ yǒu]_i [_{TP[-finite]} *pro*_i *yǐ shì*]]
 be 2PR lead 1PR comrade to serve
 ‘It is you who has to lead our comrades to serve.’
- (12) 王令省史南以即虢旅。 (Gé Yōu Bǐ dǐng 辭攸比鼎)
 End West Zhou bronze inscr., 9th – 8th c. BC)
Wáng [_{VP} *lìng* [_{DP} shěng shǐ nán]_i [_{TP[-finite]} *pro*_i *yǐ jí guō lǚ*]]
 king order inspector Shi Nan to join Guo Lü
 ‘The king ordered the inspector Shi Nan to join Lü of Guo.’

2.2.6. Purposive conjunction *yǐ* ‘in order to’:

As illustrated in (13), *yǐ* heads a purposive clause with a null subject *pro* (controlled by the matrix subject); note that this type of purposive clause excludes an overt subject and in that respect differs from English ‘in order for DP to do s.th.’

- (13) 余夙夕虔敬朕祀以受多福克明又心。(Qín Gōng zhōng 秦公鐘, 7th c. BC)
Yú sù xī qián jìng zhèn sì
 1PR morning evening faith respect 1POSS ritual
 [_{purp.cl.} *yǐ* _{pro} *shòu duō fú kè míng yǒu-xīn*]
 in.order.to receive much happiness succeed lighten minds
 ‘I will day and night faithfully respect my ritual sacrifices, in order to receive great happiness and to succeed in enlightening people’s minds.’

2.2.7. The verb *yǐ* ‘use’ in the construction ‘*yǐ* DP *wéi* XP’ = ‘use DP to serve as XP’:

- (14) 以壘灶為槨，銅歷為棺 (Shǐjì 史記 126.5.7, 1st c. BC)
Yǐ lǒng zào wéi guǒ, tóng lì wéi guān
 use clay oven make outer.coffin bronze tripod make inner.coffin
 ‘Use a clay oven to serve as outer coffin, and a bronze tripod cauldron to serve as inner coffin.’

In example (14) (pointed out to us by Edith Aldridge, p.c.), the verb *yǐ* appears only once, exactly as in the corresponding English structure. This latter fact excludes a prepositional analysis of *yǐ* here; if *yǐ* were a preposition, hence forming a constituent with *lǒng zào* ‘clay oven’, the second parallel clause would also require the PP [*yǐ* [*tóng lì*]] ‘with bronze tripod’.

If *yǐ* in (14) were analysed on a par with Modern Mandarin *bǎ*, i.e. as a kind of auxiliary selecting in turn a transitive VP (cf. Whitman 2001), then verbs other than only *wéi* ‘make, serve as’ would be expected to occur with *yǐ* here, which does not seem to be the case. But even under an analysis of *yǐ* as on a par with *bǎ*, *yǐ* would be the head of the matrix predicate, not the head of a PP in adjunct position.⁶

2.3. Interim summary

The preceding sections have provided a comprehensive survey of the different items *yǐ*, which after their respective first attestation all co-existed during the entire period of Archaic Chinese. While these different items *yǐ* are historically related, in a synchronic analysis they must be treated as co-existing homophonous items instantiating different categories. This is also the view implicitly adopted by the philological tradition when providing numerous entries for *yǐ*. Even though we have capitalized on this fact, in one respect we do not follow the tradition, i.e. we have not included the *postposition* *yǐ*, which is often appealed to as a kind of last resort for

⁶ By contrast, ‘*yǐ* + theme NP’ with double object verbs is probably to be analysed as a PP, because it can either precede or follow the verb (also cf. section 3.1 below):

- (i) 武王則令周公舍寓以五十頌處。(Xīng zhōng 癡鐘 10th–9th c. BC)
Wú wáng zé lìng zhōu gōng shě yǔ [pp] yǐ wǔshí sòng chù]
 Wu Wang then order Zhou Gong give Yu YI fifty gathered habitation
 ‘Wu Wang therefore ordered Zhou Gong to endow Yu [with fifty gathered habitations].’
- (ii) 秦亦不以城予趙，趙亦終不予秦璧。(Shǐjì 史記, Lián Pō Lin xiāngrú lièzhuàn 廉頗藺相如列傳)
Qín yì bù [pp] yǐ chéng] yǔ zhào, zhào yì zhōng bù yǔ qín bì
 Qin also NEG YI city give Zhao Zhao also finally NEG give Qin jade.disk
 ‘Qin did not give the city to Zhao, neither did Zhao finally give the jade disk to Qin.’

sentences otherwise difficult to parse. The examples for *yǐ* as an alleged *postposition* ‘with’ (in addition to the *preposition* *yǐ* ‘with’) cited in this context are always the same; however, as our own analysis of (15) demonstrates, there is no *postposition* *yǐ*:

- (15) 昔我先君之田也，旃以招大夫，弓以招士，皮冠以招虞人。 (Zuǒzhuàn, 10·20·7/2, 5th – 4th c. BC)
 [[*DP* *Xī* wǒ xiān jūn zhī tián] *yě*], [*zhān* [*yǐ* zhāo dàfū]],
 yesteryear 1PR former ruler SUB hunt TOP flag to beckon great.officer
 [*gōng* [*yǐ* zhāo shì]], [*píguān* [*yǐ* zhāo yúrén]]
 bow to beckon officer fur.cap to beckon forester
 ‘As for the huntings of our former rulers yesteryear, the flag to beckon the great officers, the bow to beckon the common officers, and the fur cap to beckon the foresters.’

The structure of the sentence is as follows: the topic DP marked by the topic head *yě* is followed by the comment part which consists of three parallel DPs. The infinitival clause headed by *yǐ* ‘to’ in each of these DPs indicates the purpose: ‘the flag (is) to beckon the great officers...’ The parallelism of the three DPs creates a list reading effect which allows to dispense with the verb, a phenomenon observed throughout the history of Chinese.

Sentences involving the sequence ‘demonstrative pronoun *shì* + *yǐ*’ are likewise said to involve the *postposition* *yǐ*, a claim which does not bear further scrutiny, either, as can be seen from our analysis of (16) below:

- (16) 乃惟四方之多罪逋逃，是崇是長，是信是使，是以為大夫卿士。
 Nǎi wéi [sì fāng zhī duō -zuì būtao], shì chóng shì zhǎng,
 then be.only four quarter SUB multi-offender runaway that honor that exalt
 shì xìn shì shǐ , shì yǐ wéi dà fū qīngshì
 that trust that employ that use make great officer court.minister
 ‘Therefore, it is only the runaways from all quarters and loaded with crimes that are honoured and exalted, that are trusted and employed, that are used to serve as great officers and court ministers.’ (Shàngshū 尚書, 22·6, 8th – 6th c. BC)

As indicated in the translation, (16) is a subject focus cleft construction with *wéi* ‘be only’ as matrix verb and *the runaways from all quarters and loaded with crimes* as the clefted constituent. The presupposition consists of five parallel clauses where the distal pronoun *shì* ‘that’ occupies the subject position in a middle construction and functions as a resumptive pronoun with respect to the clefted constituent *sì fāng zhī duō-zuì būtao* ‘runaways...’.⁷ The last, fifth clause shows the verb *yǐ* ‘use DP to serve as XP’ illustrated in (14), section 2.2.7 above. Accordingly, *yǐ* in that last clause is not a *postposition* with *shì* as its complement.

Against this backdrop, where numerous items *yǐ* of different categorial status (verb, preposition, conjunction etc.) co-exist, it is evident that a careful analysis is needed in order to identify the cases instantiating the clitic pronoun *yǐ*.

⁷ In addition to the fact that *shì* is a subject pronoun, the analysis as middle in (16) is confirmed by the observation that the verb in this type of cleft construction is never followed by its object. This might be the reason why most scholars (mis)analyse this construction as involving a fronted object pronoun *shì* (among others Peyraube 1997, Meisterernst 2010, Aldridge 2010) without elucidating at all why in addition to the clefted constituent, *shì* as (alleged) object pronoun needs to be fronted. Importantly, in later stages when the copula *wéi* ‘it is only...’ is no longer present, it is the presence of the resumptive pronoun *shì* that signals the bipartitioning into a clefted constituent and the presupposition.

3. The syntax and semantics of the prepositions *yǐ* and *yǔ*

3.1. The preposition *yǐ*

As mentioned in section 2.2 above, the preposition *yǐ*, reanalyzed from the verb *yǐ* ‘to lead’, was first attested as a comitative preposition ‘(together) with’ and subsequently encoded a variety of different meanings. (When one of these meanings is difficult to grasp, we simply gloss *yǐ* as ‘YI’.):

- theme of double object verbs: ‘V IO [PP *yǐ* DO]’:

- (17) 武王則令周公舍寓以五十頌處。(Xīng zhōng 癸鐘 10th – 9th c. BC)
wǔ wáng zé lìng zhōu gōng shě yǐ [PP *yǐ* wǔshí sòng chù]
Wu Wang then order Zhou Gong endow Yu YI fifty gathered habitation
‘Wu Wang therefore ordered Zhou Gong to endow Yu [with fifty gathered habitations].’

In (17), the PP headed by *yǐ* encodes the theme DP of the double object verb *shě* ‘endow sb. with s.th.’, as reflected in the English translation.

- theme with verbs of communication such as ‘to inform’:

As illustrated in (18) - (21), the *yǐ*-PP encoding the theme can occur pre- or postverbally. This distribution of the PPs will be discussed in section 3.3 below.

- (18) 衛以邦君厲告于井白... (Wǔ Sì Wèi dǐng 五祀衛鼎, 10th – 9th c. BC)
wèi [PP *yǐ* bāng jūn lì] gào yú jǐng bó
Wei about Bang Jun Li inform to Jing Bo...
‘Wei informed Jing Bo about Bang Jun Li...’
- (19) 女敢以乃師訟。(Yǐng yí 欒匜, 9th – 8th c. BC)
rǔ gǎn [PP *yǐ* nǎi shī] sòng
2PR dare about 2POSS commandant complain
‘Dare you complain about your commandant!’
- (20) 余以邑訊有鬪。(Liù nián Shào Bó hǔ guǐ 六年召白虎毀, 9th – 8th c. BC)
yú [PP *yǐ* yì] xùn yǒu-sī
1PR about settlement inform ministers
‘I inform the Ministers about the settlement.’
- (21) 康王即位，遍告諸侯，宣告以文武之業以申之。(Shǐjì 4·23·2, 1st c. BC)
kāng wáng jí wèi, biàn gào zhūhóu xuān gào [PP *yǐ* wén wǔ
Kāng king accede throne public announce lords greatly announce about Wén Wǔ
zhī yè] yǐ shēn zhī
DET enterprise in.order.to instruct 3OBJ
‘King Kāng having acceded to the throne, he addressed an open declaration to the feudal lords and and gave a solemn report about the enterprise of [the kings] Wen and Wu in order to instruct them.’

Note that in addition to the preposition *yǐ*, (21) also features the purposive conjunction *yǐ* ‘in order to’ discussed in section 2.2.6 above.

Furthermore, the *yǐ*-PP could also encode the benefactive ‘for, on behalf’ (cf. (22)), the locative goal (cf. (23)) and the temporal locative (cf. (24)):

- benefactive ‘for’:

(22) 虢仲以王南征。(Guō Zhōng xǔ gài 虢仲盪盞, 9th – 8th c. BC)

guō zhōng [PP yǐ wáng] nán zhēng

Guo Zhong for king go.south fight

‘Guo Zhong on behalf of the king went south on an expedition.’

- locative goal:

(23) 己侯乍鑄壺使小臣以汲。(Jǐ Hóu hǔ 己侯壺, 8th – 7th c. BC)

jǐ hóu zuò zhù hú shǐ xiǎo chén [PP yǐ jí]

Ji marquess make cast pot send little minister to Ji

‘The marquess of Ji made and cast this pot. He sent his lower officer to Ji.’

- temporal locative (also cf. von der Gabelentz 1881: 281, §704)

(24) 鄆孝子以庚寅之日命鑄餼鼎鬲。(Dān Xiàozi dìng 鄆孝子鼎; 4th – 3rd c. BC)

dān xiào-zǐ [PP yǐ gēngyīn zhī rì] mìng zhù sī ding lì

Dan Xiaozǐ at gēngyīn SUB day order cast sacrificial tripod jar

‘Dan Xiaozǐ on the day Gēngyīn ordered to cast this sacrificial tripod jar.’

- instrumental

(25) 武子擊之以杖 (Hánfēizǐ 韓非子 35/1, 3rd – 4th c. BC)

wǔzi jī zhī [PP yǐ zhàng]

Wuzi hit 3PR with stick

‘Wǔzǐ hit him with a stick.’

As already mentioned above, the instrumental preposition *yǐ* ‘with’ is attested rather late, i.e. in Classical Chinese around the 5th c. - 3rd c. BC.

3.2. The preposition *yǔ*

While the core meaning of the preposition *yǔ* is the comitative/associative ‘with’ as in the first *yǔ*-PP in (26) and in (27), *yǔ* can also encode the benefactive ‘on behalf’, as illustrated by the second *yǔ*-PP in (26):

(26) 聿求元聖，與之戮力，以與爾有眾請命。(Shàngshū 12.4, 8th – 6th c. BC)

yù qiú yuán shèng, [PP yǔ zhī] lù lì

then seek great sage with 3OBJ join strength

yǐ [PP yǔ ěr yǒu-zhòng] qǐng mìng

in.order.to for you masses request fate

‘Then I sought for the great Sage, with him I will unite my strength, in order to request the favour (of Heaven) on behalf of you, my multitudes.’ (Trans. Legge pp. 187-8)

Note the presence of the purposive *yǐ* ‘in order to’ heading the clause containing the benefactive *yǔ* PP.

(27) 公與夫人姜氏遂如齊。(Chūnqiū·春秋 2·18·1, 3rd – 5th c. BC)

gōng [PP yǔ fūrén jiāng shì] suì rú qí

duke with wife Jiāng lady thereupon go.to Qí

‘Thereupon, the duke went to Qí with his wife, the lady Jiāng.’

(28) 秦人竊與鄭盟 (*Zuǒzhuàn* 9·14·1/6, 5th – 4th c. BC)

Qín rén qiè [PP yǔ zhèng] méng

Qín people secretly with Zhèng make.covenant

‘The people of Qin secretly made a covenant with the state of Zhèng’

Given that besides the rare cases of benefactive, the *yǔ* PP always expresses the comitative/associative, we do not provide further examples.⁸

3.3. *The distribution of PPs headed by yǐ and yǔ*

As illustrated by the examples in the preceding sections, the PPs headed by *yǐ* can encode arguments (i.e. theme and goal) as well as various adjunct roles, whereas the PPs headed by *yǔ* exclusively express adjunct roles (comitative/associative and benefactive). This provides us with the key to their distribution, given the adjunct vs. argument asymmetry holding for the entire Archaic period (cf. Djamouri & Paul 1997, 2009; Djamouri/Paul/Whitman 2013a): argument XPs (DPs, PPs and complement clauses alike) must occur in postverbal position, while adjuncts are freer and acceptable in either postverbal or preverbal position.⁹

Accordingly, *yǔ*-PPs as well as adjunct *yǐ*-PPs can occur in either pre- or postverbal position, whereas the *yǐ*-PPs indicating an argument of the verb occupy the postverbal position; this is the case for the theme and goal of double object verbs and the theme of communication verbs. The three cases in (18) - (20) where the *yǐ*-PPs encoding the theme of the verbs *gào* ‘to report’, *sòng* ‘to complain’ and *xùn* ‘to inform’ are all preverbal, show that here the theme is presented as an adjunct rather than an argument. A similar phenomenon is observed for English verbs such as *tell*: *to tell sb. sth.* and *to tell sb. about sth.*; *to present sth. to sb.* and *to present sb. with sth.*¹⁰

⁸ An anonymous reviewer urged us to use for examples from the late Archaic period (5th-3rd c. BC) the readings reconstructed for Medieval Chinese on the basis of the dictionaries such as the *Jingdian shiwen* (7th c. AD) and the *Guangyun* (11th c. AD); otherwise, so the reviewer, important differences might be missed. By way of illustration, s/he mentions the different readings for the character 與 in Medieval Chinese: even, departing and rising tone. However, these are not “alternative” readings, but instead refer to three different homographic words: (i) the exclamatory sentence-final particle, with 歟 as graphic variant (even tone); (ii) the transitive verb ‘to attend (a gathering), to participate in’ with an inanimate, non-human object NP (departing tone); (iii) the verb ‘to be (associated) with sb.’ selecting an animate, human object NP (rising tone). Our examples all involve the latter *yǔ* ‘to be associated with’, which served as input to the reanalysis as preposition, on the one hand, and as clitic pronoun, on the other.

The reviewer’s reasoning is that the current practice in the literature to use the *pinyin* transliteration of Modern Mandarin for earlier stages of Chinese is anachronistic. We agree with this, and like everybody else are aware that the *pinyin* does not reflect the pronunciation of these earlier stages; its main purpose is to indicate the parsing (word boundaries etc.) invisible from the sequence of characters. But to use Medieval readings for the late Archaic period more than 1000 years ago, as suggested by the reviewer, strikes us as equally anachronistic. In fact right now there is no better option than the *pinyin*, given the controversial state of phonological reconstructions for Chinese (cf. among others Ho Dah-An 2016, Schuessler 2015, Harbsmeier 2016).

⁹ PPs headed by 于 *yú* ‘in, at’ (encoding spatial, temporal and abstract location) could likewise occur in both pre- and postverbal position, depending on their adjunct or argument status. (Cf. Djamouri & Paul (1997, 2009; *pace* Aldridge (2012b: 156) who claims that *yú*-PPs were confined to the postverbal position in Archaic Chinese.)

¹⁰ Von der Gabelentz (1881: 281, §705) draws the parallel with the German verb *schicken* ‘to give (as a present)’: *dem A ein B schicken* ‘give A[dative] B[accusative]’ and *den A mit einem B beschenken* ‘present A[accusative] with B’. In the latter case, according to von der Gabelentz, the direct object is presented as an instrument by means of *yǐ*: “[...] das directe Object mittels 以 *i* [yǐ] in einen Instrumentalis verwandeln”.

4. The clitic pronouns *yǐ* and *yǔ*

The clitic pronoun *yǐ* is attested at the same time as the preposition *yǐ*, i.e. since the 10th c. BC. The clitic pronoun *yǔ*, by contrast, occurs around the 8th c. BC, i.e. later than the preposition *yǐ*. As illustrated in the examples provided throughout this section, the semantics of the clitic pronouns *yǐ* and *yǔ* reflects the range of roles that can be encoded by the corresponding PP.

Yǐ in (29) resumes the entire first sentence ('It happened ... at Fang.') which represents the content of the report, i.e. the theme of the verb *gào* 'announce'

(29) 唯三月丁卯師旂眾僕不從王征于方雷事厥友引以告于白懋父。

(*Shī Qí dǐng* 師旂鼎; 11th – 10th c. BC)

wéi sān yuè dīngmǎo [_{subject DP} [*shī* *lǚ*]_i *zhòng pú*] *bù cóng wáng*
be 3 month *Dīngmǎo* commandant Lü mass soldier NEG follow king

zhēng yú fāng; léi shǐ [_{DP} *jué yǒu yǐn*] [_{VP} [*yǐ gào*] [*yú bó mào fù*]]
fight at Fang Lei send 3POSS comrade Yin YI announce to Bo Mao Fu

'It happened that on the day *Dingmao* of the third month the troops of the Commandant Lü did not follow the king fighting at Fang. Lei charged his companion Yin to inform Bo Mao Fu about [it].'

This is the same semantic role as expressed by the *yǐ*-PP in combination with the verb *gào* 'inform', as illustrated in (18) (repeated here in (30)), and the other examples in section 3.1 above:

(30) 衛以邦君厲告于井白... (*Wǔ Sì Wèi dǐng* 五祀衛鼎, 10th – 9th c. BC)

Wèi [_{PP} *yǐ* [_{DP} *bāng jūn lì*]] *gào yú jǐng bó*

Wei *yǐ* Bang Jun Li inform to Jing Bo...

'Wei informed Jing Bo about Bang Jun Li.'

The clitic *yǔ* in (31) indicates the comitative, on a par with the PP headed by *yǔ* '(together) with' in (32):

(31) 息侯伐鄭，鄭伯與戰于竟。(*Zuǒzhuàn* 1·11·6/1, 5th – 4th c. BC) (= (2) above)

xī hóu fá zhèng, zhèng bó [_{VP} [*yǔ zhàn*] [_{PP} *yú jìng*]]

Xī marquis attack Zhèng Zhèng earl YU fight at border

'The marquis of Xī attacked the state of Zheng; the earl of Zhèng fought with, i.e. against [him] at the borders.'

(32) 公與夫人姜氏遂如齊。(*Chūnqiū*·2·18·1, 3rd – 5th c. BC)

gōng [_{PP} *yǔ fūrén jiāng shì*] *suì rú qí*

duke with wife Jiāng lady thereupon go.to Qí

'Thereupon, the duke went to Qí with his wife, the lady Jiāng.'

4.1. Previous studies: von der Gabelentz (1881) and Ma Jianzhong (1898)

It is important to point out that we are not the first to have noted the cases where *yǐ* and *yǔ* immediately precede the verb and resume an argument or adjunct PP.

4.1.1. von der Gabelentz (1881)

The eminent linguist and sinologist von der Gabelentz (1881: 285, § 718, 719; 303, §776) already discussed *yǐ* and *yǔ* in quite some detail. He analyzed verb-adjacent *yǐ* and *yǔ* as adverbs and called them *prägnant* (p. 277, § 695), i.e. 'significant':

“We call these auxiliary words **significant** when they are not used as or instead of prepositions, but as adverbs or conjunctions. In that case, meaningwise they include a demonstrative object; e.g. 以 *ì* [yǐ], elsewhere = ‘with, through, according to’, then means: therewith, thereby, accordingly.”

[“**Prägnant** nennen wir diese Hülfswörter, wenn sie nicht als oder statt Präpositionen, sondern als Adverbien oder Conjunctionen gebraucht werden. Dann schliessen sie der Bedeutung nach ein demonstratives Object in sich ein; z.B. *ì* [yǐ], sonst = mit, durch, gemäss, heisst dann: damit, dadurch, demgemäss.”]

Von der Gabelentz (1881: 285, §717) established the link between the “significant” *yǐ* and the preposition *yǐ* in the following way:

“以 *ì* [yǐ] is significant when used adverbially, without any explicit object. The meanings and translations are in general obtained by adding an objective 之 *zhī* [zhī] after 以 *ì* [yǐ]. When the sentence contains a subject, the significant 以 *ì* [yǐ] always follows it [...]”

[“以 *ì* [yǐ] ist prägnant, wenn es, ohne ein ausdrückliches Object bei sich zu haben, adverbial gebraucht wird. Die Bedeutungen und Übersetzungsweisen ergeben sich in der Regel, wenn man hinter 以 *ì* [yǐ] ein objectives 之 *zhī* [zhī] ergänzt. Enthält der Satz ein Subject, so steht prägnantes 以 *ì* [yǐ] regelmässig hinter demselben [...]”]

Von der Gabelentz clearly uses the reference to ‘preposition + third person object pronoun *zhi*’ as a heuristic device to explain the *meaning* of the immediately verb-adjacent *yǐ*; he does not posit this as the structural analysis of *yǐ*. On the contrary, the fact that he assigns a particular “adverbial” status to this *yǐ* clearly shows that for him it is to be distinguished from the preposition *yǐ*, in particular no element is missing here and *yǐ* in itself is complete, as are the adverbs *thereby*, *therefore*, *accordingly*.¹¹ Similarly, “significant” *yǔ* is paraphrased as ‘mit ihm u.s.w.’, i.e. as ‘with him etc.’ (von der Gabelentz 1881: 303, § 776), meaningwise on a par with the preposition *yǔ* encoding the comitative.

He observed that significant *yǐ* and *yǔ* combine with a whole range of verbs, which are basically the same verbs he lists as combining with the corresponding PPs:

(33) 晉平公之於亥唐也(...) 弗與共天位也， 弗與治天職也， 弗與食天祿也。

(*Mèngzǐ* 孟子, Wan Zhang II 萬章下, 4th – 3rd c. BC)

(quoted by von der Gabelentz 1881: 303, §776; glosses and translation ours)¹²

[*Jìn píng gōng zhī* [PP *yú* *hài táng*]] *yě*, (...) *fú* [[*yǔ gòng*] *tiān wèi*] *yě*,

Jin Ping duke SUB wrt Hai Tang TOP (...) NEG YU share heaven place SFP

fú yǔ zhì tiān zhí yě, *fú yǔ shí tiān lù yě*

NEG *yǔ* govern heaven office SFP NEG *yǔ* eat heaven emolument SFP

‘As for Duke Ping of Jin with respect to Hai Tang, he [i.e. Duke Ping of Jin] did not share with [him, i.e. Hai Tang] any of Heaven’s places, nor did he govern with [him] any of Heaven’s offices or partake with [him] any of Heaven’s emoluments.’

(34) 南氏生男，則以告於君與大夫。(Zuǒzhuan 左傳 12·3·4/3; 5th – 4th c. BC)

(quoted by von der Gabelentz 1881: 285, §717; glosses and translation ours)

¹¹ His observation that *yǐ* always occurs to the right of the subject follows from the fact that *yǐ* is immediately verb-adjacent and that the word order in Chinese is SVO.

¹² Von der Gabelentz (1881: 303, §776) cites the sentence without the topic part preceding *yě* and translates as follows: “Er mochte nicht mit ihm die himmlische (= dem Herrscher zukommende) Stellung theilen, ...die h[immlischen]. Aemter verwalten, ...die h[immlischen]. Einkünfte verzehren.”

nán shì shēng nán, zé yǐ gào yú jūn yǔ dà fū
 nán lady give.birth male then YI announce to lordship and great officer
 ‘If Lady Nan gives birth to a male child, then announce [it] to the Lordship and the great Officers.’¹³
 Translation by von der Gabelentz: ‘Gebiert Frau N. einen Knaben, so berichte es an den Fürsten und die Grosswürdenträger.’ [emphasis in the original]

When in combination with double object verbs, i.e. verbs of giving and verbs of communication, *yǐ* always refers to the theme (also cf. von der Gabelentz 1881: 285, §718):

- (35) 朕得之矣而不能以告若矣。(Lièzǐ 列子·2·1/8, 4th c. BC)
zhēn dé zhī yǐ ér bù néng yǐ gào ruò yǐ
 1SG get it SFP and NEG can YI inform 2SG SFP
 ‘I know it, but I cannot tell you about it.’
- (36) 蓄藏積陳朽腐不以與人者殆。(Guǎnzǐ 管子·12·1/36, 1st c. BC)
*xù cáng jī chén xiǔ fǔ bù yǐ yǔ rén zhě dài*¹⁴
 store accumulate rot NEG YI give man ZHE dangerous
 ‘The fact to store and accumulate [food] until it rots and not to give [of it] to others is harmful.’
- (37) 厚藉斂于百姓而不以分餒民... (Yànzi Chūnqiū 晏子春秋·2·19·4, 3rd – 5th c. BC)
hòu jí liǎn yú bǎixìng ér bù yǐ fēn nǎi mǐn
 heavily tax harvest to people ER NEG YI distribute starving people
 ‘those who heavily tax the people for their harvest and do not distribute it among the starving people...’

Von der Gabelentz’s analysis is therefore clearly different from that adopted by later grammarians such as Wang Li (1979) who for cases where *yǐ* has the prepositional “meaning”, but no complement, simply stipulated the optional absence of that complement, while maintaining the prepositional status of *yǐ*. Note, however, that Wang Li was probably well aware of the exceptional character of a complementless preposition, because he stressed the fact that - unlike *yǐ* - the preposition *yú* ‘in, at’ could never appear without its complement.

4.1.2. Ma Jianzhong (1898)

Ma Jianzhong not only identifies the verb adjacent *yǐ* (i.e., the clitic pronoun) as a phenomenon different from the preposition *yǐ*, but he also explicitly discusses the antecedent of the (clitic pronoun) *yǐ*.

- (38) 苟行王政，四海之內皆舉首而望之，欲以為君。
gǒu xíng wáng zhèng, sì hǎi zhī nèi jiē jǔ shǒu ér wàng zhī,
 if practice royal government four sea SUB interior all lift head and look 3OBJ

¹³ Since English allows no preposition stranding here, the meaning of *yǐ* is rendered as ‘it’. A French translation can better capture the structure at hand: ‘Si Dame Nan met au monde un garçon, vous en informerez alors le souverain et les grands dignitaires.’ with the clitic pronoun *en* corresponding to *yǐ* and referring to the theme NP.

¹⁴ Note that *yǔ* in (36) is the verb *yǔ* ‘give’, not the clitic pronoun *yǔ*. The verb *yǔ* ‘to give’ is an unrelated homonym, as *inter alia* evidenced by its graphic variants 与 and 予 used since the beginning of the Archaic Chinese period, but unattested for the verb *yǔ* ‘be associated with’, the preposition *yǔ* ‘with’ and the clitic pronoun *yǔ* (also cf. Schuessler 2007: 588).

yù yǐ wéi jūn

wish YI make sovereign

‘If someone practices the royal government, within the four seas, all the people, lifting up their heads and looking at him, wish to make [of him] their sovereign.’

(Mèngzǐ 孟子· Téng wéngōng 5/11 滕文公)

Here is his comment on example (38):

“以”字先乎動字，間蒙上文而不言所司；助動後“以”字，必以爲例。“為”動字也，“以”字先之而不言所向。蓋“以”字司詞，即行王政之君，已見上文，故蒙而不書。

“Yi (immediately) precedes the verb, omitting the expression it governs, when aforementioned...Wéi is a verb; yǐ precedes it without expressing what it refers to. As a matter of fact, the phrase that yǐ governs here is “行王政之君” (a sovereign practicing a royal government), already appearing in the preceding context. Therefore, it is covert and not mentioned.”

Ma Jianzhong’s observations confirm the constraints governing the antecedent of yǐ discussed in more detail in section 4.4. below.

4.2. Ban on preposition stranding

The ban on preposition stranding holds throughout the history of Chinese, from Pre-Archaic Chinese (13th - 11th c. BC) until today (cf. Djamouri & Paul 1997, 2009; Djamouri/Paul/Whitman 2013b). In Chinese a preposition always needs to be followed by its complement and does not allow for it to be moved, unlike what is possible in e.g. English *What bed did you sleep in* (cf. section 4.3 below for further discussion). While in the wake of C.-T. James Huang (1982) the ban on preposition stranding is in general accepted for present day Mandarin, preposition stranding is freely postulated for earlier stages. Taking Guo Rui (2009) as representative of this approach, we show that upon closer scrutiny the data allegedly involving preposition stranding turn out to be misanalysed, as illustrated for the two cases (39) and (40) below.

(39) 人主之患，欲聞枉而惡直言，是障其源而欲其水也，水自至？

Rénzhǔ zhī huàn , yù wén wǎng ér wù zhí yán , shì zhàng qí yuán
ruler SUB problem desire hear crooked and hate straight word this block its source

ér yù qí shuǐ yě; shuǐ xī zì zhì ?
and desire its water SFP water how by.itself reach

‘One of the problems of a leader [is] to want to hear deceitful words and to hate straightforward advice; this [is like] blocking a source and wanting its water; how could the water arrive by itself?’ (*Lǚ shì chūnqiū* 呂氏春秋 23·1·1·1; Guo Rui 2009: 4, (30))
(Our transliteration, glosses and translation, none of these being provided.)

Visibly, Guo Rui (2009: 4) mistakes the adverb 自 zì ‘by itself, on its own’ for the homographic preposition 自 zì ‘from’. Since in the Chinese literature on earlier stages it is current practice to simply provide the characters of a sentence without any glosses or translation into present day Mandarin, there is no way to know what interpretation Guo Rui (2009) has in mind for the sentence under this (mis-)reading. The only indication given by him is that (39) allegedly illustrates “fronting” of the complement of a preposition when the latter is an interrogative pronoun, as also indicated by the empty bracket after *zi*: 水奚自[] 至 *shuǐ xī zì* [] *zhì* in Guo Rui (2009: 4). Apparently, he considers the interrogative *xī* ‘how’

as the fronted complement of the alleged preposition *zì* ‘from’. Crucial questions such as the landing site for the alleged wh-movement of the complement of the preposition are neither asked nor answered, nor is the implausibility of the resulting meaning ‘the water arrives from how’ discussed.

- (40) 宋方吉，不可與也。(左傳 *Zuǒzhuan*, 12·9·6/4; Guo Rui (2009: 9; ex. (76))
Sòng fāng jí, bù kě yǔ yě
 Song people auspicious NEG need be.associated SFP
 ‘The Song are in an auspicious state, there is no need [for us] to engage (in conflict) with them.’
 (Our transliteration, glosses and translation, none of these being provided.)

Yǔ in (40) is clearly the verb *yǔ* ‘be associated with’, serving as the complement of the auxiliary *bù kě* ‘need not’. If it were the preposition *yǔ* ‘with’, besides the violation of the ban on preposition stranding, the second sentence would also go against the generalization that PPs can never function as predicates and are therefore also excluded as complements of auxiliaries (cf. Djamouri & Paul 1997, 2009).

Our detailed analysis of the two examples above should suffice to show that alleged counterexamples to the ban on preposition stranding provided in the literature on earlier stages of Chinese do not go beyond the surface and simply randomly choose examples where the character in question is not followed by a DP. No attention is paid to the well-known multiple homonymy in Chinese, nor are general syntactic constraints taken into account.

4.3. *Yǐ* and *yǔ* are not orphan prepositions

While the general ban on preposition stranding excludes an analysis of the clitic pronouns *yǐ* and *yǔ* as *stranded* prepositions, we still need to examine the possibility for verb-adjacent *yǐ* and *yǔ* to be *orphan* prepositions, i.e. prepositions followed by a null pronoun as observed in e.g. French. This is necessary against the backdrop of the well-known existence of null pronouns in subject and object position throughout the history of Chinese up to now.

4.3.1. *Orphan prepositions* in French

In her study of (surface) complementless prepositions in French, Zribi-Hertz (1984) provides extensive evidence for the difference between *orphan prepositions*, i.e. prepositions with an *in situ* null pronoun complement (*pro*), on the one hand, and *stranded prepositions*, i.e. prepositions whose complement has raised and left a trace/copy, on the other.¹⁵

- (41a) *Je voyage toujours avec cette valise.* (Zribi-Hertz 1984: 46, (1) - (3))
 1SG travel always with this suitcase
 ‘I always travel with this suitcase.’

- (41b) *Je connais bien cette valise, car je voyage toujours [PP avec *pro*].*
 1sg know well this suitcase because 1SG travel always with
 ‘I know this suitcase very well, for I always travel with *(it).’

- (41c) *Cette valise, je voyage toujours [PP avec *pro*].*
 this suitcase 1SG travel always with
 ‘This suitcase, I always travel with *(it).’

¹⁵ The term *orphan preposition* was originally coined by Postal (1970: 454) for what is nowadays referred to as *stranded preposition*, i.e. a preposition whose complement has undergone movement (cf. 42a-b) immediately below).

(42a) What bed did you sleep in ~~what bed~~? (Zribi-Hertz 1984: 46, (4c-d))

(42b) What chair did you climb on ~~what chair~~?

(43a) **Quel lit as -tu dormi dedans quel-lit?* (Zribi-Hertz 1984: 45, (6c-d))
which bed have 2SG slept in
(‘What bed did you sleep in?’)

(43b) **Quelle chaise es -tu monté dessus quelle-chaise?*
which chair are 2SG climb on
(‘What chair did you climb on?’)

(41)-(43) show the contrast between English stranded prepositions, licensed only as the result of movement of the complement (cf. (42a-b)), on the one hand, and the obligatory presence in English of a preposition’s complement in the absence of any such movement, e.g. *it* in the translation of (41b-c). (For a recent overview of preposition stranding, cf. Law 2006.). Orphan prepositions in French can also occur in a non verb-adjacent position, for example after an intervening adverb (cf. (41a-b)) or following the object DP (cf. (44a-c) below). This distributional fact constitutes another important difference between orphan prepositions in French and stranded prepositions in English, because for the latter verb-adjacency is required (cf. (45b)):

(44a) [*Cette machine*]_i, *j’ai rédigé* [*DP plusieurs articles*] [*PP avec pro*]_i.
this typewriter 1SG-have written several articles with
‘This typewriter, I have written several articles on [it].’

(44b) [*Les vacances de Noël*]_i, *Pierre a trouvé* [*du travail*] [*PP depuis pro*]_i.
the holidays of Christmas Pierre has found some work since
‘The Christmas holidays, Pierre has found a job since [then, i.e. in the meantime].’

(44c) [*Le champ de blé*]_i, *on a mis* [*du grillage*] [*PP autour pro*]_i.
the field of wheat one has put some fencing around
‘The wheat field, one has put a fence around [it].’
(Zribi-Hertz 1984: 59, (36c-e))

(45a) Someone ate (peanuts) on this table (Zribi-Hertz 1984: 49, (12-13))

(45b) This table was eaten (*peanuts) on.¹⁶

¹⁶These data also show that orphan prepositions cannot be analysed as clitic pronouns, because the latter must be verb-adjacent. This is illustrated in (i) - (ii) using imperative sentences where clitic pronouns follow the verb:

(i) *Donne* (**le livre*)-*moi* [*le livre*].
give the book-to.me the book
‘Give me the book.’

(ii) *Mange* (**toujours*)-*le* *toujours* *avec* *des* *baguettes*.
eat always -it always with indef. article.pl chopstick
‘Eat it always with chopsticks.’

The distinction between orphan prepositions (as in French) and stranded prepositions (as in English) is confirmed by the observation that orphan prepositions are acceptable within islands, such as complex NPs (cf. (46a)) and *wh*-islands (cf. (46b)):

(46a) [*Cette valise*]_i, *j'ai conçu* [_{DP} *l'hypothèse que Marie pourrait voyager* [_{PP} *avec pro*]].
 this suitcase I-have conceived the-hypothesis that Marie could travel with
 'This suitcase, I have made the hypothesis that Marie could travel with [it].'

(46b) [*Cette valise*]_i, *j'aimerais bien savoir* [_{qui} *pourrait voyager* [_{PP} *avec pro*]].
 this suitcase I-would-like well know who could travel with
 'This suitcase, I 'd like to know who could travel with [it].'

(Zribi-Hertz 1984: 54-55; (30a), (31a))

If the complement of the preposition *avec* 'with' had moved to the sentence-initial topic position, this would have led to the violation of island constraints and hence to the ungrammaticality of (46a-b), contrary to fact.

Ungrammaticality resulting from the violation of island constraints is, however, observed in English where stranded prepositions cannot occur within islands, because the required movement of the complement of the preposition is blocked here:

(47a) *[This book]_i, I accept the argument that John should look at ~~this book~~.

(47b) *[This book]_i, I wonder who looked at ~~this book~~. (Zribi-Hertz 1984: 52; (24a-b))

Note finally that not all prepositions can be used as orphan prepositions in French, i.e. there are lexical gaps: *à* 'at, to', *chez* 'at sb.'s place, home', *de* 'of', *en* 'in', *jusqu'à* 'until, up to', *par* 'by', *vers* 'towards' always require their complement (cf. Zribi-Hertz 1984: 57).

In a recent study, Authier (2016) takes up the existence of orphan prepositions in French, distinct from stranded prepositions as demonstrated by Zribi-Hertz (1984), and provides additional evidence for their being clearly different from adverbs.

4.3.2. Syntactic evidence against *yǐ* and *yǔ* as orphan prepositions

Verb-adjacent *yǐ* and *yǔ* cannot be analysed as PPs with a null pronoun complement *à la française*: [_{PP} *yǐ/yǔ* pro]. Quite on the contrary, this structure is independently ruled out by general constraints holding for the syntax of Archaic Chinese.

First, under such an analysis, one would not only expect this surface-complementless PP in preverbal position, but also in postverbal position, the more so as the postverbal position was at that time still available for adjuncts as well. This is, however, not the case.

Second, if *yǐ* and *yǔ* were PPs with a covert complement, (low VP-level) adverbs should be able to intervene between the PP and the following verb: [_{PP} *yǐ/yǔ* pro] adverb V, as in the following example with a PP:

(48) 執子之手、與子偕老。 (Shījīng 詩經 31/4 ; 8th c. – 6th c. BC)
zhí zǐ zhī shǒu [_{PP} *yǔ zǐ*] *xié lǎo*
 grasp 2PR SUB hand with 2PR together grow.old
 'I grasped your hand and together with you I grew old.'

However, an adverb intervening between a clitic pronoun and a verb is not attested.

Third, an analysis of the clitic pronouns *yǐ* and *yǔ* as PPs with covert complement would make wrong predictions for the structure involving *ér*, a low adverbial head in the sense of

Cinque (1999), hosting adjunct XPs in its specifier position. *Ér* only selects a minimal verbal projection (at most including negation) and is therefore used as one of the tests for “verbhood” in the *Thesaurus Linguae Sericae*. In particular, *ér* does not allow for the presence of an adjunct PP, i.e. the sequence ‘XP *ér* [PP vP]’ is not attested. The numerous cases where ‘*yǐ/yǔ* + verb’ are preceded by the low adverbial head *ér* thus clearly argue against the prepositional status of *yǐ* and *yǔ* and in favour of their status as clitic pronouns

(49) 時子因陳子而以告孟子 (*Mèngzǐ*, Gong Sūn Chǒu II 公孫丑下, 3rd – 4th c. BC)

[*TP*_{matrix} *Shízi* [*ErP* [*TP* *pro yīn chénzi*] *ér* [*vP* *yǐ gào mèngzǐ*]]]

Shízi rely.on Chénzi ER YI announce Mèngzǐ

‘Shizi relying on Chenzi, i.e. through Chenzi, informed Mengzi about [it].’

(N.B. *it* refers to the event related in the preceding sentence.)

(50) 因其來而與來，因其往而與往 (*Lǚ shì chūnqiū* 呂氏春秋, Shèn Dà Lǎn 慎大覽, Shùn Shuō 順說, 3rd c. BC)

[*TP*_{matrix} *pro* [*ErP* [*TP* *pro yīn qí lái*] *ér* [*vP* *yǔ lái*]]], *yīn qí wǎng ér yǔ wǎng*¹⁷
rely 3POSS come ER YU come rely 3POSS go ER YU go

‘Relying on others’ coming, they come along; relying on others’ going they go along.’ (i.e. they follow other people’s behaviour).

Similarly, the negation head *fú* selects minimal vPs only: *fú* [*vP* *yǐ/yǔ* V XP], not **fú* [PP [*vP* V XP]]. It is therefore impossible to analyse *yǔ* as [PP *yǔ* pro]. Instead, *fú* must immediately precede the vP without any intervening adjunct XP.

(51) 晉平公之於亥唐也(...) 弗與共天位也，弗與治天職也，弗與食天祿也。

(*Mèngzǐ*, Wan Zhang II; 4th – 3rd c. BC) (= (33) above)

[*Jin píng gōng zhī* [*PP yú hài táng*]] *yě*, (...) *fú* [[*yǔ gòng*] *tiān wèi*] *yě*, [...]

Jin Ping duke SUB at Hai Tang TOP (...) NEG YU share heaven place SFP

‘As for Duke Ping of Jin with respect to Hai Tang, he [i.e. Duke Ping of Jin] did not share with [him, i.e. Hai Tang] any of Heaven’s places [...].’

These examples demonstrate that verb-adjacent *yǐ* and *yǔ* are clitic pronouns, not prepositions whose complement remains covert, and thereby corroborate von der Gabelentz’ insight that these instances involve an item different from prepositions.

4.4. The clitic pronouns *yǐ* and *yǔ* and their antecedents

As mentioned above, the clitic pronouns *yǐ* and *yǔ* are comparable to the French clitic pronouns *y* and *en* insofar as the latter stand for PPs encoding argument (cf. (52) - (54) and adjunct roles (cf. (55)) alike.

(52a) *Il a informé le roi* [*PP de cette affaire*].

3SG has informed the king of this matter

‘He has informed the king [about this matter].’

¹⁷ In (50), we have an instance of the verb *yīn* ‘to rely, depend on’ (as in (49)). The analysis of *yīn* as the verb ‘to rely, depend on’ is confirmed by examples such as (i) where *yīn* is preceded by the negation *bù*:

(i) 未嘗不因其資而用之也。(*Huáinánzǐ* 淮南子 6/17, 1st c. BC)

wèicháng bù yīn qí zī ér yòng zhī yě

never NEG rely 3POSS property and use 3OBJ SFP

‘On no occasion does he rely on its [i.e. the thing’s] property and uses it.’

- (52b) *Il en a informé le roi.*
 3SG EN has informed the king
 ‘He has informed the king about [it].’
- (53a) *Il est revenu [PP de Paris] hier.*
 3SG is come.back from Paris yesterday
 ‘He came back from Paris yesterday.’
- (53b) *Il en est revenu hier.*
 3SG EN is come.back yesterday
 ‘He came back from there yesterday.’
- (54a) *Il est arrivé [PP à Paris] hier.*
 3SG is arrived at Paris yesterday
 ‘He arrived at Paris yesterday.’
- (54b) *Il y est arrivé hier.*
 3SG Y is arrived yesterday
 ‘He arrived there yesterday.’
- (55) *Il a longtemps habité [à Paris]. Il y a rencontré beaucoup d’artistes.*
 3SG has long.time lived in Paris. 3sg Y have met a.lot of artists
 ‘He lived in Paris for a long time. He met a lot of artists there.’

Furthermore, *y* and *en* - in contrast to the so-called “personal” clitic pronouns¹⁸ - are underspecified for number, gender, person, as suggested by the examples (56) – (58) from Ruwet (1990). Note, though, that (69) where *en* refers to the first person (*moi*) or the second person (*vous*) strikes us as very marginal. By contrast, reference by *en* to a [+human] 3rd person in (70), though rare, seems more easily acceptable:¹⁹

- (56) [*Cette nouvelle secrétaire*]_i court le risque
 this new secretary run the risk
que son patron s’y intéresse de trop près.
 that her boss self.Y take.interest of too closely
 ‘This new secretary runs the risk that her boss interests himself too much for her.’
 (Ruwet 1990: 57, (22b))
 (N.B. *s’intéresser* selects a PP complement headed by *à*: *s’intéresser [à XP]*)

- (57) *Il m’a parlé [de vous/moi] comme je veux qu’on en parle.*
 3SG to.me.has spoken of you/ me like I want that.one EN speak

¹⁸ The personal clitic pronouns are: *me* (1SG), *te* (2SG), *nous* (1PL), *vous* (2PL), *le* (3SG masc.acc.), *la* (3SG fem.acc.), *les* (3PL acc.), *lui* (3SG dat.), *leur* (3PL dat.). There is no gender distinction, except for the third person singular, i.e. *le* (masc.) vs *la* (fem.).

¹⁹ Due to an anti-logophoricity constraint, there are numerous instances where *y* and *en* cannot refer to an XP within the same complex sentence, even though this XP is a potential antecedent with respect to Binding condition B (or its minimalist equivalent). This constraint does not hold for the personal clitic pronouns (cf. (ii)).

(i) **Emile_i pense que Sophie_j en_i est amoureuse.*

Emile thinks that Sophie EN is in.love

(ii) *Emile_i pense que Sophie_j l_i aime / est amoureuse de lui_i.*

Emile thinks that Sophie him.loves/ is in.love of him

‘Emile_i thinks that Sophie loves him_i /is in love with him_i.’

‘He talked about you/me just the way I want people to talk about me/you.’
(Ruwet 1990: 52, (4a-b))

- (58) *Emile_i a rencontré Sophie, qui en_i est tout de suite tombée amoureuse.*
Emile has met Sophie, who EN is immediately fall.in.love
‘Emile_i has met Sophie who has immediately fallen in love with [him_i]’.
(Ruwet 1990: 54, (9e))
(N.B. *tomber amoureux/se* ‘fall in love’ selects a PP complement headed by *de*:
tomber amoureux/se de XP ‘fall in love with XP’.)

Going back to the clitic pronouns *yǐ* and *yǔ*, we only observe third person antecedents. To our mind, this is due to the pragmatic oddness illustrated by (57), where the discourse participants (1st and 2nd person) mentioned in the first clause are then taken up by a clitic pronoun in the second clause.

The data at our disposal suggest that when there is an explicit antecedent for the clitic pronouns *yǐ* and *yǔ*, it occurs outside the sentence containing *yǐ* and *yǔ* (cf. (59) - (61)). On a par with pronouns in general, the clitic pronouns *yǐ* and *yǔ* can also have an implicit (discourse) antecedent (cf. (62)), or refer to a preceding sentence (cf. (63) - (64)).²⁰

- (59) 朕得之矣而不能以告若矣。(Lièzǐ 2·1/8, 3rd - 5th c. BC)
zhēn dé zhī yǐ ér bù néng yǐ gào ruò yǐ
1SG get it SFP and/but NEG can YI announce 2SG SFP
‘I know it, but I cannot tell you about [it].’
- (60) 高子聞之，以告中寢諸子。(Guǎnzǐ 35·1/69, 1st c. BC)
Gāozǐ wén zhī, yǐ gào zhōngqǐn zhūzǐ
Gaozi hear it YI announce Palace gentlemen
‘Gaozi heard [about] it and he informed the Palace gentlemen about [it].’
- (61) 聞道而以治一鄉，親其父子... (Guǎnzǐ 2·1/129, 1st c. BC)
wén dào ér [yǐ zhì] yī xiāng qīn qí fù zǐ
know Way and/but YI govern one district bring.closer 3POSS father son
‘Those who are acquainted with the Way and who govern a district with it, bring into close relationship its fathers and sons...’

(59) and (60) illustrate the same case, where the third person object pronoun *zhī* in the first sentence serves as antecedent for *yǐ* in the second sentence. Note that *ér* in (59) and (61) is not the low adverbial head *ér*, but the (homophonous) conjunction *ér* ‘and, but’ coordinating two sentences; accordingly, the antecedent of *yǐ*, i.e. *dào* ‘the Way’ in (61), is not in the same sentence as the sequence ‘*yǐ* + verb *zhì* ‘govern’. Additionally, the presence of the sentence-final particle *yǐ* (realizing C) in (59) clearly indicates the end of the first sentence.

Example (62) shows the existential negation *wú* ‘have nothing’ and thus contains an implicit antecedent for *yǐ*.

- (62) 智者無以訟。(Hánfēizǐ·41·1/4, 3rd - 4th c. BC)
zhìzhě wú yǐ sòng
skilful have.nothing YI complain

²⁰ Like pronouns in general, the clitic pronouns *yǐ* and *yǔ* are subject to Condition B, i.e. they must be free within their binding domain, i.e. roughly the minimal propositional domain they occur in.

‘A skilful man will have nothing to complain about.’

Sentences (1) and (9) above (repeated in (63-64) below) where *yǐ* refers to the content of the entire preceding sentence further illustrate cases where the antecedent is not a DP.

(63) 南氏生男，則以告於君與大夫。(Zuǒzhuàn 12·3·4/3, 5th – 4th c. BC)
Nán shì sheng nán, zé yǐ gào yú jūn yǔ dà fū
nán lady give.birth male then YI announce to lordship and great officer
‘If Lady Nan gives birth to a male child, then announce [it] to the Lordship and the great Officers.’

(64) 唯三月丁卯師旂眾僕不從王征于方雷事厥友引以告于白懋父。
(*Shī Qí dǐng* 師旂鼎; Western Zhou inscription)
wéi sān yuè dīngmǎo shī lǚ zhòng pú bù cóng wáng
be 3 month *dīngmǎo* commandant Lü mass soldier NEG follow king
zhēng yú fang; lèi shǐ jué yǒu yǐn yǐ gào [yú bó mào fù]]]
fight at Fang Lei send 3POSS comrade Yin YI announce to Bo Mao Fu
‘It happened that on the day *dingmao* of the third month the troops of the Commandant Lü did not follow the king fighting at Fang. Lei charged his companion Yin to inform Bo Mao Fu about [it].’

As demonstrated in this section and the preceding ones, the clitic pronoun *yǐ* co-occurs with different kinds of verbs, including movement verbs, simple transitive verbs and double object verbs. The thematic role encoded by the clitic *yǐ* depends on the semantics of the verb and shows as large a variety as the *yǐ* PP: purpose, comitative, means or manner etc. When in combination with verbs of communication (cf. (59-60), (63-64) above) and double object verbs (cf. (65-66) below), *yǐ* always refers to the theme argument, as does the “corresponding” PP [*yǐ* DP] with the same verb classes in examples (20-22) above:

(65) 蓄藏積陳朽腐，不以與人者殆。(Guǎnzǐ·12·1/36, 1st c. BC) (= (48))
xùcáng jīchén xiǔfǔ bù yǐ yǔ rén zhě dài
store accumulate rot NEG *yǐ* give man ZHE dangerous
‘The fact to store and accumulate [food] until it rots and not to give [of it] to others is harmful.’

(66) 厚藉斂于百姓而不以分餒民... (Yànzǐ Chūnqiū 晏子春秋 2·19·4, 3rd – 5th c. BC)
hòu jí liǎn yú bǎixìng ér bù yǐ fēn nǎi mǐn
heavily tax harvest to people ER NEG YI distribute starving people
‘those who heavily tax the people for their harvest and do not divide it among the starving people...’

All these facts can be accounted for under an analysis of *yǐ* and *yǔ* as clitic pronouns.²¹

It is important to emphasize that the clitic pronouns *yǐ* and *yǔ* are to be distinguished from the homophonous prepositions *yǐ* and *yǔ*, in the same way that the preposition *yǔ* is

²¹ An anonymous reviewer suggests “preverb” status for the clitic pronouns *yǐ* and *yǔ*. However, since the status of so-called “preverbs” is extremely vague (prefix, semi-bound/semi-autonomous verbal morpheme, adposition etc.; cf. Kulikov 2012), it is not clear which of these many variants s/he had in mind. In addition, with *yǐ* as “preverb” it will be difficult to account for the structural constraint governing the position of its antecedent. By contrast, this constraint is expected for *yǐ* as a clitic *pronoun* and observed in many other languages with clitic pronouns.

distinct from the verb *yǔ* ‘to be associated with,’ and the clitic pronoun *yǐ* is distinct from the other numerous items *yǐ*. Like the French clitic pronouns *y* and *en*, *yǐ* and *yǔ* encode the thematic roles conveyed by the PP as a whole.

5. Conclusion

This article has provided extensive evidence against the analysis of immediately verb-adjacent *yǐ* and *yǔ* as prepositions with a covert complement and in favour of their status as clitic pronouns, on a par with the French clitic pronouns *y* and *en*. Importantly, this analysis ties in with the overall syntax of Archaic Chinese and beyond, insofar as the ban on adposition stranding holds for the entire history of Chinese.

Concerning *yǐ*, we have demonstrated the unfeasibility of a uniform analysis for the many categorially different items *yǐ* co-existing for the entire period of Archaic Chinese: clitic pronoun, verb, preposition, infinitival ‘to’ etc. (*pace* Aldridge 2012b, cf. appendix). Accordingly, the clitic pronoun is one among the many different items *yǐ* and can be identified by a specific set of syntactic and semantic properties.

Clitic pronoun *yǐ* and preposition *yǐ* are attested from the same period on, whereas the clitic pronoun *yǔ* is attested later than the preposition *yǔ*. Subsequently, preposition *yǔ* and clitic pronoun *yǔ* co-exist.

The simultaneous emergence of the clitic pronoun *yǐ* and the preposition *yǐ* is important because it makes it impossible to “derive” the clitic pronoun from the preposition. Instead, the chronology of attestation suggests that it was the verb ‘lead’ that gave rise to the preposition *yǐ*, on the one hand, and the clitic pronoun *yǐ*, on the other. Given the syntax of Archaic Chinese, this is in fact the only possible scenario: only verbs, but not prepositions allow for their object to be covert. In other words, there exists no licit source structure where the preposition *yǐ* in preverbal position would have lacked a complement and could therefore have been reanalysed, i.e. be assigned an alternative parsing, as a clitic pronoun. (Cf. Whitman 2001 for detailed discussion of the structural constraints governing diachronic reanalysis.)

The situation in Chinese where the clitic pronoun (*yǐ*) and the preposition (*yǐ*) are attested at the same time is also observed for French, where the clitic pronoun *en* and the preposition *en* co-occur in the earliest text available for French, i.e. *Les Serments de Strasbourg* (842 AD). French grammarians paraphrase it by the PP ‘of this’ (*de cela*), expressing various thematic roles. What they consider as a later adverbial instance of the clitic pronoun *en* is derived from the Latin adverb *inde* ‘from this place/fact; of sb., something’ (cf. Pinchon 1972; <https://cnrtl.fr/etymologie/en>; Centre national de ressources textuelles et lexicales, accessed 19/1/2020). The equivalents of French *en* in other Romance languages such as Italian *ne* and Catalan *en/ne* are likewise traced back to the Latin adverb *inde* in the literature.

As for the clitic pronoun *y* in *Les Serments de Strasbourg*, it has different meanings: ‘there’, ‘to him’ (i.e. 3rd person dative), ‘to that’ used to refer to an aforementioned situation (cf. Pinchon 1972; <https://cnrtl.fr/etymologie/y>, accessed 19/1/2020). French *y* as well as Catalan *hi* and Italian *ci* are either said to derive from the Latin adverbs *hic* ‘here’ or *ibi* ‘in the place that was mentioned earlier’ or to result from the fusion of these two adverbs, which featured both in the fixed expression *hic et ibi*. Whether these etymologies are correct or not is not for us to judge.

What is important for our purpose here is to see that grammarians have no qualms to state the emergence of new items with distinct properties, even if their historical derivation is not completely straightforward. The same situation obtains in Chinese, as we have demonstrated throughout this article: while there is ample evidence for the existence of the

clitic pronouns *yǐ* and *yǔ* in the synchronic grammar of Archaic Chinese, their historical origin still needs to be determined.

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Appendix: Aldridge (2012b) on *yǐ*

1. Introduction

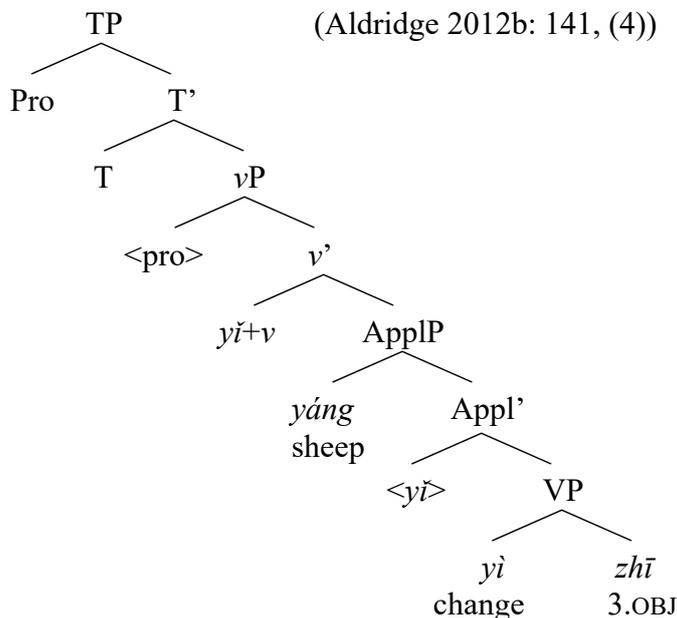
Given that Aldridge (2012b) is one of the few studies aiming at a comprehensive analysis of *yǐ*, it seems useful to discuss it here in detail, against the background of our own work. As to be demonstrated, her analysis is neither empirically adequate nor theoretically sound.

2. *Yǐ* as a high applicative: ‘*yǐ* DP V DP’, ‘V DP *yǐ* DP’, ‘*shì yǐ* V DP’

Despite the well-documented heterogeneity of the categories displayed by the different items *yǐ* (illustrated in sections 2.1 and 2.2 above), co-existing during the entire period of Archaic Chinese, Aldridge (2012b: 140) proposes a unifying analysis for all instances of *yǐ* (including the preposition *yǐ*) as a *high applicative* head in the sense of Pykkänen (2002). Pykkänen (2002) posits two kinds of applicatives, distinguished by the type of XP they encode (argument or adjunct) and by their position with respect to the VP. While the *VP-internal low* ApplP is associated with the goal argument in ditransitive constructions, the *high* ApplP located *above* VP licenses all kinds of roles such as benefactive, instrumental, location etc. It is the *high* ApplP that Aldridge claims to be realized by *yǐ*, as shown in the tree structure (1b), where *yǐ* originates in a position above VP and then further raises to *v*:

- (1a) 以羊易之 (Mengzi, Liang hui wang, 4th-3rd c. BC)
Yǐ yáng yì zhī
 YI sheep change 3.OBJ
 ‘Exchange it for a sheep.’ (Aldridge 2012b: 140; (1a) her glosses and translation)

- (1b) (Aldridge 2012b: 141, (4))

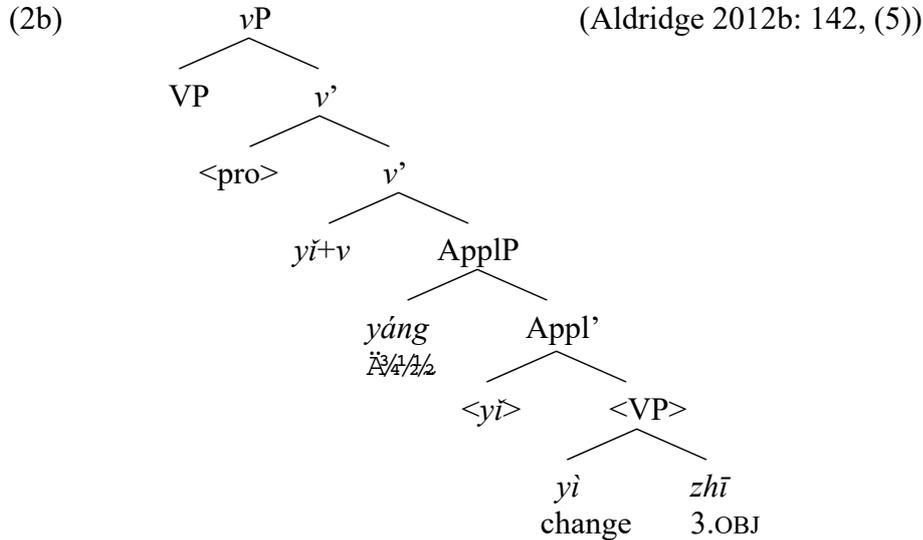


For Aldridge (2012b), ‘*yǐ* DP V DP’ represents the basic order, from which the equally attested order ‘V DP *yǐ* DP’ is derived by fronting of the VP to the outer specifier of *vP* (cf. (2b)):

- (2a) 我非愛其財而易之以羊也。 (Mengzi, Liang hui wang, 4th-3rd c. BC)²²

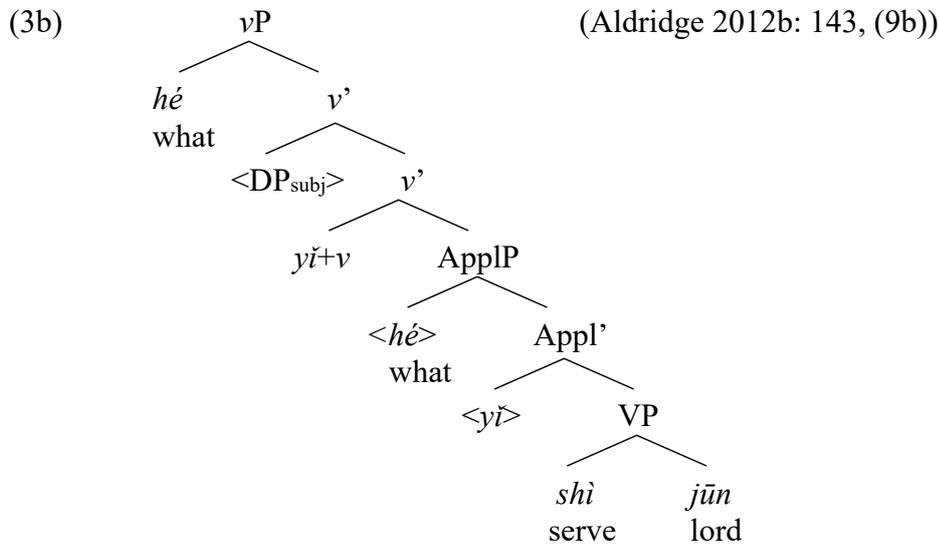
²² As evident from examples (9-10) below, the item *yě* is not a nominalizer, as suggested by Aldridge’s (2012b) gloss ‘NMLZ’ in (2a), but instead one of the numerous sentence-final particles (realizing C) attested in LAC (cf. Djamouri/Meisterernst/Paul 2009).

wǒ fēi ài qí cái ér yì zhī yǐ yáng yě
 I not.be love 3.GEN cost CONJ change 3.OBJ YI sheep NMLZ
 ‘It is not that I care about the cost and exchanged it for a sheep.’
 (Aldridge 2012b: 140, (1b); her glosses and translation)



The third order featuring the applicative *yǐ* according to Aldridge, viz. ‘DP *yǐ* V DP’, involves focus movement from SpecApplP to the edge of *v*P. This results in a configuration where the (focalized) DP now precedes the applicative head *yǐ*, and where in turn *yǐ* precedes the verb. This focus movement is claimed to be on a par with the short, i.e. vP-internal *wh* movement postulated by Aldridge (2012a,b and earlier works) for LAC:

(3a) 何以事君? (Zuozhuan, Xi 5)
 Hé yǐ shì jūn?
 what YI serve lord
 ‘What does one serve his lord with?’
 (Aldridge 2012b: 143, (9a); her glosses and translation; tones added)



This short *wh* movement is combined with the standard account of *wh in situ* in Modern Mandarin: *wh* items are indefinites and receive their interrogative interpretation via unselective binding by a null operator in CP.

The same configuration as in (3b) is proposed for sentence (4) where the distal demonstrative pronoun *shì* ‘that’ precedes *yǐ*, i.e. *shì* is said to have raised from SpecApplP to SpecvP, a focus movement parallel to the *wh* movement of *hé* ‘what’ assumed in (3).

- (4) 既無德政，又無威刑，是以及邪。(Zuozhuan, Yin 11) p. 144
Jì wú dé zhèng, yòu wú wēi xíng,
 both not.have virtuous government. and not.have imposing penalty
shì yǐ jí xié.
 SHI YI reach evil
 ‘Lacking in both virtuous government and an imposing penal code,
 this is what leads to evil.’
 (Aldridge 2012b: 144 (10a); her glosses and translation)²³

As far as we can see, these analyses raise a number of non-trivial problems.

3. Critical assessment of *yǐ* as a high applicative

At first sight, the analysis of the sequence ‘*yǐ* DP V DP’ in (3a) in terms of short *wh*-movement looks like a possible solution for those cases where traditional philologists exceptionally treated *yǐ* as a postposition, not as a preposition, based on their interpretation of the sentence which suggested a relationship between *yǐ* and *hé*. This relationship is likewise reflected in Aldridge’s translation of (3a) ‘What does one serve his lord with?’

From a theoretical point of view, however, it is not unproblematic at all to postulate *A-bar* movement within the vP, because movement of the subject from the inner specifier of vP to SpecTP will result in improper movement, the subject being A-moved over the A-bar moved *wh* phrase *hé* ‘what’ in the outer specifier of vP (cf. (3b)). Nothing is said about the validation of the strong focus feature on *v* triggering the short *wh* movement in the absence of any element raising to the outer specifier of vP (be it a *wh* item or a focused DP as in (4)). Furthermore, while an account in terms of unselective binding allows Aldridge (2012b) to derive the interrogative interpretation of *wh* items in LAC, the necessary postulation of a null operator in C poses non-trivial problems for the *Inclusiveness Condition* holding within the Minimalist Program.

Besides referring to her own hypothesis of short *wh* movement in LAC as evidence for focus movement to SpecvP, Aldridge (2012a: 5) cites vP-internal focus in Italian. This

²³ Importantly, dictionaries of LAC provide an entry for *shìyǐ* as a single word ‘thus, therefore’. The sentential adverb *shìyǐ* is attested from the Zuozhuan on (5th – 4th c. BC) and either precedes or follows the subject.

- (i) 臣是以敢出也 (Guanzi: TLS: 左傳·Zuozhuan 1·11·4/2)
Chén shìyǐ gǎn chū yě
 I hence dare leave SFP
 ‘Hence I dared to leave.’

As far as we can see, *shìyǐ* in Aldridge’s (2012b) example (4) is precisely this adverb ‘thus’:

- (ii) 既無德政，又無威刑，是以及邪。(Zuozhuan, Yin 11)
Jì wú dé zhèng, yòu wú wēi xíng,
 already.given not.have virtuous government also not.have frightening penalty
shìyǐ pro jí xié.
 thus reach evil

‘Since he [= the duke Zhuāng of Zhèng] lacked virtue in his government, and also lacked frightening punishments, thus they [his officers] became depraved.’

It is the preceding context which leads to the interpretation of the (null) subject of ‘become depraved’ as Duke Zhuang’s officers.

involves, however, a very different phenomenon, *viz.* postverbal *subjects* in so-called *free inversion* (FI) (cf. Belletti 2004). In FI, the subject appears in postverbal position in the answer to a *wh*-subject question:

- (5a) *Chi è partito/ ha parlato?* (Belletti 2004: 21, (9a-b))
 who is left / has spoken
 ‘Who has left/has spoken?’
- (5b) *E’ partito/ ha parlato Gianni*
 is left / has spoken Gianni
 ‘Gianni has left/has spoken.’

Also note that the type of focus involved here is *new information* focus, not *exhaustive* focus as claimed for LAC by Aldridge. As a consequence, the postverbal subject in Italian FI cannot be used as evidence for Aldridge’s proposal concerning Chinese.²⁴

In any case, Aldridge’s (2012a, b) interpretation of DPs preceding *yǐ* as focalized is not necessarily warranted, either. An exhaustivity reading, hence identificational focus for the demonstrative *shì* in (4) above is stated and reinforced by translating it as a cleft, but no evidence for this alleged exhaustivity is provided.²⁵

Moreover, in some cases Aldridge concludes from *contrastivity* to focus and from there to exhaustivity, inspite the by now well-established fact that both foci and topics can be contrastive (cf. among others Pereltsvaig 2004). Also note that Aldridge (2012a:1) postulates focus movement of non-wh DPs exclusively in connection with the applicative *yǐ*. It remains mysterious why focus movement should be exclusively confined to the applicative construction and only affect the applied DP in SpecAppIP.²⁶

Concerning the details of the derivation in the structures (1b-3b), it is not clear, either, how movement of V-to-AppI° followed by subsequent movement of that complex head to *v* can be excluded, leading to the undesired, *non-attested* sequence: ‘V-*yǐ* DP DP’. In fact, this is precisely the derivation proposed by Paul & Whitman (2010) for the applicative head *gěi* in Modern Mandarin: ‘V-*gěi* DP_{goal} DP_{theme}’.

- (6) [_{TP} *Wǒ* [_{AspP} *mài-gěi-le* [_{AppIP} *Mǎlì* [_{AppI'} *t_{mài-gěi}* [_{VP} *t_{Mǎlì}* [_{V'} *t_{mài}* *yǐ ge shǒubiǎo*]]]]]]]
 1SG sell-GEI-ASP Mali 1 CL watch
 ‘I sold Mali a watch.’
 (Paul & Whitman 2010: 275, (37))

Importantly, in each case there exist alternatives to Aldridge’s analysis which do not involve the problems just outlined. For reasons of space, we only illustrate this for the alleged *vP*-internal *wh* movement, because the latter is cited as evidence in favour of *vP*-internal focus movement, crucial for deriving the order ‘DP *yǐ* V DP’ in (3) and (4) above:^{27,28}

²⁴ The fact that the standard analyses of Italian FI postulate a non-overt expletive *pro* in SpecTP makes its implementation for Chinese even more implausible (cf. Belletti 2004: 25). Note that Belletti (2004: 19) explicitly excludes an analysis in terms of remnant movement.

²⁵ For a *bona fide* example of *shì* as a resumptive pronoun in a cleft construction, cf. (16) in section 2.3 above.

²⁶ Aldridge (2012a: 1, footnote 2): “For reasons which are not yet well understood, NP fronting was more common with *yǐ* ‘use’ than with other verbs. I tentatively assume *yǐ* to be a light verb heading a functional projection on the clausal spine.”

²⁷ Whether movement to the *left* of negation can count as *vP*-internal is another problematic point in Aldridge’s approach.

²⁸ Given that a PP headed by *yǐ* can occur in preverbal or postverbal position (cf. sections 3.1 above), Aldridge’s examples (1a) and (2a) can be reparsed as [_{PP} *yǐ yáng*] *yì zhī* ‘with a sheep replace it’ and *yì zhī* [_{PP} *yǐ yáng*]

In many cases where Aldridge postulates vP-internal short *wh* movement of the object to the right of a null subject (cf. (7a)), there exists an alternative parsing with an in situ *wh* subject in a middle construction (cf. (7b)):

- (7a) [_{TP} *pro*...*Hé* [_{VP} *qiú* ___ [_{PP} *yú mín*]]]?
 what ask of people
 ‘What would you ask of the people?’
 (Aldridge 2012b: 146, (17a-b); her glosses, translation and bracketing;
 null subject added)
- (7b) [_{TP} *Hé* ... [_{vP} [_{VP} *qiú* [_{PP} *yú mín*]
 what ask at people
 ‘What would be asked from the people?’

Note that Archaic Chinese also had an interrogative copula *hé* ‘be what’, clearly different from the nominal *hé* (cf. Ma Jianzhong 1898).²⁹ This verb *hé* (not mentioned by Aldridge 2012a,b) is frequently attested with sentence-final particles such as *yě* and *zāi* (the latter encoding the speaker’s attitude in questions and realizing the highest C-projection in the three-layered split CP attested for Archaic Chinese):

- (8) 父母之不我愛，於我何哉？ (Mengzi, Wan Zhang I)
 Fù mǔ zhī bù wǒ ài yú wǒ hé zāi ?
 father mother SUB NEG 1SG love at 1SG be.what SFP
 ‘My parents’ not loving me, what is there in me?’
- (9) 贈者，何也？ (*Gu Liang zhuan* 穀梁傳·1·1/17)
 fèng zhě hé yě ?
 fèng ZHE be.what SFP
 ‘Concerning *fèng*, what is this?’

In (9) the NP *fèng* is the topic, marked by the topic head *zhě*. The sentence-final particle *yě* is a low complementizer selecting TPs with a stative predicate, resulting in an equative sentence. The topic can also be a proposition as in (10) below:

- (10) 『持其志無暴其氣』者，何也？ (Mengzi 孟子, Gong Sun Chou I 公孫丑上)
 [_{TopP} [_{TP} *chí qí zhì wú bào qí qì*] [_{Topic°} *zhě*] [_{CP} [_{TP} *pro* *hé*] *yě*]
 maintain 3POSS will NEG harm 3POSS nature ZHE be.what SFP
 ‘Maintain firm one’s will without harming one’s nature, this is what?’

Aldridge’s example (3) discussed above (repeated here in (11)) precisely illustrates the interrogative copula *hé* ‘be what’ (cf. (12)):

‘replace it [with a sheep]’, respectively, with a preverbal or postverbal *yí*-PP (cf. Djamouri/Paul/Whitman (2013, section 3.5) for further discussion).

²⁹ 何字单用,以诘事物。附于称人之名,则以诘人。三次皆用焉,而用为表词者居多。「何」字合「也」「哉」「者」诸字为助者,则以诘事理之故也。(Ma Jianzhong (1998[1898]: 72).

“*Hé* is used alone in order to express an interrogation on something. Attached to the name of a person, it expresses an interrogation on the person. It can be used in three positions within a sentence [i.e. beginning, middle or final, RD & WP] where in most cases it is used as nominal/adjectival predicate [表词]. When *hé* is combined with the final particles *yě*, *zāi*, *zhě*, it expresses an interrogation on the cause of an event.”

- (11) 何以事君? (*Zuozhuan*, Xi 5)
Hé yǐ shì jūn?
 what YI serve lord
 ‘What does one serve his lord with?’
 (Aldridge 2012b: 143, (9a); her glosses and translation)
- (12) 何以事君? (*Zuozhuan*, Xi 5)
Hé yǐ shì jūn?
 be.what to serve lord
 ‘What is there to serve the lord?’

As soon as *hé* is not analysed as a nominal *wh* ‘what’, but as the verb *hé* ‘be what’, this naturally has consequences for the analysis of other items in the sentence displaying multiple homonymy. This is the case for *yǐ*, which in our analysis of (12) is the infinitival T-head *yǐ* ‘to’ discussed in (11) and (12), section 2.2.5 above.

In any case, very probably there exists no uniform analysis for *wh* questions across the board, given the large set of *wh* items attested for LAC and cited in the literature. Thus, besides (the different items) *hé*, we also have 誰 *shéi* ‘who’, 孰 *shú* ‘who’, 焉 *yān* ‘where, how, when’, 胡 *hú* ‘how’, 奚 *xī* ‘what, how’, 害 *hài* ‘what’, 甚 *shèn* ‘what’, 安 *ān* ‘how’, 曷 *hé* ‘what’ etc.

It goes beyond the scope of this article to provide a comprehensive analysis of *wh* questions in LAC. What is important for our purposes here is to have shown that alternative analyses to Aldridge’s short *wh* movement account are feasible, and hence alternatives to her derivation of the sequence DP *yǐ* as involving focus movement of the applied argument.

4. Conclusion

To summarize, Aldridge’s applicative analysis of *yǐ* is not without problems; especially her main hypothesis, i.e. *vP*-internal *wh*-movement does not seem to be on the right track. Accordingly, there might be no basis for focus movement from SpecAppIP to the edge of *vP* as parallel to that short *wh* movement, either, and hence no basis for an applicative *yǐ* at all.

Be that as it may, even if applicative *yǐ* were included in the list of *yǐ* items discussed in section 2.2 above, it is evident that there exists no *uniform* analysis for all these different *yǐ*’s, be it as applicative or any other category. This is, however, Aldridge’s (2012b: 140) proposal: “This paper challenges *the* traditional analysis of the functional morpheme *yǐ* in Late Archaic Chinese as a preposition and proposes instead that it heads a high applicative phrase within *vP*.” (emphasis ours). Given the plethora of different “uses” of *yǐ* acknowledged by the philological tradition (cf. section 2.1 above), it is misleading to talk about *the* traditional analysis of *yǐ* as a preposition.³⁰

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³⁰ The different items *yǐ* listed in section 2.2.1 are all attested for the LAC period examined by Aldridge (2012b).

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