THE MANDARIN YOU EXISTENTIAL: A VERBAL ANALYSIS

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This paper examines the syntactic status of the element you ‘have’ in the Mandarin existential construction. The basic structure of the you existential is [you NP XP]. In some previous researches, you is seen as a functional head, an Infl or a modal. Under this analysis, the post-you NP is the VP-internal subject that remains in-situ, and XP is the main predicate of the sentence. However, in this paper we propose that you is in fact the main verb of the sentence. The NP is the object of the sentence and XP an adjunct CP. We have several reasons for this claim. First, you behaves very similarly with other verbal yous. Second, the XP exhibits the CED effect, which is a trait of an adjunct expression. Third, the XP shows features of a CP, and therefore is unlikely to be the main predicate of the sentence.

1. Introduction

In Mandarin Chinese, the word you, literally meaning ‘have’, is used to form the existential construction, with the basic structure [you DP XP]. You is at the initial position of the sentence, as in (1). The post-you NP is usually followed by a predicate-like phrase XP, as in (1a) and (1b).

(1) a. You [NP yi zhi guibin-gou ][XP zai lu shang hua dao le].
    have one CL poodle at road over slip fall PRT
    ‘There is a poodle slipping on the road.’

b. You [NP yi zhi guibin-gou ][XP hen congming].
    have one CL poodle very intelligent
    ‘There is a poodle that is very intelligent.’

In addition to the existential construction, there are two other you constructions, the locative/temporal construction and the possessive construction. In the locative/temporal construction, the subject is a locative or temporal NP, as shown in (2a) and (2b). (2c) is an example of the possessive you construction.

(2) a. Zhuozi-shang you yi ben shu.
    desk-above have one CL book
    ‘There is a book on the desk.’

In this paper we focus on the structures of the existential *you* construction. In some previous researches, the *you* in this construction is regarded as a functional head, an Infl (Huang 1988) or a Modal (Cheng 1991, Tsai 2001a, 2001b, 2003, 2004). We will call this analysis the “functional analysis.” In this analysis the post-*you* NP is regarded as the VP-internal subject that remains in-situ. The *you* in the possessive construction and the locative/temporal construction, on the other hand, are all regarded as verbs. Some other researches (Li 1990, Teng 1978) treat the existential *you*, the temporal/locative *you*, and the possessive *you* as verbs, without paying special attention to the status of the existential *you*. This paper argues that such “verbal analysis” is correct. That is, the existential *you* is indeed a verb, on a par with the locative/temporal *you* and the possessive *you*. The NP is the object of *you*, and the XP is an adjunct CP.

2. Previous proposals

The previous works on the existential *you* can be divided into two groups. The first is the “functional” analysis, which proposes that the existential *you* is a functional head, whereas the possessive *you* and the locative/temporal *you* are verbs. The second analysis considers the existential *you* a verb, the same as the possessive *you* and the locative/temporal *you*.

2.1. The Functional analysis

According to Huang (1987, 1988), the existential *you* is an Infl element. It is the same as the pre-verbal *you*, as in (3).

(3) Zhangsan mei-you kanjian Lisi.
    ‘Zhangsan did not see Lisi.’

The difference between (3) and a typical *you* existential like (4) is that in the former the subject raises from Spec-VP to the Spec-IP, whereas in the latter the subject remains in the VP-internal position. There are restrictions on the raising of the subject: the subject must be specific; the raising is obligatory and is often limited to negative contexts. In this analysis, therefore, the existential *you* is a genuine functional head, as in (3), an Infl element. It is not like the possessive *you* and the locative/temporal *you*, which are verbal.

(4) You yi ge ren zai jiaoshi li.
    ‘There is a person in the classroom.’
It seems that the pre-verbal *you* as an Infl element taking a VP as complement is less controversial. The existential *you* as an Infl element, however, is not so obvious, since it does not have any temporal reading, such as perfectivity, which is seen in the pre-verbal *you*. Furthermore, there is no explanation as to why subject raising occurs with the pre-verbal *you* but not with the existential *you*. Thus there doesn’t seem to be much support for treating *you* in (3) and (4) as the same element.

According to Tsai (2001a, 2001b, 2003), *you* is a modal, which heads a modal phrase that takes VP as complement. This analysis is based on the similarity of *you* with other modals, such as *de* ‘be able’. According to Tsai, there are two kinds of languages: the first is the V-to-I, such as English; the second is the V-to-V type, such as Mandarin Chinese. In the first type, V moves to a higher functional head I, and it can license a weak NP at the subject position, namely Spec-IP. In the second type, since the lower V only moves to the higher V (or v), weak NPs cannot occur higher than the highest VP (higher VP or vP). However, it is observed in Mandarin Chinese, that weak NPs can be licensed above vP in sentences with modals. To account for this phenomenon, Tsai adopts Diesing’s Mapping Hypothesis (Diesing 1992) and extends it into the Extended Mapping Hypothesis, as in (5).

(5)  
(a) Mapping applies cyclically, and vacuous quantification is checked derivationally.  
(b) Material from a syntactic predicate is mapped into the nuclear scope of a mapping cycle.  
(c) Materials from XP immediately dominating the subject chain of a syntactic predicate (excluding the predicate) is mapped outside the nuclear scope of a mapping cycle. A subject chain is an A-chain with its tail in a subject position.

The EMH follows Diesing’s hypothesis that the existential closure is applied to the predicate. In sentences with modals, the verb moves up to adjoin to the modal. Thus, the licensing domain of the weak NP is extended to ModP. See (6).

(6)

(From Tsai 2001a: 147)
You as a modal functions as the existential closure itself and can license a weak NP at the VP-internal subject position. The EPP feature on Infl is checked by a pro merged at Spec-IP. As we can see in (7), you can license weak NPs, like the modal de in (8). The difference between you and other modals is that the subject does not move out of Spec-VP/vP in the you construction.

   I two CL book read-EXP three CL books not read-EXP
   ‘I have read two books, not three.’
   
   b. Wo you liang ben shu nian-guo,
   I have two CL book read-EXP
   you san ben shu mei nian-guo.
   have three CL book not read-EXP
   ‘I have read two books, not three.’

   six CL person lift-up- PERF that CL stone
   ‘Six people lifted up that stone.’
   
   b. Liu ge ren tai-de-qi na kuai shitou.
   six CL people lift-able-up that CL stone
   ‘Six people are able to lift up that stone.’

In conclusion, viewing you as a functional head has several benefits. First, it explains why you always appear in the sentence-initial position, and it can never appear before objects, as shown in (9).

(9)  *Ta kangdao-le you ren.
   he see- PERF have person
   Intended reading: ‘He saw some one.’

It is because in the you existential, you is merged higher than the VP-internal subject. Thus it is impossible for you to appear right before the object. Second, you can only subcategorize for an indefinite NP, whose distribution is highly restricted due to the Definite Effect (Huang 1987). This can be explained by treating you as an existential quantifier that binds an indefinite NP.

2.2. The verbal analysis of the existential you in previous researches

In works such as Teng 1978, Li 1990, and Her 1991, the existential you is treated as a verb, along with the possessive you and the locative/temporal you. According to Teng (1978), the existential you is a “presence verb.” The you existential is similar to the locative/temporal you construction, only that the temporal/locative element is not explicitly stated, possibly due to some kind of redundancy deletion. Thus, the you existential is a temporal/locative sentence, and is always relevant to some particular time or place. Li (1990) adopts Teng’s verbal analysis of you, and further points out that there is a difference between the English and Mandarin existential sentences. Compare the two sentences below:
I know that there are ghosts.

Wo zhidao you gui.
I know have ghost
‘I know there are ghosts.’

Mandarin Chinese is different from English in that the post-you NP in sentences like (11) must be specific. In other words, the entity denoted by this NP exists in a specific time or location. On the other hand, the English counterpart (10) can have either a general or a specific interpretation. That is to say, the ghosts can exist universally or in a specific time or location.

3. Problems with the previous researches

Under the functional analysis, a distinction is made between the functional you and the verbal you. However, as pointed out by Teng (1978) and Li (1990), in many cases it is hard to differentiate the functional you from the verbal you.

First, there is no clear distinction between the possessive you, the locative/temporal you, and the existential you, especially the latter two, as shown in (12a-b) and (13a-b) below:

(12) a. Wuzi-li you yi ge ren zai chi fan. 
house-inside have one CL person at eat meal
‘There is a person eating meal in the house.’
b. (Wuzi-li) you yi ge ren zai chi fan.
house-inside have one CL person at eat meal
‘There is a person eating meal (in the house).’

(13) a. Zuotian you yi ge qinqi zai wo jia kan TV. 
yesterday have one CL relative at my house watch dianshi.
‘Yesterday there was a relative of mine who watched TV at my house.’
b. (Zuotian) you yi ge qinqi zai wo jia kan TV.
yesterday have one CL relative at my house watch dianshi.
‘(Yesterday) there was a relative of mine who watched TV at my house.’

According to Li (1990), the location phrase as in (12a) and the temporal phrase as in (13a) are both NPs, serving as the subject arguments, not adverbs. Also according to Lin (2008), the locative subjects in Mandarin Chinese are merged directly at the subject position; they do not arise from locative inversion. The meanings of (12b) and (13b) are roughly the same as (12a) and (13a), the only difference being the information provided by the locative/temporal subject. Thus, the locative/temporal existential is just a you existential with an overt subject that denotes a specific time or place, as pointed out by Li (1990) and Teng (1978).

Here we would like to further point out that there is no clear distinction between the possessive you and the existential you either. The subject of the possessive you can also be omitted under sufficient information, as shown in (14) and (15).
Wo you mou zhi gou tebie ai jiao.
‘I have some CL dog particularly like bark

‘I have a dog which is particularly fond of barking.’

(Wo yang-le henduo zhi gou.)
I pet-PERF many CL dog
You mou chi gou tebie ai jiao.
‘I petted many dogs.) One of them is particularly fond of barking.’

‘One of the dogs is particularly fond of barking.’

In (15), if the bracketed part is implied or is already known to the hearer, the second part of the sentence in (15) is only slightly different from the sentence in (16). We can view (14) as a sentence in which the specific dog is restricted to one of those possessed by the subject. In this sense, the meaning of this second part of the sentence in (15) is similar to that of (14). There seems to be no reason to believe that sentence (16) and sentence (14) have different structures, except that (14) has an overt subject.

Second, the existential you can occur with at least one modal. According to Lin (2006), there is a hierarchy among the Mandarin modals, as shown in (17).

\[
\text{Necessity} > \begin{cases} 
\text{Possibility} \\
\text{Obligation} 
\end{cases} > \begin{cases} 
\text{Future} \\
\text{Permission} \\
\text{Volition} 
\end{cases}
\]

(From Lin 2006: 8)

As we can see in (18), the low modals such as hui ‘will’, keyi ‘may’, and bixu ‘need’ all precede you. This shows that even if you is a modal, it must be merged lower than all other modals, which makes it very similar to a verb.

a. Hui you san ge ren guolai zhu.
will have three CL person come.over live
‘There will be three people who come over and live here.’

b. Bixu you renshou guolai bangmang,
need have helpers come.over help,
huiyi cai neng jixu jinxing.
conference only can keep proceed
‘There must be helpers coming over to help so that the conference could continue.’

\(^1\) According to Lin and Tang (1995) and Lin (2006), modals in Mandarin Chinese are verbs. However, the functional analysis of you assumes that the modals are functional elements rather than verbs. We will not go into the relevant questions.
c. Keyi you liang ge ren kangshou chian-men,  
may have two CL people guard front-door  
san ge ren kangshou hou-men.  
three CL people guard back-door  
‘We may have two people guarding the front door, and three people guarding the back door.’

Of course, merging lower than all the modals does not stand as strong evidence for the verbal status of you, since under the functional analysis, you can be assumed to be the lowest modal. However, you doesn’t have a modal meaning (it is not intensional), and its position is lower than any known modal. All these cast doubt on the modal status of you. All that you does is only quantify over the post-you NP, without giving any information of aspect, tense, or modal force for the sentence.

Third, as long as there is sufficient information, you can license a definite NP, as shown in (19a) to (19c).

(19) a. Q: Keting-li you shei zai da diandong?  
living.room-inside have who at play video-game  
‘Who is in the living room playing video games?’
A: You Laowang-de nuer zai da diandong.  
have Laowang’s daughter at play video-game  
‘There is Laowang’s daughter playing video games.’

b. You Hong-Shizi-Hui jiunan dui,  
have Red-Cross rescue team  
zaimin keyi shao shou dian ku.  
refugees can less suffer a little pain  
‘With the Red Cross rescue team, the refugees can suffer less pain.’

c. You Lisi zai women gongsi, shi quanti yuangong-de buxin.  
have Lisi at our company is all staff’s misfortune  
‘With Lisi in our company, it is a misfortune for all of the staff.’

Note that in (19a), the answer is a complete sentence; it is not necessarily a sentence with the locative NP subject omitted. Compare (19a) with (20):

(20) a. Q: You shei zai keting-li da diandong?  
have who at living.room-inside play video-game  
‘Who is playing video games in the living room?’

have Laowang’s daughter at play video-game  
‘There is Laowang’s daughter playing video games.’

Unlike (19a), (20a) does not have a locative NP in its subject position. (20b), the answer to (20a), is exactly the same as the answer in (19a). Thus, although you often appears with indefinite or weak NPs, it can also appear with a strong NP. At least we can say that you is not always a quantifier that licenses a weak NP.

Furthermore, according to Huang (1987), one piece of evidence for the existential you to be an non-verbal Infl element is that it cannot be added with any aspect marker, as shown below in (21):
However, not all aspect markers are illegitimate with the existential you. For example, the perfective marker le is much better than the durative marker zhe or the experiential marker guo, as shown in (22):

(22)  You-le nianyu zai chizi-li,
      have-PERF catfish at pond-inside,
      jiu bu yong tanxin zhang jiejue le.
      then not need worry grow wigglers PRT
      ‘As long as there are catfish in the pond, we don’t need to worry about the growing of wigglers.’

Thus, using aspect markers as evidence to rule out the possibility that you is a verb is not always persuasive, since the grammatical judgments of these sentences depend on the aspect markers used.

In conclusion, there is no clear-cut distinction between the so-called verbal you and the “functional” you. In the next section, we propose that the existential you is the main verb of the sentence. And the post-you XP, which is considered the main predicate of the sentence in previous functional analyses, should be treated as an adjunct CP.

4. The structure of the existential you sentence

In this section we present evidence for the claim that XP is an adjunct. If XP is an adjunct, then you has to be the main verb of the sentence. The evidence includes the following: XP can actually be omitted; the post-you NP can appear in a topic-like position; and, XP exhibits the CED effect.

4.1. The condition on the obligatory presence of XP

Although in a sentence like (23a) XP seems to be obligatory, a you existential can be grammatical without XP, as shown in the contrast between (23b) and (24).

      have dinosaur DISP vegetable-filed-inside MOD tomato eat-up-PERF
      ‘There are dinosaurs that ate up the tomatoes in the vegetable field.’

b. ??You konglong.
      ‘There are dinosaurs.’

(24)  You gui, ye you shangdi.
      have ghost also have God
      ‘There are ghosts, and also God.’
Sentence (24) is similar to what is called an ontological existential sentence in Milsark’s (1974) sense. Milsark differentiates three kinds of existential sentences in English: (i) ontological, (ii) locational, and (iii) periphrastic, as illustrated below:

(25) There are no six-legged cats. (Ontological)
(26) There was a man in the garden. (Locational)
(27) There was a ship sunk. (Periphrastic)

In a broad sense, the grammaticality of an ontological sentence like (24) can be explained by Grice’s Implicature of Quantity (Grice 1978). Compare (24) with (23b). The reason why the former is grammatical, while the latter is not, is because (24) provides some new information (a.k.a. the actual existence of the divinity and spirits). There is no need to add an XP to provide more information. On the other hand, (23b) is only marginally acceptable. When (23b) is meant to be a claim about the actual existence of dinosaurs, no new information is provided, since the existence of dinosaurs is a common knowledge to people. However, when the sentence is meant to assert that there are dinosaurs in a particular time or location, the sentence will be acceptable, since this is a piece of nontrivial information and hence is informative.

This is even more obvious in sentences like those in (28). The ungrammaticality of (28a) comes from the uninformativeness of the sentence, since it is cognitively hard to conceive of the existence of three people as being informative in any way (without giving a specific time or location), because billions of people exist in the world. However, (28a) can be saved by additional information put into the sentence. This doesn’t have to be an XP. In (28b) the sentence has the sentence-final inchoative particle le. The particle le brings in the sense of change of state, namely from less than three people to three people (in a specific setting understood to the speaker and the hearer). This is clearly informative. So informativeness determines whether an XP is required. Syntactically, XP doesn’t have to occur.

(28) a. *You san ge ren.
   have three CL person
   Intended reading: ‘There are three persons.’
   b. You san ge ren le,
   have three CL person PRT
   (zheyang women bu yong tanxin ren bu go le.)
   this-way we not need worry person not enough PRT
   ‘There are already three people, and we do not need to worry that there are not enough people.’

4.2. Post-you NP in a topic-like position

The post-you NP constituent can appear in a topic-like position, as in (29). No matter whether this post-you NP is base-generated in the topic position, as
suggested by the Generalized Control analysis (Huang 1982), or moves there from the position after *xinshang* ‘admire’, *you* cannot be an Infl element or a modal.

(29)  You yi ge tongxue [wo hen xinshang].

    have one CL classmate I very admire
    ‘There is a classmate of mine whom I admire very much.’

If we adhere to the functional analysis and take *you* to be an Infl element or a modal, we have to assume an additional subject-predicate structure within VP or vP excluding the in-situ subject argument (i.e. the post-*you* NP). Such a structure is unheard of and makes no sense. If the post-*you* NP is the (VP-internal) subject of the sentence, we will have a hard time identifying the status of *wo* ‘I’ in (29). A more plausible analysis is to take the constituent XP (the bracketed portion in (29)) as a clausal structure. It is an adjunct clause with an empty operator moving to the initial position predicated of the post-*you* NP.

### 4.3. The CED effect

XP appears to show the CED effect. For example, the *you* existential cannot be the complement of the passive verb *bei* in the Mandarin passive construction. According to Huang (1999), the Mandarin *bei* construction is similar to the English *tough* construction, which involves A’-movement of a null operator and predication, as in (30):

(30)  

As we can see in (30), the object in the embedded clause is a null operator, which moves to the initial position of the embedded clause to be predicated of the matrix subject.

The *you*-NP cannot appear immediately after *bei*; note that the sentences in
(32) are all ungrammatical. If you is a modal or an Infl element, the structure of the bei passive would be like (31). However, if (31) is the correct analysis, there seems to be no particular reason why the sentences in (32) should be ungrammatical. A more natural explanation for the ungrammaticality of the sentences in (32) is that the null operator cannot move at all, since it originates in an adjunct island, namely the XP.

(31) \[ [TP Subject bei [TP OPi \ldots [ModP/IP [Mod'/I' you NP [XP V t], ]]]] \]

(32) a. *Na ben shu bei you san ge ren mai le.
That CL book PASS have three CL person bought PERF
‘That book was bought by three people.’
b. *Na ben shu bei you wo-de nuer mai le.
that CL book PASS have my daughter bought PERF
‘That book was bought by my daughter.’
c. *Na ben shu bei you gui mai le.
that CL book PASS have ghost bought PERF
‘That book was bought by some ghost.’

The you-NP cannot appear in the gapless bei sentences either. A gapless passive involves the movement of the “outer object” of the embedded predicate (Huang, Li and Li 2004). See (33a) and (33b).

(33) a. Lisi bei Wangwu ji-chu-le yi zhi quanleida.
Lisi PASS Wangwu hit-out-PERF one CL homerun
‘Wangwu hit a homerun on Lisi.’

b. `Lisi hai Wangwu [e] `ti ji-chu-le yi zhi quanleida
Lisi BEI Wangwu him hit-out-PERF one CL homerun
‘Lisi had Wangwu hit a home run on him.’

(From Huang, Li and Li 2004: 38)
(34) *Lisi bei you yi ge ren ji-chu-le yi zhi quanleida.
    Lisi PASS have one CL person hit-out-PERF one CL homerun
    ‘Someone hit a homerun on Lisi.’

If we adopt the functional analysis, the ungrammaticality of (34) would be hard to explain, since there doesn’t seem to be anything that prevents you from occurring in the embedded Infl or Modal position. A better explanation, as we have pointed out, is that (34) is ruled out for the CED effect, since the Op moves out of an adjunct island. This indicates that the XP is an adjunct.

5. Further evidence that shows the adjunct is a CP: Left-periphery

There is further evidence about the left periphery that shows that XP is not only an adjunct, but is an adjunct CP. According to Rizzi (1997, 1999), elements such as Force, Focus and Topic are placed in the left periphery of a sentence, which is at the CP level. In the existential you construction, a speaker-oriented evaluative adverb juran ‘surprisingly’ can be placed at between the post-you NP and XP, as in (35). This shows that XP should be a CP.

(35) You san ge ren juran bu hui jia chi fan.
    have three CL person surprisingly not return home eat meal
    ‘It is surprising that there are three people who do not go home to have meal.’

One may argue that juran can appear lower than the subject as well, as in (36). This can be explained if the subject in (36) is topicalized to the Topic position in the left periphery.

(36) Lisi juran bu hui jia chi fan.
    Lisi surprisingly not return home eat meal
    ‘It is surprising that Lisi did not go home to eat meal.’

On the other hand, if you is an Infl element or a modal, it is difficult to explain why the post-you NP can appear before the speaker-oriented adverb, since it does not make sense to say that you and the vP-internal subject both move to the topic position. Thus one may need to assume that the post-you NP in (35) is base-generated in a left-periphery position, which is very unlikely under the functional analysis.

An even more compelling piece of evidence comes from (37). In (37) the XP is itself a topic structure. This sentence once again shows that the XP must be a CP.

(37) You yi ge ren [ shueiguo zhi chi xianjiau ].
    have one CL person fruit only eat banana
    ‘There is a person who only eats banana among all the fruits.’
6. Conclusion

In this paper, we examine you in the existential construction and argue that it is the main verb of the sentence, rather than a functional category that merges above the predicate. The post-you NP is an object, and the XP is an adjunct CP adjoined to the predicate. Under this analysis, the existential you does not arise from the grammaticalization of the verbal you; it is a verb, on a par with the possessive you and the locative/temporal you.

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