

Contextualized Existential Constructions in Mandarin Chinese

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ABSTRACT

This paper proposes that in addition to the typical “out-of-the-blue” existential construction, a kind of contextualized existential construction exists in Mandarin Chinese. This form does not exhibit the predicate restriction observed in typical existential constructions cross-linguistically. It is argued that this type of existential construction involves a topic-comment structure and functions as a subtype of the Existential Coda Construction discussed by Zhang (2007, 2008). The current analysis also explains the apparent lack of a definiteness restriction for specific Mandarin Chinese existential constructions.

Keywords: existential construction, information structure, topic, predicate restriction, definiteness restriction

1. Introduction

The basic components of a typical existential construction in English are shown in (1). The expletive *there* is the grammatical subject, followed by a copula verb. The main NP is the Pivot and is followed by a predicate, which is referred to as the Coda.

- (1) There is a cat in the classroom.
 EXPLETIVE COPULA PIVOT CODA

For existential constructions cross-linguistically, it is well-known that there exist two distinctive semantic/discourse features (see Bentley et al., 2013; McCloskey, 2014; McNally, 2011; Moro, 1997 and many others). The first feature is a definiteness restriction, in which the Pivot NP cannot be a Proper Noun, pronoun, or definite NP, as shown in the English examples (2) through (4).

* This paper is part of my research sponsored by the Ministry of Science and Technology, Taiwan (Grant No. MOST 109-2410-H-415-034). I hereby acknowledge the financial support of the MOST. All errors remain mine.

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- (2) *There is John in the classroom.
- (3) *There is you in the classroom
- (4) *There is the cat in the classroom.

The second feature is a predicate restriction. In English and many other languages, the Coda in existential constructions must be a stage-level predicate (in short S-level predicates), as shown in (5). If the Coda is an individual-level predicate (in short I-level predicates), the sentence will become ungrammatical, as shown in (6).¹⁾

- (5) There were many cats available. (stage-level)
- (6) ??There were many cats intelligent. (individual-level)

In Mandarin Chinese, the typical existential construction is referred to as a ‘*you*-existential construction,’ and is illustrated in (7). Unlike in English, there is no expletive subject in the structure, and the copula verb is *you* (‘have’).

- (7) You [yi-zhi mao] [zai jiaoshi li].
 have one cat at classroom inside
 COPULA PIVOT CODA

Interestingly, it has been noted that there is no Coda restriction in the Mandarin *you*-existential construction, as shown in (8) and (9). Both stage-level predicates and individual-level predicates are acceptable as a Coda in the sentences.

- (8) You yi-ge xuesheng [zai jiaoshi li]. (stage-level)
 have one-CL student at classroom inside
 ‘There is a student in the classroom.’
- (9) You yi-ge xuesheng [hen congming]. (individual-level)
 have one-CL student very smart
 ‘There is a student who is very smart.’

In the following discussion, I primarily focus on Mandarin Chinese existential

1) However, please refer to Abbott (1993) and Table 2 in Section 3.1 for the possibility that English can also use I-level predicates for Coda in a different kind of existential construction.

constructions (ExCs) that have individual-level predicates. In Section 2, I first examine a previous proposal by Liu (2011) about the structure and properties of Chinese ExCs and argue that it cannot fully explain the behavior of the *you*-existential construction in Mandarin Chinese. As an alternative, I propose that there are two different types of *you*-existential construction. In Section 3, I examine one of the types, which needs a context and involves a topic-comment structure. In Section 4, I propose that this contextualized *you*-existential is a subtype of the Existential Coda Construction discussed by Zhang (2007, 2008). I also show how the current analysis supports Chang's (2004) observation that there is no definiteness restriction in certain Chinese existential constructions. I conclude the paper in the last section.

2. Two Judgments

2.1. A previous proposal

In this section, I first examine a proposal by Liu (2011) that relates the noted absence of a Coda restriction in the Chinese ExC to its topic-comment structure. Recall that the English ExC allows only a stage-level predicate, but the Chinese ExC allows not only a stage-level predicate, but also an individual-level predicate.

There are several proposals to explain the coda restriction in English. However, two kinds of proposals are specifically mentioned and rejected by Liu (2011). The first is Chierchia's (1995) argument involving vacuous quantification. Chierchia proposes that the individual-level predicate has a Gen operator, and the Gen needs to bind an NP argument and a clause argument. If there is an individual-level predicate in the Coda, the Gen operator has to bind both the individual-level predicate and the pivot NP. This will result in vacuous quantification since there is nothing for the existential quantifier to bind. The second approach Liu mentions is that of McNally (1992) and Francez (2007) who suggest that the referent of the pivot NP is restricted by the spatio-temporal parameters of the Coda. They propose that an individual-level Coda cannot define these spatio-temporal parameters, which then makes an individual-Coda unacceptable in existential constructions. Liu (2011) points out that since the Chinese ExC does in fact allow individual-level predicates, neither of the above kinds of proposals would seem to apply.

Instead, Liu (2011) proposes that the Chinese ExC does not have the Coda

restriction because it is essentially different from the English ExC. Before reviewing her arguments, however, we have to take a small detour to introduce two types of judgments by Kuroda (1972):

[...] There are two different fundamental types of judgments, the categorical and thethetic. Of these, only the former conforms to the traditional paradigm of subject-predicate, while the latter represents simply the recognition or rejection of material of a judgment. Moreover, the categorical judgment is assumed to consist of two separate acts, one the act of recognition of that which is to be made the subject, and the other, the act of affirming or denying what is expressed by the predicate about the subject. [...] (Kuroda, 1972, p. 154)

The relevant examples are cited in (10) and (11).

(10) Inu-wa hashitte iru. (Categorical judgment)
Dog-TOP running is
'The dog is running.'

(11) Inu-ga hashitte iru. (Thetic judgment)
dog-NOM running is
'There's a dog running or A dog is running.'

(Kuroda, 1972, p. 161)

According to Kuroda, the categorical judgment in (10) seems to divide the sentence into two parts. We first recognize the subject/topic of the sentence and then affirm/deny what is expressed by the predicate/comment about the subject/topic. In this example, the dog is identified first, and then the following running event is attributed to the dog. Nagaya (2019) points out that example (10) can be used appropriately as a response to the question "What about X?". This kind of question obviously presupposes the existence of X, which is the subject/topic in (10). Moreover, as noted by Liu, the NP marked by *-wa* in (10) cannot be indefinite nonspecific because of the presuppositional nature of the subject/topic.

On the other hand, the example (11) with athetic judgment simply presents a situation with a participant. Hence, the example just conveys the existence of a dog-running event. For Nagaya (2019), this is the sentence which can be used to answer the question "What happened?".

Liu goes on to point out that we can link the two kinds of judgments with S-level and I-level predicates, respectively. For example, while I-level predicates must have strong NPs as the subject, S-level predicates can have either strong or weak NPs as the subject, as shown in (12).

- (12) a. The student is sick. (S-level; strong NP)
 b. The student is smart. (I-level; strong NP)
 c. Some students are sick. (S-level; weak NP)
 d. *Some students are smart. (I-level; weak NP)

Liu notes that the above correlation is expected. This is because for I-level predicates, they denote permanent properties. It is then natural to link an I-level predicate to a presupposed entity in the discourse. In contrast, S-level predicates denote transient properties. If one understands the predication as a temporary event, it is then not so relevant whether the subject is presupposed or not.

However, the correlation between the predicate and judgment types (thetic or categorical) is not exact. Liu points out that since example (10) has an S-level predicate, this would mean that categorical judgments can also be associated with the use of an S-level predicate. The above findings and discussion are summarized in Table 1.

Table 1. Judgements, predicate types and subject

	Thetic judgment	Categorical judgment
Predicate type	S-level	S-level, I-level
Subject	Definite/indefinite	Definite/Generic

(Liu, 2011, p. 63)

Given the parameters noted in Table 1, the English ExC, which allows only an S-level predicate, would correspond to a thetic judgment (see also Basilico, 1997; Ladusaw, 2000; Walker, 2009, Zucci, 1995 among others). On the other hand, since the Chinese ExC allows both S-level and I-level predicates, Liu concludes that the corresponding judgment type would be categorical.

2.2. Two types of existential construction

As discussed above, Liu proposes that the Chinese ExC, which is associated with a categorical judgment, is different from the English ExC, which corresponds to athetic judgment. However, recall that the categorical reading divides a sentence into two parts: the subject/topic and the predicate/comment. It is well known that existential constructions cross-linguistically express a simultaneous assertion of the event and participant. Hence, when a typical ExC is used, the corresponding judgment is usually considered to be thetic. Liu's conclusion that the Chinese ExC is unique and only allows a categorical reading seems, therefore, to require further scrutiny. Indeed, if we use the tests for thetic judgments discussed in Paul et al. (2020), we find an interesting pattern for ExCs in Mandarin Chinese that appears to complicate Liu's analysis.

Paul et al. (2020) note that a thetic ExC can be uttered "out of the blue" and can also be used as a potential answer to a global question like "What happened?" (see also Nagaya, 2019). We would expect then that no Chinese ExC would be able to pass these two thetic tests if Chinese ExCs are only associated with categorical judgments. Yet, we do find some Chinese ExCs that are allowed under these two tests, as shown in (13) and (14), respectively.

(13) To be uttered "out-of-the-blue"

- a. You yi-ge xuesheng lai-le. (S-level predicate)
have one-CL student come-ASP
'There comes a student.'
- b. #You yi-ge xuesheng hen congming. (I-level predicate)
have one-CL student very smart
'There is a student who is very smart.'

(14) Fasheng-le sheme (shi)? (What happened?)

- a. You yi-ge xuesheng lai-le. (S-level predicate)
have one-CL student come-ASP
'There comes a student.'
- b. #You yi-ge xuesheng hen congming. (I-level predicate)
have one-CL student very smart
'There is a student who is very smart.'

Example (13) shows that the existential construction can be uttered out of the blue if the Coda is an S-level predicate, as in (13a), but not if the Coda is an I-level predicate, as in (13b). Notably, a way to improve the sentence is to use it in a context. For example, with context, sentence (13b) becomes grammatical in (15).

- (15) Zhe-ge ban shang,
This-CL class up
you yi-ge xuesheng hen congming.²⁾
have one-CL student very smart
'In this class, there is a student who is very smart.'

The global question test shows the same pattern as the out-of-the-blue test. The use of an ExC with an S-level predicate is acceptable, as illustrated by the question response in (14a). However, the use of an ExC with an I-level predicate is not, as illustrated in (14b). Based on these two tests, the grammaticality of (13a) and (14a) clearly indicates that some Chinese ExCs with S-level predicates can be associated withthetic judgments. This conclusion is different from the proposal by Liu (2011), who has argued that Chinese ExCs are always associated with categorical judgments.

To explain the facts that we have observed so far, we will explore whether there could in fact be two different types of *you*-existential in Mandarin Chinese – one like the familiar cross-linguistic existential construction with athetic reading and another type with a categorical reading.

3. The Properties of the *You*-existential with a Categorical Reading

In this section, I would like to further discuss the ExC with a categorical reading in Mandarin Chinese since it seems to be a type of ExC distinct from typical ExCs in other languages.

3.1. The contextualized existential and its pivot NP

Recall that typical existential constructions cross-linguistically have athetic

2) The Pivot NP can also be a bare NP without the numeral in (15). As pointed out by one of the reviewers, Korean's counterpart of example (15) without the numeral is also possible.

reading and can be uttered out of the blue and used as an answer to a global question, while ExCs with a categorical reading cannot be.

These opposite properties of thethetic ExC and the categorical ExC are reminiscent of Abbott's (1993) delineation of two different kinds of existentials – the noncontextualized and the contextualized existential. A summary of their respective properties is shown in Table 2, as cited in Chang (2004).

Table 2. Two kinds of existentials

	Noncontextualized existentials	Contextualized existentials
Usage context	Can appear with/without contexts Naturally occur at the beginning of a discourse	Must appear with contexts Cannot initiate a discourse
Properties	The NP does not presuppose the existence of its referent. The NP has a locational or predicative phrase following it. The XP is a separate constituent from the NP and is usually filled.	The NP presupposes the existence of its referent. The XP is part of the NP.
Example and structure	There is [_{NP} a book] [_{XP} on the desk].	A: What can I use to prop the door? B: There is [_{NP} the book on the desk].

(Chang, 2004, p. 2)³

From the usage context noted in the table above, we can infer that the noncontextualized existential is equivalent to the ExC with athetic reading. An ExC with athetic reading can appear without a context and therefore can be uttered out of the blue. On the other hand, the ExC with a categorical reading is equivalent to the contextualized existential since it cannot be uttered out of the blue and must appear with a context. Interestingly, a salient property of the contextualized existential is that its NP is presupposed. Recall that Liu (2011) also mentions that the NP in sentences with a categorical reading is presupposed (see also Nagaya, 2019). The presupposition requirement is therefore incompatible with an out-of-the-blue utterance and the ExC has to appear within a context.

Given this presupposition requirement, it seems surprising that the *you*-NP in the ExC with a categorical reading in (15), repeated here as (16), is indefinite.

3) The labels in the left column haven been added by the author of this paper.

- (19) Zhangsan ba san-dong fangzi gai-de hen piaoliang.
Zhangsan BA three-CL house build-DE very beautiful
'Zhangsan built three houses and they were very beautiful.'

In this example, when the speaker utters the sentence, he/she would have some awareness of these three houses, such as their location or style, and so on. This is quite similar to the phenomenon observed in example (16).

3.2. Topic-comment

If we take a look at the structural analysis of the two types of ExC in Table 2, we can see that they have different structures. In the noncontextualized ExC, the Pivot NP and the Coda belong to different constituents; whereas, in the contextualized ExC, the Pivot NP and the Coda form a constituent. Since the contextualized ExC can be viewed as equivalent to the ExC with a categorical reading, this would imply that the ExC with a categorical reading also has a structure in which the Pivot NP and the Coda form a constituent. In the following discussion, I would like to explore the relationship between the syntactic structure of the ExC with a categorical reading and its information structure.

Recall that for Kuroda (1972), a categorical judgment is considered a double judgment corresponding to the two parts of a sentence - the subject/topic and the predicate/comment. In the literature, reference has been made to existential constructions having a topic-comment structure. For example, McNally (2011) alludes to the topic-comment structure of non-thetic ExCs:

[...] It is often claimed of existential sentences that they are thematic; or, alternatively, ...they are assumed to have a topic-comment structure (e.g. Babby 1980 for Russian, Kim 1997, and Leonetti 2008 for Romance and a general survey). [...]

(McNally, 2011, p. 1833)

Moreover, the topic-comment structure has been mentioned in Huang (1987) in his analyses of Chinese existential constructions:

[...] According to these analyses, the XP is treated as a predicate. The relation that the XP (the Coda) has with the preceding NP (the Pivot) is that between

subject and predicate, or between topic and comment. [...]

(Huang, 1987, p. 71)

Recently, there have also been observations and proposals connecting the *you*-existential construction with a topic-comment structure. For example, Shi (2000), observes that a sentence like the one in (20) is quite common in Chinese, and the combination of *you* and the *you*-NP seems to function as a topic.

- (20) You yi-jian shi, wo xiang gaosu mama..
have one-CL matter I want tell mother
'There is something (and) I want to tell mother (about it).'

(Shi, 2000, (10))

Fang and Lin (2008) propose that the post-*you* NP is in a topic-like position, and that the Coda should involve an adjunct CP. For example, they suggest that in example (21), there is an evaluative adverb *jurán* ('surprisingly') between the *you*-NP and the Coda, and that the evaluative adverb is located in the CP domain (see Rizzi, 1997; Cinque, 1999). Since *you* and the *you*-NP are higher than the evaluative adverb, they propose that the Coda should be a CP.

- (21) You san-ge ren juran [_{CP} bu huijia chifan].
have three-CL person surprisingly not return.home eat.rice
'It is surprising that there are three people who do not go home to have meal.'

(Fang and Lin, 2008, (35))

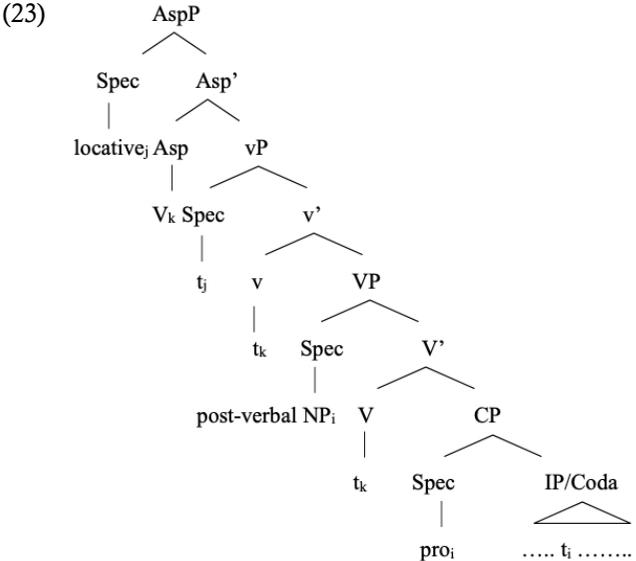
They offer further evidence from examples like (22) where the Coda itself can be a topic structure.

- (22) You yi-ge ren [_{CP} shueiguo zhi chi xianjia].
Have one-CL person fruit only eat banana
'There is a person who only eats banana among all the fruits.'

(Fang and Lin, 2008, (37))

Finally, Liu (2011) also proposes a topic-comment structure for the *you*-existential construction. Recall that to explain the allowance of both S-level and I-level predicates in the Chinese ExC, Liu has proposed that the Chinese ExC has a

categorical reading. A categorical reading divides a sentence into two parts, which is reminiscent of a topic-comment structure. Liu's (2011) proposed structure is shown in (23). In (23), there is a CP in the structure, and the topic-comment relationship between the pivot NP and the Coda is established in this CP. Although the Pivot NP is based-generated at Spec, VP, it is co-indexed with a *pro* in the Spec, CP position, which has moved from the IP/Coda. The Coda will remain in IP for sentences like (24a). For a sentence like (24b), the sentence-initial locative phrase undergoes movement from the IP/Coda to Spec, AspP.



- (24) a. You yi-ge nusehng zai change.
 have one-CL girl PROG sing
 'There is a girl singing.'
- b. Jiaoshi-li you yi-ge nusheng hen shengqi.
 classroom-inside have one-CL girl very angry
 'There is a girl who is very angry in the classroom.'

As illustrated above, there already exist proposals arguing that certain Chinese existential constructions involve a topic-comment relationship. In the next section, I further explore this possibility for the ExC with a categorical reading in Mandarin Chinese.

4. The Proposal

4.1. The categorical ExC vs. the existential coda constructions

Before specifying exactly what kind of topic-comment structure might be found in an ExC with a categorical reading, I would like to discuss a relevant construction. Zhang (2007, 2008) has discussed the following sentences in (25) and calls them Existential Coda Constructions.

- (25) a. Ta mai-le yi-zhang zuozi san-tiao tui.
He buy-ASP one-CL table three-CL leg
'He buys a table which has three legs.'
- b. Wo jiao-guo yi-ge xuesheng hen congming.
I teach-ASP one-CL student very smart
'I taught a student who is very smart.'

These sentences are quite unique and traditionally have been referred to as Pivot Constructions (see Li and Thompson, 1981). In each sentence, the underlined NP is the object of the preceding verb but also seems to function as the subject for the following predicate. The underlined NP is referred to as the Pre-Coda Nominal (PCN) because Zhang considers the predicate that follows to be the Coda. In one of Zhang's examples, shown in (26), the main verb is *you* ('have'), and the object NP following *you* is modified by a Coda.

- (26) A-Q you yi-ge nuer huang toufa.
A-Q have one-CL daughter yellow hair
'A-Q has a daughter who has yellow hair.'

(Zhang, 2007, (21b))

The sentence in (26) recalls the ExC with a categorical reading in (27) under the current discussion, except that there is an overt subject in example (26).

- (27) You yi-ge nusheng hen congming.
have one-CL girl very smart
'There is a girl who is very smart.'

Indeed, there are the following notable similarities between the Existential Coda construction and the ExC with a categorical reading. First, *you* in both constructions has been proposed to be a verb in the literature. Second, their Codas can be an AP, an NP, or a PP. In other words, the Coda can be an individual-level predicate or a stage-level predicate, as shown in (28) and (29).

(28) You yi-ge nusheng hen congming/huang toufa/zai Taipei.
 have one-CL girl very smart/yellow hair/in Taipei
 ‘There is a girl who is very smart/has yellow hair/is in Taipei.’

(29) Ta you yi-ge xuesheng hen congming/huang toufa/zai Taipei.
 he have one-CL student very smart/yellow hair/in Taipei
 ‘He has a student who is very smart/has yellow hair/is in Taipei.’

Third, just as there is a topic-comment proposal for the ExC with a categorical reading, Zhang (2007, 2008) proposes a topic-comment relationship for the Existential Coda construction. For example, the Coda can be a CP in both constructions, as shown in (31), similar to the example by Fang and Lin in (30).

(30) You yi-ge ren [_{CP} shueiguo zhi chi xianjiau].
 have one-CL person fruit only eat banana
 ‘There is a person who only eats banana among all the fruits.’
 (Fang & Lin, 2008, (37))

(31) Ta you yi-ge xuesheng [_{CP} shueiguo zhi chi xianjiau].
 he have one-CL student fruit only eat banana
 ‘He has a student who only eats banana among all the fruits.’

The similarities noted above between the ExC with a categorical reading and the Existential Coda Construction strongly suggest that they may be the same construction. Indeed, I propose that the ExC with a categorical reading is a subtype of the Existential Coda Construction and shares its structure, except that it has a covert subject, as shown in (32).

(32) *pro* you yi-ge xuesheng hen congming.
 have one-CL student very smart
 ‘There is a student who is very smart.’

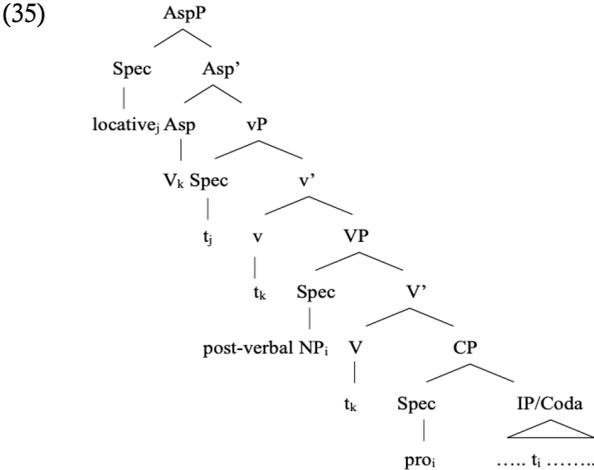
The *pro* can be overtly realized with personal subjects or locative subjects, as shown in (33) and (34). In addition to being a topic-prominent language, Lin (2008) has proposed that Chinese is also a locative-prominent language. Hence, it is not surprising that examples like (34) are widely used in daily life.

(33) Wo you yi-ge xuesheng hen congming.
 I have one-CL student very smart
 'I have a student who is very smart.'

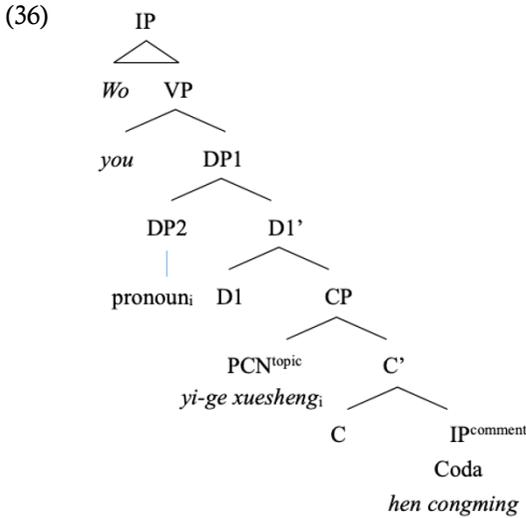
(34) Zhe-ge ban shang you yi-ge xuesheng hen congming.
 This-CL class up have one-CL student very smart
 'There is a student who is very smart in this class.'

In what follows, I would like to pursue a more fine-grained analysis of Zhang's structure for the Existential Coda Construction by comparing it with Liu's structure in (23). As observed previously, researchers seem to agree that certain Chinese existential constructions may involve a topic-comment relationship. Among the relevant proposals, Liu (2011) appears to be the only one who specifically offers a detailed structure for the topic-comment relationship observed in the ExC with a categorical reading. In comparing Zhang and Liu's proposed structures, we can start to tease apart why, under the current analysis, Zhang's structure, with some modification, better explains the behavior of the Mandarin ExC with a categorical reading.

Liu's structure, previously shown in (23), is repeated here as (35).



Turning to Zhang (2007, 2008), she proposes that the structure of the Existential Coda Construction is a kind of internally headed relative clause and has a structure like the one in (36).⁴⁾ In this structure, *you* takes a very complex DP as its object. This DP has a pronoun in the specifier, and a CP as its complement.⁵⁾ The PCN and the Coda in the Existential Coda Construction are in this CP and form a topic-comment relationship. Note that the PCN is coindexed with the preceding pronoun.^{6),7)}



There are similarities and differences between Liu and Zhang's structures. In both of them, *you* is proposed to be a verb. In addition, there is a CP to realize

4) This is in fact a modified version of Zhang's (2008) structure. For Zhang (2008), the pronoun is proposed to be an E-type Pronoun. However, here I simply use a simple pronoun in the structure. The pronoun can be considered a *pro*, following Liu (2011). The reasoning will be elaborated in Section 4.2 when we discuss the definiteness restriction.

5) According to Zhang (2007, 2008), the CP has been proposed to be a Internally Headed Relative Clause (IHRC).

6) As pointed out by one of the reviewers, the topic status of the PCN can be verified by the test by Jin (2020), in which the topic can be marked by a discourse particle *-ne*. This is shown in (i).

(i) Wo you yi-ge xuesheng-ne hen congming.
I have one-CL student-NE very smart
'I have a student who is very smart.'

7) In Chinese, it is quite natural to have a topic-like element in the embedded CP, as shown in (i).

(i) Wo zhidao [CP zhe-jian shi_{ik} [IP Zhangsān haimei wancheng t_{ik}]].
I know this-CL matter Zhangsān not finish
'I know that Zhangsān hasn't finished this matter.'

The author would like to thank one of the reviewers for bringing this to our attention.

the topic-comment relationship. However, a salient difference between these two proposals lies in what follows the verb *you*. Under Liu’s analysis, what follows *you* is a *v*P/VP. On the other hand, a DP follows *you* under Zhang’s analysis. Furthermore, the Pivot NP is outside the CP under Liu’s analysis, while it is inside the CP under Zhang’s analysis. Hence, there should be a way to distinguish these two analyses from each other. As pointed out by Zhang, it is not necessary for the topic in the Existential Coda Construction to move out from the comment. The topic can simply hold an “aboutness relationship” with the comment, as shown in (37).

- (37) Wo you [topic yi-ge xuesheng][comment ta mama_i wo zenshi t_i].
 I have one-CL student he mother I know
 ‘I have a student whose mother that I know.’

It would be hard for Liu to explain examples such as the one in (37). Recall that for Liu (2011), there is a topic chain among the Pivot NP, *pro*, and the trace of the *pro* in (35), so that a topic-comment relationship can be maintained. For an example like (37), Liu has to stipulate that the Pivot NP, which is located in Spec, VP, can also maintain an aboutness topic-comment relationship with the following CP, even though Spec, VP is not a typical topic position. On the other hand, it would be quite easy for Zhang to explain an example such as the one in (37). Under her structure, the Pivot NP is in Spec, CP, a typical topic position, and it can maintain a topic-comment relationship with the following IP, even if there is no movement involved.

If we adopt Zhang’s structure for the ExC with a categorical reading, relevant examples discussed previously from Shi (2000), Fan and Lin (2008), and Liu (2011) are well-handled. For example, sentence (20) from Shi (2000), repeated here as (38), would have a structure like the one in (39). The Pivot NP would move from TP to Spec, CP, a topic position, and it would be coindexed with a pronoun which is in the specifier of a DP.

- (38) You yi-jian shi, wo xiang gaosu mama.
 have one-CL matter I want tell. mother
 ‘There is something (and) I want to tell mother (about it).’
 (Shi, 2000, (10))

(39) You pronoun_i [CP yi-jian shi_i, [TP wo xiang gaosu mama t_i.]]

Before turning to Fang and Lin's (2008) examples (21) and (22), repeated here as (40) and (41), one unusual aspect of their analysis has to be first pointed out. They propose that the Pivot NP is in a topic-like position, but they also propose that the Coda is a CP. There seems to be a conflict here. A topic-like position should be Spec, CP. Unless they assume a multiple specifier analysis, the position of the Pivot NP is a puzzle.

(40) You san-ge ren juran [CP bu huijia chifan].
have three-CL person surprisingly not return.home eat.rice
'It is surprising that there are three people who do not go home to have meal.'
(Fang and Lin, 2008, (35))

(41) You yi-ge ren [CP shueiguo zhi chi xianjia].
have one-CL person fruit only eat banana
'There is a person who only eats banana among all the fruits.'
(Fang and Lin, 2008, (37))

Under Zhang's analysis, Fang and Lin's two examples are modified as (42) and (43), respectively. Similar to the case in (38), in (42), the Pivot NP moves from TP to Spec, CP. The evaluative adverb is in an adjoined position, or in an independent projection in a fine-grained CP, as in Cinque (1999).

(42) You pronoun_i [CP san-ge ren_i juran [TP t_i bu huijia chifan]].

I would like to propose that if the Pivot NP is a topic in (41), the sentence following it should be a TP instead of a CP, as shown in (43). As in (42), the Pivot NP also moves out of the TP to Spec, CP.

(43) You pronoun_i [CP yi-ge ren_i [TP t_i shueiguo zhi chi xianjia]].

Unlike the external topic proposal in Fang and Lin (2008), I propose that *shueiguo* ('fruit') in (43) is an internal topic (i.e. Paul, 2005), similar to the case in (44).

- (44) [_{CP} Zhangsan_i a, [_{TP} t_i shueiguo zhi chi xianjiaul]].
 Zhangsan EXCL fruit only eat banana
 ‘Zhangsan only eats banana among all the fruits.’

An argument that weighs against Fang and Lin’s proposal in (41) relates to the order between *yi-ge ren* (‘one person’) and *shueiguo* (‘fruit’). According to Badan and Del Gobbo (2011), if *yi-ge ren* (‘one person’) and *shueiguo* (‘fruit’) are both external topics, the order cannot be *yi-ge ren* (‘one person’) > *shueiguo* (‘fruit’), but has to be *shueiguo* (‘fruit’) > *yi-ge ren* (‘one person’). This *yi-ge ren* (‘one person’) is a moved topic, while *shueiguo* (‘fruit’) is an aboutness topic. For these two kinds of topics, the order should be that an aboutness topic precedes a moved topic, but not vice versa, as shown in (45).

- (45) a. Wo-de huayuan li, meiguihua_i, wo zui xihuan t_i.
 my garden inside rose I most like
 ‘In my garden, roses are the flowers that I like most.’
 b. *Meiguihua_i, wo-de huayuan li, wo zui xihuan t_i.
 rose my garden Inside I most like

Under the current analysis in (43), the order between *yi-ge ren* (‘one person’) and *shueiguo* (‘fruit’) is allowed. This is because *yi-ge ren* (‘one person’) is an external topic, and *shueiguo* (‘fruit’) is an internal topic.

Finally, the examples under Liu’s discussion, repeated in (46), can also be explained under Zhang’s analysis, as shown in (47).

- (46) a. You yi-ge nusehng zai change.
 have one-CL girl PROG sing
 ‘There is a girl singing.’
 b. Jiaoshi-li you yi-ge nusheng hen shengqi.
 classroom-inside have one-CL girl very angry
 ‘There is a girl who is very angry in the classroom.’

- (47) a. You pronoun_i [_{CP} yi-ge nusehng_i [_{TP} t_i zai change]].
 b. Jiaoshi-li you pronoun_i [_{CP} yi-ge nusheng_i [_{TP} t_i hen shengqi]].

The structure in (47a) is similar to the previous examples, in which the Pivot NP

is moved from TP. For (47b), the same derivation applies, and an overt locative subject is realized in the higher Spec, TP position.

To sum up, in this section, I have proposed that the ExC with a categorical reading is a subtype of the Existential Coda Construction, and I also show that the Zhang's topic-comment structure provides a better explanation for the previously examined existential constructions.

4.2. Not all ExCs show the definiteness restriction

In this section, I would like to discuss the definiteness restriction in ExCs in Mandarin Chinese. Let us first go over the discussion of the PCN in the Existential Coda Construction. As pointed out by Huang (1987), the Pivot NP *yi-ge meimei* in (48a) (i.e. the PCN in the Existential Coda Construction as in Zhang (2007, 2008)) must contain a numerical quantifier. A bare NP, which denotes a generic reading here, will result in ungrammaticality, as in (48b).⁸

- (48) a. Wo you yi-ge meimei huang taofa.
I have one-CL sister yellow hair
'I have a sister who has yellow hair.'
- b. *Wo you meimei huang taofa.
I have sister yellow hair

Huang proposes that this contrast is due to the requirement that the Pivot NP has to be referential. That is, the Pivot NP has to be specific. This requirement is consistent with what we have previously observed for the ExC with a categorical reading. As shown in (49), the indefinite NP is interpreted as specific. The speaker has an idea who he/she is talking about (though the addressee is not required to also know). Therefore, we can infer that this Pivot NP is an indefinite specific NP.

- (49) (Women ban) you yi-ge xuesheng hen congming.
Our class have one-CL student very smart
'(In our class), there is a student who is very smart.'

8) For a generic reading, the Pivot NP is interpreted as a definite 'kind' or 'group' of noun, but no single reference is specified or identified. In addition, as pointed by Huang (1987), even if the Pivot NP in (48b) is interpreted as an indefinite nongeneric similar to a bare plural in English, the sentence is still unacceptable.

I would in fact like to push this observation a little bit further. In line with a proposal by Chang (2004), I would suggest that the specificity of the PCN/Pivot NP can be extended to other specific NPs such as definite NPs, pronouns, and proper names.

Following Abbott (1993), Chang (2004) argues that there are two kinds of existentials in Mandarin Chinese. One is a noncontextualized existential, while the other is a contextualized existential. For the latter, there is no definiteness restriction. According to Chang (2004), the Pivot NP in the contextualized existential can be an indefinite NP, a proper name, or a definite NP, as illustrated in the following examples:

(50) A: Wo keyi song sheme gei Lisi?
I can give what to Lisi
'What can I give to Lisi?'

B: You yi-ben shu zai zuo shang
have one-CL book on table up
(ni keyi naqu gei ta).
you can take.away to him
'There's one book on the table. (You can take it to him).'

(Chang, 2004, (24))

(51) You Lisi zai jiaoshi li,
have Lisi at classroom inside
laoshi jiu bu neng fangxin.
teacher JIU not can feel.relieved
'(If) there is Lisi in the classroom, then the teacher cannot feel relieved.'

(Chang, 2004, (35A))

(52) You zhe-zhong ren lai bangmang,
have this-CL person come help
zhen shi xie tian xie di!
truly be thank heaven thank earth
'There is this type of person who came to help. Thank Heavens!'

(Chang, 2004, (30))

In addition to the above examples, I would also note that it is possible for a pronoun to be a Pivot NP, as shown in (53).

- (53) You ni zai women zhe-yi ge duiwu,
 have you at our this-one CL team
 women ying-ding le!
 we win-certain ASP
 ‘There is you in our team, and we will win for certain!’

It seems, therefore, that many kinds of specific NPs can follow *you* in the contextualized ExC, as observed above.

We have seen that the ExC with a categoral reading needs a context, and it is reasonable to equate it with the contextualized existential discussed by Chang. Furthermore, under the current proposal, the ExC with a categoral reading is proposed to be a kind of the Existential Coda Construction, and examples (50) to (53) are assumed to have covert subjects. That is, a *pro* is the subject, as shown in (54).

- (54) *pro* you ni zai women zhe-ge duiwu,
 have you at our this-CL team
 women ying-ding le!
 we win-certain ASP
 ‘Having you in our team, we will win for certain!’

It is also possible for the examples from (50) to (53) to have an overt subject. For example, in example (52), the overt subject *women* (‘we’) can be added to the sentence, and it remains grammatical, as in (55).

- (55) Women you zhe-zhong ren lai bangmang,
 we have this-CL person come help
 zhen shi xie tian xie di!
 truly be thank heaven thank earth
 ‘We have this type of person who came to help. Thank Heavens!’

Thus, it is evident that when the specificity requirement is imposed, the PCN/the Pivot NP can have various statuses. It can be an indefinite specific NP, a definite NP, a pronoun, or a proper name, with appropriate context.

At this point in the discussion, one concern regarding the PCN/Pivot NP comes to mind. Zhang (2007, 2008) has pointed out that the PCN cannot have a strong D in the Existential Coda Construction, as shown in (56).

(56) Wo you yi-ge/*na-ge/*mei-yi-ge/*da bufen xusheng hui tanqin.
 I have one-CL/*that-CL/*every/*most student can play.piano
 'I have a/*that/*every/*most student who can play the piano.'

However, this conclusion seems to be just partially right. The above restriction for the definite PCN can in fact be removed if we put the sentence in a proper context. For example, if we add another sentence to enrich the context in (56), the definite Pivot NP is allowed, as shown in (57).

(57) (Wo) you na-ge xusheng hui tanqin,
 I have that-CL student can play.piano
 zhe-ci bisai jiu buyong zao banzou le!
 this-CL contest JIU not find accompanist ASP
 'I have that student who can play the piano, so we don't have to find an accompanist for this contest!'

The possibility of a definite PCN also implies that other kinds of specific NPs such as proper nouns or pronouns should be possible as long as proper context is provided. Relevant examples are shown in (58) and (59).

(58) (Wo) you Zhangsan hui tanqin,
 I have Zhangsan can play.piano
 zhe-ci bisai jiu buyong zao banzou le!
 this-CL contest JIU not find accompanist ASP
 'I have Zhangsan who can play the piano, so we don't have to find an accompanist for this contest!'

(59) (Wo) you ta hui tanqin,
 I have he can play.piano
 zhe-ci bisai jiu buyong zao banzou le!
 this-CL contest JIU not find accompanist ASP
 'I have him who can play the piano, so we don't have to find an accompanist for this contest!'

Zhang (2007, 2008) proposes that the indefinite NP restriction relates to the pronoun in the structure (36) being an E-type pronoun and that it cannot have a

strong determiner. However, we have seen that it is possible to have definite NPs as the Pivot NP in the Existential Coda Construction. Therefore, the modification of Zhang's structure in (36), where a simple pronoun is co-indexed with the following PCN, seems to accommodate the data.

Finally, the above discussion of the Pivot NP leads to a clear distinction for the definiteness effect in Chinese existential constructions. I have shown that there are two kinds of existential construction in Mandarin Chinese, and that for the ExC with a categorical reading, the type of Pivot NP can be an indefinite specific NP, a definite NP, a pronoun, or a proper name. On the other hand, a pure ExC with athetic judgment does show the definiteness restriction. For example, when example (60) is uttered out of the blue, the Pivot NP cannot be a proper name (cf. (13a)).

- (60) To be uttered "out-of-the-blue"
*You Zhangsán lái-le!
Have Zhangsán come-ASP
'There is Zhangsán coming.'

Therefore, one has to be careful when discussing the definiteness effect in Chinese ExCs. While thethetic ExC shows a definiteness restriction, the categorical ExC does not. In light of this distinction, to simply state that the definiteness effect exists in Chinese ExCs would only be partially correct.

5. Conclusion

It is well known that the Coda Restriction is not observed in Chinese existential constructions. Unlike Liu (2011), who proposes that this is due to the fact that the Chinese ExC must be associated with a categorical judgment, I argue in this paper that boththetic judgments and categorical judgments are available in Chinese. In addition, I propose that the ExC with a categorical judgment is a subtype of the Existential Coda Construction discussed in Zhang (2007, 2008), and that the constituent following the main verb *you* should be a DP, which contains a pronoun and a CP complement. The CP structure accounts for the various topic-comment patterns observable in the ExC with a categorical judgment. Finally, in line with Chang (2004), I propose that the definiteness restriction is not operative in Chinese

ExCs with categorical readings. Further examination of the structure and properties of the contextualized/categorical existential construction in Mandarin Chinese will continue to enrich our understanding of Chinese existentials and provide an ongoing source of fresh cross-linguistic insights.

References

- Abott, B. (1993). A pragmatic account of the definiteness effect in existential sentences. *Journal of Pragmatics*, 19, 39-55.
- Babby, L. H. (1980). *Existential sentences and negation in Russian*. Ann Arbor, MI: Karoma Publishers.
- Badan, L. & Del Gobbo, F. (2011). On the syntax of topic and focus in Chinese. In P. Benincà & N. Munaro (Eds.), *Mapping the left periphery: The cartography of syntactic structures* (Vol. 5, pp. 63-90). Oxford: Oxford University Press.
- Basilico, D. (1997). The topic is 'There'. *Studia Linguistica*, 51(3), 278-316.
- Bentley, D., Ciconte, F. M., & Cruschina, S. (2013). Existential constructions in crosslinguistic perspective. *Rivista di Linguistica*, 25(1), 1-13.
- Brentano, F. (1924). *Psychologie vom empirischen Standpunkt*. Leipzig: Duncker & Humblot.
- Chang, H. (2004, May 21-23). The definiteness and information status of the NPs in Mandarin 'you'-existentials [Conference session]. *The 16th North American Conference on Chinese Linguistics (NACCL-16)*. The University of Iowa, Iowa City, Iowa, United States.
- Chierchia, G. (1995). Individual level predicates as inherent generics. In G. N. Carlson & F. J. Pelletier (Eds.), *The generic book* (pp. 176-223). Chicago: Chicago University Press.
- Cinque, G. (1999). *Adverbs and functional heads: A cross-linguistic perspective*. Oxford: Oxford University Press.
- Fang, H. & Lin, T. J. (2008). The Mandarin you existential: A verbal analysis. *UST Working Papers in Linguistics*, 4, 43-56.
- Francez, I. (2007). *Existential propositions* (Doctoral dissertation). Stanford University, U.S.A.
- Hsin, A. (2002). On indefinite subject NPs in Chinese. *Chinese Studies*, 20(2), 353-376.
- Huang, C. J. (1987). Existential sentences in Chinese and (in)definiteness. In E. Reuland & A. ter Meulen (Eds.), *The representation of (in)definiteness* (pp. 226-253). Cambridge, MA: MIT Press.
- Huang, C. J. (1988). Shuo shi he you [On shi and you]. *The Bulletin of the Institute of History and Philosophy*, 59, 43-64.
- Jin, D. (2020). A semantic account of quantifier-induced intervention effects in Chinese why-questions. *Linguistics and Philosophy*, 43(4), 345-387.
- Kim, Y. (1997). *A situation semantic account of existential sentences* (Doctoral dissertation). Stanford University, U.S.A.

- Kuroda, S. (1972). The categorical and thethetic judgment. Evidence from Japanese syntax. *Foundations of Language*, 9, 153-185.
- Ladusaw, W. (2000). Thetic and categorical, stage and individual, weak and strong. In R. H. Laurence & Y. Kato (Eds.), *Negation and polarity: Syntactic and semantic perspectives* (pp. 232-242). Oxford: Oxford University Press.
- Leonetti, M. (2008). Definiteness effects and the role of the coda in existential constructions. In A. Klinge & H. Hoeg-Muller (Eds.), *Essays on nominal determination* (pp. 131-162). Amsterdam: Benjamins.
- Li, C. N. and Thompson, S. A. (1981). *Mandarin Chinese: A functional reference grammar*. Berkeley, CA: University of California Press.
- Li, Y. A. 2006. Chinese *ba*. In M. Everaert & H. van Riemsdijk (Eds.), *The Blackwell companion to syntax* (Vol. I, pp. 374-468). Oxford: Blackwell.
- Lin, T. J. (2008). Locative subject in Mandarin Chinese. *Nanzan Linguistics*, 4, 69-88.
- Liu, Y. (2011). Topic-comment and the Chinese Existential Construction. In *Proceedings of the 23rd North American Conference on Chinese Linguistics (NACCL-23)* (Vol. 2, pp. 48-65). Eugene.
- McCloskey, J. (2014). Irish existentials in context. *Syntax*, 17(4), 343-384.
- McNally, L. (1992). *An interpretation for the English existential construction* (Doctoral dissertation). University of California, Santa Cruz, Santa Cruz.
- McNally, L. (2011). Existential sentences. In M. Claudia, K. von Heusinger & P. Portner (Eds.). *Semantics: An internal handbook of natural language meaning* (Vol. 2, pp. 1829-1848). Berlin: Mouton de Gruyter.
- Moro, A. (1997). *The raising of predicates*. Cambridge: Cambridge University Press.
- Nagaya, N. (2019). Thethetic/categorical distinction in tagalog revisited: A contrastive perspective. *Gengo Kenkyu*, 156, 47-66.
- Paul, W. (2005). Low IP area and left periphery in Mandarin Chinese. *Recherches linguistiques de Vincennes*, 33, 111-134.
- Paul, W., Lu, Y. & Lee, T. H. (2020). Existential and locative constructions in Mandarin Chinese. *The Linguistic Review*, 37(2), 231-267.
- Rizzi, L. (1997). The fine structure of the left periphery. In L. Haegeman (Ed.), *Elements of grammar* (pp. 281-337). Dordrecht: Kluwer.
- Shi, D. (2000). Topic and topic-comment constructions in Mandarin Chinese. *Language*, 76(2), 383-408.
- Stockwell, R. P., Schachter, P. & Partee, B. H. (1973). *The major syntactic structures of English*. New York: Holt, Rinehart & Winston.
- Teng, S. (1978). Modification and the structures of existential sentences. In R. C. Cheng, Y. C. Li, & T. C. Tang (Eds.), *Proceedings of symposium of chinese linguistics, LSA* (pp. 197-210). Taipei: Student Books.
- Walker, J. A. (2009, April 2-4). *(Dis)agreement in the Eastern Caribbean: Evidence from Bequia* [Conference session]. The Eighth Creolistics Workshop, Justus-Liebig-Universität, Giessen,

Germany.

- Zhang, N. (2007). Existential coda constructions revisited. In Q. Lin & S. Shyu (Eds.), *Discussions on language and culture* (pp. 25-62). Kaohsiung: College of Liberal Arts, NSYSU.
- Zhang, N. (2008). Existential coda constructions as internally headed relative clause constructions. *The Linguistics Journal*, 3(3), 8-54.
- Zou, K. (1995). *The syntax of the Chinese ba-construction and verb compounds: a morpho-syntactic analysis* (Doctoral dissertation). University of California, Los Angeles, U.S.A.
- Zucchi, A. (1995). The ingredients of definiteness and the definiteness effect. *Natural Language Semantics*, 3, 33-78.

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Received: July 26, 2022

Revised version received: October 2, 2022

Accepted: November 7, 2022