Gao, Jing*
Cornell University

MANDARIN EXISTENTIAL CONSTRUCTIONS AND THE PREDICATE RESTRICTION**

In this paper I raise questions about the predicate restriction, which claims that only stage-level predicates may appear in the coda of an existential sentence. I present novel data from Mandarin to show that the predicate restriction is not universal: It is systematically absent in Mandarin. I propose that the reason behind its absence is syntactic. Specifically, I show that the English existential coda cannot be as large as a TP, while the Mandarin existential coda contains a full TP. This, in combination with Diesing's (1992) Mapping Hypothesis, which says individual-level predicates need to be in TPs, naturally derives the difference between existentials of the English-type and those of the Mandarin-type. Finally, I show that the Mandarin existential coda is not a relative clause, despite being a full clause. Thus, this paper seeks to attain two purposes: (i) to bring attention to the possibility of violations of the predicate restriction, which has largely been thought to be universal; and (ii) to make a first attempt at explaining why the predicate restriction is absent in Mandarin.

Key words: existential constructions, the predicate restriction, Mandarin syntax

1. INTRODUCTION

Existential sentences pose many interesting problems to linguistic theories due to their non-canonical syntax and distinctive semantic features. Cross-linguistically, existential sentences appear in the following form (adapted from Bentley et al. 2003; parentheses stand for optionality). The term 'pivot' refers to the noun phrase, the existence of whose referent is being expressed, and the term 'coda' refers to the material to the right of the pivot.

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* jg2275@cornell.edu

(1)   (expletive) (proform) (copula/existence verb) pivot (coda)

It is clear from the schema in (1) that existential sentences have non-canonical syntax. In addition, existentials have shown distinctive semantic properties (Milsark, 1979; Francez, 2007; McNally, 2011). In previous research, two properties have been widely noted, commonly known as 'the definiteness effect' (or 'definiteness restriction') and 'the predicate restriction' (ibid.). The definiteness effect refers to the observation that definite nominals are prohibited from appearing as the pivot in an existential sentence. The predicate restriction refers to the observation that only stage-level predicates (SLPs) may appear as the coda of an existential; individual-level predicates (ILPs) are excluded from this position. The following English examples demonstrate the definiteness effect and the predicate restriction, respectively.

(2)   (a)   There is <u>a student</u> sick.   (indefinite NP pivot)
        (b) *There is <u>the student</u> sick.   (definite NP pivot)

(3)   (a)   There is a student <u>sick</u>.   (SLP coda)
        (b) *There is a student <u>tall</u>.   (ILP coda)

1.1. The problem

Compared to the definiteness effect, the predicate restriction has generated 'much less discussion' in the literature, 'in part because there is less controversy over the facts' (McNally, 2011: 1845). Mandarin Chinese, however, systematically allows both SLPs and ILPs in its existential codas. The following examples demonstrate this trait. The existential sentence in (5) contains an individual-level predicate in its coda, yet it is fully grammatical.

(4)   *You   yi-ge   xuesheng   bing-le*.   (SLP coda)
        EX   one-CL   student   sick-PFV
        'There is a student sick.'

(5)   *You   yi-ge   xuesheng   hen gao*.   (ILP coda)
        EX   one-CL   student   PRED tall
        Lit. *'There is a student tall.'
        'There is a student who is tall.'

The presence of *hen-gao* 'tall' in (5) cannot be explained as a post-nominal adjectival modifier, since adjectival modifiers only occur pre-nominally in Mandarin. Additionally, the degree marker *hen*, which is obligatory for forming predicates out of adjectives, must be present. These facts show that the coda in (5) is truly predicative, and that the predicate restriction is absent in Mandarin. This absence demands an explanation. However, the fact that there lacks the predicate restriction in certain languages is largely unnoted and little has been said about this peculiarity. This paper thus seeks to attain two purposes: (i) to bring attention to the possibility of violations of the predicate restriction, which has largely been thought to be universal; and (ii) to make a first attempt at explaining why the predicate restriction is absent in Mandarin.

2. PREVIOUS ACCOUNTS OF THE PREDICATE RESTRICTION

When Milsark (1979) first takes note of the predicate restriction, he claims that the predicate restriction is unnecessary as an independent statement about the behavior of existential sentences, because it follows from two independently necessary considerations: (i) the pivot of existentials must be a 'non-quantified NP'[1] (which Milsark refers to as 'the quantification restriction'; cf. example (2)), and (ii) individual-level properties cannot be predicated with non-quantified NPs (which I will refer to as 'the subject restriction' for ease of reading). Example (6) demonstrates the subject restriction: In (6b) an individual-level property is predicated with the non-quantified/weak NP subject *a man*, and the sentence is rendered ungrammatical; this contrasts with (6a), where a stage-level property is predicated with the same subject. On the other hand, (7a) and (7b) are both grammatical with a strong NP as subject.

(6) (a) **A man** was <u>sick</u>.   (non-quantified/weak NP, SLP)
     (b) *A man was <u>tall</u>.   (non-quantified/weak NP, ILP)

(7) (a) **The man** was <u>sick</u>.   (strong NP, SLP)
     (b) The man was <u>tall</u>.   (strong NP, ILP)

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[1] In later works (e.g., Barwise and Cooper, 1981; Keenan, 1987) these NPs are commonly referred to as 'weak NPs'.

While Milsark's observations appear to work well for English, such reasoning cannot be extended to Mandarin, as Mandarin is also subject to both the quantification restriction (example (8)) and the subject restriction (example (9)), yet the predicate restriction is absent.[2] It should be noted, however, that the problem we see in (9) is possibly even more complicated than it first seems, considering that indefinites subjects are generally not allowed in Mandarin (Li & Thompson 1981). The complexities shown here require further scrutiny. I do not attempt to explain this set of data in this paper but merely use these examples to point out the difficulty that we face with a semantic account of the predicate restriction.

(8) (a) *You*   *yi-ge   xuesheng*   *bing-le*.   (weak NP)
          EX   one-CL student   sick-PFV
          'There is a student sick.'

     (b) **You*   *nei-ge   xuesheng*   *bing-le*.   (strong NP)
          EX   one-CL student   sick-PFV

(9) (a) *Yi-ge   xuesheng*   *bing-le*.   (SLP)
          one-CL student   sick-PFV
          'One student is sick.'

     (b) **Yi-ge   xuesheng*   *hen   gao*.   (ILP)

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[2] One reviewer points out that (9b) is grammatical under a contrastive focus reading (see (i)), whereas in English such a contrast is usually expressed by partitives (see (ii)), not indefinite articles (see (iii)) (examples are the reviewer's). This is to say that Mandarin appears to be more tolerant towards the subject restriction compared to English. The reviewer thus wonders whether this observation may be extended into a Milsark-type explanation. I agree with these examples, and I think that future work should explore this in more detail. For the time being, I wish to add that since Mandarin does not have indefinite articles and 'one' as a numeral is not truly equivalent to the English *a*, there is a possibility that (ii) might be more comparable to (i) than (iii) is and the difference between the two languages might be smaller, especially considering that the sentence in (ii) does not need to use the partitive structure if a focus stress is placed on *one*.

(i)   *Yi-ge   xuesheng hen   gao*,   *yi-ge   xuesheng hen   ai*.
       one-CL student PRED   tall   one-CL student PRED   short
       'One student is tall, one student is short.'

(ii)   One (of the) student(s) is tall, one (student) is short.

(iii)   ?? A student is short, a student is tall.

one-CL student   PRED tall

3. THE PREDICATE RESTRICTION AND MANDARIN EXISTENTIAL SENTENCES

The difficulty of reducing the predicate restriction to a natural result of the semantic properties of existential sentences suggests that we may need to look into their syntactic properties for an answer instead. In this section I put forward one possible explanation along this line of thinking. I first discuss the syntax of English existential sentences and point out that one important syntactic property of the English existential coda is that it must be smaller than TP. This, in combination with Diesing's Mapping Hypothesis (1992), predicts that individual-level predicates are prohibited in English existentials. I then show that the Mandarin existential coda, by contrast, contains at least a full TP; thus we regularly find individual-level predicates in Mandarin existentials. Finally, I argue that the Mandarin existential coda is not a relative clause, despite it being a full clause. This is important because it shows that we cannot defer the problem of the absence of the predicate restriction in Mandarin to the claim that Mandarin existentials are relative clauses.

The Mandarin existential sentences discussed in this paper are all formed with the existential verb *you*. Their syntactic form follows the schema in (10).

(10) *You*   NP   XP
      existence verb pivot   coda

It is worth noting that employing the existential verb is not the only possible way of expressing existence in Mandarin. Mandarin existential constructions show a rich variety, consisting of several sub-types. Interested readers should refer to Huang 1987 for details. For the present discussion, I examine only the *you*-existentials. This is because they are considered the canonical type of Mandarin existentials, as they are constructed with the existential verb[3] and they pattern with the general existential schema described in (1), repeated here as (11).

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[3] The other types of Mandarin existential sentences are not constructed with the existential verb, and the existence of the referent of the 'pivot' is implied rather than asserted. For example, (i) is an example of the 'appearance verb' existential, and the existence of *yi-ge xuesheng* 'one student' is implied, not asserted.

(i)   *Jie-shang zou   lai   yi-ge   xuesheng.*

(11)   (expletive) (proform) (copula/existence verb) pivot (coda)

In the remainder of this paper I will refer to the *you*-existentials simply as 'Mandarin existentials', without specifying that they are the *you*-type. This, however, does not mean that I assume the discussions of the *you*-existentials can be directly extended to other types of Mandarin existential constructions. I leave it to future work to determine whether the analyses of the *you*-existentials can be applied to other types of Mandarin existentials.

3.1. A syntactic account of the predicate restriction

At the end of section 2, I conclude that the predicate restriction cannot be reduced to the semantic properties of existential sentences, and we may need to investigate the syntactic properties of existentials for an explanation. Previous research on the syntax of English existentials focuses intensely on the relation between the pivot and the coda. Two main lines of research are (i) the small clause analysis, which treats the pivot and the coda as one constituent called a 'small clause' that is consisted of a subject (the pivot) and a predicate (the coda), and (ii) the adjunct analysis, which treats the coda as either a VP or a sentential adjunct (as summarized in Francez, 2007). In all these analyses, the contention is on the relation between the pivot and the coda; the internal structure of the pivot is somewhat not considered to be important, perhaps rightfully so, as the types of phrases that can appear in the coda position are limited. Two examples of English existential sentences are given in (12). The codas in (12a) and (12b) consist of an Adjective Phrase and a Verb Phrase, respectively.

(12)   a.   There are two librarians [$_{AdjP}$ available].
         b.   There is a student [$_{VP}$ waiting at the door].

What is significant about the permitted phrases in English existential codas as seen in (12) is that they are quite small: None can be as big as a TP. To show that it is indeed the case that the English existential coda must be smaller than TP, we

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street-on   walk   come   one-CL   student
Lit. 'On the road walked a student.'

can employ the tests of overt T elements (example (13)) and sentential adverbials (example (14)). The ungrammatical results in these examples lead to the conclusion that the English existential coda cannot be as large as TP.

(13)　　a.　　There are two librarians (*are) available.　　　(overt T)
　　　　 b.　　There is a student (*is) waiting at the door.

(14)　　a.　　There is a student (*unfortunately) sick.　　　(sentential adverb)
　　　　 b.　　These is a student (*apparently) sick.

Given that the coda is smaller than TP, the unavailability of individual-level predicates in English existentials can be naturally derived from Diesing's LF Mapping Hypothesis (Diesing, 1992), which claims the following:

(15)　　Subjects of stage-level predicates can be mapped into either [Spec, IP] or [Spec, VP]. Subjects of individual-level predicates must stay in [Spec, IP].

Since the subject of a stage-level predicate can stay in the VP, a phrase smaller than TP may also contain a stage-level predicate. An individual-level predicate, on the other hand, needs an IP (TP) for its subject, and the English existential coda, being smaller than TP, cannot contain an individual-level predicate. If this explanation is on the right track, we would expect that the Mandarin existential coda must be at least as large as TP; only then can the coda provide the necessary position for the subject of an individual-level predicate. As I will show in the next section, this is indeed true with Mandarin existentials.

3.2. Mandarin existential codas contain full TPs

In this section I show that the size of the Mandarin existential coda is as big as a full clause. This is perhaps the most distinctive syntactic property of Mandarin existentials. While this property has been the underlying assumption in many of the existing works on the syntax of Mandarin existentials (e.g., in Fang and Lin, 2008; Zhang, 2008; Liu, 2011), there has not been explicit discussion on whether such an assumption is in fact valid. Through a series of empirical evidence, I show that the Mandarin existential coda contains a full TP. Four types of evidence are included:

(i) overt T elements (examples (16) and (17)); (ii) sentential adverbs (examples (18) and (19)); (iii) focus constructions (example (20))[4]; and (iv) sentence-internal topics (example (21)). More specifically, for an overt T element to be permitted in an existential coda, the coda must necessarily contain a TP. Likewise, sentential adverbs, focus constructions, or sentence-internal topic constructions would not have been allowed in an existential coda, if the coda does not contain a full clause.

(16)   *You   yi-ge   xuesheng <u>hui</u>   lai   kan   wo.*
       EX   one-CL student   will   come   see   1SG
       'There will be a student coming see me.'   (overt T)

(17)   *You   yi-wei laoshi <u>neng</u>   bangzhu   ni.*
       EX   one-CL teacher can   help   2SG
       'There is a teacher who can help you.'   (overt T)

(18)   *You   yi-ge   xuesheng <u>buxing</u>   de-le   zhong-bing.*
       EX   one-CL student   unfortunately   catch-PFV   serious-disease
       'There is a student who unfortunately is seriously ill.'   (sentential adv)

(19)   *You   yi-ge   xuesheng <u>xianran</u>   mei   xie   zuoye.*
       EX   one-CL student   apparently   NEG   write homework
       'There is a student who apparently did not do their homework.'   (sentential adv)

(20)   (Context: The speaker is talking about an extremely hard-working student who stays in the lab all the time and who won't even go home during weekends.)

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[4] One reviewer points out that at least some focus constructions in Mandarin are smaller than TP, using (i) as an example, in which the focus structure *lian…dou…* embeds under *hui*, the supposed T element. I agree with this comment and I think it is reasonable to postulate that Mandarin focus structures are not one-size: Some focus structures are smaller than TP; some are larger. In the case of (20), the focus structure is larger.

(i)   *Zhangsan bu hui <u>lian</u>   laoshi <u>dou</u> pian   de.*
      Zhangsan NEG will LIAN   teacher   DOU deceive SFP
      'Zhangsan will not deceive the teachers (and it is unlikely that one would deceive the teachers).'

You   yi-ge   xuesheng [FocusP <u>*lian*</u>   *zhoumo*   <u>*dou*</u> [TP *bu   hui   hui-jia*   ]].

EX   one-CL student   LIAN weekend DOU   NEG will go-home

'There is a student who won't go home even during weekends.' (focus)

(21) *You   yi-ge   xuesheng* [[TopicP <u>*dieyong*</u>]   *you   de   tebie   hao*].

EX   one-CL student   butterfly   swim   MOD   extremely good

'There is a student who swims butterfly extremely well.'   (internal topic)

It therefore seems that the crucial difference between Mandarin existentials and the English type of existentials is found in their syntactic structures. In English existentials, the coda cannot contain a phrase as large as TP. In Mandarin existentials, on the other hand, the coda contains a full TP. The (un)availability of the individual-level predicate in the coda thus naturally derives from the different sizes of the existential codas following the Mapping Hypothesis.

3.3. Mandarin existential codas are not relative clauses

Since the Mandarin existential coda contains a full clause and the coda is embedded in a root clause, it seems plausible to speculate that the coda is a relative clause. A popular analysis of the Mandarin *you*-existentials is indeed the relative clause analysis. Different variants of this analysis are found in Fang & Lin 2008 and Zhang 2008. Under the relative clause analysis, the pivot is treated as the head noun phrase and the coda the relative clause modifying the pivot. If the relative clause analysis is correct, the problem of the predicate restriction would be much less interesting, as that would mean that Mandarin existentials have a completely different structure than the English type of existentials. While the underlying assumption of the relative clause analysis – that the Mandarin existential coda contains a full clause – is well founded, as discussed in section 3.2, the relative clause analysis cannot be correct. In this section, I present a series of evidence to show that the Mandarin existential coda cannot be a relative clause.

The first challenge for the relative clause analysis comes from the fact that there generally lack post-nominal relative clauses in Mandarin. The canonical type of relative clause in Mandarin is pre-nominal. While post-nominal relative clauses

(RCs) do exist, the true post-nominal RCs look rather different from the existential codas in form (cf. Gao, 2020). An example of a Mandarin post-nominal RC is given in (22). Its semantic equivalent in the canonical form of Mandarin RCs, i.e., in a pre-nominal RC, is shown in (23).

(22)   *Nei-ge ren*,   [_RC_ *ni   zuotian   jian-guo* (*   *ta*) *(*de*)], *shi   wo   pengyou.*
         that-CL person   2SG yesterday meet-PFV   3SG   REL COP 1SG friend
         'The person, whom you met yesterday, is my friend.'

(23)   [_RC_ *Ni   zuotian   jian-guo* (**ta*) *(*de*)] *nei-ge   ren   shi   wo   pengyou.*
             2SG yesterday meet-PVF   3SG   REL that-CL person   COP 1SG friend
         'The person whom you met yesterday is my friend.'

As shown in (22) and (23), Mandarin post-nominal RCs share several syntactic similarities with pre-nominal RCs: The subordinator *de* is obligatory; resumptive pronouns in subject and object RCs are prohibited. An important difference between Mandarin post-nominal and pre-nominal RCs is that the former require a prosodic break between the head NP and the following RC, as indicated by the comma in (22). In contrast, neither the subordinator *de* nor the prosodic pause is found in existential sentences. These major differences in form make it highly questionable that the existentials could be a type of post-nominal RCs. For further validation, we may also apply relative clause diagnostics to existential sentences. One such test involves the particle *suo*, which is a remnant from Classical Chinese which is now used only in passivization and relativization (Chiu, 1992). Example (24) showcases the use of the particle *suo* in a canonical prenominal relative. By contrast, existential sentences fail this diagnostic, as shown in (25). This further suggests that the existential coda is not a relative clause.

(24)   *Bie   wang-le* [_DP_ [_RC_ *Laoshi* (*suo*)   *fanfu   qiangdiao   de*] *nei-jian shi   *].
         do.not forget-PFV   teacher SUO   repeatedly   emphasize   REL that-CL matter
         'Do not forget the thing that the teacher has repeatedly emphasize.'

(25)　*You　　yi-jian shi　　[laoshi (*suo)　fanfu　　　qiangdiao].*
　　　　EX　　one-CL matter　　teacher　SUO　repeatedly　　emphasize
　　　　Intended: 'There is a matter which the teacher has repeatedly emphasized.'

　　　　Another difficulty for the relative clause analysis comes from the conjunction word test. There is strong evidence that the pivot and the coda do not form a nominal projection, contrary to what the relative clause analysis predicts. Mandarin has several *and* equivalents which are mostly non-interchangeable. Which conjunction is to be used depends on the syntactic categories of the conjuncts. To conjoin two nominal phrases, *he* is used, as shown in example (26). However, example (27) demonstrates that it is not possible to conjoin two pivot and coda strings using the same conjunction word.

(26)　[*Yi-ge　　xuesheng*]　*<u>he</u>*　[*yi-wei　laoshi*]　　　　*chuxi.*
　　　　one-CL student　　　and　　one-CL teacher　　　　present
　　　　'One student and one teacher are present.'

(27)　*You* [　*yi-ge　xuesheng chuxi*]　　(**<u>he</u>*)　[*yi-ge　　xuesheng　quexi*].
　　　　EX　　one-CL student　present　　　and　　one-CL student　absent
　　　　Intended: 'There is a student present and a student absent.'

　　　　Those in favor of the relative clause analysis may argue that there may simply be no suitable conjunctions for coordinating two pivot and coda strings, as the Mandarin conjunctions are sensitive not just to the constituency status of the coordinated phrases but also to the syntactic types of the conjoined phrases. Liu 2011 seems to be following this line of thinking and contends that the pivot and the coda form a constituent (though Liu 2011 does not eventually settle for a relative clause analysis), using the following example as a demonstration that two codas can be coordinated to argue for constituency:

(28)　*You* [*yi-ge　nvsheng zai　　sao-di*　　], [　*yi-ge　nansheng zai ca-chuanghu*].
　　　　EX　　one-CL girl　　PROG sweep-floor　　one-CL boy　　　PROG wipe-window
　　　　'There is a girl sweeping the floor, a boy wiping the window.'　　(Liu, 2011: 53)

It is rather dubious whether the above example actually shows what it is claimed to show, however. We can, as a matter of fact, resort to verbs that have much less controversial verbal structures than the existential *you* to construct sentences with similar patterns. Compare, for instance, example (29) with Liu's example. In (29), 'let Mary sit on the left side' is followed by a second full clause, 'let John sit on the right side'. The verb *rang* 'let' takes an NP argument based-generated in [Spec, VP] and a clause argument in the complement position; *rang* undergoes movement to the *v* head position. The repeated verb *rang* is elided in the second sentence. The structures of the two sentences in (29) are shown in (30). The process involved in generating (29) is gapping. The same process is responsible for (28), i.e., we are seeing in (28) two independent sentences coordinated with the verb elided in the second sentence, not two [pivot coda] strings being coordinated. Thus, (28) does not in fact show what it is claimed to show, i.e., (28) does not show [pivot coda] is one constituent (even though in (29) *Mali* 'Mary' and *zuo zuo-bian* 'sit on the left side', together with the trace left by the verb, form a constituent).

(29) *Rang* [*Mali   zuo   zuo-bian*],   [*Yuehan zuo   you-bian*].
      let   Mary   sit   left-side   John   sit   right-side
      'Let Mary sit on the left side, John the right side.'

(30) [$_{TP}$ [$_{vP}$ *Rang$_i$* [$_{vP}$ *Mali   t$_i$*   [$_{CP}$ *zuo zuo-bian*]]]]
      [$_{TP}$ [$_{vP}$ ~~*Rang$_i$*~~ [$_{vP}$ *Yuehan t$_i$*   [$_{CP}$ *zuo you-bian*]]]]

A further piece of evidence against the relative clause analysis comes from resumptive pronouns. Resumptive pronouns in the subject or the object position are prohibited in both pre-nominal and post-nominal RCs (cf. examples (22) and (23)). This is not the case with existential codas (see example (31)). It is possible, though, that for some speakers, sentences like (31) represent two different syntactic structures simultaneously and one of the two structures is the existential construction, hence the acceptability of the pronoun might be influenced by the presence of another structure. For speakers who think (31) has simultaneously two different syntactic structures, this is due to an ongoing reanalysis of the existential verb. I do not attempt to get into details here. Since this reanalysis is not affecting all speakers, I consider (31) to be still revealing to a certain extent regarding the difference between existential sentences and relative clauses. The contrast between (31) and the relative clause examples suggests that they are constructions of different kinds.

(31) *You   yi-ge   xuesheng <u>ta</u>   chidao   le.*
       EX   one-CL student   3SG arrive.late   PFV
       'There is a student late.'

To sum up, all evidence we have seen so far leads to the conclusion that Mandarin existential codas are not relative clauses. Recognizing that Mandarin existential codas are not relative clauses puts them on par with existential sentences in other languages such as English: The relation between the pivot and the coda is not that of a head NP and an NP modifier. If Mandarin existential codas were relative clauses, the absence of the predicate restriction would be unsurprising and in fact totally expected. The next question that naturally arises is: What is the structure of Mandarin existential sentences, given that the relative clause analysis is incorrect? As far as the data in the present paper have shown, the structure of Mandarin existentials seems highly mysterious. I make no proposal in the present paper, but leave it to future work to determine the full structure of Mandarin existentials. For the current discussion, I pause at recognizing the coda is a full clause but not a relative.

4. CONCLUSION

In this paper, I raise questions about the predicate restriction, which roughly claims that only stage-level predicates are allowed in existential codas. This restriction has largely gone unchallenged in the literature. However, data from Mandarin show that the predicate restriction is robustly absent in some languages. I then make a first attempt at explaining this absence. By showing that the English existential coda must be smaller than TP while the Mandarin existential coda contains a full clause, I suggest that the reason for the absence of the predicate restriction may be syntactic. More specifically, the size of the existential coda determines whether individual-level predicates are allowed: If a language allows existential codas that are as large as a full TP, both stage-level predicates and individual-level predicates are permitted; if a language only allows existential codas that are smaller than TP, only stage-level predicates are permitted in codas.

The immediate next question is what determines the size of the existential coda in a language. My speculation is that tense may be relevant to the coda size. English, a 'tensed' language, would have two tenses in one TP if a T element is present in the existential coda, rendering the sentence ungrammatical. Mandarin, as a 'tenseless' language on the other hand (it should however be noted that whether

Mandarin is truly 'tenseless' is still very much debated), would not have the problem of 'too many tenses' even though the existential coda is of TP size. This, of course, is currently a working hypothesis, and much more evidence is needed to determine its validity. I leave this work to future research.

REFERENCES

Bentley, D. –Ciconte, F. M. & Cruschina, S. (2012). Existential constructions in crosslinguistic perspective. *Rivisata di Linguistica*, 25(1), 1-13.

Diesing, M. (1992). Bare plural subjects and the derivation of logical representations. *Linguistic Inquiry*, 23(3), 353-380.

Fang, H. & Lin, T.-H. J. (2008). The Mandarin you existential: A verbal analysis. *UST Working Papers in Linguistics*, 4, 43-56.

Francez, I. (2007). Existential propositions. Stanford University dissertation.

Gao, J. (2020). A syntactic analysis of the Mandarin postnominal relative clause. In Asatryan, M. –Song, Y. & Whitmal, A. (eds.) (2020). *Proceedings of the 50th Annual Meeting of the North East Linguistic Society*, 247-260.

Li, C.N. & Thompson, S. (1981). *Mandarin Chinese: A Functional Reference Grammar*. Berkeley: University of California Press.

Liu, Y.-H. (2011). Topic-comment and the Chinese existential construction. In: Jing-Schmidt, Z. (ed.) (2011). *Proceedings of the 23rd North American Conference on Chinese Lingusitics*, 48-65.

McNally, L. (2011). Existential sentences. In: Maienborn, C., –von Heusinger, K. & Portner, P. (eds.) (2011). *Semantics: An International Handbook of Natural Language Meaning*, 1829-1848. Mouton de Gruyter.

Milsark, G. (1979). Existential sentences in English. New York: Garland.

Zhang, N. N. (2008). Existential coda constructions as internally headed relative constructions. *The Linguistics Journal*, 3(3), 8-54.