On Apparent Parasitic Gaps in Mandarin Chinese

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1. Introduction

Parasitic gaps (a term first introduced by Taraldsen 1981) are a kind of empty category which is 'parasitic' on the presence of another empty category in the same sentence.

(1) a. Who did John criticise *e* after meeting *e*?
    b. *John criticised Peter after meeting *e*

In (1a), the island-internal empty category is 'parasitic' in that it is licensed only if the island-external empty category is present. We will henceforth refer to the former empty category as a 'PG'.

   This paper revisits the question of whether PGs similarly exist in languages like Mandarin Chinese (hereafter 'Mandarin'). While there is a consensus in the literature that PGs exist in Mandarin (Lin 2005; Ting & Huang 2008; Liu 2013 a.o.), this paper argues that the existing evidence brought to support the existence of PGs in the language is in fact inconclusive. Part of the problem has to do with the well-known fact that Mandarin, unlike English, is a language which readily permits null arguments (Huang 1982).

   Section 2 first reproduces the argument that is commonly used in arguing for the existence of PGs in Mandarin. Section 3 introduces two arguments which show that what appears to be a PG in Mandarin is only apparent. Section 4 consolidates the current claim further by offering a novel alternative way of interpreting the purported argument in Section 2. A conclusion is offered in Section 5.

2. A Purported Argument for PGs in Mandarin

Consider the following sentence.

(2)   shenme wenzhang$_i$, Lisi [zai du-guo e_i zihou]   jiu   piping-le   __$_i$?
      what   article   Lisi at read-EXP   after   then criticise-PFV
         'Which article did Lisi criticise after reading?'

Lin (2005) argues that *e* in (1) is a PG, based on the fact that the complex *wh*-phrase, when left in-situ, would result in ungrammaticality; cf. (2) and (3).

(3) *Lisi [zai du-guo e_i zihou] jiu   piping-le   shenme   wenzhang$_i$?
     Lisi at read-EXP   after   then   criticise-PFV   what   article
     Intended: 'Which article did Lisi criticise after reading?'

The contrast recalls Engdahl's (1983) generalisation, which states that *wh*-in-situ does not license PGs (cf. *which article did John criticise after reading?* vs. **who criticised which article after reading?*). Based on these Mandarin facts, Lin ultimately reaches the conclusion that syntactic *wh*-movement is necessary for licensing PGs. Since then, the literature generally assumes that PGs exist in Mandarin (Ting & Huang 2008; Liu 2013 a.o.).

3. What Looks Like a PG is not a PG
This section offers two arguments against the status of *e* in (2) as a PG. It follows that the above facts do not actually bear on the licensing conditions of PGs in *wh*-in-situ languages.

3.1. *It is not 'parasitic'*
What all the existing literature overlooks is the fact that the grammaticality of (2) does not hinge on the existence of a true gap. Sentences like (4) are perfectly well-formed; cf. (1b).

(4)   shenme wenzhang$_i$, Lisi [zai du-guo *e*$_i$ zihou] jiu piping-le   nei-ge   fuze
          what   article   Lisi at read-EXP   after   then criticise-PFV   that-CL   charge
          jiaodui   de   ren?
          proofread DE   person
          'Which article did Lisi criticise the person who is responsible for proofreading after reading?'

The *e* in (4), by definition, cannot be a PG, and there is no reason why the same '*e*' cannot be also involved in (2).

3.2. *The possibility of A-antecedents*
It is well-known that English PGs cannot be licensed by A-movement; cf. (5). Interestingly, an A-antecedent may well serve as the antecedent for the purported PG in Mandarin (Xu 1990), as (6) demonstrates.

(5) *Few articles$_i$ will be criticised by John$_j$ after his$_j$ reading *pg*$_i$ *English*

(6) henshao wenzhang$_i$ [zai   Lisi$_j$ du-guo *e*$_i$ zhihou] hui   bei   ta$_j$ piping __$_i$ *Mandarin*
       few   article   at Lisi read-EXP after   will   BEI   3.SG criticise
             'Few articles will be criticised by him after Lisi's reading.'

Notice that weak quantificational NPs cannot be topicalised in Mandarin (Ko 2005); see (7). This excludes the involvement of Ā-movement in (6) as sketched in (8).

(7) *henshao wenzhang$_i$,   wo   zhidao [__$_i$ hui   bei   Lisi   piping]
       few   article   1.SG   know   will   BEI   Lisi   criticise
       'Few articles, I think will be criticised by Lisi.'

(8) *[henshao wenzhang]$_i$ [zai Lisi$_j$ du-guo *e*$_i$ zhihou] __$_i$ hui bei ta$_j$ piping __$_i$

Ting & Huang (2008) argue that *e* in (6) is a true empty category (TEC) in Li's (2007, 2014) sense, rather than a PG (since it cannot be). Moreover, they reason that since TECs are a last-resort strategy, instances of 'genuine' PGs they identify cannot be taken to be just TECs.

　　However, such a conclusion is an artefact of one's insistence that PGs exist in Mandarin; there is no reason why *e* in (6) cannot featurally be the same one that we have in (2) and (4), which need not be analysed as a TEC.

　　Ting & Huang further argue that short (i.e. agentless) passives offer evidence for the existence of PGs, given the badness of (9), taken from Ting & Huang (2008:35, ex. 15b).

(9) *na-ge　　xiaotou$_i$ bei [$_{VP}$ PRO$_i$ turan　[zai jianchaguan zhenxun e_i　hou]　daibu-le　__$_i$]
　　　that-CL thief　　BEI　　　　suddenly at　DA　　　　　interrogate after　arrest-PFV
　　　'That thief was suddenly arrested after DA's interrogating.'

Unlike long passives, the formation of short passives is argued to exclusively involve A-movement (Huang 1999). The problem with this argument, however, is that the the inner bracketed clause in (9) is in fact a *v*P-adjunct; notice that (10) is perfect. Moreover, if (6) can involve a TEC as Ting & Huang argue, it is important to ask why the same 'last-resort' option cannot kick in in (9).

(10) ^{OK}na-ge xiaotou$_i$ [$_{vP}$ [zai jianchaguan zhenxun e_i　hou] [$_{vP}$ bei [$_{VP}$ PRO$_i$ turan daibu-le __$_i$]]]

4. Revisiting the Contrast

A 'gap' in the current argumentation is why the contrast between (2) and (3), repeated below in (11) and (12), should exist in the first place. The contrast would follow nicely if PGs are licensed by overt Ā-movement but not merely Ā-binding.

(11) shenme wenzhang$_i$, Lisi [zai　du-guo　　e_i　zihou] jiu　　piping-le　　　__$_i$?
　　　what　article　　　Lisi at　read-EXP　　　after　then criticise-PFV
　　　　'Which article did Lisi criticise after reading?'

(12) *Lisi [zai du-guo　　　e_i　zihou] jiu　　piping-le　　　shenme wenzhang$_i$?
　　　Lisi　at read-EXP　　　after　then　criticise-PFV　what　　article
　　　Intended: 'Which article did Lisi criticise after reading?'

Crossover effects are irrelevant, since (13) is just as bad. Moreover, (11) clearly involves Ā-movement, and yet the sentence is perfect.

(13) *Lisi [zai　jian-guo　　e_i　zihou]　jiu　　piping-le　　Zhangsan$_i$?
　　　Lisi　at　meet-EXP　　　after　then　criticise-PFV　Zhangsan
　　　Intended: 'Lisi criticised Zhangsan after meeting.'

　　Instead, we relate the ungrammaticality of (12) to the curious fact that an element may bind another coindexed element in the absence of c-command in Mandarin. The following data serve as evidence for this claim.

(14) *[ruguo   ta$_i$ you shijian], Zhangsan$_i$ jiu hui   qu   youyong
        if   3.SG   have time   Zhangsan   then will   go   swim
        Intended: 'If he has time, then Zhangsan will go swimming.'

(15) *Lisi [zai jian-guo   ta$_i$ zhihou] jiu   piping-le   Zhangsan$_i$
        Lisi at meet-EXP   3.SG   after   then   criticise-PFV   Zhangsan
        Intended: 'Lisi criticised Zhangsan after meeting him.'

The exact nature of the binding relations is of much theoretical interest (cf. Lasnik's 1991 'Principle D'). What matters for our purposes is that the relevant binding principle is not an everywhere condition: when *Zhangsan* in (13) undergoes topicalisation, the binding violation immediately disappears; see also (17).

(16) Zhangsan$_i$, Lisi [zai jian-guo   {e_i / ta$_i$}   zihou] jiu   piping-le   __$_i$
        Zhangsan   Lisi at meet-EXP   3.SG   after   then criticise-PFV
        'Zhangsan, Lisi criticised after meeting {e / him}.'

(17) Zhangsan$_i$ jiu   hui qu   youyong], ruguo   ta$_i$ you   shijian
        Zhangsan   then   will go swim   if   3.SG   have   time
        'Zhangsan will then go swimming, if he has time.'

Hence, there exists a natural way of understanding the contrast without committing ourselves to the existence of PGs in Mandarin: (12) is bad because of a binding violation, which is nullified when one of the coindexed elements is displaced.

5. Conclusions

The facts that (i) a true gap is unnecessary and that (ii) A-movement may license the purported PG in Mandarin cast doubt on the claim that the empty category in question is a PG. The alleged PG exhibits distinct formal properties, and moreover what is taken to initially motivate the existence of PGs (i.e. (2) and (3)) has an alternative explanation. This, of course, does not exclude the possibility that PGs do exist in Mandarin; however, data like (2) and (3) are irrelevant. While comparative syntax remains an important perspective on questions which data from a single language cannot otherwise resolve (e.g. what are the licensing conditions of PGs?), caution must be taken not to carry an analysis wholesale from one language to another based on superficial similarity.

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