Nobody there? On the non-existence of nobody *in Mandarin Chinese and related issues*

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Abstract

The present article demonstrates how the so far unchallenged misanalysis within Chinese linguistics of a few, but central, data points has led to a distorted picture biasing, *inter alia*, the general typology of *wh*-in-situ languages as well as the crosslinguistic study of Quantifier Phrases. This is the case for *méi yǒu rén* 'not exist person', *hěnshǎo yǒu rén* 'rarely exist person', and *zhǐ yǒu* DP 'only exist DP', which are not nominal projections equivalent of 'nobody', 'only DP', and 'few people' as currently assumed, but existential constructions: 'there isn't anybody', 'there is only DP', and 'there are rarely people'. In addition, a subset of speakers has reanalyzed *hěnshǎo (yǒu) rén* with a covert *yǒu* 'exist' as a QP *hěnshǎo rén* 'few people'. A corpus study highlights the limited distribution of *hěnshǎo rén* 'few people', which shows that it is not on a par with its antonym *hěn duō rén* 'many people'.

Keywords: *wh*-in-situ languages, intervention effect, monotone decreasing vs. increasing quantifiers, existential construction, Mandarin Chinese

Résumé

Le présent article montre comment la mésanalyse, jusqu'ici incontestée au sein de la linguistique chinoise, de quelques points de données centraux, a conduit à une image déformée biaisant, entre autres, la typologie générale des langues WH-in-situ ainsi que l'étude interlinguistique des syntagmes quantificationnels (SQ). C'est le cas de *méi yǒu rén* 'pas

exister personne', *hĕnshăo yŏu rén* 'rarement exister personne' et *zh*ĭ *yŏu* DP 'seulement exister DP', qui ne sont pas des projections nominales équivalentes à 'personne', 'seulement DP', et 'peu de gens' comme on le suppose actuellement, mais des constructions existentielles: 'il n'y a personne', 'il n'y a que DP' et 'il y a rarement des gens'. En outre, un sous-ensemble de locuteurs a réanalysé *hĕnshăo (yŏu) rén*, avec un *yŏu* 'exister' nul, en tant que QP *hĕnshăo rén* 'peu de gens'. Une étude de corpus met en évidence la distribution limitée de *hĕnshăo rén* 'peu de gens', ce qui montre qu'il n'est pas l'équivalent de son antonyme *hĕn duō rén* 'beaucoup de gens'.

Mots-clés: langues *wh*-in-situ, effet d'intervention, quantificateurs monotoniques décroissants vs croissants, construction existentielle, chinois mandarin

1. INTRODUCTION

Both Soh (2001, 2005) and Ko (2005: 883) use the contrast in (1a–b) below as the starting point for their respective analyses of *wh*-in-situ languages.[1]

(1) a. *{Méiyŏurén/zhǐyŏu Lǐsì/hĕnshăo rén}   *wèishénme* cízhí?
          nobody/   only   Lisi/few   people   why   resign

     b. Wèishénme {méiyŏurén/zhǐyŏu Lǐsì/hĕnshăo rén} cízhí?
          why   nobody/ only   Lisi/few   people resign
          'Why did nobody/only Lisi/few people resign?'
               (= Soh 2005: 148, (17a–b), combined with Ko 2005: 883, (36a–b); their
                                                  parsing, glosses, and translation)

Soh (2001, 2005) accounts for it in terms of an *intervention effect* (see Beck 1996), which prohibits *wh*-movement in LF over an intervening quantifier (including 'only' and negation). Further building on this and other observations, she argues that an adverbial *wh*-phrase in Mandarin Chinese such as *wèishénme* 'why' undergoes covert *feature* movement, while a nominal *wh*-phrase such as *shéi* 'who' or *shénme* 'what' undergoes covert *phrasal* movement.

   Ko (2005: 883) takes another stand and postulates that 'why' in *wh*-in-situ languages (Chinese, Japanese, Korean) is merged in narrow syntax in SpecCP of the clause it modifies. Accordingly, if an XP cannot be base-generated *above* SpecCP or cannot undergo A-bar movement, then it cannot precede 'why', either. This is said to be the case for *méiyŏurén* 'nobody', *zhǐyŏu* DP 'only DP', and *hĕnshăo rén* 'few people' in Chinese, thus accounting for (1a–b) above and (2) below, which according to Ko (2005) precisely illustrates an instance where A-bar movement (here to the matrix topic position) is barred:

(2) *{Méiyŏurén$_i$/zhǐyŏu Lǐsì$_i$/hĕnshăo-rén$_i$} Zhāngsan shuō
       nobody/   only   Lisi/few-people   Zhangsan say
       [(tā$_i$/ tāmen$_i$)   hĕn   cōngmíng].
        she/they   very   smart

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[1]The relevant data from the unpublished manuscript (Soh 2001) are taken up in Soh (2005), with the exception of *zhǐyŏu* NP 'only NP'.

'Zhangsan said that {nobody/only Lisi/few people} {is/are} very smart.'
                    (Ko 2005: 886, (42); her parsing, glosses, and translation; tones added)

The aim of this article is to demonstrate that the basic assumption underlying the ana-
lyses in Soh (2001, 2005) and Ko (2005), viz. that *méiyǒurén* 'nobody', *zhǐyǒu* DP
'only DP', and *hěnshǎo-rén* 'few people' are nominal projections (i.e., DPs or QPs),
is simply wrong (except for a subset of *hěnshǎo-rén*).[2] Instead, they are full-fledged
propositions involving the existential verb *yǒu* 'have, exist' preceded by negation or
adverbs (presented here simply as adjoined), whose unique internal argument is
merged *v*P-internally. Note that Chinese lacks null expletive subjects (see Li 1990).

(3)   a. [$_{TP}$ (Jīntiān) [$_{vP}$ méi [$_{vP}$ yǒu   rén]]].[3]
              today   NEG   exist person
          'There isn't anybody (today).' ≈ 'There is nobody (today).'

      b. [$_{TP}$ (Jīntiān) [$_{vP}$ zhǐ [$_{vP}$ yǒu   Lǐsì]]].
              today   only   exist Lisi
          'There is only Lisi (today).'

      c. [$_{TP}$ (Zhèlǐ) [$_{vP}$ hěnshǎo [$_{vP}$ yǒu   rén]]].
              here   rarely   exist person
          'There are rarely people (here).'

In the absence of any extralinguistic or linguistic context (such as a preceding ques-
tion), a temporal or locative adjunct XP such as *jīntiān* 'today', *zhèlǐ* 'here' is needed
to anchor the event. The fact that this is unnecessary in non-root contexts confirms the
principled well-formedness of the existential construction in the form '*yǒu* DP' (see
Paul et al. 2020 for detailed discussion; also see the *wh*-question in (5) below):

(4)   a. Yīnwèi   méi   yǒu   rén/   yīnwèi   bào   míng   de   rén   zhǐ   yǒu
          because NEG exist person/because report name SUB person only exist
          Lǐsì,   lǎoshī   hěn   bùmǎnyì.
          Lisi   teacher very dissatisfied
          'Because there wasn't anybody/because there was only Lisi among the registered,
          the teacher was very dissatisfied.'

      b. Yīnwèi   hěnshǎo   yǒu   rén,   gōngyuán   lǐ   zhǎng-mǎn-le   zácǎo.
          because rarely   exist person park   in   grow-full-PERF weeds
          'Because there are rarely people, the park has become overgrown with weeds.'

Accordingly, in the following, an implicit anchoring context is assumed for all
instances of *méi yǒu rén* 'there isn't anybody', *zhǐ yǒu* DP 'there is only DP', and

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[2]This misanalysis has many followers (see, among others, Tsai 2008; Yang 2012; Jin 2017,
2020). Soh (2005) and Ko (2005) are chosen here because of the explicit character of their
claims and the influence they have had on subsequent studies on *wh*-in-situ languages, as evi-
denced by their being cited frequently. For an in-depth discussion of the very complex case of
hěnshǎo yǒu rén 'There are rarely people', in particular the sometimes covert nature of *yǒu*
'exist', see section 4 below.

[3]The following abbreviations are used in glossing examples: CL: classifier; EXP: experiential
aspect; NEG: negation; PERF: perfective aspect; PL: plural; SFP: sentence-final particle; SG: singu-
lar; SUB: subordinator.

hěnshǎo yǒu rén 'there are rarely people' in order to facilitate applying the various tests distinguishing these existential constructions from DPs.

The correct analysis for (1b) to be argued for in the remainder of this article is given in (5): the negation *méi* and the adverbs *zhǐ* 'only' and *hěnshǎo* 'rarely' precede the existential verb *yǒu* 'exist', and *cízhí* 'resign' is a secondary predicate for *rén* 'person':

(5) [matrix TP Wèishénme {méi you rén_i/   zhǐ yǒu   Lisi_i/hěnshǎo (yǒu) rén_i}
              why   NEG exist person/only exist Lisi/ rarely   exist person
        [sec.pred PRO_i cízhí]]?
                          resign
    'Why {wasn't there anybody/was there only Lisi/were there rarely people} who resigned?'

(1a) will be shown to be excluded due to a general ban on *wh*-questions in a secondary predicate when the matrix predicate is negated or modified by a quantificational adverb.

The main argument against DP status of the three sequences comes from their unacceptability in postverbal object position (with verbs exclusively selecting nominal complements). This is *the* standard test for constituenthood, in this case DP-hood, based on the consistent head-initial character of the extended verbal projection in the SVO language Chinese (see Huang 1982 and his subsequent work):

(6) *Tā pèngdào-le [TP méi yǒu   rén].
    3SG meet-PERF   NEG exist person
    (Intended: 'She didn't meet anybody/She met nobody.')[4]

(7) *Tā pèngdào-le [TP zhǐ   yǒu   Lǐsì].
    3SG meet-PERF   only exist Lisi
    (Intended: 'She only met Lisi.')

(8) *Tā pèngdào-le [TP hěnshǎo (yǒu) rén].
    3SG meet-PERF   rarely   exist person
    (Intended: 'She met few people.')

Given that *méi yǒu rén* 'there isn't anybody', *zhǐ yǒu* DP 'there is only DP', and *hěn shǎo (yǒu) rén* 'there are rarely people' are not nominal projections (i.e., DPs or QPs), the unacceptability of (2) cannot be due to illicit DP movement, either. Any proposal claiming nominal status for *méi yǒu rén*, *zhǐ yǒu* DP, or *hěn-shǎo (yǒu) rén*,

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[4]The intended meaning is to be rendered as in (i), with either *rènhé* NP 'any NP' in object position or *shéi* 'who', given that *wh* pronouns can function as indefinites when under the scope of negation (see Huang 1982, Cheng 1991):

(i) Tā méi pèngdào [DP rènhé rén]/ shéi.
    3SG NEG like   any   person/who
    'She didn't meet anybody.'

More precisely, for the non-interrogative interpretation of *shéi* 'who' in (i), stress on the negation *méi* and a slightly descending intonation on *shéi* 'who' are required (see Pan 2011a for detailed discussion). This is not necessary in the case of the negative polarity item *rènhé* 'any'.

equivalent to *nobody, only* DP, and *few people,* must first come to terms with these basic distributional facts.

Visibly, the so far unchallenged misanalysis within Chinese linguistics of a few, but central, data points has led to a distorted picture biasing *inter alia* the general typology of *wh*-in-situ languages as well as the crosslinguistic study of QPs. Given the increasingly important role of Chinese in crosslinguistic research and syntactic theory, precise analyses that do not content themselves with approximate translational equivalents, but provide the linguist with a detailed and theoretically-informed picture based on a representative set of data, thereby allowing them to properly evaluate proposals for Chinese made in the literature and to develop their own claims, are indispensable.

The article is organized as follows. Section 2 compares *méi yǒu rén* 'there isn't anybody' with its affirmative counterpart *yǒu rén* 'there is someone' and shows in passing that there is no DP counterpart of 'someone' in Chinese, either. This is due to the ban on indefinite, non-specific subjects in Chinese; no such constraint holds for the internal argument of the existential verb *yǒu* 'exist'. Section 3 turns to *zhǐ yǒu* DP 'there is only DP'. It provides extensive evidence in favour of the often-neglected distinction between the adverb *zhǐ* 'only' and the existential construction *zhǐ yǒu* 'there is only'. Section 4 discusses *hěn shǎo rén* 'few people', which, as the most complex case, requires a more detailed investigation. In fact, many speakers reject or only very marginally accept *hěn shǎo rén* 'few people', and instead use the existential construction *hěn shǎo yǒu rén* 'there are rarely people' plus a secondary predicate (see (5) above). The observed variation in judgements can be accounted for by acknowledging three groups of speakers. *Hěn shǎo rén* 'few people' is shown to result from the reanalysis of the existential construction with a covert *yǒu* 'exist', *hěn shǎo (yǒu) rén* 'there are rarely people'. A corpus study confirms the many restrictions holding for the QP *hěn shǎo rén* 'few people'. Importantly, from a syntactic point of view, *hěn shǎo rén* 'few people' is *not* the counterpart of the QP *hěn duō rén*, despite their antonymic relationship. Section 5 then returns to the starting point and demonstrates how the data provided by Soh (2001, 2005) and Ko (2005) are to be accounted for; crucially, neither movement nor intervention effects are involved here.[5] Section 6 concludes the article.

2. *MÉI YǑU RÉN* 'THERE ISN'T ANYBODY' ≈ 'THERE IS NOBODY'

The incorrect analysis of *méi yǒu rén* as a DP 'nobody' is clearly an effect of the translation into English of the Chinese negated existential construction with a

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[5]Since it is not central to my analysis, I relegate to the appendix the discussion and refutation of Ko's (2005) claim that *wèishénme* 'why' is always merged in SpecCP in narrow syntax (also see Lin 1992), a claim that simply does not tie in with the overall syntax of Chinese (as likewise pointed out by Soh 2005: 149). Note already the well-known fact that *wèishénme* 'why' in Chinese may either precede or follow the subject, and may hence occur in a TP-*internal* position.

secondary predicate on *rén* 'person', the internal argument of *yǒu* 'exist' (see (9)). (For secondary predicates in existential constructions, see Huang 1984, 1987.)

(9) Méi yǒu rén$_i$ [PRO$_i$ gàosù wǒ zhè jiàn shì].[6]
    NEG exist person   tell   1SG this CL   matter
    'There isn't anybody who has informed me about that matter.'
    'Nobody has informed me about that matter.'

There are myriads of examples involving NPs different from *rén* 'person' available in every good grammar manual such as Lü (2000: 382–383), further highlighting the clausal status of *méi yǒu rén* 'there isn't anybody':

(10) a. Jīntiān méi yǒu   fēng/dàngào/kè.
        today NEG exist   wind/cake/class
        'Today there is no wind/no cake/no class.'

     b. Zěnme méi yǒu diàn   le?
        how NEG exist electricity SFP
        'How come there is no electricity?'

Another argument against the DP-hood of *méi yǒu rén* 'there isn't anybody' is its unacceptability as the complement of a preposition (see Huang 2003: 4; (11c)):

(11) Tā [PP gēn [DP Lǎo Zhāng]/*[PP gēn [TP méi yǒu   rén]]   shuo huà.
     3SG with   Lao Zhang/   with NEG exist person speak word
     'He talks to Lao Zhang/to nobody.'

Huang (2003: 4, note 7) likewise states the unacceptability of *méi yǒu rén* 'there isn't anybody' in object position (see (6) above) and therefore evidently evokes the analysis argued for here with *méi yǒu rén* as a negated existential construction 'there isn't anybody'. However, Huang (2003: 19) discards it in the end (emphasis mine):

> Concerning Mandarin, one might reasonably suggest that the language (like Japanese) does not have a negative NP. All the putative negative NPs are simply a sequence of *méi yǒu* 'not have' followed by a polarity NP that does not reanalyze into a negative NP constituent. My assumption is that it should be possible to optionally regard such a sequence as having reanalyzed into an NP, based on two considerations. First, native speakers tend to equate nobody with *méiyǒu rén* (say, in word-for-word translations), even without realizing *that* méiyǒu rén *does not occur postverbally*. Second, it was pointed out to me […] that postverbal *méiyǒu rén* is used by some young speakers, and also in pop song lyrics.[7]

Instead, *méi yǒu rén* 'there isn't anybody' is assigned NP status on a par with English *nobody*. Its unacceptability in object position is then accounted for by the absence of V-to-Infl(-to C) movement in Chinese, which leaves the verb *between* negation and the NP in object position. As a result, the latter two are not adjacent and their conflation into one NP is not possible, either, as proposed by Christensen (1986) for negative NPs in Norwegian V2 sentences, based on Klima's (1964) analysis of English

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[6]According to Huang (1989: 194), Chinese shows no difference between *pro* and PRO. In the following, I choose PRO as label for the covert subject in secondary predicates.

[7]For related discussion, see Tsai (2003). Seventeen years later, none of the Chinese students consulted accepted *méi yǒu rén* 'there isn't anybody' as an object DP in postverbal position.

nobody as the conflation of *not* and *anybody*. The same account is applied to the unacceptability of *méi yǒu rén* 'there isn't anybody' as the complement of a preposition, given that negation precedes a preverbal PP adjoined to *v*P and will therefore never be adjacent to the complement NP within the PP.[8]

This analysis is not on the right track, because *inter alia* it obscures the parallel with the affirmative existential construction, for which Huang (2003) provides an example, given below:

(12) (Yǒu)   yī-ge rén mǎi-le   měi-yi-běn   shu.
     have   someone buy-PERF every-CL   book
     'Someone bought every book.'
     Unambiguous: ∃ > ∀
                    (Parsing, glosses, and translation by Huang 2003: 18, (63b); tones added)

Huang (2003: 18) cites this example to show the contrast with the corresponding English sentence *Someone bought every book*, which is ambiguous and allows for two readings: ∃ > ∀ and ∀ > ∃.

In fact, *yǒu* 'exist' in (12) is *not* optional, unless *yī ge rén* 'one CL person' is to be understood as 'a certain person' instead of 'some person'. Because, as is well-known, Chinese does not allow for indefinite non-specific DPs in subject position;[9] the latter are, however, acceptable as the internal argument of the existential verb *yǒu*:

(13) a. Yǒu [yī ge rén]   dǎ   diànhuà gěi nǐ.
         exist 1 CL person strike   phone   to   2SG
         'There is a person that phoned you.'
         'Someone phoned you.'

     b. * [Yī ge rén]   dǎ   diànhuà gěi nǐ.
            1   CL person strike   phone   to   2SG

The specific reading of a Number Phrase 'Num CL NP' is favoured by an episodic predicate (see Fan 1985, Li L. 1990, Tang 2005, among many others), where accordingly 'yī CL NP' is acceptable in the subject position:

(14) a. [Yī ge chuān máoyī de   xiǎoháizi] chūxiàn zài gūniang shēn hòu […].
            1 CL wear sweater SUB child   emerge at girl   body behind
         'A child wearing a sweater appeared from behind the girl […]'

     b. *(Yǒu) [yī ge xiǎoháizi] hěn cōngmíng.
            exist 1 CL child   very intelligent
         'There is a child who is very smart.'   (Tang 2005: 12, (15); 13, (21'))

(15) Yī wèi yīshēng xiàng   wǒ jièshào […].
      1   CL doctor   towards   1SG introduce
      'A (certain) doctor informed me that […].'   (Fan 1985: 45)

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[8](i) Tā   bù/méi [_vP [_PP gēn (rènhé) rén]   shuō   huà].
       3SG   NEG/NEG   with any   person speak word
       'He doesn't talk/hasn't talked to people/to anybody.'

[9]This constraint does not hold in non-root contexts (e.g., conditional clauses : see Lee 1986: 90).

(16) Yī zhǐ xiǎo hóuzi   zhèng zài shù shàng dǎ   qiūqiān wánr.
      1   CL   small monkey   just   at   tree on   strike swing   play
      'A small monkey is just swinging in the tree for fun.'   (L. Li 1990: 249)

Tang (2005) contrasts (14a) featuring the episodic predicate 'appeared from behind the girl' with the individual-level predicate 'be intelligent' in (14b), where *yǒu* 'exist' obligatorily precedes *yī ge xiǎoháizi* 'a child'. Example (16) is a sentence that reports an observation, and hence has a specific subject and an episodic predicate (see, a.o., Y.-H. A. Li 1996, 1998; Huang et al. 2009: Ch. 8, for discussion of this constraint on subjects.)

   The ban on indefinite non-specific DPs in subject position also explains why Chinese has no DP equivalent for *someone*, either; instead, this is again to be rendered by the existential construction (17), with an eventual secondary predicate on *(yī ge) rén*, as in (13a) above:

(17) Yǒu (yī ge) rén.
      exist 1   CL   person
      'There is a person/someone.'

On a par with *méi yǒu rén* 'there isn't anybody', *yǒu (yī ge) rén* 'there is a person' is unacceptable in object position or as complement to a preposition, a fact well-known by every L2 learner of Chinese who in the beginning produces the unacceptable sentences below based on the wrong assumption that *yǒu (yī ge) rén* is a DP:

(18) a. *Akiū piàn-le   [yǒu (yī ge) rén].
           Akiu   cheat-PERF   exist 1   CL   person
           (Intended: 'Akiu cheated someone.')

      b. *Tā   duì   [yǒu (yī ge) rén]   bùmǎnyì.
            3SG towards exist 1   CL   person dissatisfied
            (Intended: 'Akiu is dissatisfied with someone.')
                                        (Tsai 2003: 161, (2a), (3a), slightly changed)

   The clausal nature of both *yǒu rén* 'there is somebody' and *méi yǒu rén* 'there isn't anybody' is confirmed by the question-answer pair below, where the *yes/no* question in (19a) is formed in the syntactic pattern 'V-not-V' (see Huang 1982), juxtaposing the affirmative and the negative counterparts of the verb:

(19) a. Yǒu méi yǒu   rén?
           exist NEG exist person
           'Is there anybody?'

      b. Yǒu (rén).
           exist person
           'There is somebody.'

      c. Méi yǒu (rén).
           NEG exist person
           'There isn't anybody.'

Example (19b) is the positive answer and (19c) the negative answer; in both, the existential verb *yǒu* on its own without *rén* 'person' is sufficient, thus further

demonstrating the verb status of *yǒu* and the clausal nature of (*méi*) *yǒu rén*.[10] The same holds for (20) with a secondary predicate:

(20) a. Yǒu   méi yǒu   rén   [_sec.pred. PRO dǎ   diànhuà]?
        exist NEG exist person   strike   phone
        'Was there somebody who phoned?'

    b. (i) Yǒu. (ii) Méi   yǒu.
             exist   exist NEG
             '(Yes) there was.' '(No) there wasn't.'

Finally, once again, *rén* 'person' is only one of many NPs that can be the internal argument of the verb *yǒu* 'exist' in a *yes/no* question:

(21) a. Yǒu   méi yǒu   {fēng/ diàn/   shuǐ/ wifi liánjiē}?
        exist NEG exist wind/electricity/water/wifi connection
        'Is there wind/electricity/water/a wifi connection?'

    b. Yǒu./Méi   yǒu.
        exist/ NEG   exist
        '(Yes) there is.'/'(No) there is not.'

All these well-known data are incompatible with an analysis of *méi yǒu rén* and *yǒu (yī ge) rén* as DPs (*nobody* and *someone*, respectively), but obtain automatically under the clausal analysis.

Before concluding this section, let us briefly address some general issues. Given that *yǒu* 'exist' can be negated and modified by adverbs like all other verbs, Milsark's (1974) approach is adopted, where the existential verb is not an operator itself, but introduces an operator (see Y.-H. A. Li 1996 for a mixed approach). Reformulating Milsark (1974) by using the now generalized distinction of *pivot* vs. *coda* (see McNally 2011: 8136), the *pivot* nominal following the existential verb is a property restricting the existential operator, whereas the *coda* (i.e., the secondary predicate)˛ indicates the scope of the existential operator.[11]

(22) There are [_pivot students] [_coda waiting in the classroom].

The important question already raised by Milsark (1974: 19) as to whether pivot and coda form a constituent (an NP immediately dominating an S in Milsark 1974) or whether the coda is a separate constituent attached to VP or to S has so far not been satisfactorily answered for Chinese.

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[10](19a–c) is thus on par with (ia–b), where preferably the object DP *Běijīng* is not repeated in the answer:

(i) a. Tā   qù bù qù Běijīng? b. (Tā) qù/bù   qù.
       3SG go NEG go Beijing   3SG go/NEG go
       'Will she go to Beijing?'   'Yes, she will.'/'No, she won't.'

[11]Milsark (1974: 13, 20) himself defined the *coda* as *all* material to the right of the verb.

Huang (1987: 236, 1988: 57) tentatively suggests an analysis where the DP following *yǒu* 'exist' and the secondary predicate constitute the complement clause of *yǒu* 'exist':[12]

(23) Yǒu [IP [yī ge rén]   [zài jiàoshì   lǐ]].
      exist 1   CL person be.at classroom   in
      'There is someone in the classroom.'   (Huang 1988: 57)

The second possible analysis for Chinese takes up McNally's (1992) assumptions that the *pivot* is the only argument of the existential predicate and that the *coda* is a VP-internal adjunct modifier that stands in a control relation to the pivot.

(24)
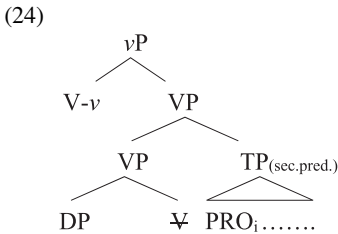
In (24), the VP consisting of the verb *yǒu* 'exist' and its internal argument is merged with the secondary predicate (also see Irimia 2005), which has the size of TP, given the acceptability of auxiliaries, aspect suffixes, etc. here. Its always covert subject, PRO, is coindexed with the internal argument of *yǒu* 'exist'. (For the relevance of "weak" c-command in Chinese, see Huang et al. 2009: 335.)

Finally, based on Huang's (1984) early intuition that secondary predicates should be treated on a par with purposive clauses, a third structure is possible:

(25)

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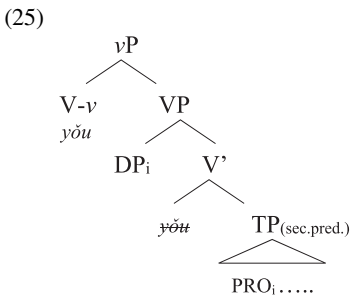
[12]I abstract away here from the stipulation made by Huang (1988: 57) that *yǒu* 'exist' is an auxiliary located in Infl. Auxiliaries and lexical verbs alike never leave the *v*P; accordingly, the head of the projection hosting the subject (Infl or T) always remains covert in Chinese (see Ernst 1994).

This structure is based on Wei and Li's (2018) analysis of postverbal purposive clauses as control complements:

(26) a. [$_{\nu P}$ V [$_{VP}$ DP [V̶-[$_{purposive\ clause}$ ....]]]]   Wei and Li 2018: 321, (54)

   b. Wǒmen jìn   yīqiè lìliàng [wánchéng zhè ge jìhuà]
      1PL   exhaust all   strength accomplish this CL plan
      'We will use all our forces to accomplish this project.'

Wei and Li (2018: 309−322) provide ample evidence that structurally, the purposive clause is a complement to the verb and projects a VP, on par with the infinitival complements of control verbs such as *kāishǐ* 'begin' and *jìxù* 'continue' (see Huang 2017).

By contrast, as indicated in (25) above, the size of the secondary predicate in existential constructions is that of a TP (with an always covert subject), as evidenced by the presence of aspect suffixes, auxiliaries, and negation, as well as adverbs and adjunct XPs preceding the negation. Since negation indicates the left edge of the extended verbal projection in Chinese, the secondary predicate must be larger than the extended *v*P:

(27) Yǒu jǐ   ge rén$_i$ [$_{TP}$ PRO$_i$ míngtiān   bù   néng cānjiā huìyì].
     exist several CL person   tomorrow   NEG   can   attend meeting
     'There are several persons who cannot attend the meeting tomorrow.'

As for the choice among the three structures, for the purpose of this article, I adopt the third one in (25), with a clear bipartitioning into matrix clause and secondary predicate. As we will see below, this allows us to account for the scopal behaviour of focus adverbs preceding *yǒu* 'exist' in the existential construction. The lack of this bipartitioning is the major drawback of Huang's (1988) structure (23) and to a certain extent also that of (24).

Further research is needed to definitively decide between the configurations (25) and (24), because the few studies on secondary predicates subsequent to Huang (1987) (Tsai 1994, Lin and Tsai 2015, a.o.) never address the important issue of the hierarchical position of secondary predicates in the clausal spine with respect to the object DP. The only consensus existing is that the secondary predicate must be located in VP or *v*P. Merging with a higher projection in TP is excluded by the overall syntax of Chinese, where, due to the systematic head-initiality of the extended verbal projection (including TP), postverbal material must be merged in the *v*P/VP. "That the XP [i.e., the secondary predicate, WP] when it appears, is under VP, but not immediately under S is assumed in all discussions" (Huang 1987: 232).

3. *ZHǏ YǑU* DP 'THERE IS ONLY DP'

Recall from (3b), repeated as (28a) below, that '*zhǐ yǒu* DP' is to be analyzed, not as a DP, but as the existential construction 'there is only DP', as evidenced by its unacceptability in object position (28b):

(28) a. [$_{TP}$ [$_{\nu P}$ Zhǐ   [$_{\nu P}$ yǒu Lǐsì]]].
                only   exist Lisi
         'There was only Lisi.'

    b. *Tā pèngdào-le [$_{TP}$ zhǐ   yǒu   Lǐsì].
       3SG meet-PERF   only exist Lisi

    c. Tā [$_{vP}$ zhǐ [$_{vP}$ pèngdào-le Lǐsì]].
       3SG   only   meet-PERF Lisi
       'She only met Lisi.'

Accordingly, *zhǐ yǒu* is *not* a single word *zhǐyǒu* 'only', but the adverb *zhǐ* 'only' preceding the existential verb *yǒu* (*pace* Tsai 2004, Erlewine 2015, a.o.),[13] as evidenced by the compatibility of *zhǐ* 'only' with other verbs ((28c), (29a–b)) and the compatibility of *yǒu* 'exist' with the nearly synonymous adverb *jǐnjǐn* 'only' (29c).

(29) a. Tā zhǐ   [$_{vP}$ huì shuō   hànyǔ].
       3SG only   can speak Chinese
       'She can only speak Chinese.'

    b. Tā zhǐ [$_{vP}$ qù-guo Běijīng].
       3SG only   go-EXP Beijing
       'She has only been to Beijing.'

    c. Zhèi cì   de   kǎoshìtí   hěn nán.
       this   time SUB exam.question very difficult.
       {Zhǐ/jǐnjǐn} yǒu yī   gè xuésheng   quán   zuò-wán-le.
       only/only   exist 1   CL student   completely make-finish-PERF
       'The exam questions this time were very difficult. There was only one   student who finished them all.'

Being an adverb, *zhǐ* 'only' must merge with a verbal projection and precede its highest head (see Paul 2017a and references therein), which explains the unacceptability of both *zhǐ* DP and *zhǐ* PP:

(30) a. *Tā xǐhuān [zhǐ   Lǐsì].
       3SG like   only Lisi
       (Intended: 'She likes only Lisi.')

    b. Tā zhǐ [$_{vP}$ xǐhuān Lǐsì].
       3SG only   like   Lisi
       'She only likes Lisi.'

The only way to render the meaning intended in (30a) is with the adverb *zhǐ* 'only' preceding and modifying the *v*P, as in (30b) (also see (28c) above).

    The well-formedness of the sequence '*zhǐ* PP VP' does not invalidate the observations above, because like any other adverb (e.g., *chángcháng* 'often'), *zhǐ* 'only' combines with the *v*P containing the adjunct PP (31a). When in the topic position above TP, 'adverb + PP' is clearly unacceptable (31b):

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[13]By contrast, the conjunction *zhǐyǒu* 'only if' is to be analyzed as one word; note the obligatory presence of the adverb *cái* 'only then' in the matrix clause:

(i) Nǐ   *zhǐyǒu* cǎiqǔ zhè ge bànfǎ *cái*   néng xué-hǎo.
   2SG only.if apply this CL method only.then can learn-good
   'You can only learn well if you use this method.'   (Lü 2000: 681)

(31) a. Tā   {zhǐ/ chángcháng} [$_{vP}$ [$_{PP}$ gēn   Lǐsì] [$_{vP}$ shuō   huà]].
        3SG   only/ often   with Lisi   speak word
        'He only/often talks to Lisi.'

      b. *[$_{TopP}$ {Zhǐ/ chángcháng}[$_{PP}$ gēn Lǐsì]/[$_{PP}$ gēn   zhǐ   Lǐsì]
            only/ often   with Lisi   with only Lisi
         [$_{TP}$ ta [$_{vP}$ shuō   huà]]].
            3SG   speak word
         (Intended: 'Only with Lisi, he talks.'/'Often with Lisi, he talks.')

      c. *[$_{TopP}$ Zhǐ   yǒu [$_{PP}$ gēn   Lǐsì]/[$_{PP}$ gēn zhǐ   yǒu   Lǐsì]
            only exist   with Lisi/   with only exist Lisi
         [$_{TP}$ ta [$_{vP}$ shuō   huà]]].
            3SG   speak word

As illustrated in (31c), the same unacceptability is observed for *zhǐ yǒu* 'only exist'.
Accordingly, neither the adverb *zhǐ* 'only' nor its combination with the verb *yǒu*
'exist', *zhǐ yǒu*, can be analyzed as "constituent *only*" in the sense of Beaver and
Clark (2008: 235), as suggested by an anonymous reviewer.

This is confirmed by Lü (2000: 678–679), who postulates a covert verb for the
rare acceptable cases of '*zhǐ* DP':

(32) a. Wūzi lǐ zhǐ   [yǒu] [$_{DP}$ Lǎo Wáng yī ge rén].
        room in only exist   Lao Wang 1   CL person
        'In the room there was only the one person Lao Wang.'

      b. Zhǐ   [shì] yùmǐ jiù   shōu-le   èrshí wàn   jìn.
        only be   corn then obtain-PERF 20   10.000 pound
        'For corn alone we obtained [i.e., harvested] 100 tons.'
                    (Examples from Lü 2000: 678–679, with the appropriate verb added)

Crucially, *zhǐ* DP 'only DP' is confined to a position where an existential construction
with *zhǐ* 'only' preceding an unaccusative verb (*yǒu* 'exist' or *shì* 'be') is acceptable,
that is, either the sentence-initial position, as in (32b), or following a locative post-
positional phrase, as in (32a).

Similar to English and other languages, definite DPs and Number Phrases (as in
(28a) and (29c) above) are perfectly acceptable when *zhǐ* 'only' modifies the existen-
tial verb, whereas bare nouns are infelicitous, because it leads to an uninformative
statement (see Beaver and Clark 2003: 336):[14]

(33) Wūzi lǐ zhǐ   yǒu sān ge rén/#rén
      room in only exist 3   CL person/person
      'In the room there are only three persons.'
      #'In the room, there is only some person/there are only people.'

Given the (crosslinguistic) pervasiveness of existential constructions with 'only' and
a definite DP as internal argument of an existential verb, a way must be found to rule
them in, alongside other well-known examples (35a–c) that disobey the otherwise
observed *Definiteness Effect* (DE), which excludes definite DPs from existential con-
structions (34):

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[14]Thanks to an anonymous reviewer for bringing examples of this type to my attention.

(34) Yǒu [yi ge xuéshēng]/*[nà   ge   xuéshēng].
     exist 1   CL student/   that CL   student
     'There was a student/*that student.'

(35) a. Is there anything worth seeing around here? Well, there's the Necco factory.

<div align="right">(Milsark 1974: 208, (97))</div>

   b. Are there any sane people in the world? There are only thee and me (and sometimes
      I wonder about thee).   (Abbott 1992: 1−2;(2b), (3a))

   c. Who showed up? Well, there was Alex.   (McNally 2011: 1834))

Exceptions to the DE have been observed since Milsark (1974) (see (35a–c)) and dif-
ferent approaches (syntactic, semantic, pragmatic) have been pursued ever since (see,
a.o., McNally 1998, for the necessity of distinguishing between definite NPs and
proper names on the one hand, and quantificational NPs on the other; see Fischer
et al. 2016 for an overview).

In Chinese as well, the constraints ruling the DE are still very poorly understood.
Not much progress has been made since Huang (1987), who considers his own in-
depth investigation of the DE in Chinese as "inconclusive" on p. 250, given that
too many different factors are involved. Two cases should suffice to illustrate his
point (also see Y.-H. A. Li 1996).

Definite DPs are acceptable when they are members of a list (36b). Definite DPs are
likewise allowed as the internal argument of unaccusative verbs such as *lái* 'come' and
zǒu 'leave' in non-root contexts, although native speakers' judgements differ here (36c):

(36) a. Zuótiān   de   wǎnhuì yǒu   shéi?
        yesterday SUB   party   exist who
        'Who was there at yesterday's party?'

   b. Yǒu   Lǐ lǎoshī, Zhāng lǎoshī hé   tāmen de   zhàngfū.
      exist Li prof.   Zhang prof.   and   3PL   SUB   husband
      'There were Prof. Li, Prof. Zhang, and their husbands.'

<div align="right">(Paul et al. 2020: 238, (14–15))</div>

   c. %Suīrán   lái-le   Lǐsì [...]
        although   come-PERF   Lisi
        'Although Lisi came, …'   (Huang 1987: 242, (60))

Against this backdrop, a violation of the DE does not constitute a counterargument
against the clausal analysis proposed here, the more so as the 'only exist' sentences
form a clearly definable class of "exceptions", precisely excluding indefinite NPs,
which are otherwise acceptable as internal arguments *par excellence* in the canonical
existential construction.

Going back to the fundamental difference between the adverb *zhǐ* 'only' and the
existential construction *zhǐ yǒu* DP 'there is only DP', the following observation by
Erlewine (2015: 24) provides further evidence in its favour:[15]

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[15]This is *not* what Erlewine (2015) proposes; he instead considers *zhǐ* 'only' and *zhǐ yǒu*
'there only is' as allomorphs. Note that the section on *zhǐ(yǒu)* was not included in the pub-
lished version (see Erlewine 2017).

(37) Zhǐ   yǒu   Lǐsì   shuō   [Zhāngsān   hē   chá].
      only exist Lisi   say   Zhangsan   drink   tea
      'There is only Lisi who said that Zhangsan drinks tea.'

<div align="right">(Glosses and translation mine)</div>

In (37), *zhǐ* 'only' can only focus *Lisi*, not any of the DPs in the complement clause, irrespective of whether they bear phonological stress or not.

The same holds for *zhǐ yǒu* DP 'there is only DP' with a secondary predicate:[16]

(38) a. Zhǐ   yǒu   Lǐsì   [sec.pred PRO   lái   -le/   piàn-le   Zhāngsān].
        only exist Lisi   come-PERF/cheat-PERF   Zhangsan
        (#dàn   Mǎlì   yě   lái-le/   piàn-le   Zhāngsān).
          but   Mary   also   come-PERF/cheat-PERF   Zhangsan
        'There is only Lisi who came/who cheated Zhangsan. (#But Mary also came/also cheated Zhangsan.)'
        (Not: 'There is Lisi who cheated only Zhangsan.')

      b. Zhǐ   yǒu   Lǐsì   [sec.pred PRO   [PP gēn   tāmen] shāngliáng], (#yě   yǒu   Mǎlì).
        only exist Lisi   with 3PL   negotiate   also   exist Mary
        'There is only Lisi who negotiates with them (#and there is also Mary).'
        (Not: 'There is Lisi who negotiates only with them.')

In (38a–b), *zhǐ* 'only' exclusively focuses on *Lisi* as the internal argument of the matrix verb *yǒu* 'exist'. The adverb *zhǐ* 'only' cannot associate with a DP in the secondary predicate, be it in postverbal (38a) or preverbal position (38b) (again irrespective of whether they bear phonological stress or not). The exclusiveness effect observed here points to a clear bipartitioning of the sentence into focus and presupposition and provides an additional argument for the structure proposed in this article, with the existential verb *yǒu* and its internal argument in the matrix clause and hence in a domain distinct from the secondary predicate TP.[17]

The facts in (38a–b) contrast with (39) from Erlewine (2015: 24), which is not an existential construction, but a standard SVO sentence: *zhǐ* 'only' occurs below the

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[16]Thanks to Xie Zhiguo (p.c.) for attracting my attention to this important fact, initially observed by him for the additive focus adverb *hái* 'in addition, still' modifying *yǒu* 'exist':

(i) Hái   yǒu   Lǐsìi [PROi chī-le   pínguǒ].
    in.addition exist Lisi   eat-PERF apple
    'There is also Lisi who ate apples.'
    (Not: 'There is Lisi who also ate apples (in addition to other food).')

[17]This is not an isolated phenomenon. When the copula *shì* 'be' is in sentence-initial position, we observe the same exclusive focus interpretation on the following DP, provided it bears phonological stress. (Otherwise, we obtain "broad focus" on the sentence as whole, that is, the entire assertion is strengthened.)

(i) Shì *Lǐsì* lái-le/piàn-le   Zhāngsān (#dàn Mǎlì yě lái-le/ piàn-le   Zhāngsān).
    be Lisi come-PERF/cheat-PERF Zhangsan   but Mary also come-PERF/cheat-PERF Zhangsan
    'It is Lisi who came/cheated Zhangsan (#but Mary also came/also cheated Zhangsan.)'

For the complete and complex picture of focus cleft and association-with-focus in Mandarin Chinese, see Paul and Whitman (2008) and references therein. Also see Pan (2018).

subject *Lisi* and precedes the matrix verb *shuō* 'say', which in turn selects a clausal complement.

(39) Lǐsì *zhǐ* shuō [Zhāngsān hē   chá].
      Lisi   only   say   Zhangsan   drink   tea

    (i) 'Lisi only said that [Zhangsan]$_F$ drinks tea.'

    (ii) 'Lisi only said that Zhangsan drinks [tea]$_F$.'

    (iii) 'Lisi only said [that Zhangsan drinks tea]$_F$ (he didn't say anything else).'

As noted by Erlewine (2015: 24) *zhǐ* 'only' can "associate with focus" with either the subject or the object DP in the clausal complement, where intonational prominence on the respective DP is required. A third possibility (not mentioned by Erlewine 2015) is association of *only* with the entire clausal complement, as in (39iii) (Liu Chang p.c.).

    To summarize, when preceding the verb below the subject in a simple SVO sentence, *zhǐ* 'only' involves "association with focus" with any (intonationally prominent) DP in its c-command domain, that is, to its right. By contrast, when *zhǐ* 'only' precedes the verb *yǒu* 'exist' in the existential construction, this results in an exclusive focus on its internal argument, not on the DP(s) within the secondary predicate, thus indicating a bipartitioning into focus and presupposition.[18]

4.   *HĚN SHǍO RÉN* 'FEW PEOPLE' AND *HĚNSHǍO YǑU RÉN* 'THERE ARE RARELY PEOPLE'

The case of *hěn shǎo rén* 'very few person' = 'few people' is the most complex of the three alleged DP/QP candidates, foremost because quite a number of speakers downright reject it or only very marginally accept it.[19] However, the same speakers use the existential construction *hěnshǎo yǒu rén* 'rarely exist person' = 'There are rarely people', where the adverb *hěnshǎo* 'rarely' precedes the verb *yǒu* 'exist'; since sometimes *yǒu* 'exist' remains covert, this gives rise to an apparent QP: *hěn shǎo rén* 'few people' (see the discussion below).

    Furthermore, even for those speakers who accept *hěn shǎo rén* 'few people' (without any covert *yǒu* 'exist'), it is *not* simply the antonym of the QP *hěn duō rén* 'many people', as tacitly assumed in the literature. In particular, it is *not* possible

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    [18]This bipartitioning is best captured by (25) above, hence my opting for this structure. The exclusive matrix scope of *zhǐ* 'only' also shows that we need to distinguish between focus domain and c-command, *yǒu* 'exist' and with it the preceding adverb *zhǐ* 'only' c-commanding all the material to its right.

    [19]It is fiendishly difficult to parse and gloss coherently in this section. I have opted for the following compromise. (a) *Hěn shǎo rén* 'very few person' = 'few people', because the speakers using it model it on the *bona fide* QP *hěn duō rén* 'very much person' = 'many people'. (b) The adverb *hěnshǎo* 'rarely' is analyzed and presented as one word, notwithstanding its transparent internal structure *hěn* 'very' + *shǎo* 'few, little'. This is motivated by its co-existence with the adverb *shǎo* 'little, a bit' (see (41) below).

to simply attribute differences between the two to the semantic contrast between monotone decreasing vs. increasing quantifiers. Instead, the differences observed are foremost due to syntax, in particular the fact that *hěn shǎo rén* 'few people' does not have the same distribution as *hěn duō rén* 'many people'.

As demonstrated below in this section, native speakers can be divided into three groups. I start out with providing the data baseline, representative of group 1, which will then serve as backdrop for the description of groups 2 and 3. I call this *data baseline*, because groups 2 and 3 likewise use the constructions judged acceptable by group 1. Group 3 is the most "encompassing" group, for it in turn accepts the constructions judged well-formed by group 2. Importantly, young speakers (i.e., university students) are present in all groups, although to a lesser degree in group 1. We thus do not observe an "ongoing change" here, because for a given individual speaker, there is no change at all, given that s/he has a fixed set of syntactic and semantic properties associated with her/his grammar of *hěnshǎo yǒu rén* 'there are rarely people' and *hěn shǎo rén* 'few people', respectively. "Ongoing change" is an unfortunate metaphor used by the linguist when confronted with the simultaneous existence of groups of native speakers having different internalized grammars for a given linguistic phenomenon. (See Hale 2007 for extensive discussion of *syntactic change* vs. *diffusion* of that change.)

4.1. The data baseline: Group 1

As just mentioned, when preceding the existential verb *yǒu* 'exist' (40a) or other verbs (40b–c), *hěnshǎo* instantiates the adverb 'rarely, on few occasions':

(40) a. [$_{TP}$ (Zhèlǐ) [$_{\nu P}$ hěnshǎo [$_{\nu P}$ yǒu   rén]]].
              here   rarely   exist person
          'There are rarely people (here).'[20]

      b. Tā   hěnshǎo lái.
          3SG   rarely   come
          'He rarely comes.'

      c. Tā   hěnshǎo (bù) zài   jiā.
          3SG   rarely   NEG   be.at home
          'He's rarely (not) at home.'

By comparison, the adverb *shǎo* means 'a bit, little, less':

(41) Bìng   gāng hǎo,   shǎo   huódòng
      illness just   good   little   practice
      'Your illness has just been cured, practice [only] a little bit (i.e., as little as possible).'
          Lü 2000: 480

When wanting to ascribe a predicate to a small number of people, speakers from Group 1 use the existential construction with a secondary predicate, where *yǒu* 'exist'

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[20]Here and in the remainder of the section, I have opted for a translation that mirrors the Chinese word order as much as possible, rather than an idiomatically correct translation: 'Rarely is there anyone who…'

is modified by the adverb *hěnshǎo* 'rarely'. They never use *hěn shǎo rén* 'few people', and every sentence-initial *hěn shǎo rén* is spontaneously corrected by adding *yǒu* 'exist': *hěnshǎo yǒu rén* 'rarely *exist* person'.

(42) a. Zhè   jǐ   nián tā   de shū mài   de   hěn hǎo,
        this several year 3SG SUB booksell DE   very good
        dàn   yǐqián hěnshǎo yǒu rén mǎi.
        but   before rarely exist person buy
        'In the last couple of years his book has been selling very well; but before, there were rarely people buying [it].'

     b. Hěnshǎo yǒu   wàiguórén chī shéròu.
        rarely   exist foreigner eat snake.meat
        'There are rarely foreigners eating snake meat'

This existential construction is also used with NPs different from *rén* 'person' (42b).

The adverb status of *hěnshǎo* 'rarely' and hence the clausal nature of '*hěnshǎo yǒu* DP' is particularly neat in the examples below provided by an anonymous reviewer, where the internal argument DP can be independently quantified (43a).

(43) a. Zhèlǐ hěnshǎo yǒu [shí ge rén]ᵢ [PROᵢ yīqǐ   hē   kāfēi].
        here rarely   exist 10 CL person   together drink coffee
        'There are rarely 10 people having a coffee together here.' (my translation)

     b. Zhè ge kāfēiguǎn hěnshǎo yǒu   zhōngguórénᵢ
        this CL coffee.shop rarely   exist Chinese.person
        [PROᵢ lái hē   kāfēi], dànshì yīyǒu, jiù yǒu wǔshí duō   ge.
             come drink   coffee but   one exist then exist 50   muchCL
        'This coffeeshop, there are rarely Chinese coming [here] to drink coffee, but as soon as there are [Chinese], then there are immediately more than 50.'

Examples (43a–b) likewise demonstrate that *hěnshǎo* 'rarely' only modifies the matrix existential verb.

Given its clausal status, *hěnshǎo yǒu rén* 'there are rarely people' is naturally unacceptable in the postverbal object position (with verbs selecting only DPs) and as complement of prepositions; it thus contrasts with the QP *hěn duō rén* 'many people', which as a nominal projection is acceptable here (for all speakers):

(44) a. Tā pèngdào-le [QP hěn duō   rén]/*[TP hěnshǎo yǒu   rén].
        3SG meet-PERF   very much person/   rarely   exist person
        'He met many people.'/(*'He met [there are rarely people].)'

     b. Tā [PP gēn [QP hěn duō   rén]/*[TP hěnshǎo yǒu   rén] shuō huà.
        3SG with   very much person/   rarely   exist person talk word
        'He talks with many people.'/(*He talks with [there are rarely people]).'

Again, the same holds for NPs other than *rén* 'person':

(45) a. Tā rènshì [QP   hěn duō xuésheng]/*[TP hěnshǎo yǒu   xuésheng].
        3SG know   very much student/   rarely   exist student
        'He knows (i.e., is acquainted with) many students/*there are few students.'

b. Tā [PP gēn [QP hěn duō xuésheng]/*[TP hěnshǎo yǒu xuésheng]
3SG with very much student/ rarely exist student
shuō huà.
say word
'He talks with many students/*talks with there are few students.'

The meaning intended in (45a) 'He knows few people/students' can be rendered as in (46), with the quantitative adjective *shǎo* 'be little, few' as matrix predicate:

(46) [TP [DP Tā rènshì de rén/ xuésheng] [AP hěn shǎo/ tài shǎo]].
3SG know SUB person/student very be.few/too be.few
'The persons/students he knows are few/too few.'

The adverb *hěn* 'very' is required for the positive degree and therefore remains untranslated, in contrast to other degree adverbs such as *tài* 'too' (see Paul 2010 and references therein).

There is also a translation corresponding structurally more closely to the English 'He knows few people/students', with *hěn shǎo* as modifier of *rén* 'person' and *xuésheng* 'student', respectively, and followed by the subordinator *de*:[21]

(47) %Tā rènshì [DP hěn shǎo *de* rén/ xuésheng]
3SG know very be.few SUB person/student
'He knows few people/students.'[22]

The construction in (47) with an uncontroversial DP as object is in principle acceptable for many speakers, although to different degrees (as indicated by "%"). Importantly, while (47) is subject to many constraints (see section 4.2 immediately below), this is not the case for (46), which is the preferred, most "natural" version, even for speakers who fully accept (47).

The discussion of the constraints holding for (47) will lead us beyond the data baseline and will confront us with variation among native speakers, indicating the co-existence of several groups. Importantly, the speakers from groups 2 and 3 accept the constructions judged as well-formed in the baseline data, but differ in whether and in which syntactic contexts they accept *hěn shǎo rén* 'few people' and *hěn shǎo de rén* 'few people'.

4.2. Beyond the data baseline: Group 2

Liu (2011: 103) provides the following triplet to illustrate the constraints holding for *hěn shǎo* 'very be.few' as DP modifier:[23]

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[21]*De* is the realization of several heads on the D-spine, the highest being D°, and thus clearly indicates the DP status of the phrase at hand (see Paul 2012, 2017b and references therein). While *de* as head takes a nominal projection as complement to its right and hosts the modifier in its specifier position [DP [AP hěn shǎo] [D′ *de* [NP *rén*]]], its glossing as *subordinator* reflects the semantic relationship between the modifier and the modified.

[22]I see no way to indicate the contrast between *hěn shǎo rén* 'few people' and *hěn shǎo de rén* 'few people' by a difference in translation.

[23]Liu's (2011) article focusses on inalienable vs. alienable possession and the corresponding optionality of the subordinator *de* and discusses the data involving *hěn shǎo* 'very be few' in passing only.

(48) a. *Wǒ kànjian-le [hěn   shǎo   gùkè].
          1SG see-PERF   very be.few customer
          (Intended: 'I have seen few customers.')

     b. 95% Wǒ kànjian-le [DP hěn   shǎo   *de* gùkè].
              1SG see-PERF   very be.few SUB customer
              'I have seen few customers.'

     c. 100% Wǒ *zhǐ* kànjian-le [DP hěn   shǎo   *de* gùkè].
              1SG only see-PERF   very be.few SUB customer
              'I have only seen few customers.'
                        (Liu 2011: 103, (26–28); glosses, translation and bracketing added)

The contrast between (48a) and (48b) shows that *hěn shǎo* 'very be.few' as Adjectival
Phrase requires the subordinator *de* when modifying a DP. However, even with *de*,
(48b) is not 100% felicitous, either, but requires the presence of the adverb *zhǐ*
'only' preceding the verb, an observation confirmed by the native speakers consulted.

     The judgements in (48a–c) likewise hold for *rén* 'person' in *hěn shǎo rén* 'few
people' as well as *hěn shǎo de rén* 'few people' and define the native speakers I refer
to as group 2:

(49) a. ???Wǒ kànjian-le [hěn   shǎo   rén].[24]
              1SG see-PERF   very be.few person
              (Intended: 'I have seen few people.')

     b. 95%Wǒ kànjian-le [DP hěn   shǎo   *de* rén].
              1SG see-PERF   very be.few SUB person
              'I have seen few people.'

     c. 100% Wǒ *zhǐ* kànjian-le [DP hěn   shǎo   *de* rén].
              1SG only see-PERF   very be.few SUB person
              'I have only seen few people.'

For PPs with *hěn shǎo de rén* 'few people' as complement, *zhǐ* 'only' modifying the
entire VP, including the preverbal adjunct PP, is again required for full acceptability.
Note that group 1 speakers likewise accept these PPs:

(50) Tā   [vP *zhǐ* [vP [PP gēn [DP hěn   shǎo   *de* rén/   xuésheng]]
      3SG   only   with   very be.few SUB person/student
      [vP shuō   huà]].
          speak word
      'She only speaks with few people/few students.'

     Besides the presence of the adverb *zhǐ* 'only', Liu (2011: 104) observes other
constraints holding for '*hěn shǎo de* NP', such as a parallelism requirement:

(51) a. [DP Hěn   shǎo   de qián] bànchéng-le   [DP hěn   dà   de   shì].
              very be.few SUB money accomplish-PERF   very be.big SUB matter
              'Little money has accomplished great things.'

---

[24]The presence of *zhǐ* 'only' does not improve sentences with *hěn shǎo rén* 'few people' in
object position.

b. [_DP Hěn shǎo de qián] jiù mǎi [_DP hěn shǎo de dōngxī].
         very be.few SUB money then buy   very be.few SUB thing
    'Little money only buys few things.'

Furthermore, he construes several minimal pairs of the type illustrated in (52a) and (53a) below with *hen duō* 'very be much' and *hěn shǎo* 'very be few' as modifiers in an object DP, and states the systematic unacceptability of the latter. Recall from the discussion of (46) above that the paraphrases in (52b) and (53b) are perfectly acceptable for all speakers.

(52) a. Tā yǒu [_DP hěn duō de yáchǐ]/*[_DP hěn shǎo de yáchǐ].[25]
          3SG have   very be.much SUB tooth/   very be.few SUB tooth
          'He has many teeth/few teeth.'

      b. [_DP Tā de yáchǐ] [_AP hěn shǎo/ hěn duō].
              3SG SUB tooth   very be.few/very be.much
          'His teeth are few/many.'

(53) a. Tā jiā yǒu [_DP hěn duō de fángzi]/
          3SG home have   very be.much SUB room/
          *[_DP hěn shǎo de fángzi].
               very be.few SUB room
          'His home has a lot of rooms/few rooms.'

      b. [_TP [_DP Tā jiā de fángzi] [_AP hěn shǎo/ hěn duō]].
                 3SG home SUB room   very be.few/very be.much
          'The rooms of his home are few/many.'

Liu (2011) therefore concludes that *hěn shǎo de* NP 'very be.few SUB NP' is *not* on a par with *hěn duō (de)* NP 'very be.much SUB NP' = 'many NP', where no such constraints are observed and where the subordinator *de* is optional, not obligatory as it is for *hěn shǎo* (see (49a–b) above).

    Concerning *hěn shǎo rén* 'few people', Liu (2011: 103) reports 189 instances in texts dating from the late 1990s in the corpus of the Center for Chinese Linguistics at Peking University, all of them occurring in sentence-initial position.[26] There are no examples of *hěn shǎo* 'very be few' directly preceding NPs, other than *rén* 'person', in his corpus. The few examples of *hěn shǎo* NP (i.e., without the subordinator *de*) found via a Google search are judged as only marginally acceptable by Liu (2011: 104: 30, 31). In addition, *hěn shǎo* 'very be few' is not a DP modifier here, because adding *de* leads to an unacceptable result; instead *yǒu* 'exist' must be reconstructed as in (54) below, i.e., these are cases of the existential construction with *hěnshǎo* as adverb 'rarely' and a secondary predicate on the internal argument NP of *yǒu* 'exist': 'there are rarely NP VP-ing':

(54) Zài déguó, hěnshǎo ??(yǒu) xuéshēng yòng zìdiǎn.
      at Germany rarely   exist student   use dictionary
      'In Germany, there are rarely students using dictionaries.'

                                                              (Liu 2011: 104; (32))

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[25] *Yǒu* here is the transitive verb 'have, possess'.
[26] See <http://ccl.pku.edu.cn:8080/ccl_corpus/index.jsp?dir=xiandai>

Going back to the 189 instances of the sequence *hěn shǎo rén* attested in the Peking University corpus, the fact that they exclusively occur in sentence-initial position provides us with an important clue. Given the lack of an expletive subject in the existential construction in Chinese and the fact that *hěnshǎo* 'rarely' is a *v*P level adverb, the only XPs liable to precede the existential construction *hěnshǎo yǒu rén* are sentence-level adverbs or adjunct XPs (such as the PP *zài déguó* 'in Germany' in (54)). When *yǒu* 'exist' is covert, the surface sequence *hěn shǎo rén* can be reanalyzed as a nominal projection in the subject position (SpecTP), and the secondary predicate as matrix predicate. This is the reason why *hěn shǎo rén* 'few people' exclusively occurs in the subject position, that is, in a sentence-initial position in the broad sense, as explained above. Examples (55a) and (55b) below show the two relevant parsings:

(55) a. [$_{TopP}$ Qíshí [$_{TP}$ [$_{vP}$ hěnshǎo [$_{vP}$ (*yǒu*) rén$_i$
       in.fact   rarely   exist person
    [$_{sec.pred.}$ PRO$_i$ [$_{vP}$ huì duì   nǐ   hǎo]]]]]]
                   will towards 2SG be.good
    'In fact, there are rarely people who will be good to you.'

    b. [$_{TopP}$ Qíshí [$_{TP}$ [$_{QP}$ hěn shǎo rén] [$_{T'}$ [$_{T°}$ Ø] [$_{vP}$ huì duì   nǐ hǎo]]]].
        in.fact   very few   person   will towards 2SG be.good
    'In fact, few people will be good to you.'[27]

This is a plausible reanalysis, because the c-command relations between all constituents are maintained in (55b); that is, (55b) shows the same hierarchical relations as (55a), in accordance with the *Conservancy of Structure Constraint* (Whitman 2001). Importantly, both constructions (55a) and (55b) remain in use and can be employed by the same speaker (see the discussion immediately below). Concerning the semantic side, quantifying over a situation as in *hěn shǎo yǒu rén* VP 'there are rarely people VP-ing' can – depending on the meaning of the sentence – imply 'few people VP', and it is this possible implication which gives rise to the analysis of *hěn shǎo rén* with a covert *yǒu* 'exist' as a QP 'few people' when followed by a secondary predicate.

    Note that assuming a covert *yǒu* 'exist' is not an isolated fact limited to the existential construction with the adverb *hěnshǎo* 'rarely'; a covert verb was likewise postulated for the adverb *zhǐ* 'only' plus DP in sentence-initial position (see (32a) above, repeated in footnote 28 below). However, while in the case of sentence-initial *zhǐ* DP 'only DP', there are indeed reasons to assume that *yǒu* 'exist' is always present, albeit

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[27]Like most sentence-level adverbs and adjunct XPs, *qíshí* 'in fact' can precede or follow the subject (see Paul 2017a for discussion and references). For ease of comparison between (55a) and (55b), *qíshí* 'in fact' in (55a) is directly located in the topic position, SpecTopP, although a TP-*internal* position is equally plausible, given the absence of a subject in the existential construction. Importantly, both positions are compatible with the reanalysis proposed, the only difference being that with a TP-*internal* adverb position in (55a), the reanalysis would also induce a change of position for *qíshí* 'in fact', from a TP-internal to a TP-external position, but always *above hěnshǎo* 'rarely' and *hěnshǎo rén* 'few people', respectively.

covertly,[28] the situation is different for *hěn shǎo rén* 'few people'. Because for a subset of group 2 speakers, sentence-initial *hěn shǎo rén* 'few people' no longer involves a covert *yǒu* 'exist', but has been reanalyzed as a QP 'few people', as evidenced by the difference these speakers make between *hěn shǎo yǒu rén* 'there are rarely people', on the one hand, and *hěn shǎo rén* 'few people', on the other:

(56) a. Dànshì xiànzài hěnshǎo *yǒu*   rén   jiēshòu zhè zhǒng kànfǎ.
        but   now   rarely   exist person accept this CL   view
        'However, nowadays there are rarely people who accept this view.'

   b. Wǒ gānggāng wèn-guo   tāmen,
      1SG just   ask-EXP   3PL
      dànshì hěn shǎo (*yǒu*) rén   jiēshòu zhè zhǒng kànfǎ.
      but   very few   exist person accept this CL   view
      'I have just asked them, but few [of them] accept this view.'[29]

In (56b), *yǒu* 'exist' is ruled out, because *hěn shǎo rén* 'few (of them)' has *tāmen* 'they' in the first part as antecedent; accordingly, only a nominal projection is acceptable here and the existential construction is excluded. Example (56a), however, lacks such a constraining syntactic context and therefore allows for the existential construction 'there are rarely people' plus a secondary predicate, given that the overall meaning of the sentence is compatible with such a general statement.[30]

4.3.   Group 3

The situation seems to have further evolved since the time of Liu's (2011) article and there is another, third group in addition to the baseline speakers (group 1) and to those described by Liu (2011), that is, my group 2. This third group not only accepts the QP *hěn shǎo rén* 'few people' in subject position (as group 2 does), but also in object position, where group 2 only accepts the DP *hěn shǎo de rén*, with *hěn shǎo* 'be few' as a DP internal modifier. *Hěn shǎo rén* 'few people' as complement in a PP is likewise fine for group 3:

(57) a. Wǒ kànjian-le [hěn shǎo rén/   hěn duō rén].
        1SG see-PERF   very few person/very much person
        'I have seen few/many people.'

---

[28]The contrast between (i) (= (32a) above) and (ii) shows that *yǒu* 'exist' must be overt with proper names and may only remain covert with quantified expressions:

(i) [TP [PostP Wūzi lǐ] [vP zhǐ [vP (*yǒu*) [NumP Lǎo Wáng [yī ge   rén]]]]].
             room in   only   exist   Lao Wang 1 CL person
    'In the room there was only the one person Lao Wang.'

(ii) [TP [PostP Wūzi lǐ] [vP zhǐ [vP *(*yǒu*) [DP Lǎo Wáng]]]].
              room in   only   exist   Lao Wang
     'In the room there was only Lao Wang.'

[29]Many thanks to Chan Tsan Tsai for providing this minimal pair.

[30]Since they never use *hěn shǎo rén* 'few people', speakers of group 1 naturally do not have this contrast. The speakers of group 3, however, all have this contrast, since they also allow *hěn shǎo rén* 'few people' in object position (see section 4.3 immediately below).

b. Wǒ   de   péngyou hěn   shǎo, suǒyǐ   wǒ zhǐ
   1SG   SUB friend   very   be.few therefore 1SG only
   [PP duì   [hěn   shǎo rén]]   hǎo.
       towards very   few   person   good
   'My friends are few; therefore I'm only friendly with few people.'

<div align="right">(Lin Jo-Wang, p.c.)</div>

In addition, again unlike group 2, group 3 speakers also allow QPs with NPs other than *rén* 'person' (58a). They also accept *hěn shǎo* as DP modifier with *de* (58b), as group 2 does, *modulo* the fact that the adverb *zhǐ* 'only' is not required. In other words, group 3 speakers seem to analyze *hěn shǎo* 'few' on a par with *hěn duō* 'many', either as a modifier (with *de*) or as a quantifier (without *de*):

(58) a. Wǒ   kànjian-le [QP   hěn   shǎo gùkè/   hěn   duō   gùkè].
       1SG   see-PERF   very   few   customer/very be.much customer
       'I have seen few/many customers.'

    b. Wǒ   kànjian-le [DP   hěn   shǎo   de/ hěn   duō   de   gùkè].
       1SG   see-PERF   very   be.few SUB/very be.much SUB customer
       'I have seen few/many customers.' (see (48a–c) above)

Group 3 co-exists with the two other groups and accepts all constructions judged well-formed for groups 1 and 2; importantly, all three of them include young speakers (i.e., university students), although as a minority in group 1. Vice versa, speakers of groups 1 and 2 are very well aware of group 3 speakers, as reflected in comments such as "This construction is unacceptable for me, but it may be fine for others". This is especially the case for group 2 speakers when confronted with *hěn shǎo rén* 'few people' in object position.

    Note, though, that notwithstanding the acceptance by native speakers of *hěn shǎo rén* 'few people' in object position in judgement tasks, the actual distribution of *hěn shǎo rén* 'few people' and *hěn shǎo de rén* 'few people' is much more constrained than that of *hěn duō (de) rén* 'many people'. More precisely, the majority of *hěn shǎo rén* 'few people' occurs in sentence-initial position, that is, the position where the reanalysis of *hěn shǎo yǒu rén* 'there are rarely people' as a QP *hěn shǎo rén* few people' took place, and there are only a few cases of *hěn shǎo rén* 'few people' in the postverbal object position. By contrast, the majority of *hěn shǎo de rén* 'few people' (*with* the subordinator *de*) are found in postverbal object position. This is the result of a corpus search (filtered by checks with native speakers) for *hěn shǎo yǒu rén* 'there are rarely people', *hěn shǎo rén* and *hěn shǎo de rén* 'few people'.[31] The brief overview of the figures for each sequence below does not claim any statistic validity; its main purpose is to highlight the complexity of the data situation for both *hěn shǎo rén* and *hěn shǎo de rén* 'few people' and to insist on the fact that they are *not* simply the counterpart of *hen duo (de) ren* 'many people' and can therefore not be directly compared with, for example, the English QPs *many people* and *few people*, either.

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[31]The corpus consulted is hosted by the Beijing Language University, available at: <http://bcc.blcu.edu.cn/>.

Let us start with *hěn shǎo yǒu rén* 'there are rarely people', with 419 examples from literary works, 2253 from newspapers and periodicals, and 1892 from the microblogging website *Weibo*. Nearly all examples feature a secondary predicate (59b–c), and there are only a handful of examples with *hěn shǎo yǒu rén* on its own (59a):

(59) a. Zhèng shì jiàqī,   xuéxiào mén qián   hěnshǎo yǒu   rén.
          just   be   holidays school   door in.front rarely   exist people
          'It's the holidays right now, there are rarely people in front of the school entrance.'
                                                                      (newspapers/periodicals)

      b. Guòqù hěnshǎo yǒu   rén   shàng xué.
          past   rarely   exist person attend school
          'In the past there were rarely people going to school.'   (newspapers/periodicals)

      c. Nǐ   zài tiānjīn wèn lù,   hěnshǎo yǒu   rén   bù   gàosù nǐ.
          2SG at   Tianjin ask road rarely   exist person NEG tell   2SG
          'If in Tianjin you ask for directions, there are rarely people who don't tell you.'
                                                                      (*Weibo*[32])

The high frequency of *hěn shǎo yǒu rén* 'there are rarely people' in *Weibo* clearly shows that *hěn shǎo yǒu rén* is likewise used by the younger generation (as the probable majority among bloggers),[33] a result confirmed by an informal acceptability judgement test with 15 native speakers (between 22 and 27 years) carried out by Yan Shanshan (p.c.) at Peking University

Turning now to *hěn shǎo rén* 'few people', the corpus provides 147 examples from literary texts, 307 examples from newspapers and periodicals, and 886 from the blog *Weibo*. Importantly, the majority appears in the subject position (including the subject position in complement clauses, see (63)), where it may be preceded by sentence-level adverbs such as *guòqù* 'in the past' and *hòulái* 'afterwards, later', as well as topicalized phrases (see (60)).[34] As explained above, these are the very same syntactic environments that allow for the existential construction, given that *hěnshǎo* 'rarely' as VP-level adverb must follow sentence-level adverbs and topicalized XPs. This is illustrated by (63), where the native speakers consulted about the corpus sentence (63a) in fact either preferred or required the presence of *yǒu* 'exist' (see (63b)), because the existential construction was judged more appropriate for conveying the intended general statement:

(60) [$_{TopP}$ [$_{DP}$ Zhè duàn cáiliào] [$_{TopP}$ guòqù [$_{TP}$ hěn   shǎo rén   [$_{vP}$ zhīdào]]]].
          this   CL   material   past   very few   person   know
          'This material, in the past few people knew about it.'

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[32]Some speakers prefer to add *huì* 'will' after the negation *bù*: 'there are rarely people who will not tell you.'

[33]Note that for *Weibo*, the corpus often provides multiple repetitions of the same sentence.

[34]All of the examined 147 examples from literary texts show *hěn shǎo rén* 'few people' in subject position. I had a cursory look at the 307 examples from newspapers and periodicals and went through the first 200 examples from *Weibo* without finding any instance of *hěn shǎo rén* in object position.

(61) Hòulái   hěn shǎo rén   zài   jiāotán, lián Mǎ Xiū yě   zhǐ shuō
     later   very few   person again chat   even Ma Xiu also only speak
     jǐ   jù   huà.
     several CL word
     'Later, few people resumed talking, even Xiu Ma only spoke a few words.'

                                                                    (literary text)

(62) Jīntiān hǎoxiàng   hěn shǎo rén   shàng bān.
     today   apparently very few   person attend work
     'Today apparently few people go to work.'   (*Weibo*)

(63) a. Wǒ kànjian [$_{TP}$ hěn shǎo rén   bù   zhùyì   tīng biérén
        1SG see   very few   person NEG   heed   listen other.person
        de   fā   yán].
        SUB emit word
        'I observe that few people do not heed and listen to what others say.'

                                                                        (*Weibo*)

     b. Wǒ kànjian [$_{TP}$ [$_{vP}$ hěnshǎo [$_{vP}$ *yǒu* rén$_i$ [PRO$_i$ bù   zhùyì tīng…]]].
        1SG see   rarely   exist person   NEG heed listen
        'I observe that there are rarely people who do not heed and listen to what others
        say…'

The case of (63a–b) illustrates the necessity to control for a covert existential verb *yǒu*
in the instances of sentence-initial *hěn shǎo rén* 'few people' and the impossibility of
automatically assigning it the same QP status as *hěn duō rén* 'many people'.

   The few examples of *hěn shǎo rén* 'few people' in postverbal position, hence as a
QP, show it as internal argument of either the unaccusative verb *lái* 'come' or the
existential verb *yǒu* preceded by the adverb *zhǐ* 'only':

(64) a. Jīntiān de   yīngyǔ kè   guǒrán lái-le   hěn shǎo rén.
        today   SUB English class really come-PERF very few   person
        'There really came few people to today's English class.'   (*Weibo*)

     b. Zhǐ yǒu   hěn shǎo rén   néng dú-dào   jiǔ niánjí yǐshàng.
        only exist very few   person can study-reach 9   grade   above
        'There are only few people who can go to school beyond the ninth grade.'
                                                              (newspaper/periodicals)

     c. Zhǐ yǒu   [hěn   shǎo rén]$_i$ [PRO$_i$ néng zhǎngwò hùnníngtǔ jiǎobàn
        only exist very few   person   can   master   concrete   stir
        gōngchǎng de   jīqì].
        factory   SUB machine
        'There are only few people who can master the machinery of the concrete mixing
        plant.'   (newspaper/periodicals)

Evidently, (64a–c) are only acceptable for the speakers from (a subset of) groups 2
and 3 who, in addition to *hěn shǎo yǒu rén* 'there are rarely people', also have the
QP *hěn shǎo rén* 'few people' in their grammar. By contrast, speakers from group
1 simply reject (64a–c).

   Note that it is the necessity of presenting the facts in a certain order that gives the
impression of a linear development, with new groups adding on successively, but this

does not reflect the real situation. Instead, the three groups seem to have co-existed for a long time, as demonstrated by the early attestation of *hěn shǎo rén* 'few people' as a QP in postverbal position in (64c) above from a 1953 article of the *Rénmínrìbào* 'People's Daily'*; similarly, (64b) dates back to 1987 in the same newspaper. What we observe evolving in time is the *diffusion* among the speakers of the analysis of *hěn shǎo rén* as QP, with a clear increase in the last decade.

The preceding discussion demonstrates that *hěn shǎo rén* 'few people' does not show the same distribution as *hen duo rén* 'many people' and can therefore not be considered as its counterpart in syntax, notwithstanding their antonymic relationship.

Turning now to the DP *hěn shǎo de rén*, with the AP *hěn shǎo* 'very be.few' as modifier of *rén* 'person', the corpus provides 16 examples from literary texts, 76 from newspapers and periodicals, and 108 from *Weibo*. Across these different text sorts, there are hardly any occurrences in subject position. The majority of cases occur in the object position of a verb modified by the adverb *zhǐ* 'only' (including many instances of the existential construction *zhǐ yǒu* 'there is only' (65)), thus confirming Liu's (2011) observation (see section 4.2 above). Among the 108 examples from *Weibo* (again with many sentences occurring twice), there are only five with *hěn shǎo de rén* 'few people' in subject position (66):

(65) Zhǐ   yǒu [_DP_ hěn   shǎo   de   ren]_i   [_PROi_ dǒngdé].
     only   exist   very   few   SUB   person   understand
     'There are only few people who understand.'   (*Weibo*)

(66) Hěn   shǎo   de   rén   jìdé.
     very   few   SUB   person remember
     'Few people remember [it].'   (*Weibo*)

Finally, there is a variant of *hěn shǎo de* NP, where *hěn shǎo* does not modify a bare noun, but the Number Phrase '*jǐ* CL NP' = 'several NP', as in (67) from Liu (2011):

(67) Wǒ   kànjian-le [_DP_ hěn   shǎo   *de* [_NumP_ jǐ   ge   gùkè]].
     1SG   see-PERF   very   be.few SUB   several CL   customer
     'I have seen very few, i.e., a (mere) handful of customers.'

                                                                        (Liu 2011: 103, (29))

Note that the relative order is rigid. Given that *jǐ* 'several' refers to a number between 3 and 9, in combination with *hěn shǎo* 'very be.few', this results in the meaning of 'very few NP, a (mere) handful of NP'.

Hěn shǎo de jǐ ge NP 'a handful of NP' (including *rén* 'person' as NP) is fully acceptable for all speakers across the three groups and is a *bona fide* DP on par with *hěn shǎo de* NP 'few people'; hence, it is acceptable in object position (see (67), (68)) and as complement of a preposition (see (69) elicited from a native speaker, there being no examples of this type in the corpus), *modulo* the required presence of the adverb *zhǐ* 'only' for some speakers.

(68) Wǒ   bǎoliú-le [_DP_ hěn   shǎo   de   jǐ   fēng].
     1SG   keep-PERF   very   few   SUB   several CL
     'I kept a mere handful [of letters].'   (*Weibo*)

(69) Tā [$_{vP}$ zhǐ [$_{vP}$ [$_{PP}$ gēn [$_{DP}$ hěn   shǎo   de   jǐ   ge rén]]   shuō huà]].
      3SG   only   with   very few   SUB several CL person speak word
      'She only speaks with a handful of people.'

(70) [$_{DP}$ Hěn shǎo de jǐ   jù huà] biàn   kěyǐ   biǎodá
           very   few SUB several CL word then   can   express
      [$_{DP}$ hěn duō   de   yìsi].
           very much   SUB   meaning
      'A mere handful of words can express many meanings.'

                                                                      (*Weibo*)

As already observed for *hěn shǎo de rén* 'few people', the occurrence of *hěn shǎo de jǐ* CL NP 'a mere handful of NP' in subject position is relatively rare (70).

4.4.   Interim summary

Starting with the last items discussed, viz. *hěn shǎo de rén*, this is a DP with an adjectival modifier, *not* a QP, and can therefore not be considered the equivalent of, for instance, the QP *few people* in English. This is confirmed by the possibility of *hěn shǎo* 'very be few' to modify the Number Phrase *jǐ ge rén* 'several CL person' as in *hěn shǎo de jǐ ge rén* 'a (mere) handful of people'. Furthermore, *hěn shǎo rén* 'few people' is *not* the counterpart of the QP *hěn duō rén* 'many people', either, given that many speakers simply do not accept this sequence; instead, they use the existential construction, *hěnshǎo yǒu rén* 'there are rarely people'.

Those speakers who do accept *hěn shǎo rén* 'few people' as a QP mostly use it in subject position and only rarely in object position; the latter is the position where *hěn shǎo de rén* 'few people' occurs most frequently. *Hěn shǎo rén* thus contrasts with the QP *hěn duō rén* 'many people' which is fully acceptable in both subject and object position. In addition, for *hěn shǎo rén* in subject position the presence of a covert existential verb *yǒu* is not excluded and must be controlled for. Concerning *hěn shǎo rén* 'few people' in object position 'NP V [*hěn shǎo rén*]', even speakers accepting it often prefer the construction [[$_{DP}$ [NP VP *de*] rén] [$_{AP}$ *hěn shǎo*]] where *hěn shǎo* 'very be.few' is the matrix predicate and the subject DP contains a relative clause: '[[The people he knows] are few]' ∼ 'He knows [few people]'.

Given these numerous constraints, it is evident that *hěn shǎo rén* 'few people' *cannot* be used as a basis for developing any crosslinguistic claims involving QPs. The tests applied to pairs of monotone increasing vs. decreasing quantifiers in other languages must be used with caution in Chinese, and among the items discussed here may *at best* be applied to *hěn shǎo rén* 'few people' vs. *hěn duō rén* 'many people' when in *subject* position (plus the necessary control for a covert existential verb *yǒu*). By contrast, against the backdrop of the present article, it is now very easy to determine whether other potential QP-candidates in Chinese, such as the equivalent of 'less than half of', 'at most three' etc., are indeed nominal projections by checking their acceptability in postverbal object position.

5. BACK TO THE BEGINNING: HOW TO ACCOUNT FOR THE OBSERVED CONTRASTS

Having established that *méi yǒu rén* 'there isn't anybody', *zhǐ yǒu* DP 'there is only DP', and the subset of *hěn shǎo rén* that contains a covert existential verb *yǒu* 'there are rarely people' are existential constructions, not nominal projections, we can now explain the contrast between (1a) and (1b), repeated as (71a) and (71b) (my parsing, glosses, and translation):

(71) a. *[matrix TP [vP {Méi   you   rén$_i$/zhǐ   yǒu   Lǐsì$_i$/hěnshǎo (yǒu) rén$_i$}
                    NEG   exist person/only exist Lisi/rarely   exist person
     [sec.pred PRO$_i$ *wèishénme* cí   zhí]]?
                    why   resign job
     ({'There wasn't anybody/was only Lisi/were rarely people} who resigned why?')

   b. [matrix TP *Wèishénme* [vP {méi   you   rén$_i$/zhǐ   yǒu   Lǐsì$_i$/
                    why   NEG   exist person/only exist Lisi/
     hěnshǎo (yǒu) rén} [sec.pred PRO$_i$ cí   zhí]]?
     rarely   exist person   resign job
     'Why {wasn't there anybody/was there only Lisi/were there rarely people}
     who resigned?'

As explained in section 1 above, *cí zhí* 'resign job' = 'resign' is a secondary predicate on *rén* 'person'.[35] Example (71a) is unacceptable, because *wh*-questions are banned from a secondary predicate when the matrix verb is negated or modified by a quantificational adverb (also see the non-felicitous English translation). In (71b), by contrast, *wèishénme* 'why' is in the matrix clause of the existential construction and acceptable; again, the same holds for English, as illustrated by the translation. (For *hěn shǎo rén* as QP, i.e., without a covert existential verb *yǒu*, see (78) below).

The unacceptability of (72) with *shénme* 'what' in object position confirms that (71a) is excluded by a general ban on *wh*-questions (adjunct and argument alike) in secondary predicates under a negated or quantified matrix existential verb:

(72) *[matrix TP {Méi   you   rén$_i$/ zhǐ   yǒu   Lǐsì$_i$/hěn shǎo (yǒu) rén$_i$}
                NEG   exist person/only exist Lisi/very few   exist person
     [sec.pred PRO$_i$ chī-guo   shénme]]?
                    eat-EXP   what
     ('{There wasn't anybody/was only Lisi/there were rarely people} who ate what?')

Again, the English translation reflects rather well that the presence of a *wh*-phrase inside the secondary predicate is the source of the unacceptability, *modulo* the fact that a relative clause is used to translate the secondary predicate in Chinese. In fact, if at all, (72) can only be accepted as an echo question (also see appendix).

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[35]*Cí zhí* 'resign job' = 'resign' is a V-O phrase, not a V° as in Soh (2005), as evidenced by the position of aspectual verb suffixes, which must follow the verb *cí* 'resign', not the noun *zhí* 'job' (see Paul 1988 for extensive discussion):

(i) Tā   cí-le   zhí(*-le)   yǐhòu hěn   gāoxìng.
    3SG resign-PERF job-PERF   after very happy
    'After he had resigned, he was happy.'

By contrast, a *wh*-phrase in sentence-initial topic position is fine, provided it is construed as Discourse-linked (see Pan 2011b):

(73) [$_{TopP}$ Shénme dōngxī {[$_{TP}$ [$_{vP}$ méi yǒu rén [$_{sec.pred}$ PRO$_i$ xǐhuān chī]]]/
          which   thing   NEG exist person   like   eat
     [$_{TP}$ [$_{vP}$ zhǐ yǒu Lǐsì$_i$ [$_{sec.pred}$ PRO$_i$ xǐhuān chī]]]/
          only exist Lisi   like   eat
     [$_{TP}$ [$_{vP}$ hěnshǎo yǒu rén [$_{sec.pred}$ PRO$_i$ xihuān chī]]]]?
          rarely exist person   like   eat
     '(For) Which thing was there only Lisi who liked to eat/wasn't there anybody who liked to eat/were there rarely people who liked to eat?'

Concerning example (2) from Ko (2005: 886), repeated as (74) (with my parsing and glosses), it is ruled out by the simple fact that the sequence *Zhāngsān shuō* [(*tā$_i$*/ *tāmen$_i$*) *hěn cōngmíng*] cannot serve as a secondary predicate for *rén* 'people' or *Lǐsì*.

(74) *{Méi you rén$_i$/ zhǐ yǒu Lisi$_i$/hěnshǎo (yǒu) rén$_i$}
        NEG exist person/only exist Lisi/ rarely   exist person
     Zhāngsān shuō (tā$_i$/tāmen$_i$) hěn cōngmíng.
     Zhangsan say 3SG/3PL   very intelligent
     (#There wasn't anybody/was only Lisi/there were few people who Zhangsan said s/he was intelligent/they were intelligent.')

In fact, (74) conflates several sources, each of which is responsible for the unacceptability, as shown by the comparison with the acceptable (75):

(75) {Méi you rén$_i$/ zhǐ yǒu Lisi$_i$/hěnshǎo yǒu rén$_i$}
       NEG exist person/only exist Lisi/rarely   exist person
     [$_{sec.pred}$ PRO$_i$ [$_{AP}$ [$_{PP}$ bǐ   nǐ] [$_{AP}$ cōngmíng]]].
                        compared.with 2SG be.intelligent
     'There isn't anybody/there is only Lisi who is more intelligent than you.'
     'There are rarely people who are more intelligent than you.'

The subject of the secondary predicate must not be overt; accordingly, enclosing the pronouns in parentheses, as Ko (2005) does in (74), is completely misleading, as their presence or absence *is* relevant to the acceptability of the sentence:

(76) *{Méi you rén$_i$/ zhǐ yǒu Lisi$_i$/hěnshǎo yǒu rén$_i$}
        NEG exist person/only exist Lisi/rarely   exist person
     [$_{sec.pred}$ tā/tāmen [$_{AP}$ [$_{PP}$ bǐ   nǐ] [$_{AP}$ cōngmíng]]].
                 3SG/3PL   compared.with 2SG be.intelligent

Adding *Zhāngsān shuō* 'Zhangsan said' again amounts to an overt subject in the secondary predicate and leads to unacceptability:[36]

(77) *{Méi you rén$_i$/ zhǐ yǒu Lisi$_i$/hěnshǎo yǒu rén$_i$}
        NEG exist person/only exist Lisi/ rarely   exist person
     [$_{sec.pred}$ Zhāngsan shuō [PRO$_i$ [$_{AP}$ [$_{PP}$ bǐ   nǐ] [$_{AP}$ cōngmíng]]].
                 Zhangsan say   compared.with 2SG be.intelligent

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[36]When *Zhāngsān shuō* is construed as an interpolation, not as a subject plus a clause-embedding verb, (77) is acceptable for some speakers: 'There is only Lisi, so Zhangsan said, who is more intelligent than you.'

As a result, when both *Zhāngsan shuō* 'Zhangsan said' and the pronoun are present in the secondary predicate, the sentence is indeed completely garbled and hard to parse and interpret.

To conclude, the two ill-formed sentences (71a) (= (1)) and (74) (= (2)) can be straightforwardly explained by constraints observed for secondary predicates in general. Crucially, *no* (A-bar) movement nor intervention effects are involved here.

Let us finally turn to *hěn shǎo rén* 'few people' as a genuine QP in subject position and revisit the contrast in (1a–b), repeated as (78a–b) below:

(78) a. *[TP [QP Hěn   shǎo   rén]   wèishénme   cí   zhí?
              very   few   person why   resign job

     b. [CP Wèishénme_i [TP [QP hěn   shǎo   rén] t_i cí   zhí?
              why   very   few   person resign job
          'Why did few people resign?'

As mentioned in footnote 5 above and presented in more detail in the appendix, Ko's (2005) proposal neglects the well-known fact that the default position for *wèishenme* 'why' is TP-*internal*, that is, to the right of the subject, and incorrectly stipulates SpecCP as the only position available. That is the reason why Soh's (2005) analysis is adopted here: covert feature movement of *wèishénme* 'why' to SpecCP in (78a) crosses the QP *hěn shǎo rén* 'few people' and induces an intervention effect, whereas this is not the case for overt movement of *wèishénme* 'why' to SpecCP in (78b).

6. CONCLUSION

Méi yǒu rén 'there isn't anybody' and *zhǐ yǒu* DP 'there is only DP' are existential constructions, not a QP 'nobody' or a quantified DP 'only DP', respectively, so they cannot be included when testing quantifier induced intervention effects in *wh* questions.

The situation is more complex for *hěn shǎo rén* 'few people'. Putting aside the group of native speakers who simply do not accept it, the presence of a covert existential verb *yǒu* 'exist' must be controlled for: *hěnshǎo* [*yǒu*] *rén* 'there are rarely people'. Even when a genuine QP, *hěn shǎo rén* 'few people' has a limited distribution, meaning that, for the majority of speakers, it is confined to the subject position. Accordingly, in syntax, *hěn shǎo rén* 'few people' is *not* the counterpart of its antonym *hěn duō rén* 'many people', which has the distribution expected for a QP, including in object position and in the complement of preposition position. Nor is this pair a good candidate to examine the semantic properties of monotone decreasing vs. increasing quantifiers within Chinese, and *a fortiori* in crosslinguistic studies, as there are too many non-semantic factors coming into play here.

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APPENDIX: THE POSITION OF *WÈISHÉNME* 'WHY' IN CHINESE AND THE *INTERVENTION EFFECT*

Even if always merging *why* in SpecCP, as Ko (2005) proposes for Chinese, Japanese, and Korean, might be appealing from a typological point of view, this SpecCP hypothesis has not been checked at all for the predictions it makes for Chinese syntax in general. To do this is precisely the aim of the present appendix, which offers a non-exhaustive set of arguments from Chinese invalidating this hypothesis and its consequences. Accordingly, any analysis still wanting to adopt the SpecCP hypothesis must first come to terms with these

counterarguments. Also note that Beck's (1996) Intervention Effect, which is explicitly defined as an LF condition, has been transposed by Ko (2005) to *overt* syntax as the relevant level where *why* is merged in SpecCP. Finally, the Intervention Effect itself and its implementation are not without conceptual problems (see, a.o., Grohmann 2006).

   First, a uniformly high position of *wèishénme* 'why' is directly invalidated by the fact that it can occur below the well-known class of exclusively TP-*internal* adverbs such as *yě* 'also', *yòu* 'again', *hái* 'still', and *yīzhí* 'continuously' (see Paul 2017a for discussion and references):

(1) a. [_{TopP} (*yě/hái/yòu/yīzhí)   [_{TP}   Tā   {yě/hái/yòu/yīzhí}
              also/still/again/continuously   3SG   also/still/again/continuously
        [_{vP} zài   jiā]]].
              be.at home
        'He is also/still/again/continuously at home.'

     b. (*yě/hái/yòu/yīzhí) [_{TopP}   *Lǐsì*_i   (*yě/hái/yòu/yīzhí)
         also/still/again/cont.   Lisi   also/still/again/cont.
        [_{TP} *tā*_i   {yě/hái/yòu/yīzhí}   zài   jiā]]
               3SG   also/still/again/cont. be.at   home
        'Lisi_i, he_i is also/still/again/continuously at home.'

Example (1a) should in principle suffice to demonstrate the well-known obligatory TP-internal position for these *non-movable* adverbs (see Li and Thompson 1981: 322). Example (1b) is provided as additional evidence; here the subject *tā* 'he' in SpecTP is co-referential with *Lǐsì* in SpecTopP and movement of *tā* 'he' to SpecTopP, while maintaining its co-indexation with the topic DP *Lǐsì*, is excluded as a possible analysis.[37]

   Against this backdrop, the examples below where *wèishénme* 'why' occurs to the right of non-movable adverbs leave no doubt as to its TP-internal position:

(2) a. Guài   le, [_{TP} Liú Èryé [_{vP} *yě* [_{vP} wèishéme dǎ   diànhuà gěi   wǒ]]]?
        strange SFP   Liu Erye   also   why   strike   phone   to   1SG
        'That's strange; why did Liu Erye also phone me?'

     b. Nǐ   dōu   sōng shǒu le,   wǒ   *hái* wèishéme yào   jiānchí?
        2SG   all   let.go hand SFP 1SG still why   want insist
        'You have let go my hand, so why should I still insist?'

     c. Nǐ   *yòu*   wèishénme yīdìng   yào   jié   hūn?
        2SG   again   why   certainly want tie   marriage
        'Why do you nevertheless want to get absolutely married?'

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[37]These distributional facts also straightforwardly invalidate Lin's (1992) reasoning leading to SpecCP as the unique position for *wèishénme* 'why', solely motivated by his observation that *wèishénme* 'why' cannot occur *below* auxiliaries. The adverbs *yě* 'also', *yòu* 'again', and *hái* 'still' likewise cannot occur below auxiliaries, but are confined to a TP-internal position. Like all those who subsequently took up his analysis, Lin offers no independent evidence besides its general feasibility.

Wanting to maintain SpecCP as the unique position for Chinese *wèishénme* 'why' in order to obtain a typological feature shared by East Asian languages in general (a *desideratum* mentioned as the *major* argument against a TP-internal position of 'why' in Chinese by an anonymous reviewer) would mean to give up the well-established generalizations concerning the different adverb classes and their (TP-internal vs. TP-external) distribution in Chinese and the associated architecture of the clause. Importantly, it is on sentences with *wèishénme* 'why' in the default TP-*internal* position that Huang (1982) and Tsai (1994) base their LF movement account of the island and intervention effects associated with *wèishénme* 'why'. It is not clear how these effects can be captured under Ko's (2005) analysis. Furthermore, the linear order 'DP *wèishénme* VP', in general parsed as [$_{TP}$ DP *wèishénme* VP], must now be parsed as [$_{CP}$ DP$_i$ *wèishénme* [$_{TP}$ t$_i$ VP]] (see Ko 2005: 886, (41)). Since no argument besides the principled existence of subject topicalization is offered, which moreover is string-vacuous here, at the very least both analyses are equally feasible.

     Second, SpecCP as the unique position for *wèishénme* 'why' is likewise contradicted by its occurring below a pronoun in SpecTP, coindexed with a DP in SpecTopP:

   (3) [$_{TopP}$ Lǐsì$_i$ [$_{TP}$ tā$_i$ wèishénme   chídào-le]]?
              Lisi   3SG why   arrive.late-PERF
          'Lisi, why did he arrive late?'

Again, proponents of the SpecCP hypothesis would have to postulate topicalization of *tā* 'he' to a position above *wèishénme* 'why' in the left periphery (3'), a movement for which there is not the slightest evidence:

   (3') *[$_{CP}$ Lǐsì$_i$ [$_{CP}$ *tā$_i$* [$_{CP}$ wèishénme [$_{TP}$ t$_i$ chídào-le]]?
              Lisi   3SG   why   arrive.late-PERF

(Ko 2005: 886 does not indicate whether the allegedly topicalized subject is adjoined to the CP hosting *wèishénme* 'why' or is located in another SpecCP.)

     Third, the perfect acceptability of (4c), where according to Ko's (2005) analysis, the subject *nǐmen* 'you' has allegedly been topicalized, is at odds with the awkwardness reported by the same native speakers for the object *nǐmen* 'you' in (4b), topicalized from the postverbal position. This further substantiates my claim that *wèishénme* 'why' can occur TP-internally, as shown in my parsing of (4c) with *nǐmen* 'you' in SpecTP, not in SpecTopP:

   (4)   a. [$_{TP}$ Wǒ hǎoxiàng   jiàn-guo   nǐmen].
                  1SG apparently see-EXP   2PL
              'I seem to have met you before.'

         b. ?? [$_{TopP}$ Nǐmen$_i$[$_{TP}$ wǒ hǎoxiàng   jiàn-guo t$_i$]]
                      2PL   1SG apparently see-EXP
              ('You, I seem to have met before.')

         c. [$_{TP}$ Nǐmen wèishénme chídào   -le]?
                  2PL   why   arrive.late-PERF
              'Why have you arrived late?'

Finally, the same anonymous reviewer challenges my claim (see section 5 above, (71)–(72)) that *wh*-phrases are unacceptable in the secondary predicate when under a negated or quantified existential matrix verb *yǒu* 'exist'. Based on a survey with 96 speakers, s/he observes that "with rich contextual information", sentence (5) (presented as fully acceptable in Soh 2005: 147, (14)) is judged as "a bit off", but "better" than (6), that "the contrast is a very strong one" and that "the pattern of intervention is particularly robust with 'why' adjuncts […] for good reasons":

(5) ?{Méiyǒurén/hěnshǎorén}   gēn   shéi   dǎjià?
    meiyouren/henshaoren   with   who   fight
    'Who does nobody/do few people dare to fight with?'

                            (Reviewer's parsing, glosses, and translation)

(6) * {Méiyǒurén/hěnshǎo rén}   *wèishénme*   cízhí?
    nobody/few   people   why   resign
    (Intended: 'Why did nobody/few people resign?')
        (Soh 2005: 148, (17a–b) combined with Ko 2005: 883, (36a–b); their parsing,
                      glosses, and translation; see (1a) in the main text above)

Unfortunately, no further details are provided about the context offered to speakers or about the "good reasons" for the robustness of intervention effects with 'why' invoked above. However, the results of an extensive discussion with Wei Haley Wei shed some light on the contrast observed; at the very least, they indicate the questions to be pursued and the factors to be controlled for.

First, (5) (repeated as (5') below), is acceptable *only* as an echo question (which probably explains the divergence of judgements between Soh (2005) and the participants in the reviewer's survey). No echo question interpretation is possible for (6) (repeated as (6')) – hence its unacceptability:

(5') {Méi   yǒu   rén/   hěnshǎo   yǒu   rén} [PP gēn   shéi]   dǎ   jià?
     NEG   exist person/rarely   exist person   with who   strike fight
    'There isn't anybody/there are rarely people who fight with WHOM?'

                            (my parsing, glosses, and translation)

(6') *[matrix TP [vP {Méi   you   rén$_i$/   hěnshǎo   (yǒu)   rén$_i$}
                 NEG   exist person/rarely   exist person
    [sec.pred PRO$_i$ *wèishénme*   cí   zhí]]?
               why   resign job
                 (my parsing and glosses; see (71a) in the main text above)

However, provided a context and sentence (7a) are given, (7b) with the *wh*-PP *wèi shénme* 'for what' (marginally) allows for an echo question that bears on the nominal *wh* 'what', on par with the PP *gēn shéi* 'with whom' in (5') above.

Context: Lisi resigned, because the company didn't give free mooncakes.

(7)   a.   Wǒ   tīngshuō-guò [[PP   *wèi*   [gè   zhǒng   fúlì]   cí   zhí   de],
         1SG   hearsay-EXP   for   each   kind   benefit resign job   DE
         kěshì   méi   yǒu   rén   [sec.pred PRO$_i$ [PP   *wèi*   yuèbǐng]   cí   zhí].
         but   NEG   exist person   for   mooncake   resign job

'I've heard people resign for various benefits, but there isn't anybody who would resign for mooncakes.'

b. Méi yǒu   rén [sec.pred PRO_i[PP *wèi* shénme] cí   zhí]?[38]
   NEG exist person   for   what   resign job
   'There isn't anybody who would resign for WHAT?'

This is confirmed by the fact that 'why' echo questions in general use the PP *yīnwèi shénme* 'because of what', asking to fill in the content for the *wh*-nominal *shénme* 'what' (8b):

(8) a. Yǒu rén   [sec.pred PRO_i [PP yīnwèi [TP gōngzī bù   gāo]] cí   zhí]
        exist person   because salary NEG high resign job
        kěshì méi yǒu   rén
        but   NEG exist person
        [sec.pred PRO_i[PP yīnwèi [TP lǎobǎn zhǎng de bù   hǎokàn]] cí   zhí.
                              because   boss   grow   DE NEG pretty   resign job
        'There are people who resign because the salary is not high, but there isn't anybody who resigns because the boss is not good-looking.'

    b. Méi yǒu   rén [sec.pred PRO_i [PP yīnwèi shénme] cí   zhí]?
       NEG exist person   because what   resign job
       'There isn't anybody who would resign because of WHAT?'

All these data invalidate Ko's (2005) intervention approach that crucially relies on SpecCP as unique position for *wèishenme* 'why'.

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[38]The echo question is more easily available for *wèile shénme* 'for what' (with the preposition *wèile* 'for' instead of *wèi* 'for'), which has a unique parsing as PP and cannot be parsed as one word, *wèishénme* 'why' (Xie Zhiguo, p.c.).