Subject FNQs are Not Two, but One

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I. Claim

In this presentation I will show that nonstandard FNQs need not be treated as involving a "special" kind of FNQs, as argued by the proponents of the adverbial analysis. They simply come out as a variation of the standard FNQs, the difference only being in the varying positions where an FNQ occurs.

II. The Nonstandard Paradigms

A pervasive problem of the standard paradigms consists in the observation that an FNQ is licensed even when there is no apparent NP trace adjacent to the FNQ (Gunji & Hasida 1998, Takami & Kuno 1998, Mihara 1998, Takami 2001, M&A 2007, Miyagawa 2014, Fitzpatrick 2006, Nakanishi 2006, Kang 2002, Y. Kim 2008, J. Kim 2013, Shi 2000, Moon 2007, Ko 2014, among others.)

(1) a. *Gakusei-ga   uisukii-o   **futa-ri** nonda.
       student-NOM whiskey-ACC two-CL drank
        'Two students drank whiskey.'

   b. ?Gakusei-ga   uisukii-mo   **futa-ri** nonda.
       student-NOM whiskey-also two-CL drank
       'Two students also drank whiskey.'

   c. ?Gakusei-ga   uisukii-o [PAUSE] **futa-ri** nonda.
       student-NOM whiskey-ACC   two-CL drank
              (Miyagawa 2010:68, 648)

(2) ?Gakusei-ga   sono botoru-no sake-o   3-nin nonda.
     student-NOM that bottle of   sake-ACC 3-CL drank
     'Three students drank sake from that bottle.'
              (Gunji and Hasida 1998:50)

(3) Amerikazin-ga Nihon-wo **samman-nin** otozureta.
   American-NOM Japan-ACC 30,000-CL   visited
   'Thirty thousand of Americans visited Japan.'
             (Gunji and Hasida 1998:54)

(4) a. ?*학생들이 문제를 **세 명** 풀었다.
   b. 학생들이 ((2)번 문제뿐만 아니라) (3)번 문제도 **세 명** 풀었다.

(5) a. 교수들이 작년에 LG연구비를 **열 명** 받았다.
   b. 마라톤 주자들이 결승점을 **20명** 통과했다.

(6) a. Gakusei-ga   Naomi-ni **san-nin** kyuukonsita.
     student-NOM   -DAT 3-CL   proposed
     Three students proposed to Naomi.'

   b. Gakusei-ga   zibun-wa tensai-da-to   **san-nin** syutyoosita.
     student-NOM self-TOP genius-be-COMP 3-CL   insisted
             (Gunji and Hasida (3.22))

A group of researchers take counter-examples of this kind as indicating an adverbial status of FNQs. According to them, these so-called nonstandard paradigms are structurally similar to their standard counterparts, and hence the improvement of these sentences can only be accounted for by treating the FNQs as adverbs, distinct from those of the standard paradigms.

III. The Ban on Quantifiers in θ-Positions

There is arguably an alternative way to account for the observed contrast here. Take a venue that the structural similarity assumed under the adverbial view is merely superficial, so that the nonstandard FNQs may occur in different positions from those of the standard ones. This being correct, the adverbial analysis would no longer be sustained. And more importantly, this approach will provide a substantially strong piece of evidence for the BQIT (Ban on Quantifiers in θ-positions), as it effectively isolates the nonstandard cases of FNQs from the standard ones by the positions an FNQ occupies.

(7) 영미가 <u>오른쪽 눈을</u> 감을 <u>수</u> 있다.
   (a right eye > can, can > a right eye)

(8) a. ?*학생들이$_i$ [$_{vP}$ 위스키를$_j$ [$_{vP}$ [t$_i$ **두 명**] t$_j$ 마셨다
   b. ?학생들이$_i$ 위스키도$_j$ [t$_i$ **두 명**] [$_{vP}$ t$_j$ [$_{vP}$ t$_i$ t$_j$ 마셨다
   c. ?학생들이$_i$ 위스키를 [PAUSE] [t$_i$ **두 명**] [$_{vP}$ t$_j$ [$_{vP}$ t$_i$ t$_j$ 마셨다

(9) English: *The students$_i$ hate$_k$ [$_{AgrOP/vP}$ **John$_j$** [$_{vP}$ **[*all** t$_i$] t$_k$ t$_j$]]]
     cf. The students$_i$ hate them all$_i$.

Icelandic: ?Studentarnir$_i$ hata$_k$ **Jon$_j$** [$_{AgrOP/vP}$ **<u>allir</u>** t$_i$] [$_{AgrOP/vP}$ **t$_j$** [$_{VP}$ t$_i$ t$_k$ t$_j$]]
     the.students hate John all

(10) a. ?*Gakusei-ga   hon-o   **yo-nin** kat-ta.
     student-NOM book-ACC four-CL buy-PAST
  b. Gakusei-ga   <u>{sore / sono hon}</u>-o **yo-nin** kat-ta.
     student-NOM it / that book-ACC four-CL buy-PAST
                    (Takami 2001:139)

(11) ??Kesa   gakusei-ga   <u>sinkan zassi-o</u> **go-nin** katteikimasitayo.
  this morning student-NOM new magazine-ACC five-CL bought
  '(already) five students bought the new magazine this morning.'

(12) A: kono sinkan zassi   uretemasu-ka?
     this new   magazine is selling-Q
     'Is this new magazine selling well?'

   B: Ee, kesa-mo gakusei-ga   <u>sore-o</u> **go-nin** katteikimasitayo.
     Yes this morning-also student-NOM it-ACC five-CL bought
     Yes, five students bought it this morning.   (Takami 2001:125)

(13)   A: 학생들이 신간잡지를 <u>몇 명</u> 샀니?
      B: 오늘 아침에 학생들이 <u>신간잡지를</u> **다섯 명** 사갔어요.

If we assume, with Takami, that background information occurs high in the structure, the acceptability of (...) is predicted. That is, if the object is placed in a T-region rather than in the edge of vP, the subject DP-NQ pair can legitimately stay in non-θ-positions, thereby

satisfying the BQIT.

(14) In such sentences as (..), (..) and (..), where the subject FNQs are permitted, the direct objects have a certain property in common; it is *quantized* in the sense of Krifka (1988, and subsequent work) and Borer (2005).

(15) Characteristics of the object contribute to determining aspectual type of a verbal predicate (Garey 1957, Verkuyl 1972, Tenny 1994, Lebin and Rappaport 1989, 1992, Van Valin 1999, Dowty 1991, etc.).

    a. i. Kim ate apples for an hour/*in an hour.
      ii. Kim ate an apple in an hour/*for an hour.
    b. i. Bill ran for five minutes/*in five minutes.
      ii. Bill ran a mile/his usual rout in five minutes/*for five minutes.
    c. i. John wrote a book in a month/*for a month.
      ii. John wrote books/propaganda for a month.
          (cited from Rosen 1999 and Rothstein 2010)

(16) Gunji and Hasida (1998): An NQ can be connected with the associated subject when the intervening object is *quantized.* in the sense of Krifka 1988,

(17) Borer (2005) argues that the telic aspect is structurally realized in the form of a functional head Asp_Q^{MAX}, with Q standing for *quantity*. That is, a telic interpretation is implemented in a specifier-head configuration of the following:

    ... $[_{AspQMax}$ DP Asp_Q $[_{VP}....]]$

A quantized DP moves to Spec of Asp_Q^{MAX} and is interpreted as subject-of-quantity; Asp_Q and its c-command domain is interpreted as a quantity predicate.

    Provided this structure, if an object bears the property of quantity, it must occur in Spec of Asp_Q^{MAX}. This then leaves a room for a subject DP to merge above vP in a non-θ-position, to which the associated NQ also merges. As the configuration meets the BQIT, the FNQ is correctly predicted to be allowed.

IV. Licensing in Telic contexts

(18) a. *Gakusei-ga   saka-o   **san-nin**   non-da
      student-NOM sake-ACC three-CL drink-PAST
        'Three students drank sake.'
    b. ?Gakusei-ga   saka-o   imamadeni **san-nin** non-da
      student-NOM sake-ACC so far   three-CL drink-PAST
      'Three students drank sake so far.' (Gunji and Hashida 1998:57)

(19) ?Gakusei-ga   imamadeni/sudeni saka-o **san-nin** non-da
    student-NOM so far/already   sake-ACC three-CL drink-PAST
    'Three students drank sake so far/already.' (Miyagawa 2014)

(20) a. ?*Gakusei-ga kodomo-to **san-nin** hasitta.
      student-NOM children-with three-CL ran.
      'Three students ran with the children.'
   b. Gakusei-ga <u>koon-made</u> **san-nin** hasitta.
      student-NOM park-as far as three-CL ran.
      'Three students ran to the park.' (Tsujimura 1990)

(21) This contrast between unaccusatives and unergatives makes more sense in light of Mihara's (1994, 1998) analysis of FNQs. Like Tsujimura, Mihara challenges a range of counter-examples to the stranding analysis. However, he notices that FNQs require an 'aspectual delimitedness' in general.

(22) a. ??Gakusei-ga tosyokan-de **sanzyuu-nin** benkyoosi-ta.
      student-NOM library-at thirty-CL study-PAST
      'Thirty students studied at the library.'
   b. <u>Heikan-magiwa-made</u> gakusei-ga tosyokan-de **sanzyuu-nin** benkyoosi-ta.
      closing-close to-until student-NOM library-at thirty-CL study-PAST
      'Until the closing time, thirty students studied at the library.'
                                                        (Mihara 1998:106)

(23) a. Uti-no doobutuen-de-wa kaba-ga mada **san-too** <u>genki-da</u>.
      my zoo-at-TOP hippo-NOM still 3-CL healthy
      'In my zoo, three hippos are still healthy.'
   b. *Uti-no doobutuen-de-wa kaba-gazannennakotoni **san-too** <u>osu-da</u>.
      my zoo-at-TOP hippo-NOM unfortunately 3-CL male
      'In my zoo, unfortunately, three hippos are male.'

(24) The stage-level predicates, unaccusative predicates, and progressive aspect are all associated with telic, and terminal PPs such as time adverbs and goal phrases are typical instances of telic modifiers as they inherently express an endpoint to an event.

(25) a. i. John ran for half an hour/*in half an hour.
        ii. John ran <u>to the store</u> in half an hour.
   b. i. Jan heeft gesprongen.   (Dutch)
        Jan has jumped
      ii. Jan is <u>in de sloot</u> gesprongen.
        Jan is in the ditch jumped.
        'Jan has jumped into the ditch.'
   c. i. Gianni ha corso.   (Italian)
        Gianni has run
      ii. Gianni e corso <u>a casa</u>.
        Gianni is run to home
                      (cited from Borer 2005 and Rothstein 2010)

(26) a. *Tomodati-ga zyup-pun **futa-ri** odotta.
      friend-NOM ten minutes two-CL danced
      'Two friends danced for 10 minutes.'
   b. Tomodati-ga <u>zyup-pun-no-uti-ni</u> **futa-ri** odotta.
      friend-NOM ten minutes-in two-CL danced
      'Two friends danced in 10 minutes.' (Miyagawa 2014:88)

(27) Krifka (1989, and subsequent work) argues that telic predicates

are those predicates that have a specified endpoint, and are hence *quantized*. Importantly, Krifka's use of quantization, as well as Borer's (2005), applies to both verbal predicates and nominal predicates. An emerging generalization is then, FNQs are licensed in telic contexts, which I will call the 'Telicity Licensing of FNQs.'

(28) Assume, with Borer (2005), that AspQP projects under telic interpretation and that a quantized XP overtly moves to [Spec, AspQP].

    <u>The quantity in AspQP (QAspect)</u>
    An XP with a property of quantity must occur in AspQP (in telic contexts).

(29) a. (=(19)) [$_{TP}$ Gakusei-ga$_i$ imamadeni [$_{AspQP}$ saka-o$_j$ [t$_i$ **san-nin**] [$_{vP}$ t$_i$ [$_{VP}$ t$_j$ non-da]]]]
     (18a)   [$_{TP}$ Gakusei-ga$_i$ [$_{vP}$ saka-o$_j$ [$_{vP}$ [t$_i$ **san-nin**] [$_{VP}$ t$_j$ non-da]]]]
    b. (=(26b)) [$_{TP}$ Tomodati-ga$_i$ zyup-pun-no-uti-ni [$_{AspQP}$ [t$_i$ **futa-ri**] [$_{vP}$ t$_i$ [$_{VP}$ odotta]]]]
     (26a) [$_{TP}$ Tomodati-ga$_i$ [$_{vP}$ t$_i$ [$_{VP}$ zyup-pun **futa-ri** odotta]]]]

(30) <u>Telecity and the external argument (TEA)</u> (Miyagawa 2014:90)
    Once the external argument moves to Spec,TP, its lower copy is visible under telic interpretation.

(31) In Miyagawa's (2014) system,
    (26b) [$_{TP}$ Tomodati-ga$_i$ [$_{AspQP}$ zyup-pun-no-uti-ni [$_{vP}$ [t$_i$ **futa-ri**] [$_{VP}$ odotta]]]]
    (26a) [$_{TP}$ Tomodati-ga$_i$ zyup-pun [$_{vP}$ **futa-ri** [$_{VP}$ odotta]]]]

(32) A nontrivial problem under the TEA: Why does the subject copy become visible (all of a sudden) in telic contexts? This problem does not arise (to begin with) under the approach defended here since an FNQ is possible insofar as merged to non-θ-positions, independently of the visible or invisible status of the subject copy.

V. Conclusion

If we are on the right track, the present approach gives a substantial support for the BQIT, while making the analysis of FNQs maximally parsimonious; the standard- and the nonstandard variations of the subject FNQs are unified and the adverbial FNQs is eliminated from the grammar. For more discussions, see Son 2017.

Selected References

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