

Two Varieties of Subject Scrambling in FNQ-constructions

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1. Introduction

In the traditional Locality approach to floating numeral quantifiers(FNQs) in Korean and Japanese, two subject positions have been identified for external merge, one in Spec,vP and the other in Spec,TP (Saito 1985, Miyagawa 1989, 2013, Miyagawa and Arikawa 2007, etc.). However, these two disparate subject positions, especially, the positioning of the subject in Spec,TP directly contravenes with the VP-internal subject hypothesis (VPISH), one of the most distinguished features in the minimalist program (Sportiche 1988, Koopman and Sportiche 1991). In this paper, I show that the two external merger positions of the subject is unnecessary in the grammar of Korean and Japanese. Rather, by accepting the minimalist assumption of the VPISH, we are better able to explain a variety of bewildering phenomena that arise in scrambling contexts of FNQ-constructions.

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In the course of elaborating this idea, I will first show that the so-called non-standard paradigms, i.e. exceptions to the standard paradigms, involve vacuous scrambling of subject and object. More specifically, I will claim that the subjects are invariably inserted in Spec,vP with no respect to the standard and nonstandard variations but they undergo disparate movement, one to the Spec, TP through A-movement while the other to the Spec,CP via A'-movement (of vacuous subject scrambling). This amounts to saying that the standard and nonstandard paradigms are each instance of A- and A'-movement, containing an A-chain (i.e. <Spec-T, Spec-v>) and an A'-chain (i.e. <Spec-C, Spec-v>), respectively. This result, combined with the principle of Distinctness of Copies (Son 2014)¹, then will effectively capture the long-standing puzzle of the Locality approach to the FNQs, i.e. why subject leaves a copy only in the case of nonstandard paradigms (Saito 1986, Miyagawa 1986, 2001, 2010, 2013, Miyagawa and Arikawa 2007, Kim 2013, among many others). This is so because nonstandard examples, as an instance of A'-movement, are only compatible with Distinctness of Copies that prohibits multiples copies of the same expression within a search space (see section 4 for details).

This paper has the following structure. Section 2 reviews Miyagawa and Arikawa's (2007) proposal of the two paradigms of subject scrambling, highlighting some conceptual problems, as well as advantages embedded in their account. Section 2 demonstrates that Miyagawa and Arikawa's (M&A, hereafter) observation on the standard and nonstandard variations are indeed more general than they thought. Once establishing these variations as general patterns of movement in the context of subject scrambling, in section 3 I show that all the puzzles and judgmental variations observed by M&A naturally follow if the two paradigms are considered as an instance of A- and A'-movement each. Section 5 concludes the paper with some desirable consequences following from the current approach.

2. Are there two different merger positions for subject?

Although it is quite a norm that in Korean and Japanese a subject cannot be separated from its associated numeral quantifier(NQ) (Haig 1980, Saito 1985, Miyagawa 1989, 2001, 2013, Ko 2007, among many others), there exist considerable number of counter-examples to this generalization. Some representative examples are listed in (1) below in Japanese. In each of the sentences in (1), the subject and its NQ are separated by the object in the same way as the ungrammatical (2), and yet the examples are fairly well acceptable (see Kuno 1973, Ishii 1998, Takami 1998, Gunji

¹ Distinctness of Copies (Son 2014: 27)

Identical copies cannot appear within a search space (defined under the PIC₂).

- cf.1. Chomsky's (2001, 2008, 2009) Phase Impenetrability Condition (PIC₂)
(In structure [ZP Z ... [HP α [H YP]]], with H and Z the heads of phases): The domain of H is not accessible to operations at ZP; only H and its edge are accessible to such operations.
- cf.2. Search spaces of T and C under PIC₂
Search space of T: Spec-v, v, Spec-V, V, Complement of V
Search space of C: Spec-T, T, Spec-v, v

and Hasida 1998, Kuno and Takami 2003, Nishigauchi and Ishii 2003, M&A 2007, Yoshimoto et al 2006 for more Japanese examples).

- (1) a. ?Gakusei-ga uisukii-mo futa-ri nonda.
 student-Nom whiskey-also 2-CLs drank
 ‘Two students also drank sake.’ (Miyagawa 2010:68)
- b. ?Gakusei-ga sake-o imanmadeni san-nin nonda.
 student-Nom sake-Acc so far 3-CL_{subj} drank
 ‘Three students drank sake so far.’ (Gunji and Hasida 1998:57)
- c. Gakusei-ga watasi-no hon-o futa-ri-sika kaw-ana-katta.
 student-Nom my-Gen book-Acc 2-CL_{subj}-only buy-Neg-Past
 ‘Only two students bought my book.’ (Takami 1998:92)
- (2) a. *Gakusei-ga sake-o san-nin nonda. [Japanese]
 student-Nom sake-ACC 3-CLsubj drank
 ‘Three students drank sake.’ (M&A 2007:651)
- b. *??Haksaeng-tul-i papkhon-ul tu-myong meokeosseo. [Korean]
 student-PL-Nom popcorn-Acc 2-CLsubj ate
 ‘Two students ate popcorn.’

Even more strikingly, Miyagawa and Arikawa (2007:651) reports that the example (2a), judged unacceptable, improves considerably provided with a prosodic break before the stranded subject NQ. (3a) below illustrates this and we find that the same holds in Korean (3b), too.

- (3) a. ?Gakusei-ga sake-o [PAUSE] san-nin nonda.
 student-Nom beer-Acc 3-CLs drank
 ‘Three students drank beer.’
- b. ?Haksaeng-tul-i maekju-rul [PAUSE] se-myeong masieossta.
 student-PL-Nom beer-Acc 3-CLs drank
 ‘Three students drank beer.’

On the basis of mitigation effects of this kind, M&A have recently proposed that the acceptable sentences in (1) have a structural representation distinct from those in (2). At the heart of their observation is the realization that these improved sentences, what they refer to as ‘nonstandard’ examples, do not share the same prosodic pattern with the standard ones. In particular, the nonstandard examples typically contain a prosodic break between the preposed object and the subject FNQ, so that the two adjacent expressions may not interfere with each other in the process of phonological organization. Since the two paradigms thus differ in prosody, according to them, the standard and nonstandard paradigms are associated with structures distinct from one another. (4) and (5) below give the standard and nonstandard cases, respectively.²

² M&A’s (2007) analysis is built on the architecture of “prosodic phonology,” which believes that syntactic and prosodic structures are closely related (Selkirk 1986 and Cho 1990, among many

- (4) a. Standard paradigm: *Gakusei-ga sake-o san-nin nonda.
 b. Representation: $[_{TP} \text{Subj} [_{vP} [\text{Obj NQ}_{\text{subj}}] [_{vP} t_{\text{obj}} V]]]$
- (5) a. Nonstandard paradigm: ?Gakusei-ga sake-o [PAUSE] san-nin nonda.
 b. Derivation: $[_{TP} \text{Subj} [_{TP} \text{Obj} [_{vP} t_{\text{obj}} [_{vP} [t_{\text{subj}} \text{NQ}_{\text{subj}}] [_{vP} t_{\text{obj}} V]]]]]$

In the standard (4) above, they argue that the preposed object and the FNQ_{subj} are solidly fused together in the same maximal projection, vP , hence a "semantic misparse" arises between the two semantically unrelated elements. By contrast, in the nonstandard (5), no such mishap takes place because the two occupy separate projections, one in vP and the other in TP . Thus, the subject NQ evades from being construed as part of the object phrase, enabling it appropriately interpreted at LF.

As an interested reader might already have noticed, this analysis of the standard-nonstandard contrast is built on some crucial assumptions. In the era of Government and Binding (GB), it was assumed that the subject is unable to scramble and is merged directly in its surface position (cf. Saito's (1985) "ban on subject scrambling"). The standard paradigm (4b) reflects this GB assumption, so the subject has no trace in Spec,vP from the start. There being no subject trace next to its adjoining NQ , the Locality requirement fails to be met and the derivation thus crashes. This contrasts with the nonstandard case in (5b), where the subject is treated as having undergone scrambling from its vP -internal position to Spec,TP , while leaving a trace in place. This configuration then gives rise to the satisfaction of the Locality requirement, leading the sentence to its grammaticality. As it stands, M&A's account of this clearly mixes two stances with respect to the external merger (EM) positions of the subject, one from GB and the other from the minimalist camp (cf. VP-internal subject hypothesis).

An equally necessary assumption for this account lies in the disparate patterns of object movement. In the standard (4b), the object lands at the edge of vP and is frozen there, whereas in the nonstandard (5b) it scrambles further to TP (required by the EPP-feature on T ; see Miyagawa 2000 for scrambling as EPP-driven movement). Although vacuous scrambling of this sort is generally prohibited in a structure-building process and thus looks strange, the vacuous movement performed here is well justifiable. According to Chomsky's (1991, 1993, 1995) 'Economy of Derivation', a representation or a derivation with extra steps is costly and is thus canceled. However, one potentially serious problem with this strict version of economy is the question of 'optionality', particularly the status of optional movement in many scrambling languages. Facing the existence of the optionality in natural languages, Chomsky (1991) relaxes the Economy of Derivation, adding that "[choosing the most economical convergent derivation to be an optimal one] may well be too strong a conclusion, raising a problem for the entire approach" (p.

others). As such, though not explicitly mentioned by M&A themselves, we posit (4b) as the appropriate structure that they have in mind for the standard paradigm. In fact, Miyagawa has agreed on this in his personal conversation with me.

433). On this ground Chomsky uses ‘economy’ to choose the most optimal derivation out of several candidates just in case they all yield the same interpretation. That is, a derivation with string vacuous movement is allowed when it gives rise to a semantic effect on the output. Fox (2000) has arrived at the same conclusion on independent grounds. According to him, the linguistic system includes processes of optimization. These processes of optimization, Fox argues, are sensitive not just to syntactic form but to the semantics associated with the syntactic form.

Since string vacuous scrambling apparently affects the standard examples in their grammaticality and thus brings about semantic effects (cf. compare the standard (3) and the nonstandard (4)), as M&A have observed, I continue to follow them in characterizing the standard and nonstandard variations by the structures with or without vacuous scrambling. Indeed, I will go one step further and argue that vacuous scrambling takes place not only in the movement process of object but of subject as well. My motivation for this use is the following. As previously pointed out, M&A’s positioning of the subject in Spec,TP for the standard paradigm does not go well with the minimalist assumption concerning the EM position of subject, i.e. the VP-internal subject hypothesis (VPISH; see Sportiche 1988, Koopman and Sportiche 1991). Moreover, it is not obvious why the subject is directly merged in TP for one paradigm when it is merged in vP in the other paradigm (and subsequently moves). On this analysis, there is no clear reason why they should follow these particular patterns as opposed to others. In fact, the reverse could just as well have been the case.

The aim of this paper is to discard this arbitrariness and show that M&A’s two paradigms (4) and (5) do not differ much in structures, the only difference being in the final landing positions of the subject and the object. More specifically, I will claim that subject is externally merged in Spec,vP both in the standard and nonstandard cases, but that only in the latter does the subject scramble to Spec,CP through vacuous scrambling. Prior to rolling out this claim in section 4, I would like to draw a reader’s attention to another related phenomenon to this standard and nonstandard disparity in the following section, which (to my knowledge) has received little or no attention till now. I will then show that all the examples under discussion are subject to the same explanation under the general patterns of A- versus A’-movement.

3. Nonstandard paradigm is more general than we might think

Ko (2007) and M&A have independently claimed that an unergative subject, being EM-ed in Spec,vP, cannot be separated from its NQ by a vP-internal element (see Perlmutter 1978, Belletti and Rizzi 1981, Burzio 1986, Miyagawa 1989, Hale and Keyser 1993, Chomsky 1995 for a structural position of the unergative subjects that sets it apart from that of unaccusative/passive subjects). So, they claimed that the unergative subject is like the transitive subject in the FNQ-context of scrambling in this regard. However, a careful examination of their own examples, illustrated in Korean (6a) and Japanese (6b) below, calls for a rethink. Their descriptions are imprecise. The correct one is rather the following: Although the unergative subject resists separation from its adjoining NQ, it is not entirely impossible.

- (6) a. ?*Haksayng-tul-i caki-tul ton-ulo two-myeong cenhwaha-yess-ta
 student-PL-Nom self-PL money-by 2-CL telephone-Past-Dec
 ‘Two students telephoned with their own money.’
- b. ?*Kodomo-ga geragerato san-nin waratta
 child-Nom loudly 3-CL laughed
 ‘Three children laughed loudly.’

As signified by the mixed mark ‘?’*’ by the authors themselves, the unergative subject optionally allows separation, though it can only do so in a restricted phonological and semantic environment. For instance, provided a phonological break right before the NQ, in a way observed by M&A for the transitive constructions, these otherwise ungrammatical examples come to survive. More interestingly, as Kim (2011:310-311) reports, all these examples become fully grammatical with an added adverbial(s). See (7) below.

- (7) a. aksayng-tul-i caki-tul ton-ulo cikcep seoul-ey
 student-PL-Nom self-PL money-by without help Seoul-at
 two-myeong cenhwaha-yess-ta.
 2-CL telephone-Past-Dec
 ‘Two students made a phone call to Seoul with their own money
 without any help.’
- b. Haksayng-tul-i himtulkey caki-tul ton-ulo tu-myeong
 student-PL-Nom hard self-PL money-by 2-CL
 mikwuk-ey ka-ss-ta.
 America-at go-Past-Dec
 ‘Two students went to America with difficulties with their own money.’

The varying judgments attested above are a familiar one. Recall that the transitive constructions also alternate in judgments and display the standard and nonstandard variations. As such, we find that M&A’s observations based on the transitive constructions extend to the unergative constructions.

In connection to this salvage effect, another interesting fact draws our attention. Although a low adverbial/PP, unlike a high adjunct, has been known to be unable to intervene the subject and its adjoining NQ (Ko 2007, M&A 2007),³ the current

³ As an anonymous reviewer points out, an adjunct is generally considered not to scramble. However, as seen in (8b) and also in (ib) below, positioning of a low-adverbial above subject does not make a sentence completely ungrammatical. This state of fact indicates that adverbial scrambling is indeed possible, although not freely allowed.

- (i) a. Kyeongchal-i peomin-ul sinsokhake keomkeohaessta
 police-Nom criminal-Acc quickly arrested
 ‘The police arrested a criminal quickly.’
- b. ?Sinsokhake kyeongchal-i peomin-ul keomkeohaessta
 quickly police-Nom criminal-Acc arrested
 ‘The police arrested a criminal quickly.’

state of facts uncovers that the adverbial intervention itself is not so detrimental. Ko (2007:65) has already alluded this fact, by assigning the symbol “?” together with the “*” on her own example of (8a). In fact, the sentence can be even better off with an additional adverb (8b) or a pause before the NQ (8c).

- (8) a. ?*Haksayng-tul-i josimseureupke sey-myeong kong-ul pat-ass-ta.
 student-PL-Nom deliberately 3-CLs ball-Acc receive-Past-Dec
 ‘Three students received a ball deliberately.’
- b. ?Haksayng-tul-i josimseureupke jikeumkkaji sey-myeong kong-ul
 student-PL-Nom deliberately up to now 3-CLs ball-Acc
 pat-ass-ta.
 receive-Past-Dec
 ‘Three students have received a ball deliberately up to now.’
- c. ?Haksayng-tul-i josimseureupke PAUSE sey-myeong kong-ul pat-ass-ta.
 student-PL-Nom deliberately 3-CLs ball-Acc receive-Past-Dec
 ‘Three students have received a ball deliberately up to now.’

Interestingly in all these upgraded sentences a prosodic phrase break takes place between the adverbial and the subject NQ, and the two string adjacent elements are organized into separate phonological phrases. Crucially, the NQ receives a higher degree or level of prosodic prominence than any other constituents in the sentence. Since a focused element characteristically draws a sentence level prominence and sets off a new prosodic phrase in phonological structure (Jun 1993, Selkirk 2002, Kratzer and Selkirk 2007, etc.), we may well take this as a fact indicating that the stranded NQ functions as focus. The following examples provide a further support to this line of analysis. As seen below, the stranded NQ, if accompanied by the focus morphology either as an affix ((9a), (9b)) or as a free morpheme (9c), the sentences become fully grammatical.

- (9) a. Ai-tul-i khukey sey myeong-ina wusessta.
 child-PL-Nom loudly 3-CLs-Foc laughed
 ‘As many as) three children laughed loudly.’ (Kim 2011:310)
- b. Haksaeng-tul-i wain-ul sey myeong-ina masseossta.
 student-PL-Nom wine-Acc 3-CLs-Foc drank
 ‘(As many as) three students drank wine.’ (Kim 2004)
- c. Haksaeng-tul-i maekju-rul tan sey myeong masseossta.
 student-PL-Nom beer-Acc only 3-CLs drank
 ‘Only three students drank beer.’ (Son 2014)

Thus far discussions lead us to the following upshot: M&A’s observation on the standard and nonstandard variations is not restricted to the transitive constructions, in which an object acts as a potential intervenor between the subject and its associated NQ. The same effects are attested in unergative constructions where a low adjunct intervenes between the two interpretably related items. In these split contexts, the stranded NQ_{subj} normally fails to obtain an appropriate interpretation, be the intervenor either an object or a low adjunct (i.e. the standard

paradigm). Almost paradoxically, however, the NQ possibly retains its interpretation when it serves as a focus and sets off a new prosodic unit (i.e. the nonstandard paradigm).

In the subsequent section, I will show that these judgmental variations are not surprising if the standard and nonstandard paradigms are each considered as an instance of A- and A'-movement. That is, only A'-movement, forming an operator-variable chain, leaves an accessible copy at LF (Chomsky 1995, Lasnik 1999, etc.), thereby satisfying the Locality requirement with its stranded NQ. Since the stranded NQ is associated with the variable, namely, the subject copy left by A'-movement, it is naturally construed as a focus, similar to a wh-counterpart in answer sentences in the context of wh-questions.

4. A-movement versus A'-movement

Mostly on conceptual grounds, and also on the basis of empirical arguments from binding and scope fact, Chomsky (1995) claims that there is no A-movement reconstruction. Since for Chomsky reconstruction is considered to be a property solely of operator-variable construction, A-movement is simply not the subject of syntactic reconstruction. However, as Lasnik (1999) correctly points out, this claim of Chomsky is merely a stipulation; there is no clear reason why this stipulation should hold. By adopting the copy theory of the minimalist program—a trace is a copy of the item that moves, and viewing that LF reconstruction effects are the result of failure to delete a lower copy, Lasnik suggests that lack of A-movement reconstruction is a consequence of the 'absence of A-movement copy.' If A-movement does not create a copy in its initial position, according to Lasnik, it forms a single-membered chain from the start and its base position will be phonetically and semantically unrecoverable. Although more favorable than Chomsky's, this suggestion still has a stipulatory savor. That is, it is not clear at all concerning how A-movement lacks a copy in its original position since the tail is the very position where an argument is externally merged and the position is needed, at least, as a locus of derivation. It is required to be there for theta theoretic reasons.⁴ In my earlier paper, I have contended, following Chomsky (1995) but contra Lasnik (1999), that A-movement indeed creates a copy in its first-merge position, but that the copy undergoes 'deletion' before the derivation reaches Transfer. The deletion is implemented by the operation called "Distinctness of Copies(DC)" that prohibits identical copies occurring too close within a single domain of search space—the domain of which is defined under Chomsky's PIC₂ (see Chomsky 2001, (11)). For instance, A-movement of a subject from Spec-v to Spec-T has both copies of the subject within the same search space of C⁰, which comprises Spec-T, T, and Spec-v. As such, the chain is incompatible with the DC and hence the lower copy in Spec-v is forced to undergo Copy Elimination as a Last Resort strategy. Lasnik's claim of 'no A-movement copy' then follows.

⁴ In the minimalist framework, attempts have been made to eliminate the theta generalization and reduce it to other mechanisms in the grammar. But it has not undergone successfully. See, for instance, Bošković and Takahashi (1998), which contend that theta-roles are syntactic features driving displacement.

On the other hand, A'-movement, forming an operator-variable chain, normally leaves a copy and involves LF reconstruction. This effect of a “visible” copy is also understandable under the principle of DC. Along the line suggested by Pesetsky and Torrego (2000) and Erlewine (2013) in English and Kaqchickel, Author (2015) has proposed that the subject in Korean and Japanese also raises from the Spec,vP to the Spec,CP in one-fell swoop via topicalization. This being correct, the A'-movement chain, viz., <Spec-C, Spec-v>, obeys the DC in the search space of C as the higher copy stays outside the given domain. More specifically, in this A'-movement chain the lower copy in the Spec-v is the only expression of the subject in the search space of C. As it thus satisfies the DC, it successfully transfers to the interfaces and becomes “visible” at LF.

This distinction of A- and A'-movement reminds us of Miyagawa's (1997) conclusion in which scrambling comes in two varieties, EPP-driven A-scrambling and focus-driven A'-scrambling (see also Miyagawa 2001, (6)). So, the standard and nonstandard cases are each an illustration of A-scrambling and A'-scrambling, respectively. Up till now in the literature it has remained unclear what mechanism causes this disparity between A- and A'-scrambling and makes the copy “visible” in one case but not in other. The source of the disparity is now found. Crucial to it is the DC that regulates the content of Transfer in each cyclic domain; that is, there must be an exclusive occurrence of the same expression in a given Search Space, similar to the effect of Richards's (2010) Distinctness or Grohmann's (2010) Condition on Domain Exclusivity(CDE).⁵ By juxtaposing the A/A'-distinction with the standard/nonstandard variations, we now establish the following structures in (10a) and (10b), each representing the standard and nonstandard paradigm.

(10) a. Standard paradigm:

$$[_{\text{TP}} \text{Subj Obj/L-Adjunct } [_{\text{vP}} t_{\text{subj}} \text{NQ}_{\text{subj}} [_{\text{VP}} t_{\text{obj/L-Adjunct}} \text{V}]]]$$

b. Nonstandard paradigm:

$$[_{\text{CP}} \text{Subj Obj/L-Adjunct } [_{\text{vP}} t_{\text{subj}} \text{NQ}_{\text{subj}} [_{\text{VP}} t_{\text{obj/L-Adjunct}} \text{V}]]]$$

Recall from the previous section that the standard/nonstandard variations are a widespread phenomenon. vP-internal elements (e.g., DO, IO, L-Adverb/PP) are generally prohibited from occurring between a subject and its associated NQ, thus constituting standard paradigms. Yet, thus far discussions have revealed a new fact. Under some special prosodic (and pragmatic/discourse) contexts may the restriction be loosened so an otherwise ungrammatical sentence becomes saved, a phenomenon of which is known as nonstandard paradigms. In the former case, the displacement of the subject creates an A-chain that disobeys the DC. The Copy Elimination then comes in as a Last Resort strategy to wipe out the subject copy in situ. Consequently, the adjoining NQ becomes uninterpretable due to the absence

⁵ This phenomenon reminds us of a general pattern of a PF strategy that attempts to reduce or eliminate phonological ‘redundancy’ within a certain minimal domain, similar to the effects of the OCP in phonology. Analogous phenomena are also found in narrow syntax, among which Richards's (2010) principle of Distinctness on linearization is particularly instructive to us in its scope and effects. For more work on a “syntactic OCP”, see Mohnan (1994), Yip (1998), Anttila and Fong (2000), Erlewine (2013), and references cited there.

of a licensing DP at LF. In contrast, in the latter (i.e. nonstandard paradigm), the subject raises to the Spec,CP via topicalization. Since the higher copy of the chain stays outside the search space of C and the lower copy in Spec,vP is thus the only expression of the subject in this domain, the DC is satisfied. The in-situ subject copy then becomes remain at LF, saving its NQ from the crash.

Although we have not paid much attention to the landing positions of the vP-internal elements, especially in the context of the two disparate paradigms above, we can easily draw them out from the structures in (10) and by hinting at M&A's observations based on prosodic/semantic differences. In the standard case of (10a) which has the subject in the Spec,TP, the preposed vP-internal element must be in a position lower than TP, presumably, in the outer edge of vP. In this edge position it erroneously merges with the subject NQ within the same maximal projection, resulting in a semantic "misparsing" that M&A have observed. On the other hand, in the nonstandard paradigm of (10b) where the subject has raised further to the Spec,CP, the vP-internal element has an option to be in the Spec,TP, a projection independent of the subject NQ. Hence, no such semantic mishap ensues. This gives us more articulated structures for the two paradigms with the precise positions of

the vP-internal elements.⁶

(11) a. Standard paradigm:

[_{TP} Subj [_{vP} Obj/L-Adjunct [_{v'} t_{subj} NQ_{subj} [_{VP} t_{obj/L-Adjunct} V]]]]

b. Nonstandard paradigm:

[_{CP} Subj [_{TP} Obj/L-Adjunct [_{vP} t_{subj} NQ_{subj} [_{VP} t_{obj/L-Adjunct} V]]]]

Given these refined structures, standard examples are judged to be ungrammatical primarily because of the lack of an in-situ subject copy. The principle of DC suppresses the in-situ copy at LF, ultimately causing a violation of the Locality requirement. In this paradigm, a semantic mishap also arises as the vP-internal elements (i.e. object/L-Adjunct) and the subject FNQ conflict with each other

⁶ An anonymous reviewer makes an interesting observation that the NQ in (i) below has an object-oriented reading only; it can hardly refer to the subject even in the presence of a pause.

- (i) Haksaeng-tul-i chinku-tul-ul (PAUSE) sey myeong mannassta.
 student-PL-Nom friend-PL-Acc 3-CL_{people} met
 ‘Students have met three of their friends.’

I agree with his/her judgment. Unlike other examples in the text, this one has an NQ that matches both the subject and the object by referring to ‘people.’ Note that (i) may have two representations as follows, in which the NQ is associated with both the object (iia) and the subject (iib).

- (ii) a. [_{TP} Subj [_{vP} ~~Subj~~ [_{VP} [Obj NQ] V]v]T]
 b. [_{CP} Subj Obj [_{vP} [~~Subj~~ NQ] [_{VP} ~~Obj~~ V]v]T]C]

Of these two derivations, (iia) is more economic by having less number of steps of movement, and is thus chosen over (iib). See Pesetsky and Torrego (2001) for ‘derivational economy’ in which ‘economy’ is counted in terms of number of steps of movement.

The same reviewer also asks about the ungrammatical status of the following sentences. According to the reviewer, the NQ in (iii) is associated with neither the subject (iiia) nor the indirect object (iiib).

- (iii) a. *??Haksaeng-tul-i seonsaengnim-tul-kke chaek-ul (PAUSE) sey myeong jueossta.
 student-PL-Nom teacher-PL-DAT_{honorific} book-Acc 3-CL_{people} gave
 (Intended: ‘Three students gave books to the teachers.’)
 b. *Haksaeng-tul-i seonsaengnim-tul-kke chaek-ul (PAUSE) sey pun
 student-PL-Nom teacher-PL-DAT_{honorific} book-Acc 3-CL_{people/honorific}
 teuryussta.
 gave_{honorific}
 (Intended: ‘Students gave books to three teachers.’)

For (iiia), it is not clear if the sentence is completely bad. Some speakers still find it acceptable with the intended subject-oriented reading (although not perfect). The varying judgments then will follow from the analysis given in this paper. The example (iiib), however, is bad in all regards. The reason for this is that an indirect object cannot form a constituent with an NQ in the first place. See this in (iv) below.

- (iv) *Haksaeng-tul-i seonsaengnim-tul-kke sey pun chaek-ul
 student-PL-Nom teacher-PL-DAT_{honorific} 3-CL_{people/honorific} book-Acc
 teuryussta.
 gave_{honorific}

I owe thanks to the reviewer for bringing out these examples with his/her judgments.

within the same maximal category, vP. On the other hand, nonstandard examples are formed through topicalization of the subject and by preposing the vP-internal elements up to TP. As the subject chain <Spec-C, Spec-v> is compatible with DC, the lower copy of the subject remains at LF, thereby satisfying the Locality requirement. Besides, in this configuration no semantic mishap arises as the vP-internal elements occupy a position apart from the subject NQ. Note importantly, however, that there still remains room in the structure of (10b) that the vP-internal constituent merges with the subject NQ within the same maximal projection, vP. If this should happen, the troublesome semantic interference would recur and make the sentence degraded. This constitutes a reason why the nonstandard paradigm is not completely acceptable.

5. Closing Remarks

In this paper I have shown that the so-called standard and nonstandard paradigms in FNQ-constructions are a more general phenomenon than M&A have originally observed. The varying acceptability is found not just in transitive constructions where an object intervenes between a subject and its associated quantifier; it is also observable in unergative constructions and in such cases where low adjuncts occur in an intervenor position. Once establishing the general phenomenon of the two paradigms in the context of subject scrambling, I have claimed that the judgmental variations of the two paradigms are well explained if we consider them under the light of A/A'-discrepancy. That is, the standard and nonstandard paradigms are each instances of A- and A'-movement. Then, only A'-movement, forming an operator-variable chain, leaves an accessible copy at LF (Chomsky 1995, Lasnik 1999, etc.) and satisfies the Locality requirement with its stranded NQ.

The current approach exerts various advantages. It desirably discards the arbitrary statement that had to be postulated under the previous Locality approach of M&A; that is, the problem of why the subject is EM-ed vP-internally (and leaves a trace) in one paradigm but not in the other. When combined with the principle of DC, the present analysis is also shown to provide a fundamental reason for the long-standing puzzle of why A'-copies, but not A-copies, are visible at LF. The reason is that A'-movement of subject is only compatible with DC in the search space of the probe C. The present analysis also explains the less-than-perfect grammatical status of nonstandard paradigms. In the given configuration of the non-standard examples, a vP-internal element and a subject NQ may still have a chance to merge in the maximal projection of vP, an option not permissible for the standard cases.

With all these advantages, one curious question arises under the current approach; that is, why we have such particular patterns of movement in the standard and nonstandard paradigms, including the displacement of the subject to TP or CP and of the VP-internal elements to vP or TP. Independent pieces of evidence are anticipated in support of the purported structures of the standard and nonstandard paradigms.⁷ I would like to conclude this paper while leaving this important

⁷ Nonstandard examples have important features in common, that is, they are all motivated by the pragmatic/informational structure and maintain a particular phonological pattern, both of which are associated with topic movement. I would like to refer an interested reader to Son

issue as a topic of a further research.

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