

# Single/Multiple Fragments with NUN

Myung-Kwan Park<sup>†</sup>

Dongguk University

---

## ABSTRACT

This paper investigates the Korean ‘what/how about’ construction. In Korean, unlike English, the wh-question word ‘what/how’ is typically phonologically suppressed and the particle ‘-(N)UN’ is used, corresponding to the English preposition ‘about’. Departing from Chung’s (2021) recent work on this construction, this paper makes three claims. First, three distinct uses of this construction indicate that ‘-(N)UN’ can be not only a contrastive topic marker but also a (contrastive) focus marker. Second, the underlying representation of this construction is that the pre-‘(N)UN’ part has a clausal structure that undergoes elision, leaving behind single or multiple fragment remnants. Meanwhile, the post-‘(N)UN’ part has *ettehkey toy(-ess)-ni* ‘what happened’/ *etteh-ni* ‘how’/ *ettehkey ha-l ke-ni* ‘how do you cope with’, where *ettekey* or *etteha-* asks a polar or wh-constituent question relating to the pre-‘(N)UN’ clause. Third, the formation of single or multiple fragment remnants is achieved via Move & Delete, where more specifically Move is the operation of scrambling widely available to the Korean language.

**Keywords:** Korean ‘what about’, -(N)UN, contrastive focus, wh-less, fragment, Move & Delete

---

## 1. Introduction

The Korean counterpart of the English ‘what about’ question,<sup>1)</sup> i.e. ‘XP-NUN?’, is composed of a fragment remnant XP followed by the contrastive focus (CF) marker -NUN, as in (1B):

---

<sup>†</sup> Corresponding author: parkmk@dongguk.edu

1) In English, ‘how about’ is used in an analogous way to ‘what about’, but the former is different from the latter in allowing the futurate tense TP after the preposition ‘about’, as follows:

(i) How/\*What about we paint the room green?

Since in Korean we have a non-clausal element before -NUN, we assume ‘XP-NUN?’ to correspond to ‘What about XP?’.



(1) Korean ‘what about’ question:

- A: John-i ecey Mary-eykey phyenci-lul ponay-ess-e.  
J.-NOM yesterday M.-DAT letter-ACC send-PST-DEC  
‘John sent Mary a letter yesterday.’
- B: imeyil-UN?  
email-CF  
‘What about email?’

On top of the Korean ‘what about’ question with a single fragment remnant XP before the CF marker as in (1B), it also allows multiple fragments (MF) as in (2B1~5), taken from Chung (2021), with some modification. The most remarkable restriction on a single or multiple fragments is that at least one of the fragment XP bears contrastive focus (the XP with a contrastive focus in (2B1~5) being highlighted), evidently in semantically contrastive relation with its correlate in the preceding sentence:

- (2) A: John-i ecey Mary-eykey phyenci-lul ponay-ess-e.  
J.-NOM yesterday M.-DAT letter-ACC send-PST-DEC  
‘John sent Mary a letter yesterday.’
- B1: **Tom\*(-i)** Sue-eykey-NUN?  
T.-NOM S.-DAT-CF  
‘What about Tom to Sue?’
- B2: John\*(-i) **Sue**-eykey-NUN?  
J.-NOM S.-DAT-CF  
‘What about John to Mary?’
- B3: **Tom\*(-i)** Mary-eykey-NUN?  
T.-NOM M.-DAT-CF  
‘What about Tom to Mary?’
- B4: John\*(-i) **onul** Mary-eykey-NUN?  
J.-NOM today M.-DAT-CF  
‘What about John to Mary today?’
- B5: \*John-NUN/\*ecey-NUN/\*Mary-eykey-NUN/\*phyenci-NUN  
-CF -CF -CF -CF

The goal of this paper is as follows. (i) First, concerning the information structure status of the marker –NUN, unlike Chung’s (2021) claim it is not a contrastive topic

marker but it is a contrastive focus marker. (ii) Second, as for the underlying structure of the ‘XP-NUN?’ construction at issue, the XP is derived via Move & Delete from an underlying clause structure before the contrastive focus marker –NUN, while the part after -NUN is derived from phonological suppression of *ettehkey* or *etteha-* ‘how’ plus generic light verb like *toy* ‘become’ or *ha-* ‘do’. (iii) Third, the XP in the ‘XP-NUN?’ question is a single fragment remnant or is composed of multiple fragment remnants. It is derived via Move, particularly scrambling, from a pre-NUN clausal structure that is to be subject to elision in the due course of derivation.

The paper is structured enlarging on these three issues. Section 2 concerns the information structure status of the marker –NUN. Section 3 probes into the underlying structure of the ‘XP-NUN?’ construction at issue. Section 4 investigates the syntactic derivation of fragment remnants in this construction. Section 5 wraps up with a conclusion.

## 2. The Status of -NUN: A Contrastive Topic or a Contrastive Focus Marker?

It is well known that the particle –NUN is used to mark Contrastive Topic (CT) and Contrastive Focus (CF) besides Topic. The examples in (3) and (4), taken from Jun (2006), illustrate its CT and CF use, respectively. (See also Lee (2003).)

### (3) -NUN as CT:

A: ay-tul	mwe hay?	B: khun	ay-NUN	ca-yo.
kid-PL	what do	older	kid-CT	sleep-DCL

‘What are the kids doing?’ ‘The first kid is sleeping.’

### (4) -NUN as CF:

A: nwu-ka	o-ess-e?	B: khun	ay-nun	o-ess-eyo.
who-NOM	come-PST-Q	old	kid-CF	come-PST-DCL

‘Who came?’ ‘The first kid came.’ (But the others didn’t.)

We take –NUN on ‘XP-NUN?’ as a contrastive focus marker, instead of a contrastive topic marker that Chung (2021) assumes it to be. In cases like (1), repeated as (5), apparently in semantic contrast with its correlate in the preceding

sentence the XP in the ‘XP-NUN?’ construction conveys a contrastive construal, so now the question is whether the XP counts as a focus or topic.<sup>2)</sup>

A. [I] **Contrastive use:** ==> its similarity to contrastive fragments, having no contrastive topic construal

(5) A: John-i ecey Mary-eykey phyenci-lul ponay-ess-e.  
J.-NOM yesterday M.-DAT letter-ACC send-PST-DEC  
‘John sent Mary a letter yesterday.’

B: **imeyil-UN?**  
email-CF  
‘What about email?’

We note that the ‘XP-NUN?’ construction like (1) is of contrastive use. (5) of contrastive use can be reconstructed into the example in (6) involving ‘Contrastive Fragmenting’<sup>3)</sup>:

(6) John-i ecey Mary-eykey phyenci-lul ponay-ss-nuntey, **imeyil-UN?**  
J.-NOM yesterday M.-DAT letter-ACC send-PST-Circum email-CT  
‘(I) heard that John sent Mary a letter yesterday; Then, what about email?’

The fragment (remnant) or prejaçant<sup>4)</sup> in (6) involving ‘Contrastive Fragmenting’

2) Lee (2003) claims that CT as well as CF induces a scalar implicature construal. On the other hand, Jun (2006) claims that only CF induces such a construal.

According to this diagnostic, the NUN-marked XP in B’s turn of (i) counts as a CF, in that it induces a scalar implicature construal, inferring that Cheli’s TOEIC score is not in the range of the 800’s but it is surely in the range of the 600’s.

(i) A: Cheli-uy TOEIC sengcek-i 900 cem-tay-ey iss-ci anh-ta.  
Cheli-GEN TOEIC score-NOM 900 score-range-in be-NM not do-DCL  
‘Cheli’s TOEIC score is not in the 900’s.’  
B: 700 cem-tay-ey-NUN?  
700 score-range-in-CF  
‘What about in the 900’s?’

However, this diagnostic of the contrastive topic and focus distinction in light of scalar implicature is more recently called into question (Kim, 2016) and is re-characterized (Jun, 2019). A more in-depth discussion of the issue at hand using this diagnostic is left open for future study. But see the discussion below on the information structure status of -NUN-marked XP.

3) We are using this terminology ‘Fragmenting’ to refer to the operation of Delete, on a par with Sluicing or Stripping.

4) The term ‘prejaçant’ is defined as ‘a proposition laid out previously; a proposition from which another proposition is inferred.’ The XP in ‘XP-NUN?’ is taken as a prejaçant since it is interpreted in association with the previous proposition unfolded.

is contrastively interpreted in association with its correlate in the preceding clause/sentence.

Since as pointed above, the function of ‘[XP]-NUN?’ is similar to that of ‘what about XP?’ in English, we can rehearse below the following conversation constructed in English in Jackendoff (1972, ex. 6.145) and Beaver et al. (2017):<sup>5)</sup>

- (7) A: Cheli-ka mwue-l mek-ess-ni?  
 -NOM what-ACC eat-PST-Q  
 What did Cheli eat?  
 B: [Cheli-nun]<sub>CT</sub> [phai-lul]<sub>F</sub> mek-ess-e.  
 Cheli-CT pie-ACC eat-PST-DCL  
 [Cheli]<sub>CT</sub> ate [pie]<sub>F</sub>.  
 A: Kulem, **Yengi-NUN?** Kunye-ka mwue-l mek-ess-ni?  
 well Yengi-CF she-NOM what-ACC eat-PST-Q  
 Well, what about Fred? What did he eat?  
 B: [Yengi-nun]<sub>CT</sub> [kwaca-lul]<sub>F</sub> mek-ess-e.  
 Yengi-CT cookie-ACC eat-PST-DCL  
 [Yengi]<sub>CT</sub> ate [cookies]<sub>F</sub>.

This conversation shows that ‘[XP]-NUN?’ is used as a contrastive question asked to redirect a stream of inquiry (cf. Bledin and Rawlins (2021) for their analysis of ‘what about XP’ in English). Since it introduces new information, it (i.e. **Yengi-NUN**) counts as a focus rather than a topic.<sup>6)</sup> But after its previous introduction,

---

5) The conversation in (7) is reconstructed into Korean from the conversation in (i) in English. The annotations such as CT and F in (i) are taken as they are from Beaver et al. (2017). As can be seen here, ‘what about’s’ do not encode, but serve as cues to contrastive topics (Jackendoff, 1972; Büring, 2003; Beaver, et al. 2017).

- (i) A: What did Mary eat? (ex. 4 from Beaver et al. 2017)  
 B: [She]<sub>CT</sub> ate [pie]<sub>F</sub>.  
 A: Well, what about Fred? What did he eat?  
 B: [Fred]<sub>CT</sub> ate the [beans]<sub>F</sub>.

6) It is a controversial issue in the study of Korean grammar whether -NUN encodes contrastive focus. Championing the positive view on it, after Jun (2006) Jun (2019) revisits this issue and proposes four diagnostics in distinguishing contrastive focus and topic uses of -NUN (see also Kim (2015) for the relevant discussion). The three diagnostics of Jun’s (*ibid.*) confirm that -NUN in XP-NUN constructions encodes contrastive focus, as in the text, and one of them (i.e., pragmatic implicature of contrastive focus vs. semantic entailment of contrastive topic) does not seem to be relevant to the test at hand.

The first diagnostic is topicality/focalizability. Topics are categorially restricted to nominals, focuses are not. With this in mind, see the following XP construction:

‘[Cheli-nun]’ and ‘[Yengi-nun]’ in B’s turns of (7) count as a (contrastive) topic.

The ‘contrastive focus’ construal of NUN on ‘[XP]-NUN?’ is more clearly identified in the suggestive use of the construction as in (8):

B. [III] **Suggestive use**: having no contrastive topic construal

(8) A: Onul cenyek mwues-ul mek-ulkka?

Today dinner what-ACC eat-Q<subjunctive>

‘What do we have for dinner?’

B: **Cwungkwuk umsik-UN?**<sup>7)</sup>

Chinese food-FOC

‘What about Chinese food?’

The dialogue in (8) can also be reconstructed into the following sentence involving ‘(Contrastive) Fragmenting’:

(9) Onul cenyek mwues-ul mek-ulkka mwut-nuntamyen, **cwungkwuk umsik-UN?**

today dinner what-ACC eat-Q ask-if Chinese food-FOC

‘If (you) ask what we have for dinner today, what about Chinese food?’

---

(i) A: Cheli-ka ppalukekey ttwi-ess-ta.  
Cheli-NOM fast run-PST-DCL  
‘Cheli ran fast.’

B: Chenchenhi-nun?  
slowly-CF  
‘How about slowly?’

Manner adverbials like *chenchenhi* ‘slowly’ (except for time and place adverbials) are resistant to being a topic, which implies that the manner adverbial in (iB) is taken as a contrastive focus.

The second diagnostic bears on word order. A topic tends to be placed in front of a focus. Witness the XP construction below:

(ii) A: Cheli-nun yenghwa-lul cohaha-y?  
Chli-TOP movie-ACC like-Informal

B: Kulem [Cheli-nun]<sub>TP/CT</sub> [wuntong-un]<sub>CF</sub>?  
then Cheli-TOP sports-TOP

‘Then, how about Cheli does something with sports?’

*Wuntong-un* ‘sports’ in (iiB) after the topic or contrastive topic is better analyzed as a contrastive focus. Summarizing, in view of Jun’s (*ibid.*) diagnostics, -NUN in XP-NUN constructions can be a contrastive focus marker. However, when the XP in XP-NUN constructions represents relationally given information and can thus serve as a topic, it is evident that the XP can also be analyzed as a contrastive topic, as Chung (2021) suggests.

7) One of the reviewers rates as unacceptable the fragment alone in (8B) without the following wh-element *ettay* ‘how about’.

XP in ‘XP-NUN?’ of **suggestive use** in (8) is also interpreted in association with the preceding clause, replacing the wh-question phrase with the answer phrase XP. This answer phrase XP clearly counts as a bona fide focus rather than as a topic.

In addition to these two uses, ‘XP-NUN?’ can also be of challenging use, as in (10). As a resistance move, the speaker challenges the other speaker not to take the action described in the previous sentence, since it will bring about an undesirable situation with the XP.

D. [III] **Challenging use** (or resistance move): having no contrastive topic construal

(10) A: Mwun-ul ye(l)-ela!

door-ACC open-IMP

Open the door!

B: **Moki-NUN?**

mosquito-FOC

‘What about mosquito?’

The dialogue of challenging use in (10) is also reconstructed into the following sentence involving ‘Fragmenting’:

(11) Mwun-ul ye(l)-ntamyen, **moki-NUN?**

door-ACC open-if mosquito-FOC

‘If (you) open the door, what about mosquito?’

XP in ‘XP-NUN?’ of challenging use in (10) is interpreted in association with the preceding sentence, but without its correlate in the preceding sentence corresponding to the XP in ‘XP-NUN?’. In this regard, the XP is a new entity introduced in the discourse at hand, counting as a focus rather than as a topic.

In sum, considering its information structure status in different discourse contexts, the XP in the ‘XP-NUN?’ construction is analyzed as a focus or a contrastive focus as well as a contrastive topic.

### 3. The Underlying Representation of ‘XP-NUN?’

Before moving on, let us make it clear how fragment remnants are derived. Chung (2021) assumes that (2B1), repeated as (12), is derived in the following way, with

the post-NUN clause undergoing elision:

(12) **Tom**<sub>-i<sub>1</sub></sub> **Sue**<sub>-eykey<sub>2</sub></sub>-NUN [-<sub>t<sub>1</sub></sub>-~~cccy~~-<sub>t<sub>2</sub></sub>-~~phynci-lul~~-~~ponay-ess-e~~]?  
 ↑            ↑ \_\_\_\_\_|\_\_\_\_\_|  
 |                               |

However, the interpretations available to (2B1) may not be derived from the structure in (12), as the English translation of (2B1) — “What about Tom to Sue?” indicates. To examine more carefully the problems with Chung’s (2021) analysis for the ‘XP-NUN?’ construction, we go back to the construction having a single fragment with -NUN as in (13).

(13) A: John-i ecey Mary-eykey kkoch-ul cwu-ess-ta.  
John-Nom yesterday M.-Dat flower-Acc give-Pst-DE  
'John gave Mary flowers yesterday.'  
B: [Sue-(eykey)-]<sub>i</sub>NUN [~~John-i ecey t<sub>i</sub>~~ ~~kkoch-ul~~ ~~cwu-ess-ni~~?]  

↑ \_\_\_\_\_ |

(Chung, 2000)

  
Sue-Dat-CF  
'What about to Sue?'

The peculiar aspect of this construction in (13B) is that it is multiply ambiguous.<sup>8)</sup> The interpretations available to (13B) are as in (14):

- (14) a. (Interpretation 1) ‘**Did** John give flowers to Sue yesterday?’  
 b. (Interpretation 2) ‘**Who** gave Sue flowers yesterday?’  
 c. (Interpretation 3) ‘**What** did John give to Sue yesterday?’  
 d. (Interpretation 4) ‘**What** did John do with Sue yesterday?’  
 e. (Interpretation 5) ‘**When** did John give flowers to Sue?’  
 f. (Interpretation 6): a multiple wh-question  
 ‘**When<sub>Z</sub>-Who<sub>X</sub>-What<sub>Y</sub>** did X/Sue do/give Y with/to Sue at Z?’

Where are these interpretations derived from? First, ‘XP-NUN?’ is a question. Second, ‘XP-NUN?’ is anteceded by the question under discussion (QUD) provided

8) In the studies on ‘what about XP?’ in English, the difficulty in accounting for available readings to this construction is described as the *pathological properties* problem (cf. Beldin and Rawlins, 2021; See also Perry 1989/2000, who raises a related triviality worry for Partee’s 1989 ‘possible world-aboutness’.)



by the previous sentence or discourse. Third, an issue or question is reconstructed from the fragment/prejacent XP that is aligned to the QUD. In this regard, the fragment/prejacent in ‘XP-NUN?’ fills in a potential slot in a QUD, forming a question with a narrowed restriction imposed by the denotation of the XP. In consequence, the ‘XP-NUN’ question asks whether the sentence reconstructed from the previous one is true, or asks a *wh*-question where one/more than one of the sentential elements in the reconstructed sentence turns/turn into one/multiple *wh*-constituent questions.

Along this line, we suggest unlike Chung’s (2021) postulation of the underlying structure for the construction at issue that the correct underlying representation for (13B) is (14), where the fragment/prejacent in ‘XP-NUN?’ is derived via MOVE and DELETE from the cleft clause-like structure and the post-NUN part is phonologically suppressed, indicated by the blank (\_\_\_\_). More specifically, the post-NUN part at hand is to undergo phonological suppression at the discourse level,<sup>9)</sup> with the accompanying rising intonation signaling this phonological suppression.

---

9) Discourse-level phonological suppression of post-NUN part in the XP construction at issue in this paper is distinguished from PF deletion or LF reconstruction-based ellipsis. The former applies without a linguistic antecedent, but the latter applies with it, in view of Fodor and Sag’s (1976) deep vs. surface anaphora. It has been termed (right/left) edge/peripheral ellipsis/(phonological) reduction in root/matrix clauses (e.g. Zwicky and Pullum, 1983, among others for some phenomena in English). What merits particular attention to the XP-construction at issue is the phonological reduction of a *wh*-phrase, which as an inherent focus is resistant to deletion (though a relative-clause *wh* in English as a topical element is subject to deletion). It has, however, been noted that though rare, it is allowed in Korean and Japanese. Aside from Chung (2000) discussed in the text, Kim (2020) particularly reports that *wuy* ‘why’ can be optionally phonologically reduced in some restricted constructions like (i):

- (i) (Way) pi-ka            o-ko            kule-nya?  
       why rain-NOM come-KO do so-Q  
       ‘How come it is raining?’

In early days Suzuki (2000) also notes that in Japanese clefts, the cleft pivot can be phonologically reduced as follows:

- (ii) ?[ Taro-ga    kinoo    Hanako-ni    at-ta-no-wa ]            doko-desu-ka?  
       Taro-NOM yesterday Hanako-DAT see-PAST-COMP-TOP where-COPL-Q  
       ‘(Where) was it that Taro saw Hanako yesterday?’

Likewise, Munaro (1999) reports that *wh*-words plus *est* ‘be’ in French embedded clause and *wh*-words in varieties of Italian dialects in root and embedded clauses can be subject to phonological suppression. The following example from Rodoretto di Prali as an Italian dialect illustrates deletion of a *wh*-word that is apparently replaced by *soc* ‘demonstrative + complementizer’:

- (iii) e        mi, soc        minjou-lò?  
       and I    ce+that eat-SCL  
       ‘Abd me, what shall I do?’

Thus, if the post-NUN part is reconstructed, it would be either a question about the truth of the proposition at hand *sasil-i-nya* ‘fact’ or a wh-constituent question phrase like *nwukwu-i-nya* ‘who is it’ or *mwues-i-nya* ‘what is it’:

- (15) [Sue-(eykey-)]<sub>1</sub> [ {John-i/[c<sub>2</sub>]} — t<sub>1</sub> — {kkoch-ul/[c<sub>3</sub>]} cwu-n kes]NUN (\_\_\_\_\_)?  
 ↑ \_\_\_\_\_ | (sasil-i-nya/nwukwu<sub>2</sub>-i-nya/mwues<sub>3</sub>-i-nya)

In fact, in Korean there is a more general expression available to ask both a polar question and a wh-constituent question: *ettehkey toy-ess-ni?* ‘how did it go/what happened?’. Thus, we modify the underlying structure in (15) into the one in (16):

- (16) [Sue-(eykey-)]<sub>1</sub> [ {John-i/[c<sub>2</sub>]} — t<sub>1</sub> — {kkoch-ul/[c<sub>3</sub>]} cwu-n kes]NUN \_\_\_\_\_?  
 ↑ \_\_\_\_\_ | (ettehkey toy-ess-ni)

Note that the phonologically realized underlying structure (with/without the full reconstructed clause before NUN) is a perfectly fine sentence.

Since in this construction the wh-word *ettehkey* ‘how’ and the generic light verb *toy* ‘become’ is phonologically suppressed, this construction is akin to the construction involving phonological suppression of *nwukwu* ‘who’ or *mwues* ‘what’ after the NUN-marked subject; as investigated by Chung (2000), the following examples represent the latter.

- (17) a. Mikwuk chotay taythonglyeng-un \_\_\_\_\_?  
 America the;first president-TOP  
 ‘(Who is) the name of the first president of America?’  
 b. Ilpon-uy swuto-nun \_\_\_\_\_?  
 Japan-Gen capital;city-TOP  
 ‘(What is) the capital city of Japan?’

Returning to multiple fragments in ‘XP-NUN?’, we also postulate *ettehkey toy-ess-ni* after the CF marker NUN, thus the underlying representation for (2B1) is not (12) but (18):

□ Multiple fragments of **contrastive use**:

---

Taken together, as found cross-linguistically, wh-words can be phonologically suppressed at the discourse level for reasons that need to be spelled out.

- (18) Tom-i Sue-eykey<sub>2</sub>[ -t<sub>1</sub>-cccy -t<sub>2</sub>-phyenci-lul ponay-n kes]-NUN \_\_\_\_?  
 ↑       ↑ \_\_\_\_\_|\_\_\_\_\_|  
             (ettkey toy-css-ni)

The other two uses of 'XP-NUN?' can be analyzed in an analogous way to its contrastive use, with the slightly different forms of phonologically suppressed post-NUN wh-phrase. What is phonologically suppressed in the suggestive use, either single fragment or multiple fragments, is *etteha-ni* 'how+Q' or its reduced form *ettay*, as in (19) and (20):

- (19) Single fragment of suggestive use:

Onul cenyek mwues-ul mek-ulikka?

Today dinner what-ACC eat-Q<subjunctive>

‘What do we have for dinner?’

- B: **Cwungkwuk umsik-UN** (~~ettay/etteha-ni~~)?

Chinese food-FOC

‘What about Chinese food?’

- (20) Multiple fragments of suggestive use:

A: Nwukwu pang-ul etten saykkkal-lo chilha-lkka?

whose room-ACC which color-in paint-Q

‘Which color do we paint which room in?’

- B: **Cheli pang-ul**    **nok-sayk-ulo-NUN** (ettay/ettcha-ni)?

Cheli room-Acc green color-in-FOC

‘What about Cheli’s room in green color?’

The challenging use of 'XP-NUN' in (21) and (22) can be followed by another variant form such as *ecci halkeya* 'how to cope with XP' or its reduced form *eccelkye*. Note, though, that unlike contrastive and suggestive uses of 'XP-NUN', it is hard to postulate that the XP in this use is derived from a clausal source in the preceding clause. In other words, the XP in this use is taken as a fragment introduced independently of the preceding clausal structure.

- (21) Single fragment of challenging use:

A: Mwun-ul yel-ela!

door-ACC open-IMP

Open the door!

B: **Moki-NUN** [ecccelye/ecci-halkeya]?  
 mosquito-CF  
 ‘What about mosquito?’

(22) Multiple fragments of **challenging use**:

A: Mwun-ul yel-cla!  
 door-ACC open-IMP  
 Open the door!

B: **Ai-tul-eykey Moki-NUN** [ecccelye/ecci-halkeya]?  
 children-to mosquito-FOC  
 ‘What about mosquito to the children?’

Taking together the three uses of ‘XP-NUN?’, their underlying representations of the post-NUN parts are schematized as in (23). These parts have in common the adverbial *ettehkey* ‘how’ or the adjective *etteha-* ‘how’, followed by the generic light verb *toy* ‘become’ or ‘do’ in the case of the adverbial *ettehkey*.<sup>10)</sup> Recall that the adverbial *ettehkey* ‘how’ or the adjective *etteha-* ‘how’ asks about the proposition denoted by the pre-NUN clause reconstructed from the preceding sentence in association with the fragment/prejacent. Thus, the ‘XP-NUN’ question is construed as a polarity question or a wh-question inquiring about one or multiple constituents in the reconstructed clause.

#### (23) The schematic underlying representation of XP-NUN construction:

XP – NUN ① [~~ettehkey toy(-ess)-ni~~]? / ② [~~ettay~~]? / ③ [~~ecccelye~~]?  
 How + beco/ame / How / How + do

## 4. How to Derive Fragment Remnants in ‘XP-NUN?’

Up to now we have represented as the XP the element appearing before the

10) In Korean, it is often noted that light verbs such as *ha-* ‘do’ can be dropped in various contexts like (ia-b):

- (i) a. John-i [C-ka Mary-eykey sa-la(=ko-ha)-n] chayk-ul sa-ss-ta.  
 John-NOM C-NOM Mary-DAT buy-IMP-COMP say REL book-ACC buy-PST-DCL  
 ‘John bought the book that C told Mary to buy.’  
 b. Mwe(-l)(-ha-le) kule-nya?  
 what-ACC do-PURP so-Q  
 ‘What do you behave in such a way for/to do?’

(contrastive) focus marker NUN. But this XP obviously in the case of multiple fragment remnants can be composed of multiple syntactic constituents as in (2B1~4).

As Chung (2021) notes, the peculiar aspect of multiple fragments with NUN (MFsN) in (2), repeated as (24), is that unlike Multiple Sluicing/Multiple Fragment Answers, the MFsN need not all but at least one of the multiple fragment remnants to bear a contrastive construal, as in (2B1~5). Thus, particularly as in (24B4), only the second fragment remnant carries a contrastive construal, while the first and the third do not carry focus; unlike fragment remnants in general in other types of ellipsis, the latter represent old information, but survive ellipsis. Note that the old information represented by a fragment in MFsN evidently invalidates any attempt (such as Chung (2021), among others) to theorize the movement of a fragment remnant out of ellipsis by resorting to focus/wh features on it.

(24) A: John-i ecey Mary-eykey phyenci-lul ponay-ess-e.  
J.-NOM yesterday M.-DAT letter-ACC send-PST-DEC  
'John sent Mary a letter yesterday.'

B1: **Tom\*(-i)** Sue-eykey-NUN?

T.-NOM S.-DAT-CT  
'What about Tom to Sue?'

(Interpretation 1): a multiple wh-question

'**When<sub>Z</sub>-Who<sub>X</sub>-What<sub>Y</sub>** did X/TOM do/give Y with/to Sue at Z?'

(Interpretation 2) '**Did** Tom give a letter to Sue yesterday?'

(Interpretation 3) '**What** did Tom give to Sue yesterday?'

(Interpretation 4) '**What** did Tom do with Sue yesterday?'

(Interpretation 5) '**When** did Tom give a letter to Sue?'

B2: John\*(-i) Sue-eykey-NUN?

J.-NOM S.-DAT-CF  
'What about John to Mary?'

B3: **Tom\*(-i)** Mary-eykey-NUN?

T.-NOM M.-DAT-CF  
'What about Tom to Mary?'

B4: John\*(-i) **onul** Mary-eykey-NUN?

J.-NOM today M.-DAT-CF  
'What about John to Mary today?'

B5: \*John-NUN?/\*ecey-NUN?/\*Mary-eykey-NUN?/\*phyenci-NUN?  
           -CF                    -CF                    -CF                    -CF

Before making a proposal on the syntactic operation of forming MFsN, we note that fragment remnants in this construction at issue need to be derived from the same clause, which reflects the clause-boundedness requirement for QR. This prediction is borne out, as (25B1~3) shows:<sup>11)</sup>

- (25) A: Appa-ka       [Yengi-ka achim-ul       kelu-ess-tako]   malha-ayss-e.  
           Father-NOM   Y.-NOM   breakfast-ACC skip-PST-DEC   suggest-PST-DEC  
           ‘Father said that Yengi skipped breakfast.’
- B1: Yengi-ka       **cenyek-UN?**  
       Yengi-NOM   dinner-CF  
       ‘What about Yengi for dinner?’
- B2: ?\*Appa-ka       **cenyek-UN?**  
       father-NOM   dinner-CF  
       ‘What about Father for dinner?’
- B3: **Cenyek-UN?**  
       dinner-CF  
       ‘What about for dinner?’

Unlike (25B1) where the two fragment remnants are from the same clause, (25B2) where they are from the different clauses are ruled out. (25B3) shows that the fragment remnant can be derived from the embedded clause after undergoing a long-distance movement.

The clause-mate requirement for fragment formation in MFsN looks similar to the same requirement on multiple wh’s in Multiple Sluicing, as in (26):

□ Its similarity to Multiple Sluicing in meeting the clausemate condition:

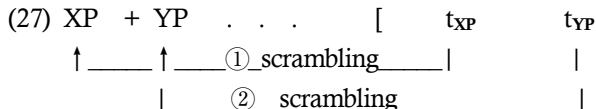
- (26) \*Haksayng-tul-i kakca [Cheli-ka       enu       kyoswunim-kwa  
       students-NOM   each   Cheli-NOM   which   professor-with  
       sangtamhaysstako]   cwucanghayss-nuntey,  
       have a meeting       claim-PST-CIRCUM

11) We follow the general assumption that when the embedded object fragment with Accusative marking moves out of ellipsis and combines with -NUN-marking, the latter marking morphologically wins over the former structural Case marking, as often suggested for the pivot position of cleft constructions in Korean.

na-nun [[[nwu-ka] [kyoswunim nwukwu-wa]inci] kiekì naci anh-nunta.  
 I-TOP who-NOM professor who-with-Q remember don't  
 'Though each of the students claimed that Cheli had a meeting with one  
 of the professors, but I cannot remember [who with which of the professors.]'

One promising way of deriving the clause-mate requirement for remnant/surviving multiple wh's in Multiple Sluicing will be to resort to the clause-mate requirement that the second wh- or its quantificational correlate of 'functional' construal meets, as suggested in Abels and Dayal (2020). However, this explanation cannot be extended to the formation of multiple fragment remnants in the 'XP-NUN?' construction, as there is no wh in the ellipsis sentence or no quantificational correlate in the antecedent sentence. Thus, an alternative analysis is in need.<sup>12)</sup>

We suggest that multiple fragments in the 'XP-NUN?' construction are formed by adjunction to a scrambled element (Sohn (1994); See also Saito (1994) for the covert counterpart of Sohn's (ibid.) adjunction operation) or 'surprising constituent formation' (Takano, 2002) (or an analogous operation was proposed in multiple wh-formation in multiple wh-fronting languages (Rudin, 1988; Richards, 2001, among others). The operation goes as follows.



Two empirical motivations for this operation are in order. One comes from saving effects of an argument NP on an adverbial phrase moving out of an embedded clause (Park and Shin, 2017). As in (28b), the adverbial *ppali* 'quickly' cannot move from embedded to matrix clause, but in (28c), it can when accompanied by the embedded object NP. In (28c), when it undergoes scrambling from embedded to matrix clause,

12) Alternatively, we may suggest that multiple fragments in the 'XP-NUN?' construction are formed by Form Sequence (Chomsky 2019/UCLA, 2020/LSJ, 2021/WCCFL), as in (i), where the coordinator & is optionally present and if present, it is usually realized before X<sub>n</sub> in externalization.

(i) < (&), X<sub>1</sub>, . . . , X<sub>n</sub> >

According to Chomsky, Form Sequence produces a pure sequence, yielding a flat structure where there is no formal c-command relation, but there is a strong tendency for a left-to-right counterpart. We leave for future research the relevance of Form Sequence in the formation of multiple fragments or wh's.

it does not do so alone; if it did, it would violate the constraint that it would in (28c). Thus, before its scrambling from embedded to matrix clause, it needs to adjoin to the embedded object NP that is going to scramble from embedded to matrix clause. This is described as the ‘free ride’ effect of an adverbial since it can undergo otherwise impossible scrambling from embedded to matrix clause after adjoining to an argument NP.

- (28) a. Cheli-nun [Yengi-ka ppalli umsik-ul mek-nuntako] malha-yss-ta.  
 Cheli-TOP Yengi-NOM quickly food-ACC eat-DCL-COMP said  
 ‘Cheli said that Yengi ate food quickly.’  
 b. \*[Ppalli]<sub>1</sub> Cheli-nun [Yengi-ka [t]<sub>1</sub> umsikul meknuntako] malhayssta.  
 c. [Umsik-ul<sub>1</sub> ppalli<sub>2</sub>/Ppalli<sub>2</sub> umsik-ul<sub>1</sub>] Cheli-nun [Yengika [t]<sub>1</sub> t<sub>2</sub> tmeknuntako]  
 malhayssta.

The similar but covert aspect of the free ride effect of adjoining an adverbial to an argument NP can be found in the following examples (Sohn, 1994). In Korean, the reason wh-adverbial *way* ‘way’ displays island effects, being unable to associate interpretively with the matrix Q marker outside the island, as in (29a). However, the argument wh in the same clause with the wh-adverbial in (29a) can save the latter from being trapped in the relative clause. Accompanied by the same clause wh-argument, it can associate interpretively with the matrix Q marker, giving rise to a matrix question construal. Meanwhile, when the argument and the adverbial wh’s are in different clauses as in (29c-d), the island-obviation effects do not arise.

- (29) a. \*Ne-nun [[Cheli-ka Swuni-eykey way ponayn] mwulken-ul]  
 you-TOP Cheli-NOM Swuni-to why sent thing-ACC  
 hwakinhayss-ni?  
 checked-Q  
 ‘\*Why did you check the thing that Cheli sent to Swuni [t]?’  
 b. Ne-nun [[Chelika nwukwueykey way ponayn] mwulken-ul]  
 you-TOP Cheli-NOM who-to why sent thing-ACC  
 hwakinhayss-ni?  
 checked-Q  
 ‘\*Why did you check the thing that Cheli sent to whom [t]?’  
 c. \*Ne-nun [[nwu-ka [Cheli-ka Swuni-eykey way ponaysstako]  
 you-TOP who-NOM Cheli-NOM Swuni-to why sent



- sayngkakkanun] mwulken-ul] hwakinhayss-ni?  
 think                      thing-ACC    checked-Q  
 ‘Why did you check the thing that who thought that Cheli sent to Swuni [t]?’  
 d. \*Ne-nun [[Yengi-ka    [Cheli-ka    nwukwueykey ponaysstako]  
     you-TOP   Yengi-NOM   Cheli-NOM   who-to                      sent  
     way sayngkakkanun] mwulken-ul] hwakinhayss-ni?  
     why think                      thing-ACC    checked-Q  
     ‘Why did you check the thing that Yengi thought [t] that Cheli sent to  
     whom?’

Returning to (2B1), whose underlying representation in (18) is repeated in (30), the two fragment remnants are extracted from the clausal structure before the CF marker NUN.

(30) Multiple fragments **of contrastive use**:

Tom-i<sub>1</sub> Sue-eykey<sub>2</sub>[-t<sub>1</sub>-eccey t<sub>2</sub>-phyenci-lul ponay-n kes]-NUN \_\_\_\_?  
     ↑        ↑        |                      |                      (ettehkey toy-ess-ni)  
                  |                      |

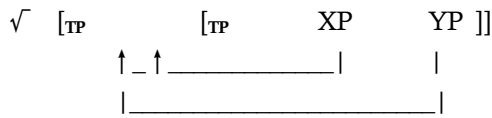
In the assumed analysis based on the idea of adjunction to a scrambled element, at the final landing site the one fragment remnant adjoins to the other one. Since this movement and adjunction are taken as an instance of scrambling, it does not involve any syntactic feature that typical movement does. Thus, a fragment remnant moving out of the clause to be elided in (2B1~4) may lack a syntactic feature like focus feature, as scrambled elements in general may. However, recall that at least one of the fragment remnants in a multiple fragment answer needs to bear focus feature because without it, the answer XP would not be compatible with the following contrastive focus marker -NUN.

Unlike the legitimate derivation of forming multiple fragment remnants in (2B1)/(30), the illegitimate derivation of forming multiple fragment remnants in (25B2) will be represented in more details as follows:

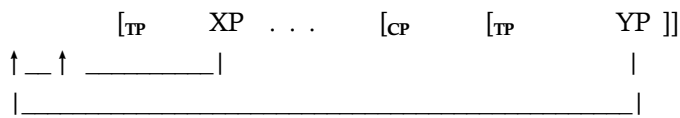
(25) B2: ?\*Appa-ka **cenyek-ul** [-t- [Yengi-ka t- kelu-ess-tako] malha-n-ke]-NUN \_\_\_\_?  
     ↑        ↑        |                      |                      (ettehkey toy-ess-ni)  
                  |                      |

To understand more carefully the two legitimate and illegitimate derivations involving adjunction to a scrambled element, we schematically represent them as in (31):

(31) a. clausemates XP and YP:



b. XP in higher clause and YP in lower clause:



The structural difference between (31a) and (31b) lies in the presence or the absence of the embedded CP. Though the YP in (31b) undergoes successive cyclic movement, the embedded CP constitutes a barrier for the YP. We suggest that on a par with head movement and cliticization that is clause-bounded and involves adjunction to a lexical element instead of a clausal spine functional category at the landing site, adjunction to a scrambled element involves movement attaching to a lexical phrase, thus counting as an A-movement (See also Roberts (2010) for his traditional adjunction analysis of head movement along this line). Thus, since adjunction to a scrambled element counts as an A-movement, it is allowed in (31a), but it is not in (31b); in the latter case, crossing the intervening CP precludes the YP from undergoing adjunction to the scrambled element.

Before leaving this section, we note that a larger pied-piped constituent can occur as one of the MF remnants in ‘XP-NUN?’ as in (32B). The larger pied-piped constituent is available as the focused element inside the constituent achieves a percolation of its focus feature upward to the constituent (Yoon (2002); Kotek and Erlewine (2016)). However, in the case of the focused fragment remnant out of an island, the resulting XP-NUN construction as in (32C) is ruled out, whether the XP is a single fragment remnant or multiple fragment. This renders compelling evidence in favor of the proposed movement analysis for fragment remnants in the construction at issue.

- (32) A: [Pak kyoswunim-i ponaycwusi-n chayk-i] Cheli-lul  
 Park Prof.-NOM send-REL book-NOM Cheli-ACC  
 kippu-key ha-yss-e.  
 pleased make-PST-DEC  
 ‘The book that Prof. Park sent (to him) pleased Cheli.’  
 B: [Kim kyoswunim-i ponaycwusi-n chayk-i] Yengi-NUN?  
 B’: [Kim kyoswunim-i ponaycwusi-n chayk]-NUN?  
 C: \*[Kim kyoswunim-i] Yengi-NUN?  
 C’: \*[Kim kyoswunim]-NUN?

Relating to the example in (32) is the obviation of the island by deleting the right-peripheral part of the last fragment remnant (cf. An (2016); Park (2016)). However, this island obviation effect does not arise in this construction, as shown by the ungrammaticality of (33C):

- (33) A: Cheli-ka [Pak kyoswunim-i ponaycwusi-n chayk-ul] ilk-ess-e.  
 Park Park Prof.-NOM send-REL book-ACC read-PST-DCL  
 ‘John read the book that Prof. sent (to him).’  
 B: Yengi-ka [Kim kyoswunim-i ponaycwusi-n chayk]-NUN?  
 C: ?\*Yengi-ka [Kim kyoswunim]-NUN?<sup>13</sup>

Unlike typical multiple fragment constructions, the fragment remnant in the ‘XP-NUN’ construction ends with the contrastive focus marker, which is resistant to being subject to elision.

---

13) Unlike (33C), the following example in (i) is rated as acceptable by Chung (2021). Two things are to be noted here. The preceding clausal anaphoric elements such as *kulay?* ‘is that so’ and *kulem* ‘if so’ facilitate the parallel interpretation with *chelki sitay* in association with the preceding sentence. Without them, the second fragment is substantially degraded. The second thing to note is that *chelki sitay* ‘Iron Age’ (unlike *Kim kyoswunim* in (33B)) can make us more readily associated via metonymy/synecdoche with the things or relics of the Age or the activity related to them.

- (i) A: Mary-ka [[chengdongki sitay-ey sayong-toi-n] yumwul-uy] cengli-lul  
 M.-NOM Bronze age-at use-PASS-PNE relics-GEN arrangement-ACC  
 machi-ess-ta.  
 finish-PST-DEC  
 ‘John finished arranging the relics that were used in the Bronze Age.’  
 B: kulay? kulem, John-i chelki sitay-nun?  
 Is.that.so then J.-NOM Iron Age-CF  
 (Intended) ‘Is that so? Then, did John finish arranging the relics that were used in the Iron Age?’

## 5. Conclusion

Investigating the Korean ‘XP-NUN’ question as a counterpart of ‘what about?’, we have first argued that departing from Chung’s (2021) suggestion, the particle NUN serves either as a contrastive topic marker or as a (contrastive) focus marker. Second, unlike Chung’s (ibid.) suggestion the fragment remnant XP is not derived from the clausal structure after the contrastive focus marker, but from the one before the marker. In addition, the post-NUN part in the underlying representation of the construction at issue has the wh-question expression such as *ettehkey* or *etteha-* ‘how’ plus generic light verb such as *toy-* ‘become’ or *ha-* ‘do’ that is to undergo phonological suppression at the discourse level. Crucially, *ettehkey* or *etteha-* ‘how’ with the following verbal element asks about an event or situation denoted by the reconstructed clause before the -NUN particle, thus the ‘XP-NUN’ question being interpreted as a polar or wh-constituent question. Third, regarding the derivation of the XP as a fragment remnant, it is moved via scrambling out of the underlying clausal structure before the -NUN particle. Like the general ‘Contrastive Fragmenting’ construction, contrastively focused fragment remnants in the ‘XP-NUN?’ construction always display island effects, regardless of whether the XP at hand is composed of a single or multiple fragment remnants. In addition, when the XP is constructed with multiple fragment remnants, it involves adjunction to a scrambled element (Sohn, 1994) or ‘surprising constituent formation’ (Takano, 2002), which is not an unusual operation in the system of scrambling.

## References

- An, D.-H. (2016). Extra deletion in fragment answers and its implications. *Journal of East Asian Linguistic*, 25, 313-350.
- Beaver, D. I., Roberts, C., Simons, M., & Tonhauser, J. (2017). Questions under discussion: Where information structure meets projective content. *Annual Review of Linguistics*, 3, 265-284.
- Bledin, J., & Rawlins, K. (2021). About what about: Topicality at the semantics-pragmatics interface. A handout/abstract read/posted at the 2021 SALT.
- Büring, D. (2003). On D-tree, beans, and B-accent. *Linguistics and Philosophy*, 26, 511-545.
- Chomsky, N. (2019). Lecture at UCLA. April 29th, 30th, May 1st, 2nd. [a manuscript with some changes is available on <https://ling.auf.net/lingbuzz/005485>]

- Chomsky, N. (2020). Lecture at LSJ. November 22nd.
- Chomsky, N. (2021). Lecture at WCCFL. April 9th.
- Chung, D. (2000). Wh-questions without Wh-words. *The Proceedings of the 14<sup>th</sup> Pacific Asia Conference on Language, Information and Computation*, 57-66.
- Chung, D. (2021). Elliptical contrastive topic construction and theories of multi-elemental fragments. *Studies in Generative Grammar*, 31-1, 169-193.
- Jackendoff, R. (1972). *Semantic interpretation in generative grammar*. Cambridge: MIT Press.
- Jun, Y. (2006). Tayco hwacheywa tayco choscemuy phyoci ‘nun’ (Korean marker ‘NUN’ for contrastive topic and contrastive focus). *Hangeul*, 274, 171-200.
- Jun, Y. (2019). Hankwuke cengpokwucophyoci ‘un/nun’uy uymi - tayco uymilul cwungsimulo. (A semantics for (n)un as an information structure marker: With a focus on the meaning of contrast). *Linguistics*, 85, 99-137.
- Kim, I. (2016). Can Korean -(n)un mark (contrastive) focus? *Language Sciences*, 56, 105-117.
- Kim, Y.-H. (2020). Wh-less wh-questions in Korean and their implications for the position(s) of WHY. *Studies in Generative Grammar*, 30-1, 1-30.
- Kotek, H., & Erlewine, M. Y. (2016). Covert pied-piping in English multiple wh-questions. *Linguistic Inquiry*, 47(4), 669-693.
- Lee, C. (2003). Contrastive topic and/or contrastive focus. *Japanese Korean Linguistics*, 12, 352-364.
- Munar, N. (1999). *Free relatives as defective wh-elements: Evidence from the North-Western Italian dialects*. Unpublished article, Padova & Venice.
- Park, M.-K. (2016). The syntax of multiple fragments in Korean: Overt absorption, Max-Elide, and scrambling. *Language Research*, 52, 421-450.
- Park, M.-K., & Shin, U.-J., (2017). On the long-distance scrambling/phonological suppression of adjuncts in Korean. *Studies in Generative Grammar*, 27(3), 675-695.
- Partee, B. (1989). Speaker’s reply. In S. Allén (Ed.), *Possible worlds in humanities, arts and sciences: Proceedings of Nobel Symposium 65* (pp. 124-137). Berlin: De Gruyter.
- Perry, J. (1989). Possible worlds and subject matter. Discussion of Barbara H. Partee’s paper “Possible worlds in model-theoretic semantics: A linguistic perspective”. In S. Allén (Ed.), *Possible worlds in humanities, arts and sciences: Proceedings of Nobel Symposium 65* (pp. 124-137). Berlin: De Gruyter.
- Perry, J. (2000). *The problem of the essential indexical and other essays*. Stanford: CSLI Publications.
- Richards, N. (2001). *Movement in language: Interactions and architectures*. Oxford: Oxford University Press.
- Ian, R. (2010). *Agreement and head movement: Clitics, incorporation, and defective goals*. Cambridge, MA: The MIT Press.
- Rudin, C. (1988). On multiple questions and multiple Wh-fronting. *Natural Language and Linguistic Theory*, 6, 455-501.
- Saito, M. (1994). Additional-wh effects and the adjunction site theory. *Journal of East Asian*

- Linguistics*, 3, 195-240.
- Sohn, K.-W. (1994). Adjunction to argument, free ride and a minimalist program. In K. Masatoshi, & H. Ura (Ed.), *Formal Approaches to Japanese Linguistics* (Vol. 1, pp. 315-334). MIT Working Papers in Linguistics, MIT, Cambridge, Massachusetts: Department of Linguistics and Philosophy.
- Suzuki, T. (1997). WH-deletion in Japanese: Formal properties of informal style of Japanese. *University of Washington Working Papers in Linguistics*, 15, 1-39.
- Takano, Y. (2002). Surprising constituents. *Journal of East Asian Linguistics*, 11-3, 243-301.
- Yoon, J.-M. (2002). QR, interface economy and pied-piping in English. *Language Research*, 38(4), 1077-1130.
- Zwicky, A. M., & Pullum, G. K. (1983). Deleting named morphemes. *Lingua*, 59(2-3), 155-175.

Myung-Kwan Park

Professor

Department of English

Dongguk University

30, Phildong-ro 1-gil, Jung-gu, Seoul 04620, Korea

E-mail: parkmk@dongguk.edu

Received: October 31, 2021

Revised version received: November 26, 2021

Accepted: December 17, 2021