Seyeon Park
Final paper

A QUD approach to Korean discourse markers *-i/ka* and *-(n)un*

1. Introduction

In Korean, two types of marker *-i/ka* and *-(n)un*[1] have been discussed extensively as to whether its meaning contributes syntactically, semantically, or pragmatically (Jun 2015; Kim 2015; Kim 2016; Kwon & Zribi-Hertz 2008; Lee 2015; Sohn 2001). One of the most general approach to these two markers is to view *-i/ka* as a nominative marker as a grammatical case (i.e. *swuji* in (1a)) and *-(n)un* as a topic marker that marks what the sentence is about (i.e. *swuci* in (1b)).

(1)   a. *swuci-ka hakkyo-ey ka-ss-e.*
        Suji-NOM school-LOC go-PST-DECL
        'Suji went to school.'

      b. *swuci-nun yenghwa-lul cohaha-∅-e.*
        Suji-TOP movie-ACC like-PRS-DECL
        'Suji likes movies.'

However, two observations each regarding *-i/ka* and *-(n)un* have led to following research on the relation between the discourse markers (i.e. this will refer to both *-i/ka* and *-(n)un* in this paper) and information structure[2]. First, subjects frequently occur without as nominative marker as a bare subject in daily conversation (Kwon & Zribi-Hertz 2008), even being more nature to be omitted. Second, *-(n)un* can mark non-topical arguments in a sentence (Kim 2015). Case ellipsis is illustrated in (2a) and non-topical marking in (2b).

(2)   a. *minca(-ka) yongho(-lul) chac-nun-ta.*
        Minca-NOM Yongho-ACC find-PRS-DECL
        'Minca is looking for Yongho.'   [Sohn (2001); p.232]

      b. A: Are you good at playing soccer?

        B: *cal-un   mos ha-∅-e.*
          well-TOP NEG do-PRS-DECL

        'I cannot play it well (, but I am not bad at it either.)'   [Kim (2015); p.90]

Moreover, *-i/ka* and *-n(un)* show a complemantary distribution that they cannot both attached to an argument. If they are a nominative and a topic, we could expect the opposite of what we observe in (3).

(3)   a. * *swuci-nun-i peyikul mek-ess-e.*
        Suji-NUN-KA bagel   eat-PST-DECL
        Intended: 'Suji ate bagels.'

---

[1] Note that *-i/ka* and *-un/nun* are each allomorphs.

[2] Some changes have been made on the examples in this paper with respect to the glossings.

b. * *swuci-ka-nun peyikul mek-ess-e.*
   Suji-KA-NUN bagel eat-PST-DECL
   Intended: 'Suji ate bagels.'

This paper introduces three previous research that analyzes the discourse markers, focusing on those that marks the subject, in the approach from information structure. Jun's (2015) account analyzes *-i/ka* as a focus marker, and posits a separate topic and contrast marker for *-(n)un*. Kim (2014, 2015) argues that *-i/ka* has a pragmatic function which he calls "Unique Specification" (Kim 2014) and that *-(n)un* imposes discourse salience (Kim 2015). Kwon & Zribi-Hertz (2008) argues that Korean shows a Differential Marking (DM) and analyzes the discourse markers based on f-structure proposed by Erteschik-Shir et al. (2007).

In this paper, I argue that a question-based approach (QUD) of information structure better accounts for the phenomenon with respect to the following reasons. First, the markers and other focus-sensitive particles (i.e. *-man* 'only', *-to* 'even/also') show a complementary distribution. This suggests that the meaning and the usage of *-i/ka* and *-(n)un* may have some relation to focus related information structure. Second, in opposition to the pattern that previous literature has shown, both *-i/ka* and *-(n)un* are used differently based on the type of questions. Third, unlike previous research that has analyzed both *-i/ka* and *-(n)un* separately with different methodologies, QUD proposes a possibility to account for both markers with one single analysis. Note that topicality which has been argued to be marked with *-nun* in fact includes a contrastive meaning (section 3.1).

The following section introduces three previous analyses: focus, topic and contrast (Jun 2015), unique specification and discourse salience (Kim 2014, 2015), and differential marking (Kwon & Zribi-Hertz 2008). Section 3 illustrates three sets of data that show the possibility that the meaning of *-i/ka* and *-(n)un* is not just restricted to the simple meaning of focus, topic, and contrast. Section 4 outlines the Question under Disqussion (QUD) model in information structure, and section 5 applies QUD model to Korean discourse marking KA and NUN.

2. Previous analyses

This section introduces three previous analyses on the discourse marker *-i/ka* and *-(n)un* focusing on their information structure[3].

2.1. Focus, topic, and contrast (Jun 2015)

The subsection on focus, topic, and contrast depends on Jun (2015). According to Jun, *-i/ka* has been analyzed to be a focus marker where it marks new relational information. And *-(n)un* has been analyzed as a topic and a contrast marker. A topic marker marks old relational information whereas a contrast marker marks a contrastive topic.

Jun cites Yi (1988) that "case-marked elements are much more inclined to be the focus than non-case-marked ones". In (4), the argument that is marked with either *-ka* and *-lul* is argued to mark relationally new information (e.g. *cala* 'turtle' in (4a) and *thokki 'rabbit' in (4b)*).

(4) a. *cala-ka   thokki mul-ess-ta.*
        turtle-KA rabbit bite-PST-DECL

---

[3]The discourse markers in the following examples will be glossed as KAand NUN, rather than NOMand TOP

   b. *cala thokki-lul mul-ess-ta.*
      turtle rabbit-ACC bite-PST-DECL
      'The turtle bit the rabbit.'

    However, frequently data that is presented to support the arguments are to be suspected unacceptable, such as (4b). As in examples (5), in whichever order it is expressed, the object seems to be marked with *-lul* only when the subject is marked with *-ka*. To set up the question to focus the object (e.g. What did the rabbit bite?) , it is in fact natural to answer without any markers (e.g. *cala thokki mul-ess-ta.*).

(5)   a.   *thokki-lul cala-ka mul-ess-ta.*
         rabbit   turtle-KA bite-PST-DECL

    b. ?? *thokki-lul cala mul-ess-ta.*
         rabbit-ACC turtle bite-PST-DECL

    c. ?? *cala thokki-lul mul-ess-ta.*
         turtle rabbit-ACC bite-PST-DECL
         'The turtle bit the rabbit.'

Examples in (6) are argued to be all-focused sentences (i.e. all information is new information); therefore a subject is *-ka* marked. Again, example (6a) sounds acceptable considering it as an answer to the question "What is on the table?" focusing the subject; however, in example (6b), it sounds more natural to say with a bare subject.

(6)   a. *chayksang wi-ey   moca*(-ka) iss-∅-e.*
         table   top-LOC hat-KA   be-PRS-DECL
         'There is a hat on the table.'

    b. *ceki minho*(-ka) o-∅-e.*
         there Minho-KA   come-PRS-DECL
         'There comes Minho.'

    In comparision to focus, a topic which is relationally old information is argued to be marked with a topic marker *-(n)un*. Similarly, examples in (7) arise a question of acceptability. With topic markers, the sentences seem to arise a contrastive meaning.

(7)   a. *cala-nun thokki-lul mul-ess-ta.*
         turtle-NUN rabbit-ACC bite-PST-DECL
         'As for the turtle, it bit the rabbit.'

    b. *thokki-nun cala-ka   mul-ess-ta.*
         rabbit-NUN turtle-KA bit-PST-DECL
         'As for the rabbit, the turtle bit it.'

    A contrastive function of *-(n)un* is argued to arise when the argument marked with the marker is a subset of subject of the question being asked, as in (8). In example (8a), the subject of the answer *ai-tul* 'children' is itself the subject of the question, whereas, in example (8b), its subject *minho* 'Minho' is the subject of *ai-tul* 'children', the subject of the question. It is nonetheless problematic that both examples arise a contrastive reading.

(8) What are the children doing?

    a. *ai-tul-un   kongwen-eyse nol-∅-a.*
       child-PL-NUN park-LOC   play-PRS-DECL

       'The children are playing in the park.'   [Topic]

    b. *minho-nun   chwukkwu-lul ha-∅-e.   (kuliko tongho-nun   nongkwu-lul*
       Minho-CONT soccer-ACC   do-PRS-DECL and   Tongho-CONT basketball-ACC

       ha-∅-e.)
       do-PRS-DECL

       'Minho is playing soccer. (And Tongho is playing basketball.)'   [Contrast]

2.2. Unique specification and discourse salience (Kim 2014, 2015)

Kim (2014, 2015) proposes a different explanation for focus, and topic and contrast meanings derived from the markers: "Unique Specification" for KA and "Salience"-based analysis for NUN.

    In Unique Specification, *-i/ka* picks out a specific referent from the context; but Kim (2014) explains that "it does not presupposes the existence of alternatives" which is different from a general viewpoint of focus.

(9) Definition of discourse salience (Kim 2015)
Discourse salience is cognitive prominence of the meaning of any part of an utterance made by discourse participants, the degree of which is determined by the amount of attention allotted to it.

    In Salience-based analysis, the function of *-(n)un* it imposes salience on a discourse referent. What is consistent with previous analysis is that it does not separated topic and contrast, but posits two differnt type of salience for topic and contrast. Kim (2015) argues for two different functions of salience which are given and imposed salience.

(10) Definition of contrast (Kim 2015)
Contrast is a relation between discourse referents that are partitioned with respect to some semantic property P such that it is established (either via assertion or implicature) that the value 'true' when P is applied to one part of the set and 'false' or 'unknown' when applied to the other.

(11) Definition of simple emphasis (Kim 2015)
Simple emhasis is a non-information-structural effect of attracting attention, which is caused by the difference between the actual (and unexpected) salience of an item and its expected salience.

2.3. Differential marking and F-structure (Kwon & Zribi-Hertz 2008)

Kwon and Zribi-Hertz (2008) argue that Korean is a Differential Marking (DM) language given that it shows the case of bare subjects and objects. Nevertheless, they argues that DM in Korean is related to an interpretive contrast rather than to animacy and definiteness which are argued to be involved in subject and object markedness (Aissen 2003, cited in Kwon & Zribi-Hertz (2008)).

Following Erteschik-Shir (1997, cited in Kwon & Zribi-Hertz (2008)), Korean bare subjects and objects are argued to "fail to stand as constituents in focus structure", which means bare subjects are neither focalized nor topicalized. Kwon and Zribi-Hertz analyze Korean KA and NUN based on the f-structure (focus structure) proposed by Erteschik-Shir (1997). F-structure are structural description where foci, instantiating new information, are paired up with topics, instantiating resupposed or old information.

Mostly following Aissen's (2003), Kwon and Zribi-Hertz prsent the data which do not confrom to the Differential Marking hierarchy as in (12).

(12) DCM hierarchy (Aissen 2003, p. 437, cited in Lee 2015)
    a. Animacy hierarchy: Human > Animate > Inanimate
    b. Definiteness hierarchy: Personal pronoun > Proper noun > Definite NP > Indefinite specific NP > Non-specific NP

First, Kwon and Zribi-Hertz argue that KA is ambiguous between a neutral thetic reading (i.e. (13b))and a contrastive reading (i.e. (13c))). Also, the contrastive reading is argued to be "exhaustive-listing" where 'Minsu' is exclusively selected from the set of possible alternatives who might be looking for scissors. Even we accept this argument, it is possible to add a sentence, for instance, 'Minna is also looking for the scissors' after (13c) which does not make 'Minsu' an exclusive entity from the possible alternatives.

(13)   a. *minswu-ka kawi-lul   chak   -ko iss -ta.*
          Minsu-KA scissors-ACC look.for PROG DECL

    b. $_s[\varnothing]_{TOP}$ [Minsu is looking for the scissors]$_{FOC}$
        'Minsu is looking for scissors.'

    c. $_s[\varnothing]_{TOP1}$ [[⟨Minsu⟩$_{FOC2}$]$_{TOP2}$ is looking for the scissors]$_{FOC}$
        'It is Minsu (and nobody else) who is looking for scissors.'

Second, it is argued that NUN is ambiguous between a neutral topic (i.e. (14b)) and contrastive interpretation (14c). In (14c), 'Minsu' is argued to be selected from the topical set including 'Minsu' and for example 'Minna.' However, as it will be discussed in later section, sentences with an argument marked with NUN such as (14a) only seem to get contrastive readings.

(14)   a. *minswu-nun kicha-lul tha-ko   kass-e.*
          Minsu-NUN train-ACC get.in-COMP go-DECL

    b. [Minsu]$_{TOP}$ [went by train]$_{FOC}$
        'Minsu went by train.'

    c. [[⟨Minsu⟩$_{FOC2}$]$_{TOP2}$]$_{TOP1}$ [went by train]$_{FOC1}$
        'Minsu went by train (while Minna went by car).'

Below in (15) is the explanation on the bare subject and the differential marking based on focus proposed by Kwon & Zribi-Hertz (2008).

(15) DM and f-structure in Korean
    a. When morphologically marked, subjects (+nun or +ka) and objects (+lul) are constructed as f-structure constituents.
    b. When bare, i.e. morphologically unmarked, subjects and objects do not stand as f-structure constituents.

3.   Data

This section introduces three sets of data that intend to show the meaning of KA and NUN are not just confined to focus, topic or contrast. Also, the data seem to show that the discourse markers differ in their meaning depending on the context, especially when it is used in a focus-sensitive context.

3.1.   Meaning of KA and NUN

The meaing of KA used to be mostly explained through focus. As in (16a), the sentence not only means that 'Suji ate bagels' but that it was Suji from the set of possible entities that might have eaten the bagels.' The meaning of NUN used to be explained through topic and contrast where it either explains what the sentence is about or it introduces another topic into the discourse that contrasts with it. As in (16b), the sentence, again, not only means that 'Suji ate bagels' but it implies that there is some other entity who might be related to the discourse context that contrast with 'Suji'. One point to be discussed is that, as in (16b), the sentence where a subject is marked with NUN always seems to have a contrastive meaning where it implies another entity to be contrasted with, rather than making a topic[4].

(16)   a.   *swuci-ka peyikul-ul mek-ess-e.*
            Suji-KA   bagel-ACC eat-PST-DECL
            '[Suji]$_F$ ate bagels. '

       b.   *swuci-nun peyikul-ul mek-ess-e.*
            Suji-NUN   bagel-ACC eat-PST-DECL
            '[Suji]$_{CT}$ ate bagels. '

The difference betweeen KA NUN is illustrated in (17) as to whether the sentence entirely excludes the entity who might have eaten bagels as 'Suji'. As in (17a), when the subject is marked with KA, it can be followed by a sentence with another entity (e.g. 'Sarah') who ate bagels. So, even though the subject is focused, it does not entirely exclude the case where another entity X would have eaten bagels. However, as in (17b), when the subject is marked with NUN, it is unacceptable to be followed by a sentence 'Sarah also ate bagels'. Thus, when the subject is marked with NUN, it excludes the possibility of the presence of another entity.

(17)   a.   *swuci-ka peyikul mek-ess-e.*   *sala-to   peyikul mek-ess-e.*
            Suji-KA bagel   eat-PST-DECL Sarah-also bagel   eat-PST-DECL
            'Suji ate bagels. Sarah also ate bagels.'

       b.   # *swuci-nun peyikul mek-ess-e.*   *sala-to   peyikul mek-ess-e.*
            Suji-NUN bagel   eat-PST-DECL Sarah-also bagel   eat-PST-DECL
            'Suji ate bagels. Sarah also ate bagels.'

Two examples below also pose a question regarding the meaning of KA and NUN. The examples look like a parallel contrastive contruction; however, they behave differently. Despite the meaning

---

[4]In opposition to previous literature that argues NUN marks topic, intuition that I have collected from myself and others seems to exclude that possibility. Rather, the intuition always has included the presence of another contrasting entity. An empirical study might be needed to support this argument, but this intuition will stand in this paper.

they convey seems identical (i.e. 'Suji ate bagels and Sarah ate the pie.'), (18) can argued to be a parallel structure whereas (19)cannot since it includes more meaning than 'Sarah ate the pie.' One noticeable difference is that the subject in the second clause in (18) is marked with NUN where the second subjct in (19) is marked with KA. Specifically, example (19) conveys the meaning that is it not 'Suji' who ate the pie but 'Sarah' is, which is the meaning we cannot get from (18).

(18) *swuci-nun peyikul-ul mek-ess-ko,   sala-**nun**   phai-lul mek-ess-e.*
      Suji-NUN bagel-ACC eat-PST-COMP Sarah-NUN pie-ACC eat-PST-DECL
      'Suji ate bagels and Sarah ate the pie.'

(19) *swuci-nun peyikul-ul mek-ess-ko,   sala-**ka**   phai-lul mek-ess-e.*
      Suji-NUN bagel-ACC eat-PST-COMP Sarah-KA pie-ACC eat-PST-DECL
      'Suji ate bagels and Sarah ate the pie.'

3.2.   Relation with focus-sensitive particles 'only'

The discourse markers KA and NUN seem to contribute some meaning onto sentences including a particle *-man* 'only' which itself exclude other possibilities as an exclusive. An exclusive particle 'only' is arugued to be a focus-sensitive particle as in (20a) and (21a). Two examples are identical as 'Jisu only introduced Suji to Sarah' other than the focused argument which differentiates their meaning. Unlike languages like English, in Korean, a marker *-man* 'only' is directly attached onto the argument that it intends to mark as in (20b) and (21b). Thus, *-man* 'only' in Korean cannot be said to be a focus sensitive particle.

(20) 'Jisu only introduced X to Sarah.'
      a. Jisu only introduced [Suji]$_F$ to Sarah.
      b. *ciswu swuci-man sala-eykey sokayha-yss-e.*
          Jisu   Suji-only   Sarah-DAT introduce-PST-DECL

(21) 'Jisu only introduced Suji to X.'
      a. Jisu only introduced Suji to [Sarah]$_F$.
      b. *ciswu swuci sala-eykey-man sokayha-yss-e.*
          Jisu   Suji   Sarah-DAT-only introduce-PST-DECL

   Nonetheless, it seems to have some relation with KA and NUN. Example (22) describes a relation between the expectation and the reality expressed by the used of each KA, NUN, and *-man* 'only'. When marked with KA, as in (22a), the speaker has expected 'Suji' to be at the party which turned out to be true in reality. In contrast, when marked with NUN, as in (22b), the speaker's expectation is also that 'Suji' would have come to the party, which was not true. However, when marked with *-man* 'only', the difference with KA and NUN is that the speaker has expected 'Suji', and only her, to be at the party, which turned out to be true.

(22) a. *swuci-ka phathi-ey o   -l cwul al-ass-e.*
          Suji-KA party-LOC come FACT   know-PST-DECL
          'I thought Suji would come to the party (, and she came).'
          Expectation = {Suji, x, y, z}
          Reality = {Suji, x, y, z}

b. *swuci-nun phathi-ey o   -l cwul al-ass-e.*
   Suji-NUN party-LOC come FACT know-PST-DECL

   'I thought Suji would come to the party (, but she didn't).'
   Expectation = {Suji, x, y, z}
   Reality = {x, y, z}

c. *swuci-man phathi-ey o   -l cwul al-ass-e.*
   Suji-only party-LOC come FACT know-PST-DECL

   'I thought only Suji would come to the party (, and only she came).'
   Expectation = {Suji}
   Reality = {Suji}

The observation becomes interesting when we compare (22c) to (23). When either KA or NUN is used with *-man* 'only', we get the different reality based on the same expectation that 'Suji', and only she' would come to the party. WhenKA is used ,the reality turns out that more people have shown up including 'Suji' to the party. In contrast, when NUN is used, the reality turns out that none of the people has shown up including 'Suji' to the party.

(23) a. *swuci-man-i phathi-ey o   -l cwul al-ass-e.*
         Suji-only-KA party-LOC come FACT know-PST-DECL

         'I thought only Suji would come to the party (, but others also came).'
         Expectation = {Suji}
         Reality = {Suji, x, y, z}

      b. *swuci-man-un phathi-ey o   -l cwul al-ass-e.*
         Suji-only-NUN party-LOC come FACT know-PST-DECL

         'I thought at least Suji would come to the party (, but no one came).'
         Expectation = {Suji}
         Reality = { }

3.3. Relation with focus-sensitive, 'negation'

Recall that *-man* 'only' is not a focus sensitive marker in Korean. However, one other focus sensitive particle, negation (Beaver et al. 2017), seems to be also focus sensitive in Korean. See (24) for difference in implications regarding negation and foucs.

(24) Negation (Beaver et al. 2017, p.271)
      a. Craige didn't introduce [Mandy]$_F$ to Judith.
      b. Craige didn't introduce Mandy to [Judith]$_F$.

Similar to English, and unlike *-man* 'only', negation is Korean is not marked on the argument directly.

(25) a. *ciswu swuci-nun sala-eykey sokay   an   ha-yss-e.*
         Jisu Suji-NUN Sarah-DAT introduce NEG do-PST-DECL

         'Jisu didn't introduce [Suji]$_F$ to Sarah.'
         Reading: There may be someone other than Suji who Jisu introduced to Sarah.

b. *ciswu swuci sala-eykey-nun sokay   an   ha-yss-e.*
   Jisu Suji Sarah-DAT-NUN introduce NEG do-PST-DECL

   'Jisu didn't introduce Suji to [Sarah]$_F$.'
   Reading: There may be someone other than Sarah who Jisu introduced Suji to.

It seems that its different implications depend on different focus marking on the argument.

(26) a. *swuci-ka sala-hanthey chayk an   cwu-ess-e.*
         Suji-KA Sarah-DAT   book NEG give-PST-DECL

         '[Suji]$_F$ didn't give Sarah the book.'
         Reading: The speaker is aware of someone who didn't give Sarah the book, and it is not Suji.

     b. *swuci-nun sala-hanthey chayk an   cwu-ess-e.*
        Suji-NUN Sarah-DAT   book NEG give-PST-DECL

        '[Suji]$_{CT}$ didn't give Sarah the book.'
        Reading: The speaker is not aware of someone who didn't give Sarah the book, and even not sure the person exists. But the speaker is aware that it is at least not Suji.

4. Question-based Information structure

This section higly depends on Beaver et al. (2017) and Velleman & Beaver (2016). Question-based quesetion under discussion (QUD) model follows Beaver et al. (2017) partly citing Rooth (2016). On Rooth's analysis, based on alternative semantics, focus is interpretated based on a set of alternative propositions, as cited "the meaning of a question is a contextually restricted set of propositions that are possible answers to the question."

Focus always have the "same" pragmatic function. It focuses onto the answering entity to a question, thus it supports to indicate what question the speaker is answering to. Also, Focus always marks question and answer congruence.

(27) Beaver et al. 2017
      a. Focus meaning of [*Mary*]$_F$ *smiled*: $\{x \text{ smiled} \mid x \text{ is an individual}\}$
      b. Focus meaning of *Mary* [*smiled*]$_F$: $\{\text{Mary } P \mid P \text{ is a property}\}$

In (27a), the arugment 'Mary' is focused, introducing a set of possible answers to the question *Who smiled?*. In (27b), the predicate 'smiled' is focused, introducing a set of possible answer to the question which is now *What did Mary do?* that is relevant.

Current Question refers to the most recent QUD interacted by the discourse participants, and its meaning is named the Rooth-Hamblin alternatives of the Current Question.

(28) Focus Principle (cited in Beaver et al. (2017))
      Some part of a declarative utterance should evoke a set of alternatives containing all the Rooth-Hamblin alternatives of the Current Question.

Unlike focus, contrastive-topic marking indicates that there are a larger discourse startegy present in the discourse context, which consists of a number of related QUDs. Among those related QUDs, only one of them is the current question (Büring 2003).

A contrastive topic is invoked from multiple discourses involving multiple independent questions (e.g. *What did Mary eat?* and *What about Fred? What did he eat?* in (29)) which is named strategies of inquiry illustrated in (30). Roberts (1996) cited in Beaver et al. (2017) argues that "particular prosodic marking" marks the subject (i.e. subject marked with 'CT'), resulting in the interpretation of the discourse involving contrastive topic.

(29) Beaver et al. 2017
      A: What did Mary eat?
      B: [She]$_{CT}$ ate [pie]$_F$.
      A: Well, what about Fred? What did he eat?
      B: [Fred]$_{CT}$ ate the [beans]$_F$.

(30) Strategy of inquiry of the discourse in example xx (Beaver et al. 2017)
      Who ate what?
            What did Mary eat?
            What did Fred eat?

QUD approach for contrastive topic even applies to implicit questions that do not involve any explicit questions, as in (31). The structure of the strategy of inquiry is illustrated in (32). Again this interpretation is possible based on the speaker Bob's use of prosodic focus and contrastive topic marking.

(31) Velleman & Beaver 2016
      Bob: The [SOUND]$_{CT}$ was [AWFUL,]$_F$ but the [DRUMMER]$_{CT}$ was [FANTASTIC,]$_F$ and the [SINGER]$_{CT}$ was [BETTER THAN EVER.]$_F$

(32) Velleman & Beaver 2016
      (q_1: *How was the concert?*
            (q_2: *Was the sound good?*
                  (a_2: Bob: The [sound]$_{CT}$ was [awful,]$_F$))
            (q_3: *How was the band?*
                  (q_4: *How was the drummer?*
                        (a_4: Bob: ... but the [drummer]$_{CT}$ was [fantastic,]$_F$))
                  (q_5: *How was the singer?*
                        (a_5: Bob: ... but the [singer]$_{CT}$ was [better than ever.]$_F$))))

5.   QUD and Korean case marking

This section intends to show the different use of KA and NUN by context which here means the context of questions, and to apply the QUD approach to show how the different meaning is derived.

   In general, there are three ways address an utterance: topic, focus, and contrastive topic. At first glance, all three examples convey the meaning 'Suji ate bagels' to the question 'What did Suji eat?'. However, example (33a) and (33b) have some additional meaning that does not actually answer to the question 'What did Suji eat?'. The only answer that addresses to the current question is (33c) that is answered with a bare subject *swuci* 'Suji'. As marked in the subject, (33a) marks focus, and (33b) marks contrastive topic. The detailed discussed regarding the questions will follow below.

(33) a. *swuci-ka peyikul mek-ess-e.*
          Suji-KA bagel   eat-PST-DECL
          '[Suji]$_F$ ate bagels.'   [Focus]

      b. *swuci-nun peyikul mek-ess-e.*
          Suji-NUN bagel   eat-PST-DECL
          '[Suji]$_{CT}$ ate bagels.'   [Contrative topic]

      c. *swuci peyikul mek-ess-e.*
          Suji bagel   eat-PST-DECL
          'Suji ate bagels.'   [Topic]

5.1. Focus

In Korean, the discourse marker KA seems to mark focus. This contrast to some researchers who
have argued Korean allows optional case marking or allows a case to be omitted (Sohn 2001). As
in (34), KAseems to be optional without any contextual difference.

(34) *moca(-ka) chayksang wi-ey   iss-∅-e.*
      hat-KA   table   top-LOC be-PRS-DECL
      'The hat is on the table.'

However, a sentence with a marked subject and a bare subject differ in their meaning when we
consider what question they are addressing. As in (35), the subject marked with KA(e.g. *moca-ka*
'hat') answers the question 'What is on the table' invoking a possible set of alternatives 'X is on
the table.' Here, it is unacceptable to answer the question with the bare subject *moca* 'hat'.

(35) 'What is on the table?'
      a. 'X is on the table.'
      b. *moca*(-ka) *chayksang wi-ey   iss-∅-e.*
          hat-KA   table   top-LOC be-PRS-DECL
          'The hat is on the table.'

In contrast, the sentence with a bare subject (e.g. *moca* 'hat') answers the question 'Where is the
hat' which directly asks about 'the hat'. Here, it is unacceptable to answer the question with the
marked subject *moca-ka* 'hat'.

(36) 'Where is the hat?'
      a. 'The hat is on X.'
      b. *moca(*-ka) chayksang wi-ey   iss-∅-e.*
          hat-KA   table   top-LOC be-PRS-DECL
          'The hat is on the table.'

   However, the focused subject which invokes a set of alternatives is not an exclusitve entity that
excludes other entities from the possible 'X' (e.g. *chayk 'book'*)from for instance, 'X is on the
table.'

(37) *moca-ka chayksang wi-ey   iss-∅-e.   chayk-to chayksang wi-ey   iss-∅-e.*
      hat-KA table   top-LOC be-PRS-DECL book-also table   top-LOC be-PRS-DECL
      'The hat is on the table. The boook is also on the table.'

5.2. Contrastive topic

As mentioned above, the discourse marker NUN seems to mark contrastive topic. As in (38), the sentence where the subject is marked with NUN does not only convey the meaing of 'Suji ate bagels', but additionally it indicates the speakers knowledge and intention to convey that there are someone else who ate something else other than bagels or that the speaker is not sure what others in the context.

(38) *swuci-nun peyikul mek-ess-e*.
      Suji-NUN bagel   eat-PST-DECL
      '[Suji]$_{CT}$ ate bagels.'

'Suji ate bagels' can be used as answers to two different questions, as in (39) and (40). In (39), the speaker answers to the question 'What did Suji eat?'. The answer with a NUN marked on 'Suji' initiates another subquestion to 'Who ate what' (i.e. a superquestion to 'What did Suji eat?') which is 'What did Sarah eat'. The answer to another question would be either 'Sarah ate the pie.' or 'I do not know what Sarah ate.'

(39) Who ate what?
        What did Suji eat?
        What did Sarah eat?

The second question is illustrated in (40) where the speaker answers to the question 'What did Sarah eat.' The answer with a NUNmarked 'Suji' implies that two procedures have been made. First, the answer to the question is 'I do not know what Sarah ate. Second, another subquestion to the superqeustion 'Who ate what' has been initiated, which is 'What did Suji eat?'. The answer addresses to this implicit question 'What did Suji eat?'.

(40) Who ate what?
        What did Sarah eat?
        What did Suji eat?

As Beaver et al. (2017) also discussed, the contrastive topic construction can be formed with implicit questions where there are no addressed explicit questions, as in (41). Note that two clauses are parallel structure.

(41) *swuci-nun cohaha-yss-ko*, *sala-nun*   *silheha-yss-e*.
      Suji-NUN like-PST-COMP Sarah-NUN hate-PST-DECL
      'Suji liked it, and Sarah hated it.

The sentence in (41) initiates two questions 'Did Suji like the concert?' and 'Did Sarah like the concert?' which are the subquestions of the superquestion 'How was the concert'.

(42) Implicit question
      How was the concert?
        Did Suji like it?
        Did Sarah like it?

We have seen that, in Korean, the contrastive topic sentences with NUN marking are slightly different from those with prosodic markings in English. In Korean, it does not require a comparable sentence that also has NUN marking, but one sentence with NUN marked subject itself arises two subquestions in the discourse which arise the contrastive contextual meaning. Thus, the marking itself form a larger stratety of inquiry of the discourse.

Moreover, Beaver et al. (2017) introduces a case where a sentence with a contrastive topic seems to arise a further implicit question, rather than being a felicitous answer to the expected question. As in (43), 'next week, I am going to columbus' with a contrastive prosodic marking on 'next week' does not comply as a felicitous answer for 'Where is B going next week?' which is the current question. Rather, it answers to the further implicit question 'Where is B going when?'.

(43)   Beaver et al. (2017, p.277-278)

   a. A: So, I hear you're going to be away next week. Going anywhere interesting?
       B: Well, [next week]$_{CT}$ I'm going to [Columbus]$_F$.

   b. A: OK, where are you going next week?
       B: #Well, [next week]$_{CT}$ I'm going to [Columbus]$_F$.

However, in Korean, as we have seen above with other cases of contrastive topic marked sentences, a marked entity initiates both current question and another subquestion that is involved in a superquestion of both questions. For instance, as in (44), a sentence with a NUN marked *taum-cwu* 'next week' can both be an answer to the question 'Where are you going when?' and 'Where are you going next week?'

(44)   a. A1: Where are you going for vacation?

   b. A2: Where are you going next week?

       B: *na taum-cwu-nun   pwusan-ey   k(a)-a.*
          I   next-week-NUN Busan-LOC go-DECL

       'Next week, I go to Busan, (and somewhere else some other time).'

The strategy of inquiry of the discourse for (44) is illustrated in (45). Whether the question asked in the context is 'Where are you going next week?' or 'Where are you going when?', the answer in (44) arises two questions 'Where are you going next week?' and 'Where else are you going other than next week?'; thus, it reads as 'Next week, I go to Busan, but, some other time, I go to somewhere else.'

(45)   a. Where are you going when?
           Where are you going next week?
           Where else are you going other than next week?'

   b. **Where are you going when?**
           Where are you going next week?
           Where else are you going other than next week?'

Final particular marking of Korean contrastive topic marking is NUN marking on the non-arguments such as *cal* 'well' in (46).

(46)   A: Are you good at playing soccer?

B: *cal-un   mos ha-∅-e.*
　　well-TOP NEG do-PRS-DECL

'I cannot play it well (, but I am not bad at it either.)'　　　　　　[Kim (2015); p.90]

The answer marked with NUN arises a set of gradient questions regarding 'well', as in (47). Given the property of 'well', when the speaker denies the former question (e.g. 'Are you good at soccer?'), it would mean that the speaker is very likely to conform to the following question (e.g. 'Are you not so good at soccer?'). Therefore, speaker B of (46) does not play well at soccer, but also not a bad player.

(47)　How well do you play soccer?
　　　　　Are you good at soccer?
　　　　　Are you not so good at soccer?
　　　　　Are you bad at soccer?

5.3. Repair

This subsection introduces the example which looks like a parallel contrastive contruction but in fact it forms a complex structure with a focused sentence following a contrastive topic sentence.

　　In (48), if Suji ate the pie based on the speaker's knowledge, speaker B would have answered with a bare subject. However, the use of NUN indicates that the speaker either knows that Suji didn't eat the pie or does not know the fact regarding the pie. So, as in (49), speaker B takes an alternative strategy to answer about Suji's another information which is initiated by a NUN marking on 'Suji'. The initiated question 'Did Suji eat bagels?' has a parallel structure with the question 'Did Suji eat the pie?; thus, the structure explains the contrastive topic marking of NUN.

(48)　A: Did Suji eat the pie?

　　　　B: *swuci-nun peyikul mek-ess-e.*
　　　　　　Suji-NUN bagel   eat-PST-DECL

　　　　'Suji ate bagels.'
　　　　Reading: Suji ate bagels. She didn't eat the pie or the speaker doesn't know whether she ate the pie.

(49)　Who ate the what
　　　　　What did suji eat?
　　　　　　Did Suji eat the pie?
　　　　　Did Suji eat bagels?

　　Moreover, the speaker can take another strategy when the speaker knows that the answer is negative or does not know about the fact. As in (50), speaker B answers to the question 'Did Suji eat bagels' with the answer 'It is Sarah who ate bagels.' conveying an additional information that Suji didn't eat bagels or that the speaker is not aware about Suji eating bagels. In comparison with (48), when the speaker provides an information of an alternative entity who, for instance, 'X eat bagels' other than 'Suji' in (50), the marker KA is used rather than NUN.

(50)　A: Did Suji eat bagels?

B: *sala-ka   peyikul mek-ess-e.*
   Sarah-KA bagel   eat-PST-DECL

'Sarah ate bagels.'

(51) illustrates the strategy of inquiry of (50) which differentiates with (49) and explains why KA is used to mark the alternative entity 'Sarah'. Here, 'Sarah ate bagels' does not form a parallel structure with the question 'Did Suji eat bagels', but rather it answers to its superquestion 'Who ate bagels?', focusing on 'Sarah'.

(51)   (Who ate bagels?)
        A: Did Suji eat bagels?
         (B: No, Suji didn't eat any bagels.)
      B: Sarah ate bagels.

This structure also works for implicit questions as we have seen the case with contrastive topic structure, as in (52). Unlike contrastive topic structure, the second clause of (52) implies the question 'Who hated the concert?'. The overall meaning of (52) is focused on 'Who hated the concert?' rather than on how each entities felt about the concert. Thus, as described in (53), the first clause answers to the subquestion 'Did Suji hate it' as 'Suji didn't hate it, but she actually liked it.'; and the second clause answers to its superquestion 'Who hated it' focusing on 'Sarah' who hated the concert.

(52)   *swuci-nun cohaha-yss-ko*, *sala-ka   silheha-yss-e.*
     Suji-NUN like-PST-COMP Sarah-KA hate-PST-DECL
     'Suji liked it, and Sarah hated it.

(53)   How was the concert?
      Who hated it?
        Did Suji hate it?

5.4. Negation

Ths subsection introduces the examples of negation which we have discussed to be sensitive to the focus marker KA and a contrastive topic marker NUN. For instance, there are two ways to answer to the sentence (54) other than 'Suji didn't give Sarah the book' using a bare subject 'Suji', marking 'Suji' with KA and marking with NUN which, as we expect, conveys two different meaning.

(54)   *swuci sala-hanthey chayk cwu-ess-e.*
     Suji Sarah-DAT   book give-PST-DECL
     'Suji gave Sarah the book.'

The example where the subject 'Suji' is marked with NUN not only has the meaning where Suji didn't give Sarah the book, but also implies either that someone else gave Sarah the book or that the speaker is not aware of what happened with the book but at least knows that Suji is not involved in the evvent. The question being addressed here would be 'Did Suji give Sarah the book?'.

(55) a. *swuci-nun ani-ya.*
Suji-NUN NEG-DECL
'It is not Suji.'

b. *swuci-nun sala-hanthey chayk an cwu-ess-e.*
Suji-NUN Sarah-DAT book NEG give-PST-DECL
'[Suji]$_{CT}$ didn't give Sarah the book.'

The example where the subject 'Suji' is marked with KA not only has the meaning where Suji didn't give Sarah the book, but also the speaker knows that there is someone other than Suji who gave Sarah the book. In this case, the person who gave Sarah the book exist and the speaker also knows about this specific person. The question being addressed here would be 'Who gave Sarah the book?'

(56) a. *swuci-ka ani-ya.*
Suji-KA NEG-DECL
'It is not Suji.'

b. *swuci-ka sala-hanthey chayk an cwu-ess-e.*
Suji-KA Sarah-DAT book NEG give-PST-DECL
'[Suji]$_F$ didn't give Sarah the book.'

Based on the analysis above, examples below illustrate the different meanings by marking different arguments.

(57) *swuci ne-hanthey sala sokayha-e-cwu-ess-e.*
Suji you-DAT Sarah introduce-COMP-give-PST-DECL
'Suji introduced Sarah to you.'

(58) a. *swuci-nun ani-ya.*
Suji-NUN NEG-DECL
'It is not Suji.' or '[Suji]$_{CT}$ didn't introduce Sarah to me.'

b. *na-nun ani-ya.*
I-NUN NEG-DECL
'It is not me.' or 'Suji didn't introduce Sarah to [me]$_{CT}$.'

c. *sala-nun ani-ya.*
Sarah-NUN NEG-DECL
'It is not Sarah.' or 'Suji didn't introduce [Sarah]$_{CT}$ to me.'

6. Further discussion

In this paper, two types of discourse markers KA and NUN have been discussed based on their information structure. Specifically, I have argued that a question-based approach of information structure better accounts for the different usage and meanings of KA and NUN, which are focus and contrastive topic.

One further discussion that I am interested in is a generic reading that a NUN marking arises, as in the example below. When a common noun is marked with NUN and used with a present tense

predicate, the sentence no longer imposes a contrastive reading but has a generic reading. But in the case of KA marking, as in the example below, it seems to still mark focus and has a function as a repair. I believe it would be interesting to show what specific relation does the contrastive topic and generic meaning has since they are both marked with the same discourse marker NUN.

(59) a. say-nun   nal-n-ta
          bird-NUN fly-PRS-DECL
          'Birds fly.'
     b. say-ka   nal-n-ta
          bird-KA fly-PRS-DECL
          'Birds fly.'

Abbreviations

ACC = accusative, COMP = complementizer, CONT = constrastive, DAT = dative, DECL = declarative, FACT = the fact that, KA = -i/ka, LOC = locative, NEG = negative, NOM = nominative, NUN = -(n)un, PL = plural, PROG = progressive, PRS = present, PST = past, TOP = topic.

References

Aissen, Judith. 2003. Differential object marking: iconicity vs. economy. *Natural Language & Linguistic Theory* 21(3). 435–483.

Beaver, David I, Craige Roberts, Mandy Simons & Judith Tonhauser. 2017. Questions under discussion: where information structure meets projective content. *Annual Review of Linguistics* 3. 265–284.

Büring, Daniel. 2003. On d-trees, beans, and b-accents. *Linguistics and philosophy* 26(5). 511–545.

Erteschik-Shir, Nomi. 1997. *The dynamics of focus structure*. Cambridge, UK: Cambridge University Press.

Erteschik-Shir, Nomi et al. 2007. *Information structure: the syntax-discourse interface*. Vol. 3. Oxford University Press.

Jun, Youngchul. 2015. Focus, topic, and contrast. *The handbook of Korean linguistics*. 179–195.

Kim, Ilkyu. 2014. On the meaning of korean–i/ka. *Language and Linguistics* 63. 1–26.

Kim, Ilkyu. 2015. Is korean-(n) un a topic marker? on the nature of-(n) un and its relation to information structure. *Lingua* 154. 87–109.

Kim, Ilkyu. 2016. Can korean-(n) un mark (contrastive) focus? *Language Sciences* 56. 105–117.

Kwon, Song-Nim & Anne Zribi-Hertz. 2008. Differential function marking, case, and information structure: evidence from korean. *Language*. 258–299.

Lee, Hanjung. 2015. Case particle ellipsis. *The handbook of Korean linguistics*. 196–211.

Roberts, Craige. 1996. Information structure in discourse: toward a unified theory of formal pragmatics. *Ohio State University Working Papers in Linguistics* 49. 91–136.

Rooth, Mats. 2016. Alternative semantics. In. Oxford University Press.

Sohn, Ho-Min. 2001. *The korean language*. Cambridge University Press.

Velleman, Leah & David Beaver. 2016. Question-based models of information structure. In *The oxford handbook of information structure*.

Yi, Nam-Soon. 1988. *Kwuke-uy pucengkyekkwa kyekphyoci saynglyak(a study on the indefinite case and case-marker ellipsis in modern korean)*. Seoul: Top Press.