Is *amwu*(N)−*to* a negative quantifier?*

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Chung, Daeho. 2012. Is *amwu*(N)-*to* a negative quantifier? *Linguistic Research* 29(3), 541-562. Watanabe (2004) analyzes the traditionally called negative polarity item in Japanese as a negative quantifier (N-word), to account for the fact that it can be a fragmental answer to an affirmative interrogative sentence, despite the apparent polarity mismatch between the affirmative predicate in the antecedent clause and the negative predicate in the ellipsis site. The polarity disparity resolves in his system due to Agree between the N-word and the elided negative predicate, which induces the [NEG] feature of the former to get copied into the latter and ultimately cancels out the [NEG] feature of the predicate in the ellipsis site as an instance of double negation. This work argues that although Korean behaves like Japanese with respect to the N-word fragments, the negative quantifier analysis cannot be carried over to Korean based on the following two reasons: (i) the neg-feature-copy-followed-by-cancel-out mechanism leads to interpretation failure in some structures involving an N-word (e.g., an N-word as a short answer to a negative interrogative, an N-word in the RNR construction, and an N-word in the non-negation context); and (ii) polarity mismatch can be induced by a non-N-word (e.g. *acik* 'still, yet' as a short answer to an affirmative interrogative sentence and *selma* '(not) a chance' as a short response to an affirmative declarative sentence). As for the availability of an N-word as a fragmental response to an affirmative sentence, it is speculated in this work, conforming to Ahn and Cho (2011), that such N-word fragments involve no ellipsis and they are to be pragmatically licensed. If this is on the right track, then the semantic isomorphic condition becomes irrelevant to such fragments, and the polarity mismatch problem disappears accordingly. **(Hanyang University)**

Keywords   Negative Polarity Item (NPI), Negative Quantifier (N-word), polarity

mismatch, feature copy, ellipsis, semantic isomorphic condition (SIC), fragments

1. Introduction

Watanabe (2004) claims that the traditionally called negative polarity items (NPIs) in Japanese, expressions like wh-*mo*, are to be analyzed as negative quantifiers, based on the observation that they behave like N-words found in Romance languages. (See Watanabe (2004) for a series of N-word properties that Japanese wh-*mo* displays.) His major argument comes from the availability of wh-*mo* in Japanese as a short fragmental answer to an affirmative interrogative sentence.

(1) (Watanabe 2004, 564; his (13b))
    A: Nani-o   mita no?
       What-Acc saw   QE
    B: Nani-mo
       What-MO
       'Nothing.'

Amwu(N*)-to* in Korean behaves similarly, as shown below:[1]

(2) A: nwu-ka   o-ess-ni?
       who-Nom come-Pst-QE
       'Who came?'

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[1] The discourse in (2) does not sound perfectly natural, as one of the reviewers points out, and many informants do not accept the short answer in (2B). Most of them, however, accept the following discourse:

(i) A: nwukwu-nwukwu   o-ess-ni?
       who-who   come-Pst-QE
       'Who came?'
    B: acik-kkaci-nun   amwu-to-yo.
       now-until-Top   AMWU-TO-DE
       'Nobody until now.'

So I assume that the discourse in (2) is basically acceptable, though not perfect.

B: amwu-to
    AMWU-TO
    'Nobody.'

The discourses in (1) and (2) appear to be problematic, as there is an apparent polarity disparity between the elided part and its potential antecedent, i.e., the negative vs. affirmative status of the predicates. Watanabe (2004) basically follows Merchant (2001, 2004) and makes the following assumptions on ellipsis: (i) Ellipsis is to meet a *semantic* isomorphic condition (SIC, henceforth), i.e., the elided part must have a *semantically* identical antecedent; (ii) Ellipsis needs a linguistically expressed antecedent; and (iii) Ellipsis is a PF suppression of a string of expressions that are informatively given. With these assumptions in mind, consider the following, which is (2) with the elided part represented:[2]

(2)' A: nwu-ka   o-ess-ni?
        who-Nom come-Pst-QE
        'Who came?'
    B: amwu-to   [o-ci   ani-ha-ess-ta]
        AMWU-TO   come-CI   NEG-do-Pst-DE
        'Nobody did.'

Since the antecedent clause in (2A)' has an affirmative predicate, while the elided part in (2B)' is negative, the ellipsis process in (2B)' appears not to satisfy the SIC at first glance.

To resolve the polarity mismatch, Watanabe (2004) proposes a negative quantifier analysis (NQA, henceforth) of the traditionally called NPIs, according to which NPIs are in fact negative quantifiers (N-words in his term) that need to be licensed by Agree.[3] The negative feature in an N-word (like *dare-mo* in Japanese and *amwu-to* in Korean) gets copied via Agree into the negation head, which is also negative due to the negative morpheme. The two negative features in the negation head now

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[2] Korean examples will be used from now on, unless indicated otherwise.
[3] I realized that Kim (2001) also claims that the particle *to* in *amwu* N-*to* in Korean bears a [+NEG] feature, rendering the DP/NP into a negative quantifier. However, I do not find any additional empirical evidence for the NQA provided in her work.

cancel each other, which turns the originally negative predicate into a non-negative, i.e., affirmative counterpart. The feature-copy-followed-by-cancel-out mechanism makes it possible to satisfy the semantic isomorphic condition on ellipsis, as described below.

(2)"   A: nwu-ka o-ess-ni?
                  ┌─── [AFF]
        B: acik-kkaci-nun amwu-to [ani-o-ess-ta].
                           [NEG]   [NEG]
                           [NEG]   [NEG][NEG] ([NEG] copy due to
                                                    Agree)
                           [NEG]   [NEG][NEG] (Feature cancellation due
                                                    to double negation)
                           [NEG]   [AFF]   (SIC satisfied.)

The current work argues, however, that the NQA cannot be carried over to the traditionally called NPIs (at least not in Korean), as NPIs do not necessarily bear a [+NEG] feature and the polarity mismatch is not necessarily induced by an N-word. The paper is organized as follows. In Section 2, it will be shown that there are at least two kinds of problems the NQA faces. First, the neg-feature-copy-followed-by-cancel-out mechanism leads to interpretation failure in some structures involving an N-word (Section 2.1). Second, the polarity mismatch can be induced by a non-N-word like *acik* 'still, yet' and *selma* '(not) a chance' (Section 2.2). Then, some speculation will be made on the availability of *amwu* N-*to* as a fragmental response to an affirmative sentence, in Section 3, where it will be conjectured, along the similar lines of Ahn and Cho's (2011) treatment of Case-less fragmental expressions, that such NPI fragments involve no ellipsis and they are to be pragmatically licensed. Section 4 concludes the paper.

2. Problems with the NQA

Watanabe's (2004) argument for the NQA is crucially motivated to account for

the fact that the so-called N-word can function as a short answer to an affirmative interrogative sentence. His argument only goes through under several assumptions. First, ellipsis observes the SIC. Second, the N-word and the head of NegP Agree. Third, Agree copies the [NEG] feature in the N-word, which is inherently negative, into the head of NegP. Due to the feature copy followed by the cancel-out of the double negation, the SIC is satisfied in the relevant ellipsis context.[4]

It will be argued in this section that the NQA is not tenable for the following two reasons. First, as will be shown in Section 2.1, the neg-feature-copy-followed-by-cancel-out mechanism leads to interpretation failure in several contexts involving an N-word (e.g., an N-word as a short answer to a negative interrogative, an N-word in the RNR construction, and an N-word in a non-negation context etc.). Second, as will be illustrated in Section 2.2., the polarity mismatch sometimes takes place despite absence of an N-word (e.g. *acik* 'still, yet' as a short answer to an affirmative question and *selma* '(not) a chance' as a short response to an affirmative statement.

2.1 Interpretation failure cases

2.1.1 N-words as short responses to a negative utterance

Expressions of the form *amwu*(N)-*to* in Korean can be used as a short answer to a negative interrogative (as well as to an affirmative interrogative) sentence. Consider the following example:

(4) A: mwues-mwues-ul ani-kacieo-ess-ni?
      what-what   NEG-bring-Pst-QE
      'What things didn't you bring?'
   B: ssulmanha-n kes-un   amwukes-to-yo.
      useful-Rel   thing-Top   AMWUKES-TO-DE

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[4] The third assumption, however, sounds orthogonal to the Chomsky's (2007, 2008) no-tampering condition (NTC), which demands that Merge of X and Y leaves X and Y unchanged. How is it possible for a neg head to attain a feature in the course of derivation? As Watanabe (2004) himself admits, there seems to be no other instance where a syntactic object changes its feature composition in the course of derivation. Features can be valued, but alteration of a feature composition of a given expression is a dubious operation due to the NTC.

'Nothing useful.'

Under Watanabe's (2004) Agree and feature copy mechanism, the relevant feature representation will be as follows.

(4)' A: mwues-mwues-ul <u>ani-kacieo-ess-ni</u>?

                           [NEG]

    B: ssulmanha-n kes-un <u>amwukes-to</u>   ~~ani-kacieo-ess-ta~~.

                        [NEG]   [NEG]

                        [NEG]   [NEG][NEG] ([NEG] copy due to

                                                     Agree)

                        [NEG]   ~~[NEG][NEG]~~ ([NEG] cancellation)

                        [NEG]   [AFF]   (SIC NOT satisfied)

The elided predicate in (4B)' is originally negative due to the negative morpheme (the sentence negation) but turns out to be non-negative ([AFF]) due to the [NEG] feature copy (caused by Agree) and the cancel-out of the two [NEG] features. The elided predicate, which is ultimately non-negative, has a [NEG] expression as its antecedent in (4A)', violating the SIC on ellipsis. Then the discourse in (4) should be infelicitous, contrary to fact.

A similar problem arises in the opposite environment, where an N-word resides in the antecedent clause, while no N-word in the ellipsis site. Consider the discourse in (5) and its relevant feature matrix in (5)':

(5) amwu-to   moim-ey   nathana-ci ani-ha-ess-ta.

    AMWU-TO   meeting-at appear-CI NEG-do-Pse-DE

    simcie hoycang-to,   pwuhoycang-to

    even   president-TO vice;president-TO

    ~~moim-ey   nathana-ci ani-ha-ess-ta~~

    meeting-at appear-CI NEG-do-Pst-DE

    'Nobody appeared at the meeting. Not even the president or vice president.'

(5)' <u>amwu-to</u> moim-ey nathana-ci ani-ha-ess-ta.

    [NEG]   ~~[NEG] [NEG]~~   ([NEG] copy followed by [NEG]

                                          feature cancel-out)

                      [AFF]

Simcie hoycang-to, pwuhoycang-to ~~moim-ey nathana-ci ani-ha-ess-ta~~

                                            [NEG]

The antecedent of the elided predicate starts as a negatively valued element due to the presence of the sentence negation but its polarity turns out to be affirmative due to the feature copy caused by Agree and cancel-out of double [NEG] features in the antecedent clause. The elided predicate in the second sentence is simply negative since there is no N-word available in the sentence. Despite the violation of the SIC, the fragmental expression in the discourse does not lead to a semantic anomaly, again contrary to the expectation the NQA makes.

2.1.2 N-words in RNR constructions

The shared part in a so-called right-node-raising (RNR) construction is distributively interpreted. Consider the following examples:

(6) a. A-nun sakwa-lul, B-nun pay-lul, C-nun photo-lul <u>mek-ess-ta</u>.

       A-Top apple-Acc B-Top pear-Acc C-Top grape-Acc eat-Pst-DE

       'A (ate) apples, B (ate) pears, and C ate grapes.'

    b. A-nun sakwa-lul, B-nun pay-lul, C-nun photo-lul

       A-Top apple-Acc B-Top pear-Acc C-Top grape-Acc

       <u>mek-ci ani-ha-ess-ta</u>.

       eat-CI Neg-do-Pst-DE

       'A (did not eat) apples, B (did not eat) pears, and C did not eat grapes.'

The shared predicate in (6a) is affirmative, and each conjunct is affirmatively interpreted, as the English translation indicates. Likewise, the shared predicate in (6b) is negative, and each conjunct is negatively interpreted.

With this in mind, consider the cases where *amwu*(N)-*to* is asymmetrically

distributed in an RNR construction, as exemplified below:

(7) (In a situation where students have to pass tests for English, math, and science to be qualified.)

A-nun yenge-lul,   B-nun   swuhak-ul, C-nun amwu   kwamok-to
A-Top English-Acc B-Top   math-Acc   C-Top AMWU subject-TO
<u>thongkwaha-ci   mos-ha-ess-ta</u>.
pass-CI   Neg-do-Pst-DE
'A (did not pass) English, B (did not eat) math, and C did not pass any subject.'
#'A (passed) English, B (passed) math, and C passed no subject.'

If the shared predicate in the last conjunct were interpreted as a non-negative due to the operation of Agree with N-word *amwu kwamok-to*, the first two conjuncts would have to be interpreted as a non-negative reading. In fact, however, the first two conjuncts are negatively interpreted, as the English translation indicates.[5]

2.1.3 N-words in contexts lacking overt negation

In Watanabe's (2004) system, the N-word needs an overt negation to obligatorily Agree with. Otherwise, the derivation is expected to crash at LF due to the presence of an uninterpretable focus feature in the N-word. *Amwu(N)-to* in Korean cannot be an N-word as it shows up in certain contexts where no overt negation is realized. There exist at least two such contexts.

First, like English *any*, Korean *amwu(N)-to* can be licensed by some inherently negative predicates (INPs), e.g., V-*ki silh* 'to be displeased to V' or V-*ki silheha* 'to dislike V-ing', when embedded under a complement clause but not when appearing as their direct complement.[6] (See Klima 1964, Linebarger 1987, Progovac 1988,

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5   There are three major approaches to the RNR constructions: movement analyses, deletion analyses, and multi-dominance analyses, among others. (See Chung and Sohn 2007, and references therein.) No matter which theory is taken, Watanabe's (2004) system, where a [NEG] feature in a negative predicate gets cancelled due to Agree with an N-word, fails to properly capture the polarity interpretation in the RNR, since the shared predicate has to be heterogeneously interpreted depending on the presence or absence of an N-word in the conjunct.

6   As observed in Chung (2006), *amwu(N)-to* can be positioned in a subject position as far as it is

1993, Laka 1990, Kim 1999, for English, and Sohn 1995, 2004, Lee 1996, Lee, Chung, and Nam 2002, Chung 2004, 2006, among others, for Korean.)[7]

(8) a. The witness denied that anybody left the room before dinner.

   b. The professor doubts that the students understood any explanation.

(9) a. *The witness denied anything.

   b. *The professor doubts any explanation.

(10) (=Sohn 1995:42, (57a))

     John-un [e amwuto manna-ki] silheha-n-ta.

     J.-TOP   anyone meet-C   dislike-PRES-DE

     'John dislikes seeing anyone.'

(11) (=Sohn 1995:42, (56a))

     *John-un   amwuto silheha-n-ta.

     J.-TOP   anyone   dislike-PRES-DE

     'John dislikes anyone.'

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licensed by an inherently negative predicate that takes a complement clause.

  (i) (=Chung 2006, 214, his (7))

    a. amwuto$_i$ [e$_i$ kulen   telewun   il-ul   ha-ki] silheha-n-ta.

       anyone   that dirty   work-ACC do-KI dislike-PRES-DE

       Lit. 'Anyone among them dislikes doing that sort of dirty job.'

       'No one likes to do that sort of dirty job.'

    b. amwuto$_i$ [e$_i$ na-wa   ccakha-ki]   silheha-ess-ta.

       anyone   I-with become;partner-KI   dislike-PST-DE

       Lit. 'Anyone among my classmates disliked being my partner.'

       'None of my classmates liked to be my partner.'

    c. chilswun-i   toy-n   nokwu-lul   ikkul-ko   amwuto ka-ki

       70;years;of;age become-Rel old;bones   take;along   anyone   go-KI

       silheha-nun tosepyekci   Yeswu-uy kkuth,..

       dislike-Rel islands;and;remote;countryY.-Gen   end, ..

       '... the end of Yewu, a remote island place where no one likes to go, carrying an old and week body at the age of seventy, ...'

    d. amwuto math-ki silheha-nun hoycangcik-eyse kokwunpunthwuha-ess-tanun ...

       anyone take-KI dislike-Rel   presidentship-at make;a;strenuous;effort-PST-they;say, ...

       '...made a strenuous effort as a chair whose duties no one liked to take...'

7 Kim (1999) makes a different generalization: Only content elements can be licensed by an inherently negative predicate, while entity elements cannot. This generalization cannot accommodate the fact that inherently negatives like V-*ki silheha* and V-*ki silh* can license a subject NPI, as observed in Chung (2006). See the examples cited in footnote 6.

A second context where *amwu(N)-to* can also be licensed without an overt negation is when it appears in a BEFORE clause, as in (12).[8]

(12)   (=(Chung 1997, his (2))
       <u>amwuto</u>   ilena-ki   **ceney**, na-nun mollay   ku pang-eyse
       anyone   get;up-NMN before I-TOP stealthily the room-from
       get;out-PST-DC
       ppacyenaka-ess-ta.
       'I got out of the room stealthily before anyone got up.'

Agree cannot take place, as there is no overt negation available in sentences in (10) and (12). Thus it is expected under Watanabe's (2004) system that such sentences are to be illegitimate, contrary to fact.[9]

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8 Not every native speaker agrees on the grammatical status of sentences like (11). They are taken to be basically grammatical in Lee (1993), Chung (1993, 1997) and Lee (1996), while Nam (1997) states that *amwu(N)-to* is not available in a BEFORE clause in Korean. Nam (1997), however, does not seem to be completely committed since such sentences are marked as ??, not as *, which applies to totally ungrammatical sentences. I believe that sentences like (12) are not perfect, but qualitatively different from the sentences which are identical but with BEFORE replaced by AFTER.

   (i) *<u>amwuto</u>   ilena-n   **hwuey**, na-nun mollay   ku pang-eyse   ppacyenaka-ess-ta.
       anyone   get;up-NME after   I-TOP stealthily the room-from   get;out-PST-DC
       'I went out of the room stealthily after anyone woke up.'

9 Contrary to the widely accepted view that expressions of the form wh-*mo* in Japanese are strong NPIs, typically based on the contrast like (i), Yabushita (2012) claims that *dare-mo* in Japanese is not an NPI, not even a weak NPI, taking the examples in (ii):

   (i) (=Yabushita 2012, 471; his (4))
       a.   *Dare-mo   paatii-ni   ki-ta.
            who-MO   party-Dat   come-Past
       b.   Dare-mo   paatii-ni   ko-nakat-ta.
            who-MO   party-Dat   come-Neg-Past
            'Nobody came to the party.'
   (ii) (=Yabushita 2012, 472; his (6))
       a.   Hito-wa   dare-mo   itsukawa shinu.
            human-Top who-MO   someday die
            'Everyone (Anyone) dies someday.'
       b.   Hito-wa   dare-mo   jibun-ni amai.
            human-Top who-MO   self-Dat lenient
            'Everyone (Anyone) is lenient to herself.'

2.2 Polarity mismatch despite absence of an N-word

In this subsection it will be observed that polarity mismatch may arise in fragmental responses, even when there is no N-word in the discourse. Two such cases will be discussed in this subsection. It will be illustrated that adverbs like *acik* 'still, yet' and *selma* '(not) a chance; (no) way' are not N-words, but they may cause polarity reversal.

2.2.1 *Acik* 'still/yet'   as a short answer to an affirmative interrogative

Adverb *acik* 'still/yet' is licensed as far as it comes with a predicate containing an [+continuous] aspectual feature. Thus, stative predicates like *iss* 'to stay' are semantically compatible with *acik*, while achievement predicates like *tochakha* 'to arrive' are not, as shown below:

(13)   a. Mary-ka **acik**   cip-ey   **iss**-ta.
              M.-Nom still   home-at   stay-DE
              'Mary still stays at home.'
        b. *Mary-ka   **acik**   **tochakha**-ess-ta.
               M.-Nom   still   arrive-Pst-DE
              'Mary still arrived.'

When negated, a [-continuous] predicate becomes compatible with *acik*, as it changes into a [+continuous] counterpart. Compare (13b) and the following:

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c. Hito-wa   dare-mo   yume   yabure, furikaeru.
    human-Top   who-MO   dream   break   reflect
    'Everyone (Anyone) loses in her dream and reflects on herself.'

The crucial difference between the sentence in (ia) and those in (ii) lies in the fact that the former contains an episodic predicate, while the latter take a non-episodic predicate. He attributes the contrast to the logical property of *dare-mo*: it is an 'unrestricted' universal quantifier. (ia) is ungrammatical because it is a contradictory sentence: it is impossible that every human being came to a party at a specific time in the past.

Regardless of the validity of Yabushita's (2012) theory, the data he provides in (ii) makes an interesting theoretical implication. Wh-*mo* in Japanese cannot be treated as inherently negative expressions, casting doubt on Watanabe's (2004) negative quantifier analysis.

(14) Mary-ka **acik   tochakha-ci ani**-ess-ta.
     M.-Nom still   arrive-CI   NEG-Pst-DE
     'Mary has not arrived yet.'

It is clear that adverb *acik* cannot be an N-word since sentences like (13a) never carry a negative interpretation. As such, it should not induce a negation-feature-copy-followed-by-cancel-out process that the N-word does, for the sentences like (14). If it did, the sentences like (14) would be semantically odd, as the predicate would ultimately become non-negative and [-continuous], violating the semantic restriction that adverb *acik* is subject to.

With this background information in mind, let us examine how *acik* behaves in the context of fragmental answers. Interestingly, *acik* can be used as a short answer to an affirmative interrogative sentence with a [-continuous] predicate, as in (15), as well as with a [+continuous] predicate, as in (16).

(15) A: John-i   tochakha-ess-ni?
         J.-Nom   arrive-Pst-QE
         'Has John arrived?

     B: (anyo) **acik**   [tochakha-ci   ani-ha-ess-e]-yo
         No   still   arrive-CI   NEG-do-Pst-E-DE
         '(No,) (not) yet.'

     B': #(yey) **acik** [tochakha-ess-e]-yo
            yes   still   arrive-Pst-E-DE
         (Intended) '(Yes,) he has already arrived.'

(16) A: John-i   cip-ey   iss-ni?
         J.-Nom   home-at   stay-QE
         'Is John home?

     B: (yey), **acik**   [cip-ey   iss-e]-yo
          Yes   still   home-at stay-E-DE
         '(Yes,) (he is) still (at home).'

     B': #(anyo) acik   [cip-ey   eps-e]-yo
            yes   still   home-at   not;stay-E-DE
         (Intended) '(No,) he is still not at home.'

The short answer in (16B) does not cause any particular problem with Watanabe's (2004) system, since the affirmative predicate in the elided part has an affirmative predicate as its antecedent, meeting the SIC on ellipsis. In contrast, the short answer in (15B), if interpreted as non-negative, will be problematic, since the elided predicate is negative, while the predicate in the antecedent clause is non-negative.

2.2.2 *Selma* '(not) a chance' as a fragmental response

Adverb *selma* '(not) a chance' appears in an affected environment, but its distribution differs from that of a typical N-word of the form *amwu*(N)-*to* since it can be licensed in an affirmative interrogative sentence, as well as in a negative declarative sentence and in a negative interrogative sentence:

(17) a. **selma**   A-ka   pelsse   o-l   li-ka
        (not);a;chance   -Nom   already   come-PNE   possibility-Nom
        eps-ta.[10]
        not;exist-DE
        'A hasn't already come, has she?'
    b. **selma**   A-ka   acik-to   ani-o-ess-nayo?
        (not);a;chance   -Nom   still   Neg-come-Pst-QE
        'A has come already, hasn't she?'
    c. **selma**   A-ka   pelsse   o-ess-nayo?
        (not);a;chance   -Nom   already   Neg-come-Pst-QE
        'A hasn't come yet, has she?

This indicates *selma* does not always require the presence of negation at least at the syntactic level. Nevertheless, *selma* or *selma* V-(*u*)*li-ka* can be a (negatively interpreted) fragmental response to an affirmative sentence, as exemplified below:

(18) A: John-i   ku   saken-uy   yonguyca-lay.

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[10] Like *selma*, V-*l li-ka* can be licensed by a negative copular verb in a declarative or by an affirmative copular verb in a rhetoric question form. It can be a short response to an affirmative utterance.

J.-Nom that case-Gen   suspect-be;they;say

'It is said that John is the suspect of the case.'

B: **selma**,   kuleha-l   li-ka   {**eps**-ta/iss-na?}

(not);a;chance be;so-PNE possibility-Nom not;exist-DE/exist-QE

'No way. That can't be true.'

B': **selma**.

(not);a;chance

'No way. (John can't be the suspect; That can't be right, etc.)'

The availability of *selma* or *selma* V-(*u*)*li-ka* as a negatively interpreted short response to an affirmative utterance goes against Watanabe's (2004) expectation, as the SIC is violated.

3. Some speculation on fragmental answers in Korean

We have seen that there are several theoretical and empirical problems with the system pursued in Watanabe (2004) in relation to the availability of the so-called N-word in the context of short answers. A legitimate question then is how it is possible for *amwu*(N)-*to* to be a short response to an affirmative interrogative sentence, despite the apparent violation of the ellipsis condition, as in (2), repeated below:

(2) A: nwu-ka   o-ess-ni?

who-Nom   come-Pst-QE

'Who came?'

B: amwu-to

AMWU-TO

'Nobody.'

I have no definite answer to this important question for the moment. However, I speculate in this section, basically following Ahn and Cho (2011), that not every instance of fragmental expressions in Korean involves a process of PF ellipsis.[11]

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11 Admittedly, the discussion to be made in this section remains literally a speculation and much

Ahn and Cho (2011) argue that fragmental expressions in Korean are of the two types: fragments derived via ellipsis from a full sentential structure and fragments with no full-fledged sentential structure that are directly interpreted with the help of pragmatics.[12] They claim that Case-marked fragmental answers belong to the former type, while Case-less fragmental answers to the latter type.

With this background information, let us examine how expressions of the form *amwu* N behave in fragmental environments. First notice that *amwu* N may come with a Case marker (as well as with a delimiter -*to*), as in (19):

(19) a. John-eykey **amwu   calmos-i/-to**   eps-ta.
          J.-Dat   any   fault-Nom/-TO   not;exist-DE
          'John has no fault.'
      b. John-i   **amwu   yekhal-ul/-to**   mos-ha-ko.iss-ta.[13]
          J.-Nom   any   role-Acc/-TO   Neg-do-Prog-DE
          'Chelswu is not playing any role.'

It is interesting to observe, however, that *amwu*(N)-*to* but, not *amwu*(N)-Case, can be used as a short response to a question, as in (20) and (21):

(20) A: John-eykey   mwusun   calmos-i   iss-ni?
              J.-Dat   what   fault-Nom   exist-QE
              'What fault does John have?'
      B: {amwu calmos-**to**(-yo)/*   amwu calmos-**i**(-yo)}
              any   fault-TO(-DE)/   any   fault-Nom(-DE)
              (Intended) 'Not any fault.'
(21) A: John-i   mwusun   yekhal-ul   ha-ko. iss-ni?

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work is required to be done to elaborate the idea, which I leave open to future research.

12 As summarized in Ahn and Cho (2011, 22), there are three major approaches to fragments in the literature: direct interpretation analyses (Barton 1990, 1991, 1998, Lappin 1996, Ginzburg and Sag 2000, Jackendoff 2002, Culicover and Jackendoff 2005, Barton and Progovac 2005, Stainton 1995, 1997, 1998, 2005, 2006); ellipsis analyses (Hankamer 1971, Wasow 1972, Morgan 1973, Williams 1977, Tancredi 1992, Fiengo and May 1994, Stanley 2000, Merchant 2004, Ludow 2005); and hybrid analyses (Morgan 1989, Fortin 2007, Choi and Yoon 2009).

13 As one of the reviewers points out, *amwu* N-Acc (19b) sounds less acceptable than the nominative counterpart in (19a) . However, I believe accusative vs. -*to* in (21B) differ in grammaticality from each other.

J.-Nom   what   role-Acc   do-Prog-QE
'What role is John playing?'

B: {amwu   yekhal-t**o**(-yo)/*amwu   yekhal-**ul**(-yo)}
      any   role-TO(-DE)/ any   role-Acc(-DE)
(Intended) 'Not any role.'

The contrast between *amwu*(N)-*to* vs. *amwu*(N)-Case can be accounted for, given that only the latter type of short answers involves ellipsis, and such answers are subject to the restrictions that ellipsis is subject to, including the SIC.

(20)' A: John-eykey   mwusun   calmos-i   iss-ni?
            J.-Dat   what   fault-Nom   exist-QE
            'What fault does John have?'

       B: *[amwu   calmos-**i**]ᵢ   ~~John-eykey eᵢ iss-e~~-**yo**
            any   fault-Nom   J.-Dat   exist-(-DE)
            (Intended) 'Not any fault.'

(21)' A: John-i   mwusun yekhal-ul   ha-ko.iss-ni?
            J.-Nom   what   role-Acc   do-Prog-QE
            'What role is John playing?'

       B: *[amwu   yekhal-**ul**]ᵢ   ~~John-i eᵢ   ha-ko.iss-e~~-yo
            any   role-Acc   J.-Nom   do-Prog- (-DE)
            (Intended) 'Not any role.'

As the N-words in (20B) and (21B) are Case-marked, the short responses can be said to involve ellipsis. In other words, the short responses are reduced from the full-fledged syntactic structures due to ellipsis at PF. If so, the ellipsis leads to a violation of the SIC, accounting for the illegitimacy of those short responses with a Case marker.

In contrast, there is some room that *amwu*(N*)-to* in fragments is, or at least can be, directly interpreted with the help of pragmatics, as no Case is attached.[14] Then

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[14] One of the journal reviewers points out to me that it is not clear whether *amwu*(N)-*to* bears abstract Case as the particle *-to* and case particles cannot co-occur, as discussed in Ahn (2012, 129, footnote 60), who claims that a nominal expression with a delimiter *-to* can be ambiguously construed with respect to Case. Discussions in this section go through under the assumption that ellipsis is sensitive to morphologically case.

amwu-to in (2) will not have any additional structure and its interpretation is achieved by some pragmatic accommodation, as schematically indicated in (2B)'', where the symbol Δ stands for lack of any structure:

(2)''A: nwu-ka   o-ess-ni?
          who-Nom   come-Pst-QE
          'Who came?'
       B: amwu-to   Δ   (Syntax & LF)
                                                     (Pragmatic Accommodation)

          amwu-to   (DID NOT COME)

A similar comment can be made of the case of polarity mismatch involving *acik,* another Case-less element, when it is used as a short answer:

(14)' A: John-i   tochakha-ess-ni?
            J.-Nom   arrive-Pst-QE
            'Has John arrived?
        B: (anyo) **acik**   Δ   (Syntax & LF)
                                                           (Pragmatic Accommodation)
                    (JOHN HAS NOT ARRIVED) yet.

Semantics requires that *amwu*(N)-*to* have negation in its immediate scope (Kim 1999); that *acik* be followed by a [-continuous] predicate. Probably, these requirements are fulfilled with the help of pragmatic accommodations.[15]

One last question may arise is why there is no pragmatic fix or salvation effect in the sentences like the following.

(22) *John-i amwuto   manna-ess-ta.
       J.-Nom anyone   see-Pst-DE

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[15] Short answers with *yes* or *no* in English may have to be similarly treated:

   (i) A: Did he come?
       B: No. [he did not come.] (Polarity mismatch problem)
       B': No.

(Intended reading due to the pragmatics) 'John did **not** see anyone.'

If pragmatics fixes all the grammatical anomalies, then expressions like (22) ought to be improved in their acceptability. Of course, pragmatics is not a cure-all.

There lies a crucial difference between *amwu*(*N*)-*to* in a fragmental environment vs. *amwu*(N)-*to* in a non-fragmental environment. *Amwu*(N)-*to* in a fragmental environment can get a semantic interpretation with the help of pragmatics since syntax does not feed the semantic structure. In contrast, *amwu*(N)-*to* in a full-fledged structure does not have the privilege of being interpreted in this way, as the syntax is ready to feed the corresponding semantic structure. A sort of 'resolve earliest possible' principle is in action in grammar. It seems to be the case that pragmatics intervenes only when grammar does not have chance to resolve a problem.

4. Conclusion

Watanabe (2004) claims that the traditionally called negative polarity items (NPIs) in Japanese (wh-*mo*) are to be analyzed as negative quantifiers, crucially from the fact that these expressions can be used as short responses to an affirmative interrogative sentence, apparently violating the semantic isomorphic condition on ellipsis. This paper has argued, however, that the negative quantifier analysis cannot be carried over to Korean NPIs of the form *amwu*(N)-*to*. It has been shown that Watanabe's crucial mechanism to solve the polarity mismatch problem, i.e., the [NEG] copy followed by [NEG] feature cancel-out due to double negation leads to interpretation failure in some constructions containing an N-word/NPI in Korean, This indicates that Agree for an N-word/NPI assumed to be obligatory in Watanabe (2004) is questionable. It has also been illustrated that polarity mismatch takes place even without an N-word, which indicates Agree may be irrelevant to polarity reversal at all. For these reasons, I conclude that the answer to the question, *Is* amwu(N)-to *a negative quantifier?* is negative.

As for the availability of *amwu*(N)-*to* as a short response to an affirmative interrogative sentence, it is conjectured that the fragmental expression of the form *amwu*(N)-*to*, as a typical Case-less fragment, does not have a full-fledged structure,

obviating the need to satisfy the semantic isomorphic condition (SIC) on ellipsis. In contrast, *amwu* N with a Case marker does involve ellipsis and cannot be used as a short fragmental response to an affirmative interrogative sentence without violating the SIC. If this conjecture is on the right track, there is some room that pragmatics intervenes to resolve the semantic requirement that *amwu*(N)-*to* is to satisfy. Of course, much work is required on this speculation, which I leave open to future research.

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