Island Effects and NCI Fragment Licensing*

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Lee, Doo-Won. (2014). Island Effects and NCI Fragment Licensing. *The Linguistic Association of Korean Journal. 22*(2). 1-26. When extraction occurs out of Complex NP or adjunct islands, the sentence gets unacceptable. That is, extraction of an element out of each island is unacceptable. At this point, it is worthy of notice that while its plain fragment counterpart such as *Swukhi-lul* 'Swukhi-ACC' or *sakwa-lul* 'apple-ACC' is acceptable, its negative concord item (hereafter, NCI) fragment counterpart such as *amwu-(N)-to* 'any-N'even' is unacceptable. When the NCI undergoes extraction out of the embedded island to the position in the matrix clause where the negative head appears, it not only shows island effect, but also its trace within the island violates the clause-mate condition with the negative head, which induces the sentence to be totally out. When the NCI fragment appears as a response to a matrix question containing a wh-question in the embedded island, its trace in the embedded clause cannot be licensed by the invisible Neg in the matrix clause. However, there does not arise an island effect in the NCI fragment since ellipsis repairs the problem. By showing that there arises a grammatical contrast between fragment answers to an ECMed wh-question and a matrix question containing a wh-question in the embedded islands, we set forth evidence that would support Merchant's (2004) and Park's (2013) stance that the NCI fragment answer to a matrix question containing a wh-question in the embedded clause is not acceptable.

Key Words: ellipsis, embedded clause, fragment, island, matrix clause, NCI, negation

1. Introduction

When extraction occurs out of Complex NP or adjunct islands, the sentence gets unacceptable as in (1A) and (2A)[1] (cf. Park 2008, Kim 2013). While extraction of *Swukhi-lul* 'Swukhi-ACC' in (1A) and *sakwa-lul* 'apple-ACC' in (2A) out of each island is unacceptable, the fragment answers *Swukhi-lul* 'Swukhi-ACC' and *sakwa-lul* 'apple-ACC' in (1A') and (2A') are acceptable. Unlike in (1A') and (2A'), however, the NCI fragment answer in (1A'') and (2A'') is unacceptable, which is what is at stake here. Thus we will try to delve into why.

(1) Q: Yenghi-nun [Chelswu-ka   nwukwu-lul salangha-lttay]
            -TOP   -NOM whom-ACC love-when
        cilthwuha-yess-ni?
        feel jealousy-PST-Q   (cf. Kim 2011: 248, his (26c))
        'Whom did Yenghi feel jealousy when Chelswu loved?'
    A: ?*Swukhi-lul$_i$ Yenghi-nun [Chelswu-ka t$_i$ salangha-lttay]
                -ACC   -TOP   -NOM love-when
        cilthwuha-yess-ta.
        feel jealousy-PST-DC
        'Swukhi, Yenghi felt jealousy when Chelswu loved?'
    A': Swukhi-lul.
                -ACC
        'Swukhi.'
    A'': ?*amwuto.
           anyone
         'Nobody.'
(2) Q: John-un [casin-uy tongsayng-eykey mwues-ul cwun salam]-ul
            -TOP self-GEN brother-DAT   what-ACC gave person-ACC
        manna-ss-ni?
        meet-PST-Q
        '*What did John meet a person who gave to his brother?'

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1) Island effects in English and Korean will be discussed in detail in the sub-section 4.1.

A: ?*sakwa-lul$_i$ [John-un [casin-uy tongsayng-eykey t$_i$ cwun salam]-ul
　　apple-ACC　　-T　self-GEN brother-DAT　　gave person-ACC
　manna-ss-e.
　meet-PST-DC
　'(Intended reading) John met a person who gave an apple to his
　brother.'

A': sakwa-lul
　apple-ACC
　'An apple.'

A'': ?*amwukesto.
　anything
　'Nothing.'

The contrast between (3a) and (3b) shows that the trace of the NCI in the embedded clause should be licensed by the clause-mate negation (cf. Park 2013).

(3) a. amwukesto$_i$ Mary-ka [$_{IP}$ John-i t$_i$　an　sa-ss-ta-ko]　mit-nun-ta.
　　anything　　　-NOM　　-NOM not　buy-PST-DC-C believe-PRS-DC
　　'Anything$_i$, Mary believes that John did not buy t$_i$.'
　　　　　　　　　　　　　　　　　　　　　(Kim 2013: 463, her (38))

b. *amwukesto$_i$ Chelswu-nun [Inswu-ka t$_i$　al-n-ta-ko]　malha-ci
　anything　　　　　-TOP　　　-NOM know-P-D-C say-CI
　anh-ess-ta.[2)]
　not-PST-DC　　　　　　　　　　(cf. Park 2013: 599, his (28))
　'Anything$_i$, Chelswu did not say that Inswu knew t$_i$.'

Park (2013) argues that why (3b) is unacceptable is because the NCI (i.e., *t* in (3b)) in the embedded clause cannot be licensed by the negation in the matrix clause, although it undergoes scrambling. This will be a key to tackle the issues raised between the plain and NCI fragments in (1) and (2), although ellipsis repairs the problem in the plain fragments such as (1A') and (2A').

When the NCIs undergo extraction out of islands to the position in the matrix clause where negation appears, the sentence is totally out as in (4).

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2) Park (2013) judges the example in (3b) to be ??/*.

(4) a. *amwuto_i Yenghi-nun [Chelswu-ka t_i salangha-lttay]

anyone   -TOP   -NOM love-when

cilthwuha-ci-anh-ass-ta.

feel jealousy-CI-not-PST-DC

b. *amwukesto_i John-un [casin-uy tongsayng-eykey t_i cwun salam]-ul

anything   -TOP self-GEN brother-DAT   gave parson-ACC

manna-ci-anh-ass-ta.

meet-CI-not-PST-DC

'John didn't meet a person who gave anything to his brother.'

It will be shown that when the NCI in (4) is extracted out of the island, its trace cannot be licensed by negation in the embedded clause, which makes the sentences to be more degraded than the NCI fragment answers in (1A'') and (2A''). That is, although the NCI fragments in (1A'') and (2A'') are degraded and deviant, they are not so unacceptable as the examples in (4) since ellipsis repairs the island problem.

Finally, by showing that there arises a grammatical contrast between fragment answers to an ECMed wh-question and a matrix question containing a wh-question in the islands,[3] We will set forth evidence that confirms Park's (2013) observation that fragment answers to a matrix question containing a wh-question in the embedded clause are not acceptable.

The organization of this paper is as follows. In section 2, we will first examine why the *amwu-(N)-to* systematically behaves like NCIs rather than negative polarity items (NPI) such as English *any*, with respect to the five tests of Vallduví (1994) and Giannakidou (2000). In section 3, we will review the previous researches. In section 4, we will try to tackle the issues raised between the plain and NCI fragments. Finally, concluding remarks will be made in section 5.

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[3] For the sake of convenience here, I use the term ECM instead of the term RTO. The fragment undergoing Move out of the matrix clause is acceptable, which is non-trivial here. To show this, the fragment answer *amwu*-N-*to* to the ECMed wh-question will be exemplified here. ECM itself is neither a main concern nor an issue here.

2. Negative Concord Items

It has been well known in literature (Y. Kim 2001, Watanabe 2004, Hwang 2010, R. Kim 2013, Park 2013, among others) that the *amwu-(N)-to* systematically behaves like NCIs rather than NPIs such as English *any*, with respect to the five tests of Vallduví (1994) and Giannakidou (2000).[4] First, the *amwu-(N)-to* cannot appear in nonnegative contexts such as yes-no questions and conditionals, whereas NPIs such as English *any* can.

(5) a. Yes-no question
　　　　*amwuto John-ul　　a-ni?
　　　　 anybody　　 -ACC know-Q
　　　　 'Does anybody know Jean?'
　　b. Conditional
　　　　*John-i　　　 amwukesto hwumchi-myen ku-nun chephotoy-lke-ya.
　　　　　 -NOM anything　　 steal-if　　　　 he-TOP be arrested-will-DC
　　　　'If John steals anything, he'll be arrested.'

Secondly, in the simplex structure, the *amwu-(N)-to* can appear in the subject position, whereas English *any* cannot.

(6) a. amwuto John-ul　　 piphanha-ci anh-ass-ta.
　　　　anybody　　 -ACC criticize-CI　not-PST-DC
　　　　'Nobody didn't criticize John.'
　　b. '*Anybody didn't criticize John.'

Thirdly, the *amwu-(N)-to* can be modified by expressions like *almost*, while English *any* cannot.

(7) a. John-un　　keuy　amwukesto mek-ci anh-ass-ta.
　　　　 -TOP almost anything　　eat-CI　not-PST-DC
　　　　'*John didn't eat almost anything.'
　　b. *John didn't eat almost anything.

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4) Refer to Kim (2013: 450-451) and Park (2013: 589-592) for more details.

Fourthly, licensing of the *amwu-(N)-to* is clause-bound, while that of English *any* is not.

(8) a. *na-nun [John-i amwuto conkyengha-yess-ta-ko] malha-ci anh-ass-ta.
      I-TOP   -NOM anyone admire-PST-DC-C say-CI   not-PST-DC
      'I didn't say that John admired anyone.'
   b. I didn't say that John admired anyone.

Finally, the *amwu-(N)-to* can appear as an elliptical answer, whereas English *any* cannot.

(9) Q: John-i   nwukwu-lul mana-ss-ni?
          -NOM whom-ACC   meet-PST-Q
       'Who met John?'
   A: amwuto.
      anyone
      'Nobody.'
(10) Q: Whom did John meet?
    A: *Anybody.

3. Previous Researches

3.1 Kim's (2013) Fragment Answer

Why can *amwuto* 'anyone' be used without negation when ellipsis takes place as in (11A) while it cannot when there is no ellipsis as in (11A')? Kim (2013) argues that *amwuto* 'anyone' in (11A) can be used without negation exactly because there is ellipsis: Ellipsis repairs the problem.[5]

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5) In our system, ellipsis repairing the problem as in (11A) occurs only when there appears invisible NEG.

(11) Q: nwu-ka Jean-ul   manna-ss-ni?
         who-NOM   -ACC meet-PST-Q
         'Who met Jean?'
    A: amwuto [J̶e̶a̶n̶-̶u̶l̶   m̶a̶n̶n̶a̶-̶s̶s̶-̶t̶a̶]. (meaning 'Nobody met Jean.')
        anyone   -ACC meet-PST-DC
    A': *amwuto Jean-ul   manna-ss-ta. (meaning 'Nobody met Jean.')
         anyone   -ACC meet-PST-DC

The core idea is that the NCIs such as *amwu-N-to* expressions are subject to Neg-feature checking requirement, which is violated in (11A'), but the violation of Neg-feature checking requirement is repaired by ellipsis in (11A). This contrast is in accordance with the distinction between (12) and (13). She implements this idea along the line of Merchant (2004, 2010).

(12) a. *That he will hire someone is possible, but I won't divulge who *[that he'll hire] is possible.
     b. *She kissed a man who bit one of my friends, but Tom doesn't realize which one of my friends she kissed a man *[who bit].
     c. *Ben left the party because he ate something awful, but he wouldn't tell me what Bill left the party *[because he ate].
(13) a. That he will hire someone is possible, but I won't divulge who *[IP t̶h̶a̶t̶ ̶h̶e̶'̶l̶l̶ ̶h̶i̶r̶e̶] is possible.
      b. She kissed a man who bit one of my friends, but Tom doesn't realize which one of my friends [IP s̶h̶e̶ ̶k̶i̶s̶s̶e̶d̶ ̶a̶ ̶m̶a̶n̶ ̶*̶[̶w̶h̶o̶ ̶b̶i̶t̶]̶].
      c. Ben left the party because he ate something awful, but he wouldn't tell me what Bill left the party *[IP b̶e̶c̶a̶u̶s̶e̶ ̶h̶e̶ ̶a̶t̶e̶].

Merchant (2004, 2010) recasts * as a feature of traces rather than as a feature of island nodes as in Chomsky (1972). On the assumption that wh-movement proceeds by adjunction to every maximal projections (Chomsky 1986, Fox 2000), when an island is crossed, the newly created intermediate trace will be given the feature * and all later intermediate traces will also be *-marked. A standard island effect will then come about whenever intermediate *traces survive until PF. On the other hand, the sluicing example with an island will be grammatical since

deletion eliminates all *-marked traces from the PF-representation as in (14b).

(14)a. They want to hire someone who speaks a Balkan language, but I don't know which (Balkan language).

b. They want to hire someone who speaks a Balkan language, but I don't know [CP which (Balkan language)'''' [IP *t''' [IP they [VP *t'' [VP want to hire someone [CP *t' [CP who speaks t]]]]]]].

Extending Merchant's (2004, 2010) analysis to Neg-feature checking requirement, Kim (2013) supposes that a trace of NCI is *-marked when the NCI cannot check Neg-feature against the polarity head. In brief, (11A) will be acceptable since all the *-marked traces are deleted by ellipsis as in (15a), whereas (11A') is deviant since *amwuto* cannot check Neg-feature and thus its trace is *-marked as shown in (15b).

(15) a. [amwuto$_1$ [IP *t$_1$'' [PolP *t$_1$' [vP Jean-ul$_2$ [VP t$_1$ [VP t$_2$ manna]]-ss]-ta]

b. [[IP amwuto [PolP *t$_1$' [vP Jean$_2$-ul [VP t$_2$ manna]]-ss]-ta]

Note that all the *-marked traces are deleted by fragment ellipsis. She points out that this is a welcoming need since it can explain the puzzle of islands-insensitive Korean fragments.[6] Referring to Park (2008), Kim (2013) further argues that fragments in Korean are insensitive to islands: While extraction of *sakwa-lul* out of Complex NP in (16) is unacceptable,[7] the fragment answer *sakwa-lul* in (17) is acceptable.

(16) ?*[sakwa-lul]$_i$ [John-un   casin-uy tongsayng-eykey t$_i$ cwun salam]-ul
apple-ACC   -TOP self-GEN brother-DAT   gave person-ACC
manna-ss-e.
meet-PST-DC

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6) As will be shown, however, the NCI fragment extracted out of the island is not acceptable. At this point, the deviance of the NCI fragment is not triggered by the island effect, but by the violation of the clause-mate condition with the invisible NEG, which will be a main concern here.

7) (16) is Park's (2008) example cited from Kim (2013).

'(Intended reading) John met a person who gave an apple to his brother.'

(17) Q: John-un [casin-uy tongsayng-eykey mwues-ul cwun salam]-ul
    -TOP self-GEN brother-DAT   what-ACC gave person-ACC
    manna-ss-ni?
    meet-PST-Q
    '*What did John meet a person who gave to his brother?'

A: sakwa-lul
    apple-ACC
    'An apple.'   (Kim 2013: 461, her (34))

However, Merchant (2004) observes that fragments in English are subject to islands as in (18).

(18) Q: Does Abby speak the same Balkan language that BEN speaks?
    A: *No, CHARLIE.

To explain the deviance of the fragment answer in (18), Merchant (2004) assumes that Focus Projection is located above CP and Fragment moves through the CP spec up to the FP spec as in (19a). Ef-feature (Ellipsis feature for fragment) is located on C but not on F and thus causes IP to be deleted. The *-marked trace $*t_1'$ remains after the deletion and thus the fragment answer in (18) is deviant.

(19) a. [FP CHARLIE$_1$ [CP $*t_1'$ [IP she speaks the same Balkan language [that t_1 speaks]]]]
    b. [FP sakwa-lul$_i$ [CP $*t_i'$ [IP John-un [vP casin-uy tongsayng-eykey t_i cwun] salam-ul manna-ss]-e]]

However, Kim (2013) suggests that in (17A), Ef-feature is located on F and thus CP is deleted as in (19b), without any remaining *-marked trace. A desirable result.

3.2 Critical Review on Kim (2013)

As Kim (2013) correctly points out, however, interestingly, the example in (3a), repeated in (20), where the Neg-feature checking requirement looks satisfied derivationally, is OK.

(20) amwukesto$_i$ Mary-ka [$_{IP}$ John-i t$_i$ an(i) sa-ss-ta-ko]   mit-nun-ta.
    anything   -NOM   -NOM not buy-PST-DC-C believe-PRS-DC
    '*Anything$_i$, Mary believes that John didn't buy t$_i$.'

(Kim 2013: 463, her (38))

At this stage, however, a critical issue that we come to have a counter-example such as (3b), repeated in (21b), for the Neg-feature checking comes to the fore.

(21) a. *Chelswu-nun [Inswu-ka amwukesto al-n-ta-ko] malha-ci
            -TOP   -NOM anything know-PRS-DC-COMP say-CI
        anh-ess-ta.
        not-PST-DC
        'Chelswu did not say that Inswu knew anything.'
    b. *amwukesto$_i$ [Chelswu-nun Inswu-ka t$_i$ al-n-ta-ko]   malha-ci
        anything   -TOP   -NOM know-P-D-C say-CI
        anh-ess-ta.
        not-PST-DC
        'Anything$_i$, Chelswu did not say that Inswu knew t$_i$.'

(cf. Park 2013: 599, his (28))

The example in (21b), where the Neg-feature checking requirement looks satisfied derivationally in the matrix clause, must be OK, contrary to fact. One might think that the trace of the NCI in the embedded clause of (21A) may be *-marked since it cannot check Neg-feature in the embedded position. However, this is not on the right track since the NCI fragment in (22A), where all the *-marked traces are deleted by ellipsis, is not acceptable.

(22) Q: Chelswu-nun [Inswu-ka mwues-ul al-n-ta-ko] sayngkakha-ci
　　　　　　　　-TOP　　　-NOM what-ACC know-PRS-DC-COMP think-CI
　　　anh-ass-ni?
　　　not-PRS-Q
　　　'Chelswu doesn't think that Inswu knows anything.'
　A: ??amwukesto.
　　　anything
　　　'Nothing.'

Note that like in (21b), the trace of the NCI fragment in the embedded clause of (22b) cannot be licensed by the negative head in the matrix clause. Note that in the wh-question in (22Q), the negation appears in the matrix clause. Unlike in (17A), the deviation of the NCI fragment in (22b) cannot be repaired by ellipsis.

In addition, the NCI fragment answer to (23Q), which has a Complex NP structure, is unacceptable as in (23A), which cannot be captured by Kim (2013), either.

(23) Q: John-un　[casin-uy tongsayng-eykey mwues-ul cwun salam]-ul
　　　　　　-TOP self-GEN brother-DAT　　what-ACC gave person-ACC
　　　manna-ss-ni?
　　　meet-PST-Q
　　　'*What did John meet a person who gave to his brother?'
　A: ?*amwukesto.
　　　anything
　　　'Nothing.'

The deviance of the NCI fragment in (23A') is reminiscent of the observation that why (21b) is unacceptable is because the NCI (i.e., t in (21b)) in the embedded clause cannot be licensed by negation in the matrix clause, although it undergoes scrambling. In this vein, the deviance of (23A') seems to be due to the fact that the trace of the NCI fragment in the embedded clause cannot be licensed by the negation in the matrix clause as in (24B). As will be shown, in the NCI fragment structure, the invisible negative head can only appear in the matrix clause, but not in the embedded clause (Merchant 2004, Park 2013).

(24) A: Yenghuy-nun (emma-eykey) [Chelswu-ka   ecey   pam-ey
                -TOP (mother-DAT)   -NOM yesterday night-in
        mwues-ul/mwue-l   mek-ess-ta-ko]   malha-yess-ni?
        what-ACC/what-ACC eat-PST-DC-COMP   eat-PST-Q
        'What did Yenghuy say (to her mother) Chelswu eat last night?'
    B: ??amwukesto(-yo).
        anything(-Discourse marker)   (Park 2013: 586, his (3) & (4))

Before proceeding toward the fact that fragment answers to a matrix question containing a wh-element in the islands are not acceptable as in (23A'), in the next sub-section, I will first review Park's (2013) revelation about the secret that fragment answers to a matrix question containing a wh-question in the embedded clause are not acceptable as in (24B).

2.3 Park's (2013) NCI Fragment Answer

Park (2013) assumes that a fragment answer derives from Move and Delete (cf. Park 2005; Ahn & Cho 2005). Along this line of analysis for a fragment answer, he represents the derivation of (25B) as a response to (25A). Park (2013) suggests that the negative head in Korean can be suppressed in ellipsis constructions through the relations with the NCIs. At this point, the negation appears as a null negation/negative head.

(25) A: Chelswu-ka   ecey   pam-ey mwues-ul/mwue-l   mek-ess-ni?
                -NOM yesterday night-in what-ACC/what-ACC eat-PST-Q
        'What did Chelswu eat last night?'
    B: Move
        (?)amwukesto(-yo)$_i$ [Chelswu-ka ecey pam-ey t_i NEG mek-ess-ta.]
          anything(-Discourse marker) -NOM yesterday night-in eat-PST-DC

He further argues that there is a null negation/negative head in ellipsis constructions in Korean that participates into a licensing relation with NCI fragments. As he points out, there is a cross-linguistic evidence showing the distributions of the null or omitted/suppressed negative head. Haegeman (1994, 1995) reported that in West Flemish, which is a negative concord (NC) language,

the apparent negative head *en* 'not' is optional in the presence of the so-called n(egative)-word/quantifier or NCI like *niets* 'nothing', as shown (26).

(26) a. da Valère me niets ketent (en)-was
        that Valère with nothing contend was
        'that Valère was not pleased with anything.'

When the NCI occurs in a sentence, the negative head appears optionally.

The overt negative marker and the null negative one in Korean each has the following composition (Park 2013).

(27) a. the overt negative marker: [uninterpretable Neg](valued)
     b. the null negative marker: [uninterpretable Neg](unvalued)

Every feature must possess a value by LF (Pesetsky and Torrego 2007): Any unvalued feature must probe for a valued instance of itself. And then, by LF, all uninterpretable features [uninterpretable F] must be matched to some interpretable instance [interpretable F]. The NCI such as *amwu*-N-*to* has valued [interpretable F] of Neg (Park 2013). Park (2013) argues that the suppressed/null negative head is a feature i.e., [uninterpretable Neg](unvalued) and that it is required to be checked off/assigned a value by the NCI such as *amwu*-N-*to*.

Park (2013) examines how the NCIs such as *amwuto* 'anyone' or *amwukesto* 'anything' occur as a fragment answer to a positive information wh-question. In fact, he also referred to Chung's (2012) discussion for the case-marked indefinite expression as a fragment and Kang and Tieu's (2013) characterization of the *etten*-N-*to* 'ANY-N-even' form as an NPI. However, for the present purpose, here I only review the use of the NCIs occurring as a fragment answer.[8]

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8) An anonymous reviewer wonders why the NCI fragment in (iB) is not acceptable even though the invisible NEG in the matrix clause can license it.

(i) A: Chelswu-nun [Inswu-ka mwues-ul an sa-ss-ta-ko] malha-yess-ni?
          -TOP   -NOM what-ACC not buy-PST-DC-C say-PST-Q
    'What did Chelswu say that Inswu did not buy?'
  B: *amwukesto.
    anything

(28) A: Chelswu-ka   ecey   pam-ey mwues-ul/mwue-l   mek-ess-ni?
       -NOM yesterday night-in what-ACC/what-ACC eat-PST-Q
    'What did Chelswu eat last night?'
  B: (?)amwukesto(-yo).
     anything(-Discourse marker)
(29) A: Yenghuy-nun (emma-eykey) [Chelswu-ka   ecey   pam-ey
       -TOP (mother-DAT)   -NOM yesterday night-in
    mwues-ul/mwue-l   mek-ess-ta-ko]   malha-yess-ni?
    what-ACC/what-ACC eat-PST-DC-COMP eat-PST-Q
    'What did Yenghuy say (to her mother) Chelswu eat last night?'
  B: ??amwukesto(-yo).
     anything(-Discourse marker)   (Park 2013: 586, his (3) & (4))

He reported that as a response to a simple root or matrix question as in (28A), the fragment answer with the *amwu*-N-*to* 'any-N-even' form as in (28) is slightly degraded but acceptable, whereas as a response to a matrix question containing a wh-question in the embedded clause as in (29A), the fragment answer with the *amwu*-N-*to* 'any-N-even' form as in (29B) is considerably degraded and unacceptable. His point is that the NCIs in Korean are all considerably degraded or unacceptable as an answer to the wh-expression in the embedded clause. Following Merchant (2004), Park (2013) suggests that the invisible negative head in fragment constructions can only appear in the matrix clause, but not in the embedded clause. Hence, the fragment in (29B) is schematized as follows.

(30) ??[amwukesto]ᵢ ~~[Yenghuy-nun (emma-eykey) [Chelswu-ka ecey pam-ey tᵢ~~ ~~mek-ess-ta-ko]~~ NEG_invisible ~~malha-yess-ta]~~   (Park 2013: 598, his (4B))

He further observes that why (30) is unacceptable is because the NCI (i.e., *t* in (31b)) in the embedded clause cannot be licensed by the negation in the matrix clause, although it undergoes scrambling as in (31b).[9]

_____

'Nothing.'

However, my consultants including myself judge the fragment in (iB) to be acceptable. The invisible NEG in the matrix clause still licenses the NCI.

(31) a. *Chelswu-nun [Inswu-ka amwukesto al-n-ta-ko]   sayngkakha-ci
                  -TOP   -N   anything know-PRS-DC-COMP think-CI
        anh-nun-ta.
        not-PRS-DC
        'Chelswu doesn't think that Inswu knows anything.'
     b. ??/*amwukesto$_i$ [Chelswu-nun Inswu-ka t$_i$ al-n-ta-ko] sayngkakha-ci
        anh-nun-ta.   (Park 2013: 599, his (28))

4. Islands and NCI Fragments

4.1 Complex NP and Adjunct Island Effects

Ross (1967) formulated his constraints in terms of movement. One of his constraints is the complex NP constraint (i.e., CNPC), which means that no element contained in a sentence dominated by an NP may be extracted from that NP. Constructions that illustrate this constraint include relativization, wh-questions, and topicalization from relative clauses, as shown in the following respectively.

(32) a. *the book [which$_i$ I know [$_{NP}$ the man [$_{CP}$ who wrote t$_i$]]]
     b. *Which book$_i$ do you know [$_{NP}$ the man [$_{CP}$ who wrote t$_i$]]?
     c. *This book$_i$, I know [$_{NP}$ the man [$_{CP}$ who wrote t$_i$]]

The CNPC also applies to the constructions such as the examples in (33), where a subject is extracted from a relative clause.

(33) a. *the man [who$_j$ I read [$_{NP}$ the book$_i$ [$_{CP}$ which t$_j$ wrote t$_i$]]]
     b. *Who$_j$ did you read [$_{NP}$ the book$_i$ [$_{CP}$ which t$_j$ wrote t$_i$]]?
     c. *The man$_j$, I read [$_{NP}$ the book$_i$ [$_{CP}$ which t$_j$ wrote t$_i$]]

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9) As Park (2013) correctly points out, the asymmetry between the NCI fragment answers for a wh-expression in the simple root or matrix clause and that for a wh-expression in the embedded clause is attributed to the lack of scrambling effects for NCIs as in (31b).

As Kim (2006, 2011) correctly points out, we can reach the same conclusion even in the case of adjunct island phenomena, as the contrast between (34a) and (34b) shows.

(34) a. ??Who was Mary angry [while John spoke to t_{who}]?
  b. Who was angry [while John spoke to whom]?

As Lee (2011) points out, however, there arises an absence of complex NP island effects in Korean wh-in-situ questions, as shown in (35). That is, while the wh-movement in English violates the CNPC at overt syntax, the wh-movement in Korean does not trigger the complex NP island effect at LF.

(35) a. Ne-nun [$_{NP}$ [$_{CP}$ **nwu-ka** t_i ssun] chayk$_i$-ul] **kacang** cohaha-ni?
    you-TOP who-NOM wrote book-ACC most like-Q(=C[+WH])
    '*Who do you like the book (he) wrote most?'
  b. Ne-nun [$_{NP}$ [$_{CP}$ **nwu-ka** t_i cwun] canghakkum$_i$-ul] **kacang**
     you-TOP who-NOM gave scholarship-ACC most
    manhi patass-ni?
    much get-Q(=C[+WH])
    '*Who did you get scholarship that e gave most?'
  c. Ne-nun [$_{NP}$ [$_{CP}$ t_i **etten chayk-ul/mwues-ul** ssun] cakka$_i$-lul]
    you-TOP which book-ACC/what-ACC wrote author-ACC
    kacang coahaha-ni? (mwues = wh-element)
    most like-Q(=C[+WH])
    '*Which book$_i$/What$_i$ did you like most the author [who wrote
    t_i]?'   (Lee 2011: 260-261, his (11))

The adverb *kacang* 'most' induces the questions to be given the answer to the wh-elements; hence, its preceding *nwukwu/etten chayk/mwues* 'who/which book/what' is a wh-element.

In Korean, the adjunct island effect does not arise, either (Kim 2006, 2011).

(36) a. Yenghi-nun [Chelswu-ka   nwukwu-lul salangha-lttay]
         -TOP   -NOM whom-ACC love-when
      cilthwuha-yess-ni?
      feel jealousy-PST-Q   (cf. Kim 2011: 248, his (26c))
      'Whom did Yenghi feel jealousy when Chelswu loved?'
    b. ne-nun [nwu-ka   o-n-hwu-ey]   ttena-ss-ni?
       you-TOP who-NOM come-PRS-after leave-PST-Q
       'Who do you want to come here?'
    c. ne-nun   [nwu-ka   o-myen] cohkeyss-ni?
       you-NOM   who-NOM come-if like-will-C°[WH]
       'Who do you want to come here?'

4.2 Fragments

While extraction of *Swukhi-lul* out of an adjunct in (37A) is unacceptable, the fragment answer *Swukhi-lul* is acceptable as in (37A'). At this point, we need to note that unlike in (37A'), the NCI fragment answer in (37A'') is unacceptable.

(37) Q: Yenghi-nun [Chelswu-ka   nwukwu-lul salangha-lttay]
           -TOP   -NOM whom-ACC love-when
       cilthwuha-yess-ni?
       feel jealousy-PST-Q (cf. Kim 2011: 248, his (26c))
       'Whom did Yenghi feel jealousy when Chelswu loved?'
    A: ?*Swukhi-lul$_i$ Yenghi-nun [Chelswu-ka t$_i$ salangha-lttay]
           -ACC   -TOP   -NOM love-when
       cilthwuha-yess-ta.
       feel jealousy-PST-DC
       'Swukhi, Yenghi felt jealousy when Chelswu loved?'
    A': Swukhi-lul.[10)]
            -ACC
        'Swukhi.'

---

10) Refer to Ahn (2012) and Wee (2014) for the distinction between case-marked and caseless fragmentary answers, which is not dealt with here.

     A′′: ?*amwuto.
       anyone
      'Nobody.'

This is also what the answers to the question in (17Q), repeated in (38Q) show.

(38) Q: John-un　[casin-uy tongsayng-eykey mwues-ul cwun salam]-ul
       -TOP self-GEN brother-DAT　　what-ACC gave person-ACC
    manna-ss-ni?
    meet-PST-Q
    '*What did John meet a person who gave to his brother?'
  A: ?*[sakwa-lul]ᵢ [John-un　[casin-uy tongsayng-eykey tᵢ cwun salam]-ul
     apple-ACC　　　-TOP self-GEN brother-DAT　　gave person-ACC
    manna-ss-e.
    meet-PST-DC
    '(Intended reading) John met a person who gave an apple to his
    brother.'
  A': sakwa-lul
    apple-ACC
    'An apple.'
  A′′: ?*amwukesto.
     anything
    'Nothing.'

Before further proceeding toward the NCI fragment answer as a response to a matrix question containing other wh-questions in the complex noun phrase island or adjunct island, let's first consider a fragment answer to a simple positive wh-question.

(39) Q: nwu-ka　　canghakkum-ul cwu-ess-ni?
     who-NOM scholarship-ACC give-PST-Q
  A: Kim-hoycangnim-i
     president-NOM
   'President Kim.'

     A′: amwuto.
         anyone
         ′Nobody.′
(40) Q: Kim-kyoswunim-i   mwues-ul sse-ss-ni?
             -professor-NOM what-ACC write-PST-Q
         ′What did Prof. Kim write?′
     A: sosel-ul
        novel-ACC
        ′A novel.′
     A′: amwukesto.
         anything
         ′Nothing.′

   There is a null negation/negative head in ellipsis constructions in (39A′) and
(40A′) that participates into a licensing relation with NCI fragments.
   At this stage, for the present purpose, let′s return to the NCI fragment
answer as a response to a matrix question containing other wh-questions in the
Complex NP or adjunct island. Before proceeding toward the fragments in (37)
and (38), let′s consider the fragment answers in (41) and (42).

(41) Q: ne-nun [$_{NP}$ [$_{CP}$ nwu-ka t_i cwun] canghakkum$_i$-ul] pat-ass-ni?
         you-TOP   who-NOM gave scholarship-ACC get-PST-Q
         ′*Who did you get scholarship that e gave?′
     A: Kim-hoycangnim-i.
            president-NOM
        ′President Kim.′
     A′: ?*amwuto.
            anyone
        ′Nobody.′
(42) Q: ne-nun [$_{NP}$ [$_{CP}$ mwues-ul ssun] cakka-lul]   manna-ss-ni?
         you-TOP   what-ACC wrote author-ACC meet-PST-Q
         ′*What did you meet the author who wrote?′
     A: sosel-ul.
        novel-ACC

'A novel.'

A': ?*amwukesto.

anything

'Nothing.'

When ellipsis takes place in the plain fragment answer in (41A) and (42A), the Complex NP island is erased, which induces each fragment to be acceptable. This seems to mean that why each NCI fragment answer is unacceptable is not because it shows the island effect, but because each NCI appearing as an fragment answer cannot be licensed by the negation (i.e. negative head). This is also borne out by the unacceptable fragment answer in (37A'') to the wh-question in (37Q), which is included in the adjunct island. The invisible negative head in fragment constructions can only appear in the matrix clause (Merchant 2004, Park 2013) and the NCI (i.e., its trace) in the embedded clause must be licensed by the invisible negation (Park 2013). Park's (2013) argument that the NCI (i.e., its trace) in the embedded clause must be licensed by the negation is supported by Kim's (2013) example in (3a), repeated in (21b).

(21b) amwukesto$_i$ Mary-ka [$_{IP}$ John-i t$_i$ an(i) sa-ss-ta-ko] mit-nun-ta.

In brief, the above NCI fragment answers are not acceptable. They are schematized as follows.

(43) a. ?*amwuto$_i$ ~~Yenghi-nun [Chelswu-ka t$_i$ salangha-lttay]~~ NEG$_{invisible}$ ~~cilthwuha-yess-ta~~. (37A'')
    b. ?*amwukesto$_i$ ~~John-un [casin-uy tongsayng-eykey t$_i$ cwun salam]-ul~~ NEG$_{invisible}$ ~~manna-ss-ta~~. (38A'')
    c. ?*amwuto$_i$ ~~na-nun [[t$_i$ cwun] canghakkum$_i$-ul]]~~ NEG$_{invisible}$ ~~pat-ass-ta~~. (41A')
    d. ?*amwukesto$_i$ ~~na-nun [[t$_i$ ssun] cakka-lul]~~ NEG$_{invisible}$ ~~manna-ss-ta~~. (42A')

At a glance, it seems that while the ellipsis in the plain fragment in (44) repairs the island problem, the ellipsis in the NCI fragment in (43) cannot.

(44) a. Swukhi-lul~i~ ~~Yenghi-nun [Chelswu-ka t~i~ salangha-lttay]~~
~~cilthwuha-yess-ta.~~ (37A′)

b. sakwa-lul~i~ ~~[John-un [casin-uy tongsayng-eykey t~i~ cwun salam]-ul~~
~~manna-ss-e.~~ (38A′)

c. Kim hoycangnim-i~i~ ~~na-nun [t~i~ cwun] canghakkum~i~-ul]~~ ~~pat-ass-ta.~~ (41A)

d. sosel-ul~i~ ~~na-nun [t~i~ ssun] cakka-lul] manna-ss-ta.~~ (42A)

In fact, however, the trace of the NCI fragments in the embedded clauses in (43) cannot be licensed by the invisible Neg in the matrix clause, which induces the fragments to be ungrammatical.

4.3 NCI Licensing and Island Effects

As mentioned above, when extraction occurs out of Complex NP or adjunct islands, the sentence gets unacceptable as in (45) (cf. Park 2008, Kim 2013).

(45) a. ?*Swukhi-lul~i~ Yenghi-nun [Chelswu-ka t~i~ salangha-lttay]
cilthwuha-yess-ta.

b. ?*sakwa-lul~i~ [John-un [casin-uy tongsayng-eykey t~i~ cwun salam]-ul
manna-ss-e.

c. ?*Kim hoycangnim-i~i~ na-nun [t~i~ cwun] canghakkum~i~-ul] pat-ass-ta.
president-NOM I-TOP gave scholarship-ACC get-PST-DC
'I got scholarship which President Kim gave.'

d. ?*sosel-ul~i~ na-nun [t~i~ ssun] cakka-lul] manna-ss-ta.
novel-ACC I-TOP wrote author-ACC meet-PST-DC
'I met an author who wrote a novel.'

What is at stake here is that when the NCIs undergo extraction out of islands to the position in the matrix clause where the negation appears, the sentence is totally out as in (46).[11]

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11) In (46), *anh* 'not' corresponds to the invisible NEG in (43).

(46) a. *amwuto$_i$ Yenghi-nun [Chelswu-ka t$_i$ salangha-lttay]
         anyone   -TOP   -NOM love-when
      cilthwuha-ci-anh-ass-ta.
      feel jealousy-CI-not-PST-DC
   b. *amwukesto$_i$ John-un [casin-uy tongsayng-eykey t$_i$ cwun salam]-ul
      anything   -TOP self-GEN brother-DAT   gave parson-ACC
      manna-ci-anh-ass-ta.
      meet-CI-not-PST-DC
      'John didn't meet a person who gave anything to his brother.'
   c. *amwuto$_i$ na-nun [[t$_i$ cwun] canghakkum$_i$-ul]] pat-ci-anh-ass-ta.
      anyone   I-TOP   gave   scholarship-ACC get-CI-not-PST-DC
      'I did not get scholarship which anyone gave.'
   d. *amwukesto$_i$ na-nun [[t$_i$ ssun] cakka-lul]   manna-ci-anh-ass-ta.
       anything   I-TOP   wrote author-ACC meet-CI-NOT-PST-DC
      'I didn't meet an author who wrote anything.'

The examples in (45) only show island effect. On the other hand, when the NCIs in (46) are extracted out of the island, its trace violates even the clause-mate condition with the negation. This observation is non-trivial in that although the NCI fragments in (43) are degraded and deviant, they are not so unacceptable as the examples in (46). The reason is because ellipsis in (43) repairs the island problem. Note that the NCI fragments only violate the clause-mate condition with the negative head.

At this stage, for the present purpose, let's consider the so-called ECM construction in Korean. Lee (2006) argues that the ECMed elements are base-generated in the embedded Spec-CP (cf. Bruening 2001, Kim 2005), deriving its theta-role (but not case) from a coindexed position with a null pro in a thematic A-position as in (47) (Yoon 1996). Lee (2006) further suggests that the ECMed element (i.e, NP$_i$ in (47)) is in a non-thematic argument position in the matrix clause (i.e., matrix Spec-vP) (cf. Kim 2005).

(47) [$_{CP}$ [$_{vP}$ (NP$_i$) [$_{CPi}$ [$_{TP}$ pro$_i$]] V]]

The lower subject gap (i.e., pro) by the ECMed element (i.e., (NP$_i$))

base-generated in the embedded Spec-CP can be filled optionally by a lexical pronoun (Yoon 1996, Lee 2006).

If the NCI fragment answer undergoes Move not out of the embedded clause but out of the matrix clause, however, the sentence is OK since the trace of the fragment is licensed by the invisible NEG in the matrix clause (Lee 2014). For the present purpose, let's consider the fragment answer in (48B). The fragment answer *amwu*-N-*to* to the ECMed wh-question in (48A) is slightly degraded but acceptable. This is because the ECMed wh-element *nwukwu-lul* 'whom-ACC' in (48A) occupies some position in the matrix position.

(48) A: ne-nun   nwukwu-lul hayngpokha-ta-ko mit-ess-ni?
        you-TOP whom-ACC happy-DC-COMP believe-PST-Q
        'Whom did you believe to be happy?'
     B: amwuto
        anyone
        'Nobody.'

(48A) is schematized as in (49). The NCI in the matrix clause (i.e., in matrix Spec-vP) is licensed by the negation within the same matrix clause (Lee 2014), which induces the fragment to be acceptable.

(49) [[amwuto]ᵢ [NegP tᵢ [CP ~~ne-nun [proᵢ hayngpokha-ta-ko~~]] NEGinvisible ~~mit]-ess-ta~~]

In brief, unlike in (43), the trace of the NCI fragment in (48B) obeys the clause-mate condition with the invisible NEG in the matrix clause. Thus, there arises a grammatical contrast between fragment answers to an ECMed wh-question and a matrix question containing a wh-question in the islands.

5. Conclusion

This paper started with examining why the *amwu-(N)-to* systematically behaves like NCIs rather than negative polarity items (NPI) such as English *any*,

with respect to the five tests of Vallduví (1994) and Giannakidou (2000). We have critically reviewed Kim's (2013) idea that while the NCIs such as *amwu-N-to* expressions are subject to Neg-feature checking requirement, the violation of Neg-feature checking requirement is repaired by ellipsis along the line of Merchant (2004, 2010). Following Merchant (2004), Park (2013) suggests that the invisible negative head in fragment constructions can only appear in the matrix clause, but not in the embedded clause. As a response to a simple root or matrix question, the fragment answer with the *amwu*-N-*to* 'any-N-even' form is slightly degraded but acceptable, whereas as a response to a matrix question containing a wh-question in the embedded clause, the fragment answer with the *amwu*-N-*to* 'any-N-even' form is considerably degraded and unacceptable. In this vein, it has been shown that when the NCI is extracted out of the island and its trace cannot be licensed by the negation in the embedded clause, the sentence becomes more degraded than the NCI fragment construction. Although the NCI fragment is degraded and deviant, it is not so unacceptable as the construction where the NCI is extracted out of the embedded island to the matrix clause where negation appears. Note that ellipsis repairs the island problem in the NCI fragment, which only violates the clause-mate condition with the negative head. Finally, by showing that there arises a grammatical contrast between fragment answers to an ECMed wh-question and a matrix question containing a wh-question in the islands, we have set forth evidence that would support Park's (2013) observation that fragment answers to a matrix question containing a wh-question in the embedded clause are not acceptable.

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