On the Lack of Syntactic Effects in Korean Wh-Questions*

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Hong, Sun-Ho. 2004. **On the Lack of Syntactic Effects in Korean Wh-Questions.** *The Linguistic Association of Korea Journal, 12*(3), 43-57. I take up two potential diagnostics of syntactic movement (i.e. island effects and intervention effects) in this paper. Unlike English, there is no island effect except for an island arising from the Wh-island Constraint in Japanese and Korean. Furthermore, unlike Hagstrom's (1998) analysis of Japanese wh-questions, there is no intervention effect in Korean. So, I adopt an alternative approach to these problems which the movement analyses are unable to deal with. I propose that Korean wh-words should be considered as pure indefinite pronouns void of an inherent interrogative or an inherent quantifier operator feature along the lines of Kuroda (1965), Nishigauchi (1990), Li (1992), Aoun and Li (1993a,b,c), Cheng (1991), Tsai (1994, 1999), and Kim (2000). Furthermore, I also propose that, unlike English, in Korean the operator feature is base-generated as one of the features in Cs, and the link between Cs and wh-words is determined by binding rather than movement.

Key words: Attract Closest, Island Effects and Intervention Effects

1. Introduction

I will consider two potential diagnostics which have been considered to be related to a syntactic movement: island effects and intervention effects. I will also consider whether these diagnostics are universal even in wh-in-situ languages such as Japanese and Korean etc.[1]

2. Syntactic Effects

2.1 Island Effects

Unlike English there is no island effect except for an island arising from the Wh-island Constraint in Korean. The following examples in (1a,b) show violation of the wh-island constraint in both English and Korean,

(1) Wh-island Constraint
　　a.* What$_i$ do you remember [for whom [we bought t$_i$]]?
　　b.* Mary-ka [[John-i　 mwues-lul　sa-ass-nun] ci]　　 a-ni?
　　　　Mary-Nom John-Nom what-Acc buy-past-Rel-Q(Comp)　know-Q
　　　　"What does Mary know whether John bought?"

However, a number of other constraints like the Complex Noun Phrase Constraint (CNPC), the Adjunct Island Constraint, and Empty Category Principle, etc reveal a contrast between two languages. For example, the

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1) Although syntactic constraints such as island constraints cannot provide a fundamental explanation of properties of any operation that involves a syntactic movement, they have been considered to be one of the diagnostics of movement. Chomsky (1977) provides the following general diagnostics for wh-movement:

(i) a. Move a wh-expression
　　b. Leave a gap
　　c. where there is a bridge, there is an apparent violation of Subjacency,
　　　 Propositional-Island Condition (PIC), and Specified Subject Condition (SSC).
　　d. Observe Complex Noun Phrase Constraint (CNPC)
　　e. Observe Wh-Island Constraints. Chomsky (1977, p.86)

English examples in (2a) and (3a) violate CNPC and Adjunct Island Constraint, but the Korean examples in (2b) and (3b) do not:

(2) CNPC (Complex Noun Phrase Constraint)
a. * Who_i does Mary like [books [that criticise t_i]]
b. Mary-ka [[t_i nwuku-lul   bipanha-n] $chaek_i$]-lul   choaha-ni?
   Mary-Nom who-Acc   criticise-Rel   book-Acc   like-Q
   "lit. Who does Mary like books that criticise?"
(3) Adjunct Island Constraint
a.?? Who_i was Mary angry [when John spoke to t_i]
b. Mary-ka [[John-i nwuku-eke   malha-l] ttay] hwane-ess-ni?
   Mary-Nom John-Nom who-Dat speak Rel when angry-past-Q
   "lit. Who was Mary angry when John spoke to?"

2.2 Intervention Effects

In Hagstrom (1998) and Pesetsky (2000), Attract Closest (AC) is regarded as a main economy condition:[2]

(4) Attract Closest (AC)
    α can raise to target K only if there is no legitimate operation Move β targeting K, where β is closer to K.
                   Chomsky (1995, p.280, p.296) Pesetsky (2000, p.15)

Hagstrom (1998) argues that a particle appearing in wh-questions undergoes syntactic movement even in languages which do not show any obligatory movement of the wh-expressions themselves. According to his analysis, in Japanese wh-questions, the question particle *ka* is base-generated within the wh-phrase and then moves to C in the

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2) In Chomsky (1995), Minimal Link Condition (MLC) restricts elements moving to a given target K to the closest one among those that have the property that they can enter into a checking relation with K. He regards MLC not as an economy condition but as a part of the definition of Move and takes Attract Closest (AC) to be an attractor-oriented condition.

matrix clause by syntactic movement, as illustrated in (6): (ka is a copy)
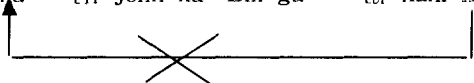
(5) Dare-ga   hono-o   kaimasita   ka?
    Who-Nom   book-Acc   bought   Q
    Who bought a book?

(6) [$_{CP}$ [$_{TP}$ Dare-ka-ga   [$_{vP}$ hono-o kaimasita]] ka]?

Hagstrom (1998) assumes that the particle *ka* in the disjunctive phrase in (7) is the same morpheme as the *ka* which is found at the end of questions. Thus, according to his assumption, the *ka* in the disjunctive phrase is hierarchically above the *ka* within the wh-expression before Q-movement. This means that the *ka* within the wh-expression in object position should cross the subject which contains the other *ka*. He argues that this leads to an intervention effect in (7), violating AC in (4).

(7) ?*John-ka   Bill-ga   nani-o   kaimasita   ka?
    John-or   Bill-Nom   what-Acc   bought   Q
    "What did John or Bill buy?"

Thus, the following movement is not allowed:

(8) [$_{CP}$ ka   [$_{TP}$ John-ka   Bill-ga   [$_{vP}$ nani-ka-o   kaimasita]]]?

However, the application of scrambling to (8) allows the object to be in a higher position than the subject. Thus, the *ka* within the wh-expression can move from this higher position to the complementiser without having to cross the other *ka* that is part of the

subject and violating AC, as illustrated in (10):

(9) Nani-o   John-ka   Bill-ga   kaimasita   ka?
     What-Acc   John-or   Bill-Nom   bought   Q
     "What did John or Bill buy?"

(10)-ka   [nani ka -o]ᵢ John-ka Bill-ga [nani -ka -o]ᵢ kaimasita
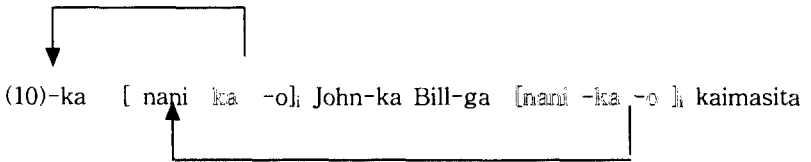
Hagstrom (1998) assumes that the *ka* which is used as part of the existential quantifier expression is also the same morpheme as the *ka* which is found at the end of questions that we have discussed. So, we can see the same intervention effect that we found in the wh-question which contains a disjunctive phrase preceding a wh-expression:

(11) ?*dare-ka-ga   nani-o   kaimasita   ka?
        Someone-Nom   what-Acc   bought   Q
        "What did someone buy?"

The structure of the above sentence can be illustrated in (12):

(12)[CP-ka   [TP dare-ka-ga [ᵥP nani-ka-o   kaimasita]]
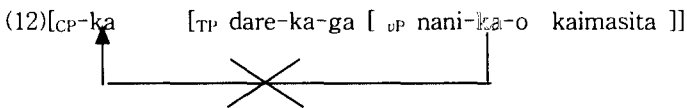
Scrambling allows the wh-expression to be in a higher position than the quantifier phrase, so that movement of the particle *ka* in the wh-expression does not lead to an intervention effect, in conformity with AC.

(13)   Nani-o   dare-ka-ga   kaimasita   ka?
        what-Acc   someone-Nom   bought   Q
        "What did someone buy?"

(14)-ka   [nani-ka-o]ᵢ dare-ka-ga t nani-ka-oᵢ   kaimasita
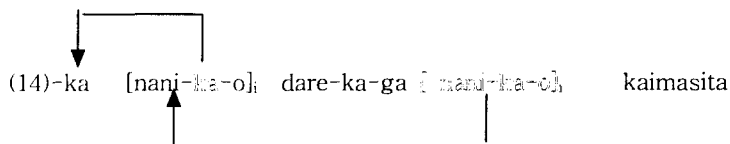
However, Hagstrom's intervention analysis does not seem to work well in the corresponding examples in Korean:

(15) a. John-i-na   Mary-ka   mwues-ul ilkess-na? (in Korean)
        John-Nom or Mary-Nom   what-Acc   read-Q
        "What did John or Mary read?"
     b. Mwues-ul   John-i-na   Mary-ka   ilkess-na?
        What-Acc   John-Nom or Mary-Nom   read-Q
(16) a. Nwuku(i)nka-ka   mwues-ul ilkessnun-ka?   (in Korean)
        Someone-Nom   what-Acc read-Q
        "What did someone read?"
     b. Mwues-ul   nwuku(i)nka-ka   ilkessnun-ka?
        What-Acc   someone-Nom   read-Q

The particles *na* and *ka* in (15) and (16) are also used in questions in Korean like the particle *ka* in Japanese:

(17) a. Tom-i   cheok-ul   il-ass-na?
        Tom-Nom   book-Acc   read-past-Q
        "Did Tom read the book?"
     b. Tom-i   cheok-ul   sa-ass-nun-ka?
        Tom-Nom   book-Acc   buy-past-Rel-Q
        "Did Tom buy the book?"

(18) a. Tom-i   mwues-ul   il-ass-na?
         Tom-Nom   what-Acc   read-past-Q
         "What did Tom read?"
     b. Tom-i   mwues-ul   sa-ass-nun-ka?
         Tom-Nom   what-Acc   buy-past-Rel-Q
         "What did Tom buy?"

If Hagstrom's analysis is correct, Korean examples in (15a-16a) should also be ungrammatical, but they are perfectly grammatical. We will consider this problem more carefully in the following section.

3. A Non-Movement Approach to Wh-in-situ

3.1 Unselective Binding

If the language has only the interpretable option of English (apart from covert raising at LF), it will have no intelligible wh-questions and presumably no clear evidence for a wh-feature at all. But languages commonly have wh-in-situ with an interrogative interpretation. Chomsky (1995) suggests an alternative interpretive strategy for such cases:

(19) They [languages] must employ an alternative interpretative strategy for the construction Q[. . . wh . . .], interpreting it, perhaps, as something like unselective binding.
           Chomsky (1995, p.291) (words in the bracket are my own)

Sentences (20) and (22) are equivalent or, at least, close in meaning, because their logical representation are equivalent.

(20) If a man owns a donkey, he always beats it.
(21) Always (x,y) [[man (x) & donkey (y) & own (x,y)]   [beat (x,y)]]
                                     Nishigauchi (1990, p.130)

(22) For every man and every donkey such that the former owns the latter, he beats it.

(23) ∀(x,y) [[man (x) & donkey (y) & own (x,y)] [beat (x,y)]]

Nishigauchi (1990) refers to the type of quantificational binding involving indefinite NPs as in Heims (1982), Haiks (1984) and Reinharts (1987) theories as external binding. Unselective binding is external binding: a quantificational expression binds more than one indefinite NP simultaneously. Thus, in (21) and (23), the adverb of quantification *always* and the universal quantifier operator bind *a man* and *a donkey* at the same time, in an unselective fashion. They are both assigned the force of universal quantification.

3.2 Binding Relation

Following Kuroda (1965), Cheng (1991), Li (1992) and Hong (2004), I propose that wh-words in Korean and Japanese should be considered as pure indefinite pronouns void of an inherent interrogative or an inherent quantifier operator feature. Furthermore, I also propose that, unlike English, in Korean and Japanese the operator feature is base-generated as one of the features in Cs, and the link between Cs and wh-words is determined by unselective binding rather than movement. Unlike Hagstrom's (1998) analysis, as considered earlier, the following examples in (24) and (25) in Korean do not have intervention effects:

(24) a. John-i-na   Mary-ka   mwues-ul ilkess-na? (in Korean)
        John-Nom or Mary-Nom   what-Acc   read-Q
        "What did John or Mary read?"
     b. Mwues-ul   John-i-na   Mary-ka   ilkess-na?
        What-Acc   John-Nom or Mary-Nom   read-Q

(25) a. Nwuku(i)nka-ka   mwues-ul ilkessnun-ka?   (in Korean)
        Someone-Nom   what-Acc   read-Q
        "What did someone read?"

    b. Mwues-ul   nwuku(i)nka-ka ilkessnun-ka?

       What-Acc   someone-Nom   read-Q

Contrary to what is predicted, all sentences are grammatical. Thus, unlike Hagstrom (1998), I argue that disjunctive particles, quantificational licensing particles and interrogative particles are different.

They inherently have different feature properties, so the interpretations of wh-words can be different depending on a binder which licenses its own meaning for them. Following Suh (1990), and Chung (1996), we assume that Korean wh-expressions are clauses.[3] The structure of the whole Korean wh-expression will be as follows:

(26)   CP = (wh-expression in Korean)

                    IP   C

         vP   I   -nka($=\exists$)/-na($=\forall$)/-tunci($=\forall$)/$\varnothing$($=\exists$)$_x$

  DP=(wh-word) v'

Form+ind($_x$)   VP v

            -i (=be)
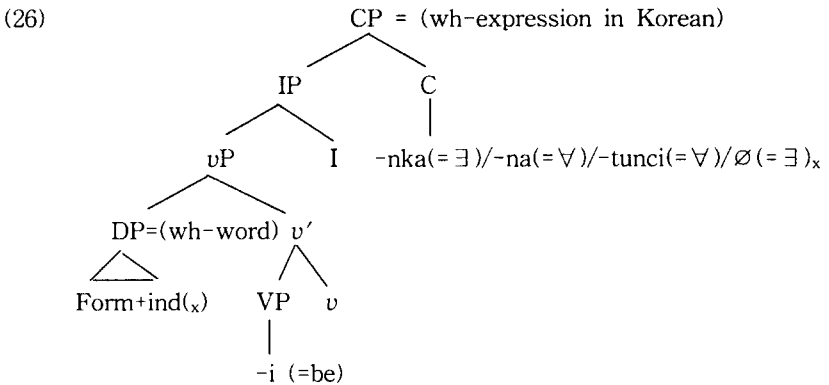
Korean wh-expressions are clauses. The copular *i* is generated in V, and the licensing morphemes *-nka/-na/-tunci/Ø* containing an operator feature are located in C within wh-expressions. Wh-words themselves are pronominal variables, which are composed of an idiosyncratic form feature, an indefinite pronoun and its semantic parts like a human or non-human, locational or temporal feature etc.

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3) Suh (1989) argues that all wh-expressions are wh-question clauses, and existential quantifier phrases are considered as indirect questions. Furthermore, Chung (1996) argues that universal quantifier phrases are also considered as indirect questions.

Neither the disjunctive particle nor the quantificational licensing particle in (24a) and (25a) blocks the binding relation between the wh-word and the interrogative particles *ka* or *na*, since the binding domain of the quantificational licensing particle is within the wh-expression, as shown in (26). In addition, I also argue that a disjunctive particle is not a scope-bearing binder. Like a conjunctive particle in Korean, it does not need a variable to bind:

(27) John-kwa Bill-i   mwues-ul   sa-ass-ni?
     John and Bill-Nom what-Acc   buy-past-Q
     "What did John or Bill buy?"

Thus, Hagstrom's intervention effect in Japanese should be reconsidered with a different view. Following Cheng (1991), Fukui (1986,1988,1995) and Fukui and Takano (1998), I accepted the particle system in Cs in Korean. Let us assume that the behaviour of the particles (Q-element and quantificational-elements) in Cs are parallel to that of *always*. Since wh-words do not have their own quantificational force at all, their interpretations are determined by particles in Cs which are associated with a certain quantificational force. The the link between wh-words and particles in Cs proceeds in unselective fashion, as shown by examples that we have already discussed. The across-the-board (ATB) reading in the following example in Korean supports unselective binding in wh-in-situ:

(28) Nwu-ka   eti-ese   mwues-ul   sata-n-ci,   na-nun
     Who-Nom   where-at   what-Acc   buy-Rel-Q   I-Top
     sangkwan   an-hanta.
     care   not-do
     "For all x,y,z, x a person, y a thing, z a place, I dont care
     if x buys y at z."

If wh-words themselves have their own inherent force, the above sentence can have 2^3 readings, since it contains three wh-words.

However, the sentence in (28) only has an ATB reading, since the interrogative question particle *ci* c-commands the wh-words and licenses the interpretation of them simultaneously by unselective binding.

(29) a. Zhangsan mai-le   shenme ma?
        Zhangsan bought   what   Qy/n
        "Did Zhangsan buy something?"
     b. Zhangsan mai-le   shenme (ne)?
        Zhangsan bought   what   Qwh
        "What did Zhangsan buy?"
(30) a. Mary-ka   mwues-ul sassa-na/ni?
        Mary-Nom   what-Acc bought-Qy/n
        "Did Mary buy something?"
     b. Mary-ka   mwues-ul sassa-no/ni?
        Mary-Nom   What-Acc bought-Qwh
        "What did Mary buy?"

Based on the above examples in (29) and (30) in Chinese and the Kyungsang dialect of Korean, we can assume that both *ci* in embedded clauses and *ni* in matrix clauses in the standard Korean actually embody two different complementisers in the same form: one is a yes/no question C and the other is a wh-question C. Now consider the sentence given in (31):

(31) Mary-ka [[John-i   mwues-lul   sass-nun]   ci] a-ni?
     Mary-Nom   John-Nom what-Acc bought-Rel   -Q   know-Q
     "# What does Mary know whether John bought?"
     "Does Mary know what John bought?"

The structure of the sentence in (31) can be illustrated in (32):

(32) [CP   [CP . . .   wh   . . .   C]   . . .   C]
                                           {Qwh}   {Qy/n}

In Korean, a yes/no question particle in C in interrogative clauses

should be considered as just a clause-typing marker like a declarative particle in C in declarative clause, since it does not need a variable to bind. However, a wh-question particle in C in interrogative clauses should be considered as a binder which need a variable, since it is also related to the scope of a wh-question. Thus, the sentence in (31) can be interpreted as a yes/no question. However, the following structure is ill-formed:

(33) *[CP2   [CP1   . . .   wh   . . .   C1   ]   . . .   C2   ]
                                            {Qwh}   {Qwh}

In movement approaches, this has been treated as a wh-island effect, but in the non-movement approach based on the binding system it will be considered as a blocking effect. Normally, a scope bearing element should bind its variables, but in the above structure C1 blocks the binding relation between *wh* and C2. Thus, although C1 can bind *wh*, C2 cannot bind it because of the existence of the closer binder C1. Thus, if we adopt a binding analysis of wh-in-situ, we can account for the exception of wh-island effects in Korean.

Now, let us consider why there is no intervention effect in Korean.

(34) a. Nwuku(i)nka-ka   mwues-ul   ilkessnun-ka?   (in Korean)
       Someone-Nom   what-Acc   read-Q
       "What did someone read?"
    b. Mwues-ul   nwuku(i)nka-ka   ilkessnun-ka?
       What-Acc   everyone-Nom   read-Q

In Suh (1990), Chung (1996), Hong (2004) and Hong and Lee (2004), the whole structures of Korean wh-expressions are clauses, so the binding domain is within the wh-expressions. An existential quantifier particle *nka* determines the meaning of wh-word within the clausal structure of the wh-expression by unselective binding. So there is neither blocking effects nor intervention effects in examples in (35).

(35) a. [CP   [CP wh · C] . . . wh   . . .   C]
                  { ∃ }   {Qwh}

     b. [CP   wh   [CP   wh ·C]   . . .   C]
                              { ∃ }   {Qwh}

Thus, if we adopt a binding analysis of wh-in-situ, we can solve the problems that Hagstroms (1998) analysis faced in handling syntactic effects in wh-in-situ languages.

We can generalise the linking system between English and Korean/ Japanese:

(36) a. English: Agree system
     b. Japanese and Korean: Binding system

4. Conclusion

In this paper, I considered two potential diagnostics which have been considered to be related to syntactic movement: island effects and intervention effects. I proposed that wh-words in Korean and Japanese, should be considered as pure indefinite pronouns void of an inherent interrogative or an inherent quantifier operator feature, based on the empirical evidence such as the across-the-board (ATB) reading. Furthermore, I also proposed that, unlike English, in Korean and Japanese the operator feature is base-generated as one of the features in Cs, and the link between Cs and wh-words is determined by (unselective) binding rather than movement. Following Cheng (1991), Fukui (1986,1988,1995) and Fukui and Takano (1998), I accepted the particle system and the binding system as linking systems between Cs and wh-expressions in wh-in-situ languages. I argue that, since the linking mechanism between C and wh-expressions is different in Syntax between wh-movement languages and wh-in-situ languages, there is no syntactic effect in wh-in-situ languages such as Korean and Japanese.

References

Aoun, J. and Li, A. (1993a). *Syntax of Scope*. Cambridge, Mass.: MIT Press.

Aoun, J. and Li, A. (1993b). Wh-elements in-stu: SS or LF? *Linguistic Inquiry 24*. 199-238.

Aoun, J. and Li, A. (1993c). On Some Differences between Chinese and Japanese Wh-Elements, *Linguistic Inquiry 24*. 365-371.

Cheng, L-S. (1991). *On the Typology of Wh-Questions*, Ph.D Dissertation. MIT.

Chomsky, N. (1977). On Wh-Movement. in P. Culicover, T. Wasow, and A. Akmajian, (ed), *Formal Syntax*, 71-132, New York: Academic Press.

Chomsky, N. (1995). *The Minimalist Program*. Cambridge, Mass., MIT Press.

Chung, D-H. (1996). *On the Representation and Licensing of Q and Q-dependents*. Ph.D. Dissertation. USC.

Fukui, N. (1986). *A Theory of Category Projection and its Application*, Ph.D Dissertation. MIT.

Fukui, N. (1988). Deriving the Differences between English and Japanese: A Case Study in Parametric Syntax, *English Syntax 5, 249-270*.

Fukui, N. (1995). The Principle-and-Parameters Approach: A Comparative Syntax of English and Japanese, in Shibatani, M and T. Bynon (ed), *Approaches to Language Typology*, Oxford University Press, Oxford, 327-371.

Fukui, N. and Y. Takano. (1998). Symmetry in Syntax: Merge and Demerge, *Journal of East Asian Linguistics* 7, 27-86.

Haik, I. (1984). Indirect Binding: *Linguistic Inquiry* 15. 185-223.

Hagstrom, P. (1998). *Decomposing Questions*, Ph.D Dissertation. MIT.

Heim, I. (1982). *The Semantics of Indefinite Noun Phrases*. Ph.D Dissertation. University of Massachusetts, Amherst.

Hong, S-H. (2004). On the Lack of Syntactic Effect in Wh-in-situ, ms. presented in LAGB (Linguistic Association of Great Britain).

Hong, S-H. and S-W Lee. (2004). Korean Wh-Words as Choice Function Variables, ms presented at the conference 'Strategies of Quantification,' at the University of York.

Kim A-R. (2000). Korean Wh-phrases Void of Operator, *Japanese/Korean Linguistics 9*, 311-324.

Kuroda, S-Y. (1965). *Generative Grammatical Studies in the Japanese Language.* Ph.D Dissertation. MIT.

Li, Y-H. A. (1992). Indefinite Wh in Mandarin Chinese, *Journal of East Asian Linguistics* 1, 125-155.

Nishigauchi, T. (1990). *Quantification in the Theory of Grammar.* Dordrecht, Kluwer Academic Press.

Pesetsky, D. (2000). *Phrasal Movement and Its Kin,* MIT Press, Cambridge Mass.

Reinhart, T. (1987). Specifier and Operator Binding, in E. J. Reuland and A. ter Mulen (ed), *The Representation of (in)definiteness.* Cambridge, Mass., MIT Press.

Suh, C-S. (1989). *A Study of Korean Grammar* (in Korean). Hankuk Mwunhwasa.

Tsai, W.-T. D. (1994). *On Economising the Theory of A-bar Dependencies,* Ph.D Dissertation. MIT.

Tsai, W.-T. Dylan. (1999). On Lexical Courtesy, *Journal of East Asian Linguistics* 8, 39-73.

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