Rescuing Broken Dependency in Korean Fragments

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1. Introduction

Korean does not allow postposition stranding as in (1). However, Fragment Answers (FA) can optionally drop the postposition as in (2). Under the ellipsis approach to fragments (Merchant 2004), the bare NP fragment in (2) seems to involve a PF-repair strategy: the underlying source of the bare NP is (1), where ellipsis of TP will eliminate the stranded postposition and thus save the structure. However, many researchers have advocated either a non-ellipsis/direct interpretation approach to (bare) NP fragments, which argues that fragments are generated as they are without structure (Morgan 2989,Barton and Progovac 2005, Choi & Yoon 2009, Fortin 2007), or a cleft analysis (Park 2009).

(1) *Bill$_i$ [$_{TP}$ John-i t$_i$-*lo pwuthe* ton-ul pat-ass-e]
B. J.-Nom -*from* money-Acc receive-Past-Dec
'lit., Bill, John received money from'

(2) A: John-i nwukwu-*lo pwuthe* ton-ul pat-ass-ni?
John-Nom who-from money-Acc receive-Past-Q
'Who received money from whom?'
B: Bill(-*lo pwuthe*)
'(From) Bill'

In this paper, we show that examples like (2B) are merely part of a bigger paradigm that encompasses (morphologically) dependent markers such as postpositions and case markers, and argue that the paradigm can best be captured under the PF-ellipsis approach. We will examine this paradigm by investigating the variability of dependent case markers in multiple FAs.

2. Data

Korean is a language that allows multiple fragment answers (MFAs) as in (3B). However MFAs are not unrestricted, varying with presence/absence of a dependent marker on fragments, as shown in (3C)-(3E). The same variety is observed with a postposition, as shown in (4). NPs with nominative and accusative case markers show the same pattern as in (5)-(6). The generalization that captures these examples is (7) (cf. Park 2013). The (D) and (E) examples are not acceptable since the first NP fragment is in bare form.

(3) A: nwu-ka nwuku-*lo pwuthe* ton-ul pat-ass-ni?
who-Nom who-from money-Acc receive-past-Q
'Who received money from whom?'
B: John-i (Nom) Bill-*lo pwuthe* ('from')
C: John-i Bill-Ø
D: *John-Ø Bill-*lo pwuthe*
E: *John-Ø Bill-Ø

(4) A: [nwuku-*lo pwuthe*]$_i$ nwu-ka t$_i$ ton-ul pat-ass-ni?
who-from who-Nom money-Acc receive-past-Q
'Who received money from whom?'

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B: Bill-*lo pwuthe* John-i
C: ?Bill-*lo pwuthe* John-Ø
D: *Bill-Ø John-i
E: *Bill-Ø John-Ø

(5) A: nwu-ka nwukwu-lul choaha-ni?
who-Nom who-Acc like-Q
'Who does like who?'
B: John-i (Nom) Mary-lul (Acc)
C: John-i Mary-Ø
D: *John-Ø Mary-lul
E: *John-Ø Mary-Ø

(6) A: nwukwu-lul$_i$ nwu-ka t_i choaha-ni?
who-Acc who-Nom like-Q
'Who does like whom?'
B: Mary-lul John-i
C: ?Mary-lul John-Ø
D: *Mary-Ø John-i
E: *Mary-Ø John-Ø

(7) *In the MFA environment, only the right-most element can be bare.*

According to this generalization, it is expected that FA with more than two NPs would show the same pattern, i.e., only the right-most NP can be bare/case-less. The prediction is borne out. In (8), the answer (B) is acceptable because only the right-most NP *sakwa* 'apple' is bare. In (C) and (D), on the other hand, the first and/or the second NP is case-less and they show unacceptability as expected.

(8) A: nwu-ka nwukwu-ekey mwues-ul cu-ess-ni?
who-Nom whom-Dat what-Acc give-past-Q
'Who gave what to whom?'
B: John-i Bill-ekey **sakwa(-lul)**
C: ***John-Ø** Bill-ekey sakwa-lul
D: *John-i **Bill-Ø** sakwa-lul

The variability of MFAs in examples above seems to be a serious problem for the Direct Interpretation Approach (cf. Barton & Progovac 2005, Fortin 2007). The approach would argue that bare NP fragments are base-generated as they are without structure, thus providing a straightforward account for the acceptability of the bare NP fragment in (2). However, it is unclear why such variability is observed in MFA. The same problem also arises for the Dependent Marking Parameter (Choi and Yoon, Choi, 2009). Under this approach, presence/absence of dependent markers plays a crucial role for acceptability of fragments at LF. Note, however, that it would be silent about the asymmetry between the (C) and (D) examples in (3)-(6) and (8) whose acceptability is contingent on which fragment bears a dependent marker. For a potential (Pseudo-)cleft analysis (Park 2009), it is generally known that multiple foci are not allowed in a cleft construction. Then we incorrectly predict that no MFAs should be allowed, contrary to fact.

3. Proposal

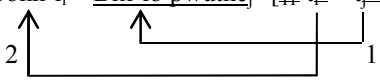
We argue that the variability of the dependent marker reflects PF-rescuing effects that result from the possibility of deleting offending *s, represented in PF (Chomsky 1972, Fox and Lasnik 2003, Bošković 2011). Specifically, we argue that movement that strands a dependent marker leaves a * on the crossed elements since these intervening elements 'breaks' the (morphological) dependency between the marker and its host and that

subsequent ellipsis of TP will get rid of the offending *s, giving rise to a rescue effect. The derivation of bare fragment in (2B) is shown in (9:2B), where movement of *Bill* across the subject leaves a * on it. Subsequent TP-ellipsis eliminate this *, rendering the fragment acceptable. In case of MFA (3C), whose derivation is given in (9:3C), movement of *Bill* leaves a *on the subject *John-i* within TP. Then *John-i* moves across the fronted *Bill*, followed by TP-ellipsis. Here we assume with Bošković (2011) that movement to a different position (A-to-A') does not copy the offending *. (9:3D) is unacceptable since movement of *John* leaves a * on the fronted PP, *Bill-lo pwuthe*, which survives TP-ellipsis. The same analysis holds for (9:3E).

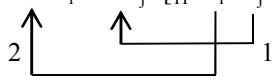
(9): (2B) [$_{FP}$ Bill$_i$ [~~$_{TP}$ *John-i [t$_i$ *lo pwuthe*] ton-ul pat-ass-e]]~~

B. J.-Nom *-from* money-Acc receive-Past-Dec

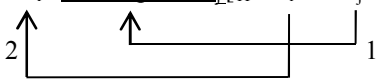
(3B) [[$_{FP}$ John-i$_i$ Bill-lo pwuthe$_j$ [~~$_{TP}$ t$_i$ t$_j$ ton-ul patasse~~]]



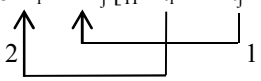
(3C) [$_{FP}$ John-i$_i$ Bill$_j$ [~~$_{TP}$ *t$_i$ t$_j$ lo pwuthe ton-ul patasse~~]]



(3D) [$_{FP}$ John$_i$ *Bill-lo pwuthe$_j$ [~~$_{TP}$ t$_i$ i t$_j$ ton-ul patasse~~]]

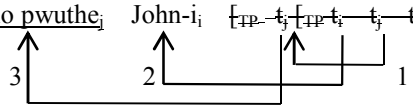


(3E) [$_{FP}$ John$_i$ *Bill$_j$ [~~$_{TP}$ *t$_i$ i t$_j$ lo pwuthe ton-ul patasse~~]]

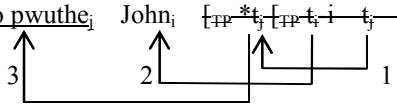


Concerning (4), the wh-phrase *Nwukwu-lo pwuthe* 'from whom' is scrambled in the antecedent clause. As an answer to this question, the PP, *Bill-lo pwuthe,* in (10: 4C) first undergoes scrambling and adjoins to TP in order to satisfy a parallelism requirement (Fiengo and May 1994, Fox and Lasnik 2003). Crucially, following Mahajan (1990) and Saito (1992) we assume that this 'short' scrambling involves A-movement. Subsequent movement of *John* leaves a * on the scrambled PP. As a last step, the scrambled PP moves to FP, but this involves A-to-A' and thus does not copy the offending *. By contrast, in (10: 4D) and (10: E), the offending * on *John(-i)* left by the illicit movement of *Bill* survives TP-ellipsis, resulting in unacceptable MFAs. The same analysis holds for (5)-(6) and (8).

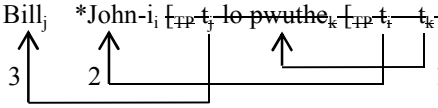
(10): (4B) [$_{FP}$ Bill-lo pwuthe$_j$ John-i$_i$ [~~$_{TP}$ t$_i$ [$_{TP}$ t$_i$ t$_j$ ton-ul padasse~~]]]



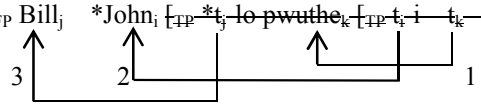
(4C) [$_{FP}$ Bill-lo pwuthe$_j$ John$_i$ [~~$_{TP}$ *t$_i$ [$_{TP}$ t$_i$ i t$_j$ ton-ul padasse~~]]]



(4D) [$_{FP}$ Bill$_j$ *John-i$_i$ [~~$_{TP}$ t$_j$ lo pwuthe$_k$ [$_{TP}$ t$_i$ t$_k$ ton-ul padasse~~]]]



(4E) [$_{FP}$ Bill$_j$ *John$_i$ [~~$_{TP}$ *t$_j$ lo pwuthe$_k$ [$_{TP}$ t$_i$ i t$_k$ ton-ul padasse~~]]]



4. Extension: Islands

It is widely known that a single FA in Korean exhibits island-insensitivity as in (11) (Park 2005). However, when one fragment is extracted from inside an island and the other from outside the island, a clear contrast is observed. In (12B), the first NP *John-i* is extracted from outside the island and the second NP *ton-ul* is from inside the island. By contrast, when the island is scrambled in the antecedent, and the first NP fragment *ton-ul* is extracted from inside an island and the other *John-i* outside the island as in (13), the MFA is not acceptable.

(11) A: John-i [$_{island}$ mwues-ul kaji-n saram-ul] chasskoiss-ni?
J-Nom what-Acc have-Rel person-Acc look.for-Prog-Q
'Lit., John is looking for who has what?'
B: ton-ul
money-Acc
'money'

(12) A: **nwu-ka** [$_{island}$ **mwues-ul** kacin saram-ul] chackoissni?
Who-Nom what-Acc have-Rel person-Acc look.for.Q
'Lit., Who is looking for a person who has what?'
B: ?John-i ton-ul
John-Nom money-Acc
'John is looking for the person who has money.'

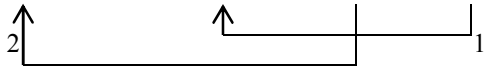
(13) A: [$_{island}$ **mwues-ul** kaci-n saram-ul] **nwu-ka** chackoissni?
What-Acc have-Rel person-Acc who-Nom look.for-Q
'Lit., Who is looking for a person who has what?'
B: *ton-ul John-i
Money-Acc John-Nom
'Lit., the person who has money, John is looking for'

We argue that this contrast also reflects a PF-rescue effect. With the assumption that extracting an NP out of an island is considered as an island constraint violation, this illicit movement leaves offending *s on the crossed elements, rendering the sentence ungrammatical. However, this ungrammatical sentence is repaired when TP-ellipsis eliminates the *s or when elements with the *s undergoes a different type of movement. In case of (11), extracting *ton-ul* 'money' out of the island leaves a * on the intervening NP *John-i* (as well as the island itself, as suggested by Chomsky 1972). However, subsequent TP-ellipsis deletes the *, as shown in (14).

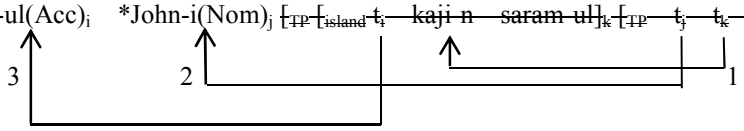
(14): (11B) [$_{FP}$ ton-ul$_i$ ~~[$_{TP}$ *John-i [$_{island}$ t$_i$ kaci-n saram-ul] chasskoisse]~~]

The analysis straightforwardly accounts for the contrast between (12) and (13), whose derivations are given in (15: 12B) and (15: 13B), respectively. As shown in (15:12B), the offending * is eliminated by TP-ellipsis just like (14: 11B). However, in (15: 13B), the movement of *ton-ul* across the fronted subject *John-i* leaves a * on the latter since it involves extraction out of an island. This * survives the subsequent TP ellipsis, rendering the fragments unacceptable.

(15): (12B) [$_{FP}$ John-i(Nom)$_i$ ton-ul(Acc)$_j$ ~~[$_{TP}$ *t$_i$ [$_{island}$ t$_j$ kaji-n saram-ul] chasskoisse]~~]



(13B) [$_{FP}$ ton-ul(Acc)$_i$ *John-i(Nom)$_j$ ~~[$_{TP}$ [$_{island}$ t$_i$ kaji-n saram-ul]$_k$ [$_{TP}$ t$_j$ t$_k$ chasskoisse]~~]



5. Conclusion

We have shown that Korean fragment answers exhibit a rescue-by-ellipsis effect of broken dependencies. By observing the generalization that only the rightmost NP fragment can be bare, we showed that non-ellipsis analyses fail to capture this generalization and argued that a rescue-by-ellipsis approach must be adopted. Assuming that that illegitimate movement leaves an offending * on the crossed elements which intervenes the morphological dependency, we argued that ellipsis can eliminate the * and thus rescue the structure. We also extended our analysis to the cases involving extraction out of an island.

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