

A-movement and Intervention Effects in Korean Tough Movement

Formal Syntax

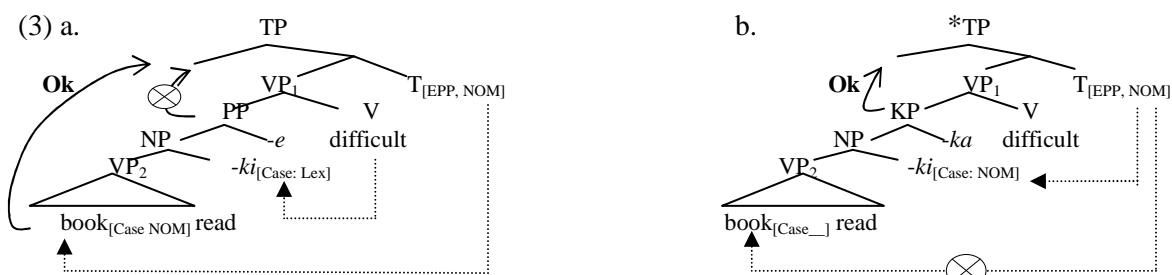
We analyze Tough Movement (TM) in Korean as an instance of A-movement and show how the locality conditions in the computation of A-dependencies (Chomsky 1998, 2001, 2005) should be understood in order to account for the Intervention Effects found in these constructions. Firstly we propose that Object-to-Subject Raising in Korean TM is triggered by the nature of the Case assignment to the non-finite complement (NC). In (1a), the NC bears the dummy postposition *-e* due to Lexical Case assignment and Object-to-Subject Raising becomes obligatory, as shown by the fact that it cannot appear with Accusative Case (Chae 1998, Ko 2005). In (1b), where the NC bears the structural Nominative Case *-ka*, A-movement out of the embedded clause is impossible (2a).

- (1) a. I chayk_i-i/*lul [InFP t_i il-ki]-e elyeppta. (TM)
 this book-NOM/ACC read-NML-LOC difficult.be
 ‘‘This book is difficult to read’’
- b. [InFP Chelswu-ka i chayk-ul il-ki]-ka elyeppta. (Non TM)
 Chelswu-NOM this book-ACC read-NML-NOM difficult.be
 ‘‘For Chelswu to read this book is difficult’’

We demonstrate that A-movement is impossible from the NC marked with *-ka* because the whole NC is prompted to the Subject position and becomes an island for purposes of A-movement (2a). However, A-movement of the embedded object is possible when the NC is assigned Lexical Case, surfacing with the dummy postposition *-e* (2b).

- (2) a. *[TP₁ Mia-nun [vP Chelswuⁱ-lul [TP₂ [InFP tⁱ i chayk-ul il-ki]-ka] elyeppta-ko] mit]-ess-ta].
 Mia-TOP Chelswu-ACC this book-ACC read-NML-NOM difficult-C believe-PAST-DEC
 ‘‘Mia believed Chelswu to be difficult to read this book’’
- b. [TP₁ Mia-nun [vP i chayk_i-ul [TP₂ t_i [InFP t_i il-ki]-e] elyeppta-ko] mit]-ess-ta].
 Mia-TOP this book-ACC read-NML-LOC difficult-C believe-PAST-DEC
 ‘‘Mia believed this book to be difficult to read’’

Following Kim’s (2002) claim that Korean does not have adjectives, but stative verbs, and adapting Nunes’ (2008) analysis of Minimality Effects on A-movement to accommodate the full range of Korean data, we will argue that movement of the object becomes obligatory in (1a) when the NC of the Tough-type stative verb receives Lexical Case within the VP (Woolford 2006). Lexical Case assignment has two consequences: (i) the NC cannot move to [Spec, TP] to receive structural Nominative Case and satisfy the EPP feature in T, and (ii) the movement of the embedded object becomes obligatory in order to value its Case feature and the EPP feature in T (3a).



On the contrary, as shown in (3b), if the head *-ki* of the NC receives structural Nominative Case by T, the object cannot receive Nominative Case due to the intervention of the head *-ki*, because this head needs to value its Case feature by the same Goal (Chomsky 2001), making the derivation crash. In order to demonstrate that the head *-ki* is intervening in (3b), we show that, even when the NC bears Lexical Case, Object-to-Subject Raising is blocked if there is an embedded subject bearing (structural) Nominative Case (4), making the derivation crash for the same reasons given in (3b); that is, according to our analysis, (3b) and (4) show up identical Minimality Effects (Rizzi 1990; Chomsky 2001): the embedded object cannot agree with the matrix T because there is a closer Goal: the head *-ki* of the NC in (3b) or the embedded subject in (4), which needs to value its Case feature and so it is still activated (Chomsky 2001).

- (4) *[TP Chelswuⁱ-ka [InFP [vP tⁱ [vP i chayk-i il]-ki]-e]] elyeppta-ess-ta].
 Chelswu-NOM this book-NOM read-NML-LOC difficult-PAST-DEC

We will argue that (4) is a variant of the Dative Intervention Effect in Icelandic (5a), but in the Korean case it is not the Dative that is responsible of the intervention but the Nominative. We assume,

following Hornstein & Nunes (2002), that in Korean the Experiencer in (5b) is an inherently (Dative) Case-marked element inert for purposes of A-movement and therefore should not induce Intervention Effects for A-relations.

- (5) a. *O' lafur hefur virst me'r [t vera ga' faDur]
 Olaf.NOM has seemed me.DAT be intelligent
 'I have found Olaf intelligent' (Holmberg & Hróarsdóttir 2003)
- b. I chayk-i Chelswu-**eykey** il-ki-e elyep-ess-ta
 this book-NOM Chelswu-**DAT** read-NML-**LOC** difficult-PAST-DEC
 "This book is difficult for Chelswu to read"

We observe that, as happens in Icelandic (6a), Intervention Effect disappears if the intervening element is A'-moved. In a similar way, the Intervention Effect in Korean goes away with topicalization/focalization of the object (6b) or by *wh*-movement (6c) of the intervening element.

- (6) a. Hverjum hefur O' lafur virst vera ga' faDur?
 Who.DAT has Olaf.NOM seemed be intelligent
 'Who has found Olaf intelligent?' (Holmberg & Hróarsdóttir 2003)
- b. I chayk-i, Chelswu-**ka** il-ki-e elyep-ess-ta.
 this book Chelswu-**NOM** read-NML-**LOC** difficult-PAST-DEC
 (Lit.) THIS BOOK, is difficult for Chelswu to read'
- c. Nwu-**ka** i chayk-i il-ki-e elyep-ess-ni?
 who-**NOM** this book read-NML-**LOC** difficult-PAST-Q
 (Lit.) 'This book is difficult for whom to read?'

The A'-status of the object in (6b) is confirmed by the reconstruction facts: the object is reconstructed below the Nominative Subject for Condition C (7a) and Condition A (7b) in its thematic position within the embedded clause.

- (7) a. *[Chelswu_i-uy chayk-i]_j, ku_i-**ka** t_j il-ki-e elyep-ess-ta.
 Chelswu-GEN book-NOM he-**NOM** read-NML-**LOC** difficult-PAST-DEC
 (Lit.) 'Chelswu_i's book, is difficult for him_i to read'
- b. [Caki_i-uy chayk-i]_j, Chelswu_i-**ka** t_j il-ki-e elyep-ess-ta.
 self-GEN book-NOM Chelswu-**NOM** read-NML-**LOC** difficult-PAST-DEC
 (Lit.) 'Self_i's book, is difficult for Chelswu_i to read'

On the other hand, in (8) the object cannot be reconstructed below the Dative Experiencer. The absence of reconstruction for Condition C (8a) and Condition A (8b) fits well with other cases of A-movement in Korean, like Passive, Subject-to-Subject Raising and Unaccusatives (Cho 1994).

- (8) a. Chelswu_i-uy chayk-i ku_i-**eykey** il-ki-e elyep-ess-ta.
 Chelswu-GEN book-NOM he-**DAT** read-NML-**LOC** difficult-PAST-DEC
 "Chelswu_i's book is difficult for him_i to read"
- b. *Caki_i-uy chayk-i Chelswu_i-**eykey** il-ki-e elyep-ess-ta.
 self-GEN book-NOM Chelswu-**DAT** read-NML-**LOC** difficult-PAST-DEC
 (Lit.) 'Self_i's book is difficult for Chelswu_i to read'

Further, our analysis makes strong predictions regarding the nature of the possible non-finite complements that can be selected by the Tough-type stative verbs in Korean, giving a principled explanation of the Lexical Restructuring Effects (Wurmband 1998) exhibited by the non-finite complement when it surfaces with the dummy postposition *-e*: impossibility of passivizing the embedded verb, of embedded honorification, etc.

Selected references: Chae H-R (1998), "A comparative analysis of the Tough-construction and the comparative in English and Korean", *Language Research* 34, 33-71. Cho, J-H. (1994). *Scrambling in Korean: Crossover, reconstruction and binding theory*. PhD dissertation, University of Connecticut. Nunes, J. (2008) "Inherent Case as a Licensing Condition for A-movement: The Case of Hyper-raising Constructions in Brazilian Portuguese", *Journal of Portuguese Linguistics* 7:83-108. Holmberg, A & Thorbjörg H. (2003). "Agreement and movement in Icelandic raising constructions". *Lingua* 113:997-1019. Kim, M-J. (2002a), "Does Korean have adjectives?" In T. Ionin, H. Ko and A. Nevins eds., *MIT Working Papers 43. Proceedings of HUMIT 2001*, Cambridge, MA. *MIT Working Papers*, pp. 71-89.