Minimal Attraction Principle

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Lee, Chongmin. 1998. **Minimal Attraction Principle.** *Linguistics,* 6-1, 389-395. In this paper we discuss the minimal nature of attraction in the existential construction. If the attraction of meaning features is restricted to the closest position to the existential expletive, the related phenomena can be axplained away desirably. When the expletive is moved from the sentence internal position, the original copy can function as the attractor for the checking of its associate. This idea corresponds to the basic philosopy of minimal attraction and it remains to find some further motivations and mechanisms. **(Chonbuk National University)**

1. Feature Attraction

It is a proper procedure to talk about the feature system of a Lexical Item (LI) in the minimalist program. The primary question is whether the Formal Features (FF) are a cover term for any lexical features related to the phonology, syntax, and semantics. The basic assumption seems to be that the FF is the general terminology though it is used in the binding phenomena.

We may observe the following statement first:

(1)

a. FF(LI) includes the categorial feature of the nominal phrase and should have argument (A-position) properties, including the ability to serve as a controller or binder. (Chomsky 1995c, p. 272)

b. ... the features adjoined to AGRo also have A-position properties, C-commanding and binding in the standard way. (Chomsky 1995c, p. 272)

c. ... only formal features of the associate raise, leaving its semantic features behind .... (Chomsky 1995c; Lasnik 1995a, p. 72)

If the FF(LI), that is, the Formal Features of a Lexical Category, can control or bind an empty pronominal or a reciprocal pronoun, it means that the FF(LI) is the subset of all the possible features of a lexical item.

However, we can consider the FF and the Meaning Features (MF) separately. The former includes the Case and agreement features. On the other hand, the referential or quantificational or scopal properties are classified as the latter. Ann (1997, p. 53) gives the distinction of I(nternal)-agr and E(xternal)-agr, which is different from the FF and MF distinction. However, this idea is also suggestive of such a differentiation.

This does not exclude the possibility of including the pure semantic properties of a lexical item in the name of MF. For example, let us suppose we have a desk. What makes 'desk' a desk? The properties which distinguish a desk from a chair (or anything else) are semantic in a broad sense. In this discussion I would rather regard the so-called binding or quantification properties as belonging to the MF(LI).

We may observe the following distribution of reciprocals in (2):

(2) (Chomsky 1995c, p. 272)

a. The DA [accused the defendants during each other's trials]

b. The DA [proved [the defendants to be guilty] during each other's trials]

In the above sentences the reciprocal pronoun is bound by the NP *the defendants*. How does this binding occur? It is assumed that the whole category *the defendants* raises to the matrix Spec of AGRoP at the level of Logical Form (LF). In other words, FF(*the defendants*) keeps its A-position properties and binds its anaphor under the assumption

that FF is attracted. If we stick to the strict sense of FF, we may call Chomsky's FF(*the defendants*) as MF(*the defendants*) in our terminology. Hence, in the Attract-F Theory, the actual binder is MF(LI).

With respect to this semantic partition of feature geometry, Lasnik (1996a) leaves an interesting statement as follows;

(3) Lasnik (1996a, p. 112)

> Under the assumption that these licensing phenomena involve referential and quantificational properties, and not just formal features, the correct result is obtained.

I have to say that the above description should be read as it is given out of context. This means that semantic properties like reference and quantification (and scope) are differentiated from formal properties like Case and agreement. It is an indirect evidence for our proposal that MF is different from FF. In this paper, the two terms may be used altogether in irrelevant cases.

We may go back to the examples in (2). In the AGR-based theory, *the defendants* raises to [Spec, AGRoP] at LF. Then the raised NP can bind its anaphor properly, satisfying the Binding Theory (A).

It is possible to deduce the same result with the feature raising analysis. Then the MF(*the defendants*) raises to the matrix verb (or the matrix inflection) and the C-command requirement for anaphors are maintained. This approach flows into the attraction theory of associates in the expletive constructions.

2. The Binding Problem

If an anaphor is bound by a set of MF at LF, we are faced with an immediate question which Chomsky (1995c, p. 275) raises. He does not seem to provide any proper answer. At this point, it seems appropriate

to observe the following contrast:

(4)

a. they seem to each other [t to have been angry]
b. *there seem to each other [t to have been many linguists given good job offers]

There is no question that the matrix subject *they* can license its coreferential anaphor in (4a). However, we cannot explain the ungrammaticality of (4b) if the associate raises to the matrix expletive or the other way. If Binding Theory applies at LF, the matrix subject *there* is replaced by its associate or MF(*many linguists*) raises to the matrix verb *seem* or the matrix Infl(ection). In either of these cases, MF(*many linguists*) can bind its anaphor, but (4b) is ungrammatical.

Chomsky (1995c, p. 275) gives an awkward answer to this problem. He suggested the following structure when MF is raised to the matrix Infl.

(5) a. [ANA [MF(*many linguists*) seem]]
b. [MF(*many linguists*) [ANA seem]]

He assumes that the anaphor and MF(the associate) raise at LF. It is very unreasonable to accept the hypothesis that "neither of these structures qualifies as a legitimate binding-theoretic configuration," when the ANA(phor) takes MF(*many linguists*) as its antecedent. This sounds unconvincing. If the feature matrices constitute the hierarchical structures, there is no reason to disallow binding relations in (5).

At LF (4b) has the same structure or the nearly same structural representation as (4a). But only (4b) is not grammatical. How can we jump out of this dilemma?

3. The Solution

The answer is very simple. Chomsky (1995c) goes too far in arguing that MF(the associate) is attracted to the matrix Infl in any kind of existential sentences. I argue that MF Attraction should be minimal in the spirit of the minimalist program. Let me propose the Minimal Attraction Principle (MAP):

(6) Minimal Attraction Principle (MAP)
Attract F must be minimal.

When we apply Attract F, it is legitimate to limit its domain as long as a convergent derivation is guaranteed. Let's look back at the example (4b). Chomsky (1995c) fails to realize that MF(*many linguists*) has been attracted far away unnecessarily.

Let me repeat (4b) as (7):

(7) (=4b)
*there seem to each other [t to have been many linguists given good job offers]

In the above example, there is no reason to raise MF(*many linguists*) beyond the embedded Infl. It breaks the chain C(*there*, t) and a kind of Relativized Minimality (or Path Containment) results. In a chain-theoretic sense, the expletive leaves its copy in its original position. Hence, it is necessary and sufficient to say that MF(*many linguists*) raises to the embedded Infl and (7) obeys the MAP. A conglomeration of the expletive itself and its associate is completed without any further attraction.

If the MAP is on the right track, the question about (7) is resolved very easily. It means that MF(*many linguists*) is attracted to the embedded tense *to* and can not bind its anaphor at LF. We get the

binding violation in (7). Hence (7) is not grammatical.

4. Concluding Remarks

It has been unnoticed in the theory of minimalism that the associate raising should be restricted for a convergent derivation (Lasnik and Saito 1991, Chomsky 1995c). Even in cases that the existential expletive *there* raises overtly, its associate has been assumed to undergo F-Attraction covertly at LF. Contrary to this view, I propose the MAP, which requires even LF F-Attraction to be minimal necessarily. At the same time, the MAP brings up the result such that MF(associate) raises to Infl (or Tense). In other words, F-attraction cannot break the chain made in the overt syntax (the Minimal Link Condition).

References

Ann, Hee-Don. 1997. Yeongeoeui myeongsaguwa ilchiso. (The English NP and Agreement). *Studies in Generative Grammar* 7-1, 49-66. (Written in Korean.)

Boscovic, Zeljko. 1995. *Principles of Economy in Nonfinite Complementaion.* Doctoral Dissertation. University of Connecticut.

Chomsky, Noam. 1995a. *The Minimalist Program.* MIT Press.

Chomsky, Noam. 1995b. *Bare Phrase Structure.* In Gert Webelhuth ed. *Government and Binding Theory and the Minimalist Program.* Blackwell, 385-439.

Chomsky, Noam. 1995c. Chapter 4 Categories and Transformations. In Chomsky 1995a.

Collins, Chris. 1995. Towards a Theory of Optimal Derivations. *MIT Working Papers in Linguistics 27*, 65-103.

Collins, Chris. 1997. *Local Economy.* MIT Press.

Diesing, Molly. 1992. *Indefinites.* MIT Press.

Groat, Erich. 1997. *A Derivational Program for Syntactic Theory.* Doctoral

dissertation. Harvard University.

Jang, Youngjun. 1995. Arguments for LF Feature Movement: Icelandic Object Shift and English Existentials. Ms. Harvard U.

Jang, Youngjun. 1996. Minimal Feature Movement. Ms. Harvard U. To appear in *Journal of Linguistics* 33.

Jang, Youngjun. 1997a. *Tense and Complementizer Feature-Checking.* Doctoral dissertation. Harvard University. Published by Hankuk Publisher.

Jang, Youngjun. 1997b. Passive Expletive Constructions in English. Presented at the Korean Generative Grammar Circle. Daewoo Foundation. Seoul.

Lasnik, Howard. 1995a. Last Resort and Attract F. *FLSM* 6, 62-81.

Lasnik, Howard. 1995b. Last Resort. In Shosuke Haraguchi and Michio Funaki eds. *Minimalism and Linguistic Theory, 1-31,* Tokyo.

Lasnik, Howard. 1996a. Level of Representation and the Elements of Anaphors. To be presented at the workshop on "Binding and Atomism", Holland Institute of Generative Linguistics, 101-115, Leiden.

Lasnik, Howard and Mamoru Saito. 1991. On the Subject of Infinitives. *Chicago Linguistic Society* 27, 324-343.

Lee, Chongmin. 1996. *Yeollyeola Yeongmunbeob (Open! English Grammar).* Press House. Seoul. (Written in Korean).

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