Some Consequences of Minimal Attraction

Lee Chongmin
(Chonbuk National University)

Lee Chongmin. 1999. **Some Consequences of Minimal Attraction.** *Linguistics* 7-3, 27-37. In this paper we discuss the minimal nature of attraction in the existential construction. If the attraction of meaning features is restricted to move to the possible closest position, the related phenomena can be explained 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 philosophy of minimal attraction and it remains to find some further motivations and mechanisms. **(Chonbuk National University)**

1. Minimal Attraction

In the recent studies of the expletive construction, it has been proposed that the set of minimal features is attracted to the matrix Infl in any kind of existential sentences (Chomsky 1995, 1998, 1999). I have argued that the feature attraction should be minimal in the spirit of the minimalist program. Hence, the Minimal Attraction Principle (MAP) was proposed in my previous research (Lee 1998).

Let's look at the following principle:

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

Whenever the rule Attract **F is applied**, its domain can be limited if it is legitimate as a convergent derivation. In the tradition of minimalism, it is not necessary to move the feature set all the up to the matrix Infl.

It is legitimate to limit its domain as long as a convergent derivation is guaranteed. It means that Chomsky (1995c) fails to realize that the

minimal features (MF) have been attracted far away unnecessarily.

2. Some Consequences

If we accept the MAP, we come to face another example which seems to pose a serious problem. In actuality, the following examples are used to elicit MF Attraction at a long distance.

(2)
a. *there seem [t to be a man in the room]
b.   there seems [t to be a man in the room]

It might be said that FF(*a man*) must raise to the matrix Infl, such that the agreement facts can be explained. Chomsky (1995c, p. 273) argues that the agreement features of the associate must raise to [Spec, AGRs]. That is not true or at least not economical in the sense that MF(*a man*) has been raised two times. It is a costlier derivation.

Under the MAP, FF(*a man*) is raised to the embedded Infl and the complex Infl agrees with the trace of the expletive moved at Spell-out. As is usual with Chain Theory, the trace shares its agreement features with its original category. This can be illustrated in the following way:

(3)
a. *there seem [t [FF(a man) to] be a man in the room]
b.   there seems [t [FF(a man) to] be a man in the room]

In the above structures, FF(*a man*) is [-plural, 3 person], which is adjoined to the embedded Infl *to*. The Spec-head agreement matches t and [FF(a man) to], and t transmits FF(*a man*) to the matrix expletive subject. Finally, FF(*a man*) is checked off against the matrix Infl, that is, the verb *seems* in (3b). This process can be compared with Boscovic's (1995) expletive lowering analysis.

We may add some more examples in relation to the control facts. We

may consider the following examples:

(4)

a. There arrived three men (last night) without PRO identifying themselves.

b. Three men arrived (last night) without PRO identifying themselves.

In the unaccusative construction, MF(*three men*) raises to the matrix Infl and can C-command PRO so that it is licensed as the appropriate controller. In (4), it does not make any difference whether LF Movement is the replacement into the matrix subject or the feature attraction into the matrix Infl. It is also noted that (4a) is less perfect than (4b) (Lasnik 1996a, p. 111).

Lasnik (1996a, p. 111) observes the following contrast:

(5)

a.   ?*Without PRO identifying themselves, there arrived three men (last night).

b.   Without PRO identifying themselves, three men arrived (last night).

The grammaticality difference in (5) gives support to the idea that MF(*three men*) does not replace or substitute the matrix subject. Rather, we can say that FF is raised to the matrix Infl. In other words, MF(*three men*) adjoined to the Infl-verb complex *arrived* cannot C-command the adverbial phrase. Hence we get the ungrammaticality of (5a).

It sounds hasty to say that the thematic hierarchy applies in the following examples.

(6)

a.   there arrived three men (last night) without PRO identifying themselves. (=4a)

b. *I met three men (last night) without PRO identifying themselves.

In (6a), the associate NP *three men* is the controller. Then why can't the NP in the same position cannot control PRO in (6b)? Lasnik (1996a, p. 112) argues that thematic hierarchy plays a role in determining the controller. Rather, we can say that the overt lexical argument is more prominent than the set of FF(*three men*) for some reason.

Lasnik (1996a, p. 111) mentions the less grammatical nature of (6a), that is, (4a). When (4a) and (4b) are compared together, the former is relatively worse but the latter is perfectly grammatical. It might be said that the overt subject NP can control PRO clearly. The controlling power is weak when the controller is the feature set, not the lexical category. Furthermore, the C-command relation is established via adjunction.

Chomsky (1995c, p. 283) gives the right observation such that FF(an associate) adjoins to Infl, not to the expletive specifier *there*. Let's compare his examples again:

(7) (Chomsky 1995c, p. 272)
a. there is a [book missing from the shelf]
b. there seem [t to be some books on the table]

As we pointed out his flaw in the assumption that FF(an associate) raises to the matrix Infl in all these cases, Chomsky wrongly argues that the associate attraction is made to the matrix Infl in (7b). However, this derivation violates the MAP. The MAP allows FF(some books) to raise to the embedded Infl, where t and FF(some books) undergo the Spec-head agreement and the expletive trace transmits FF(some books) to the expletive *there*. Hence, FF(*seem*) is checked off against to the matrix subject indirectly.

Now we can go back to the control and other examples:

(8) (Chomsky 1995c, p. 274)

a. there arrived three men (last night) without PRO identifying themselves (=3a)

b. there arrived with their own books three men from England

(9)

a. They met John (last night) without PRO identifying themselves.

b. They met with their own books three men from England.

When we compare (8) and (9), it seems that the expletive is replaced in (8). However, if MF(three men from England) raises to the matrix Infl, we can have the C-command requirements satisfied in (8). It is not necessary to raise FF(John) or FF(three men from England) to the matrix Infl. It might be said that the subject has primacy among competing controllers, in which case the lexical subject wins out.

Negation scope facts also reflect that some semantic features of negation raise to Infl (or some implicit head of NegP). We may consider (10):

(10) (Lasnik 1995a, p. 71)

a.   The DA proved [noone to be at the scene] during any of the trials

b. *The DA proved [there to be noone at the scene] during any of the trials

If it is assumed that negative features are regarded as FF or MF, it raises to the matrix Infl covertly in (10a) and the negative polarity item is licensed. On the other hand, in (10b) MF(*noone*) raises to the embedded Infl. There is no reason to postulate the covert raising of the [MF(*noone*)-*there*] complex for two reasons. One is that MF raises to the head category. The other comes from the MAP, which says that an associate moves only necessarily.

We also need to consider the perception verb constructions:

(11)

a. John saw a train arrive at the station.

b. *John saw there arrive a train at the station.

If the expletive *there* is replaced by an associate, (11b) might be grammatical. Hence, FF(*a train*) undergoes head movement as a feature attraction, (11b) lacks the embedded Infl. It is possible to say that FF(associate) is attracted to the head of IP.

   The idea that Infl (or T) mediates the associate raising at LF is further supported by the following examples (Jang 1997b):

(12) (Jang 1997a; 1997b, p. 5)

a.   There arrived [a man]

b. *there's arrival (of) [a man]

c. *there arrival of a man

The expletive *there* cannot occur in an NP in its traditional sense. It means that the associate raises to Infl as Attract F. (12b) and (12c) are ungrammatical, because FF(*a man*) cannot be attracted to Infl.

   However, Jang (1997, p. 28) presents the following examples, which are suggested by Chomsky (personal communication).

(13)

a. Damaging evidence about the men came to light during each other's trials.

b. The DA presented damaging evidence about the men during each other's trials.

It has been implied that the binding facts shown above prove anaphors to be bound without being C-commanded by their antecedents. Then the binding theory is ineffective here. However, we might say that MF(*the men*) is percolated through some kind of head-head agreement. The referential properties are soaked into *evidence*, the lexical head of

the whole NP. MF(*evidence*) raises to the matrix tense complex and the C-command and binding effects are derived in the same way.

3. Some Further Questions

It is very easy to know that it is not so easy to explain the scope interpretation in the following sentences (Jang 1995, 1996, 1997).

(14)

a. There is a student in the room.

b. A student is in the room.

(15)

a. There are not many people in the room.

b. Many people are not in the room.

As is wellknown, (14a) has only the nonspecific reading, but (14b) has the specific and nonspecific readings. If the associate or MF(associate) raises to any higher position beyond VP, then we have to get the specific interpretation (Cf. Diesing 1992). Jang (1997) argues that MF(associate) does not raise in (14a) and there is no ambiguous reading. It is meant that the semantic feature of specificity does not raise here, that is, only the formal features of agreement or Case are raised so that the scope interaction may not occur in (14a). He has the same story in (15). The meaning feature of quantification does not seem to raise (15a).

However, we have seen that MF(associate) raises to Infl or Tense. How can we get out of this paradox? There are several possible answers. First, as Jang (1997) suggests, only some relevant features to human language computation raise if they are necessary for checking. Then we may assume that the meaning features of specificity or quantification have no reason to raise to be checked at LF.

Another rather stipulative idea is to assume that the scope interaction occurs only if the operator C-commands its functor asymmetrically. We
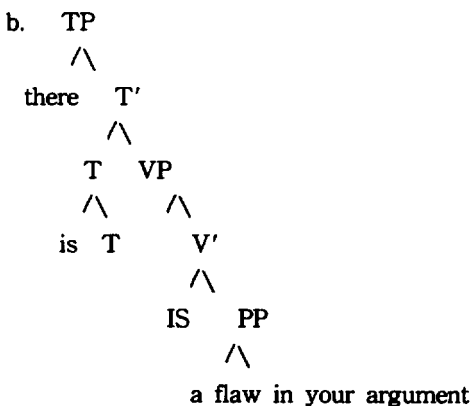
may go back to (14a). If MF(*a student*) is adjoined to *is*, MF(*a student*)
and *is* C-command each other. Hence, the specific reading is not
derived.

The third option is that MF(*a student*) raises to *is* in the VP-internal
position. In other words, MF(*a student*) raises to the copy of *is* in
(14a), which is left after V-to-T raising. If F-attraction can apply to
the copy of the moved element, it shortens the distance of attraction. It
is a byproduct of minimal attraction. To put it differently, this idea is in
harmony with the MAP, because F-attraction does not break the given
chain. If this is correct, we can keep Diesing's (1992) mapping
hypothesis.

If we are on the right track, then the meaning of specificity is not an
inherent semantic property of an indefinite NP. The nonspecific meaning
results from the interaction of the existential verb *be* and the indefinite
NP, for example, when the latter has the wider scope than the former.
In other words, the specific meaning is derived when the indefinite NP
has the wider scope than the verb *be*.

We can show this difference by illustrating the following tree
structure.

(16) a. There is a flaw in your argument.
     b.   TP
          /\
       there   T'
              /\
            T   VP
           /\   /\
          is T   V'
                  /\
                IS   PP
                    /\
                a flaw in your argument

In the above structure, the Spec of VP is ignored and IS is the copy of the actual verb *is*. The associate *a flaw* has the feature set [-pl, +NOM, +N, -Definite, +FLAW] and the main verb *is* has the features like [-pl, +NOM, +V, +EXISTENCE]. As it might be suggested, there is a chain C(*is, IS*) and MF(*a flaw*) raises to *IS*. This raising does not cross over VP and mapping is achieved within VP. Hence, we do not get the ambiguous reading from (16a) naturally.

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

Ahn, Hee-Don. 1997. Yeongeoeul myeongsaguwa ilchiso. (The English NP and Agreement). *Studies in Generative Grammar* 7. 1. Pp. 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. Pp. 385-439.

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

Chomsky, Noam. 1998. Minimalist Inquiries: the Framework. MIT Working Papers in Linguistics.

Chomsky, Noam. 1999. Derivation by Phase. MIT Working Papers in Linguistics.

Collins, Chris. 1995. Towards a Theory of Optimal Derivations. *MIT Working Papers in Linguistics* 27. Pp. 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. Pp. 62-81.

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

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. Leiden. Pp. 101-115.

Lasnik, Howard. 1999. Subjects, Objects, and the EPP. Paper read at the 1999 LSA Workshop.

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

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

Lee, Chongmin. 1998. Minimal Attraction Principle. *Linguistics* 6.1: 389-397.

English Education Department
Chonbuk National University
664-14 1-ga Deogjin-dong Deogjin-gu
Chonju 561-756, Korea
E-mail: chongmin@moak.chonbuk.ac.kr
Fax: 82-652-270-2737