

# An Agree-based Analysis of Raising and ECM in *there*-Constructions\*

Sangoh Lee  
(Howon University)

Lee, Sangoh. 2004. Agree-based Analysis of Raising and ECM in *there*-Constructions. *The Linguistic Association of Korea Journal*, 12(4), 167-185. In this paper, we will examine Chomsky's (2000, 2001a) Agree-based analysis of expletive *there*-constructions, adopting the cyclic movement of *there* in accordance with the conventional approach that  $T_{def}$  has EPP-feature. Then, we will address some problems and suggest other possible approaches. By presenting English expletive constructions, specially referring to the constructions of raising and ECM, I am going to provide an empirical evidence in which the syntactic object selected by a probe for Agree is different from the syntactic object for Move to satisfy the EPP-feature of the same head. In this sense, it can be argued that Move for the satisfaction of EPP of T does not happen as an ancillary operation on Agree, but an independent syntactic operation.. In other words, it is the EPP-feature that is concerned with Move. As a result of this analysis, we can get rid of the inconsistency between Agree and Move in terms of DIC effects.

**Key Words:** Agree, Matching, Probe-Goal,  $T_{def}$ , EPP feature, Raising, ECM, Defective Intervention Constraint(DIC), Minimal Link Condition(MLC), EXPL, PRT

## 1. Introduction

According to Chomsky (2001a), the condition that induces Agree between matching active elements, i.e., matching of Probe-Goal, is given as "the Complete  $\phi$ -feature Hypothesis,"<sup>1)</sup> which observes the condition

---

\*This work was supported by the 2004 Research Grant of Howon University.

1) The hypothesis is given in below on the assumption that Probe and Goal must both be active for Agree to apply.

for Agree between activated elements. Assuming the hypothesis, only a probe with a full complement of  $\Phi$ -features is capable of deleting the uninterpretable feature which activates the matched goal under agreement. It is therefore assumed that the probe with a full complement of  $\Phi$ -features includes finite T (nominative), *v* (accusative), and control T (null). For this reason, Chomsky (2000, 2001a) argues that manifestation of a structural Case, which is an uninterpretable feature of the goal, depends on interpretable features of the probe.

Let's consider the properties of non-control infinitivals ( $T_{def}$ ) and weak expletives EXPL of the *there*-type. According to Chomsky (2000), non-control infinitivals fall into place if T always has at least a minimal feature complement, i.e., only [person] for  $T_{def}$ . For example, move of DP/NP to Spec- $T_{def}$  deletes the  $\Phi$ -set of T (i.e., uninterpretable [person]) but not the structural Case feature of DP/NP, so that DP/NP can undergo further movement and agreement.<sup>2)</sup> The  $\Phi$ -features of infinitival T in raising and ECM constructions are assumed to be incomplete, hence defective. According to a conventional approach, defective T has been assumed to have EPP feature.

Then, what is a defective probe? Chomsky (2000, 2001a) classifies a defective probe as non-control infinitivals T and raising and ECM infinitivals headed by  $T_{def}$ . It is further assumed that a defective probe in the embedded phrase has only [person] feature (i.e., a kind of [D]-feature in Chomsky's (1995) sense). In addition, as another candidate having a defective element, Chomsky analyzes EXPL *there* into having a kind of uninterpretable [person] feature as an  $X^0$  head. That is,  $T_{def}$  and *there* are taken to have only [person] feature.

In sum, when  $\Phi$ -features of probe are complete, they can delete uninterpretable feature of matching goal. Finite T, light verb *v*, and control T are in general  $\Phi$ -complete. In addition, the goal with full complement of  $\Phi$ -features can eliminate uninterpretable features of

---

$\alpha$  must have a complete set of  $\Phi$ -features (it must be  $\Phi$ -complete) to delete uninterpretable features of the paired matching element  $\beta$ .

2) The phase heads *v*/C have no counterpart to  $T_{def}$  with a reduced  $\Phi$ -set, and therefore do not provide an *escape hatch* for successive-cyclic A-movement.

probe. From this point of view, [Spec, T<sub>def</sub>] plays the role as an escape hatch which NP/DP raise to the Spec of T<sub>def</sub> through successive-cyclic A-movement.

## 2. Raising Constructions

Chomsky (2000, 2001a) assumes that *there* is merged into [Spec, TP] to satisfy the EPP requirement. In Chomsky (2000, 2001a) *there* has only [person] feature, while in Chomsky (1993, 1995) *there* has just [D] feature. Further, the weak expletive *there* has neither semantic nor Case feature, its unique role being to check off the EPP feature of T. In addition, it should be noted that some results are expected if EXPL is an X<sup>0</sup> head and its [person] feature is uninterpretable. Therefore, EXPL is capable of probing its domain T' (=D(EXPL)), locating the  $\Phi$ -set of T as the closest goal. From this assumption, if we analyze EXPL *there* into having a kind of uninterpretable [person] feature as an X<sup>0</sup> head, the probe can be the [person] of *there*, and the goal can be that of T<sub>def</sub> as the closest goal. To make our discussion more concrete, let's consider how we might derive (1) from Chomsky's (2000, 2001a) viewpoint.

- (1) There    seems    <sup>t<sub>there</sub></sup>    to    be    a man    in the room.  
       u[person] u[ $\Phi$ -set] u[person]    u[person]    [ $\Phi$ -set]  
                   (EPP)                                   (EPP)            u[Case]

The intermediate structure of (1) will be (2).

- (2) [there        to    be        a man]  
       u[person] u[person]        [ $\Phi$ -set]  
                   (EPP)                    u[Case]

Although the agreement relation between the merged expletive *there* and incomplete category T<sub>def</sub> occur at the stage of the derivation of the example (3) below, *there* bearing u[person] feature as a probe remains undeleted, but u[person] feature of T<sub>def</sub> deletes.

- (3) \*There seems there to be a man in the room.

They do not delete their  $u[\text{person}]$  features simultaneously. This violates "one fell swoop" operation of deletion condition, i.e., maximization principle<sup>3</sup>).

However, this matching relation between *there* and  $T_{\text{def}}$  is not compatible with the requirement that only a probe with a full complement of  $\Phi$ -features is able to delete the uninterpretable features that make the matched goal active. And it is suggested that uninterpretable features of  $\alpha$  must be in an appropriate relation with interpretable features of  $\beta$ . Despite his theory-internal problems, at this stage,  $u[\text{person}]$  feature of the defective T as well as the EPP-feature of the defective T is checked by *there*. Maybe, Chomsky (2000) cannot but assume the following complex derivational situation: in case that

---

3) According to Chomsky (2001a), the contraction between Agree and Move in '*there*-construction' is resolved by "Maximization Principle" (i).

- (i) Maximize matching effects

On this proposal, Chomsky (2001a,b) says, if local (P,G) match and active, their uninterpretable features must be eliminated at once, as fully as possible. Thus, there must be no option of partial elimination of uninterpretable features under local match after the elimination of the remaining uninterpretable features under more remote match. In particular, if probe P requires Move, then the operation must be carried out as quickly as possible. Applying the principle (i) to raising construction with unaccusatives, (iia) converges as (iib).

- (ii) a. [C [T be likely [EXPL to-arrive a man]]]  
 b. there is likely to arrive a man

The head T in the matrix clause has uninterpretable  $\Phi$ -features and an EPP-feature and the EXPL *there* has an uninterpretable  $[\text{person}]$  feature. According to the maximization principle, the local matching occurs between the head T and the  $[\text{person}]$  feature of the nearest EXPL. This leads EXPL to raise to the SPEC position of TP. The operation deletes the EPP-feature of T because of the incompleteness of the EXPL. Therefore, Agree holds between the probe T's  $\Phi$ -features and the more remote goal *man*. As a result, the matching pair the  $\Phi$ -features of T (i.e., the  $\Phi$ -set of T) and the structural Case features of *man* are deleted.

*there* at the Spec of defective T is checked by the u[person] feature of the defective T, the u[person] feature of *there* deletes, then *there* is frozen in place. As a result, EXPL *there* is unable to Move further to satisfy EPP in a higher position, because EXPL *there* is active only when it has u[person] feature. Consequently, a non-convergent derivation will arise, as shown in (3). To avoid the ill-formedness of a sentence like (3), Chomsky cannot but assume a complex argument that the status as a probe of *there* turns into that of a goal at the derivational point of (3). However, the unchecked [person] feature can make *there* keep on activating. That is, according to Chomsky, it is assumed that u[person] feature of *there* remains unchecked since the  $\Phi$ -feature of  $T_{def}$  is incomplete as in (4).

- |                         |          |           |                |              |
|-------------------------|----------|-----------|----------------|--------------|
| (4) [ $T_{comp}$ -seems | there    | $T_{def}$ | be a man       | in the room] |
| u[ $\Phi$ -set]         | [person] |           | [ $\Phi$ -set] |              |
| (EPP)                   |          |           | u[Case]        |              |

For Chomsky's (2000, 2001a) account, a problem occurs when sentence like (3) reaches the derivational point as shown in (4). That is, expletive *there* is merged at the Spec of finite T (i.e.,  $T_{comp}$ ), satisfying the EPP as in (4). However, in this case, the status of u[ $\Phi$ -set] of T as a probe turns into a goal under the assumption that "EXPL is an  $X^0$  head and its [person] feature is uninterpretable, therefore able to probe its domain  $T'$ , locating the  $\Phi$ -set of T as the closest goal". Accordingly, when EXPL *there* merges into the Spec of the matrix clause T, *there* acts as a probe, while the  $\Phi$ -set of T as a goal as shown below in (5). However, it is not consistent with his own position that any full complement of  $\Phi$ -features has to invariably play a role of probe alone. Consider the following sentence from the light of Chomsky's (2000, 2001a) framework.

- |           |                   |             |           |                |              |
|-----------|-------------------|-------------|-----------|----------------|--------------|
| (5) There | $T_{comp}$ -seems | $t_{there}$ | $T_{def}$ | be a man       | in the room. |
|           | u[ $\Phi$ -set]   |             |           | [ $\Phi$ -set] |              |
|           |                   |             |           | u[Case]        |              |

In (5), when *there* merges into the Spec of the finite T, EPP of  $T_{\text{comp}}$  is checked by its  $u[\Phi\text{-set}]$  feature. Under local match, the  $u[\Phi\text{-set}]$  of the matrix  $T_{\text{comp}}$  deletes the  $u[\text{person}]$  feature of *there* at last, but the  $u[\Phi\text{-set}]$  of  $T_{\text{comp}}$  does not delete yet. That is, the  $u[\Phi\text{-set}]$  feature of  $T_{\text{comp}}$  seeks its goal *a man* to enter into the operation of Agree.

However, in this stage, the status of  $u[\Phi\text{-set}]$  of  $T_{\text{comp}}$  changes that of goal in (4) into that of probe in (5), therefore the status of  $[\Phi\text{-set}]$  of the remote NP *a man* becomes a goal. We must notice here that the activator  $u[\text{Case}]$  feature of the lowest NP *a man* is not valued yet at this point. And finally, another operation Agree can hold between the  $u[\Phi\text{-set}]$  of  $T_{\text{comp}}$  and the  $[\Phi\text{-set}]$  of the lowest NP *a man*, deleting the  $u[\Phi\text{-set}]$  of T and structural Case feature of *a man*. In this case, under Chomsky's (2000, 2001a) assumption, an intervention effect between  $T_{\text{comp}}$  and *a man* is not induced, since the trace of *there* is invisible to the operation Agree, in accordance with his Minimal Link Condition (MLC). However, this assumption cannot hold. That is, if we follow Chomsky, we can see that the operation Agree between  $T_{\text{comp}}$  and *a man* does not take place in the stage of (4), but in the stage of (5). Again here, it violates the maximization principle. Furthermore, for the defective intervention effect to be inert, Chomsky (2000, 2001a) has to assume the following unnecessary stipulations.

- (6) a. Only the head of A-chain blocks matching under the MLC.
- b. Maximize matching effects.
- c. The intervention effects is nullified unless intervention blocks remote matching of all features.

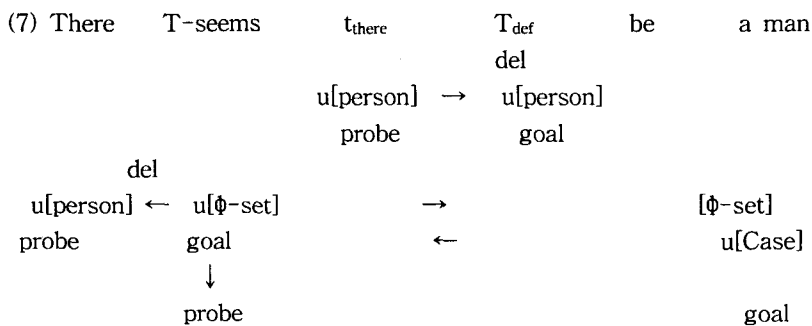
We have to notice that (6b) is nullified by the violation of deletion condition between the expletive *there* and  $T_{\text{def}}$ .

Under Chomsky's (2000) assumption, (6) allows  $u[\Phi\text{-set}]$  of T to probe down and value the  $u[\text{Case}]$  of NP in spite of the intervention of the inactive  $[\text{person}]$  of EXPL in (5).

Unlike Chomsky, I will show in the next section that the inactive

[person] of EXPL *there* intervenes between probe and goal in the case of the operation Move for the satisfaction of EPP. In Chomsky (2000), we have to notice that T's matching feature cannot be a Case feature of DP *a man*, because it is not a closest c-command domain of T due to the existence of the EXPL *there*. Putting this important and immediate problem aside, let us return to the example in (5).

Returning to the stage of (5), the operation Agree which is applied to derive the structure in (1) can be illustrated as in (7), although there seems to make computational burden increase in the complex probe-goal system.



We can draw the conclusion from the above diagram that the operation Move leads us to postulate T's dual Agree as well as dual status of *there*.

EXPL *there* may have two options for Merge in (7); it merges into the Spec of the defective T, or into the Spec of the finite T in accordance with the preference for Merge over Move. Note that Chomsky's (2000) conventional approach assumes EXPL *there* to bear u[person] feature. Chomsky (2000) merges *there* at the Spec of defective T under the assumption that defective T also has u[person] feature, which is checked by the u[person] of *there*. At this stage, EPP-feature of the defective T is also checked by *there*. However, this matching relation is not compatible with the requirement that uninterpretable features of P must be in an appropriate relation with interpretable

features of G.

Chomsky's (2001a) alternative approach assumes that EXPL *there* merges at the Spec of finite T (i.e., T<sub>com</sub>) under the assumption that only a functional head with a complete set of  $\Phi$ -features has EPP-feature. However, in this case, the status of u[ $\Phi$ -set] feature of T as a probe turns into a goal under the assumption that EXPL is an X<sup>o</sup> head and its [person] feature is uninterpretable, therefore able to probe its domain T', locating the  $\Phi$ -set of T as the closest goal.

### 3. ECM Constructions

Let us now consider the following ECM constructions. Sentences such as (8a-b) have a derivation along the lines of (9-12) below.

- (8) a. Mary believes there to be a man in the room.  
 b. Mary believes a man to be in the room.
- (9) a. [T<sub>def</sub> be a man in the room]  
 b. [T<sub>def</sub> be a man in the room]
- (10) a. [*there* t<sub>def</sub> be a man in the room]  
 b. [a man t<sub>def</sub> be t<sub>a man</sub> in the room]
- (11) a. *v*-believe [*there* to be a man in the room]  
 b. *v*-believe [a man t<sub>def</sub> be t<sub>a man</sub> in the room]
- (12) a. [T [<sub>vP</sub> Mary believes [<sub>TP</sub> *there* T<sub>def</sub> be a man in the room]]]  
 b. [T [<sub>vP</sub> Mary believes [<sub>TP</sub> a man t<sub>def</sub> be t<sub>a man</sub> in the room]]]

In (10a), the EPP-feature of T<sub>def</sub> is satisfied by Merge of expletive *there*; in (10b) by raising of the associate nominal *a man*. In (10a), under local match, the [person] feature of *there* deletes the u[person] feature of T<sub>def</sub>, but the u[person] feature of *there* remains unchecked. On the other hand, in (10b) the raised NP *a man* can delete the defective  $\Phi$ -feature of T<sub>def</sub>, i.e., [person], satisfying the EPP-feature of T<sub>def</sub>. After merging the matrix verb, we have the structures in (11). If we merge (11) with T and external argument *Mary*, we have the structures in (12). In (12a), the  $\Phi$ -set of *v* can delete the u[person]



feature of *there*. Although the  $u[\text{person}]$  feature of the expletive is checked off, the  $\Phi$ -set of  $v$  remains unchecked. As a result, under a long-distance match, Agree holds between the  $\Phi$ -set of  $v$  and the  $\Phi$ -set of *a man*, deleting all the uninterpretable features – such as the  $u[\Phi\text{-set}]$  of  $v$  and the structural Case feature of *a man*. In this case, it is clear that *there* cannot induce an intervention effect in the sense of the operation Agree, like *there* in raising constructions.

As regards the absence of intervention effects, Chomsky (2000, 2001) claims that *there* cannot induce an intervention effect because its  $[\text{person}]$  feature is  $\Phi$ -incomplete. Although we can see that *there* in raising constructions does not block the application of Agree between probe and goal, Move for the satisfaction of the EPP-feature takes intervention effect, in the next section. Returning to (12a), we can have a long-distance agreement between the probe,  $\Phi$ -features of  $v$ , and its goal, *a man*. On the other hand, in (12b) under local match, Agree takes place, deleting the  $\Phi$ -set of  $v$  and the structural Case of *a man*. Consequently, the NP *a man* becomes inactive and is *frozen in place*, since its uninterpretable Case feature is deleted. And lastly, in (12) *Mary* moves to the specifier of the matrix T, satisfying EPP, and its Case feature is checked with the  $\Phi$ -features of the matrix T, as in (13).

- (13) a.  $[_{TP} \text{Mary believes } [_{TP} \text{there } T_{\text{def}} \text{ be a man in the room}]]$   
 b.  $[_{TP} \text{Mary believes } [_{TP} \text{a man } T_{\text{def}} \text{ be } t_{\text{a man}} \text{ in the room}]]$

We have seen that *there* in ECM constructions has something in common with *there* in raising constructions in the sense that it does not induce an intervention effect in the operation Agree. That is, Raising and ECM constructions bearing *there* have something in common with each other by the time the derivation reaches in the stage shown above in (11).<sup>4)</sup>

---

4) We need to investigate whether raising and ECM constructions have something in common with each other. In raising construction  $\alpha$  is related with the matrix T, while in ECM construction  $\alpha$  is related with the head of  $vP$  in accordance with Chomsky's (2000) minimal domain condition. That is, *there* must be checked outside

## 4. Analysis

### 4.1. Defective Intervention Constraints Revisited

#### 4.1.1. Agree and DIC in Raising Constructions

Agree is an operation of deleting uninterpretable features under matching of probe with goal. According to the revised notion of Agree, for a matching pair to induce Agree, the goal must be in the c-command domain of the probe. Furthermore, P and G only enter into Agree if the features are activated. Only uninterpretable features activate a whole category, so that it may participate in agreement. For instance, if the interpretable  $\phi$ -features of DP are not activated by an u[Case] feature, they cannot enter into Agree with a probe bearing u [ $\phi$ ]-features. Furthermore, their checked (i.e., valued) features remain visible to the narrow-syntactic derivation within its own *phase* prior to Spell-Out. This blocks further Agree relations over these checked features at a distance, which can be stated in terms of DIC. This assumes that features are deleted within the cyclic computation and remain visible until the immediately higher phase completes. However, to account for the fact that DIC is inert, Chomsky (2001a) assumes the unnecessary stipulations such as the maximization principle and the MLC. Let's consider the example (14).

---

$\alpha$  by T as a head of the TP headed by complete T ( $T_{comp}$ ) in the former, while *there* must be checked outside  $\alpha$  by  $v$  as a head of the  $vP$  headed by complete  $v$  ( $v_{comp}$ ) in the latter. DIC does not block the operation Agree in both raising and ECM constructions. They are invisible for the operation Agree.

Consider the following example.

- (i) a. He believes there to be someone in the backyard  
 b. [<sub>v'</sub> v [<sub>vP</sub> believe [<sub>TP</sub> there T<sub>def</sub> [<sub>vP</sub> be someone in the backyard]]]]

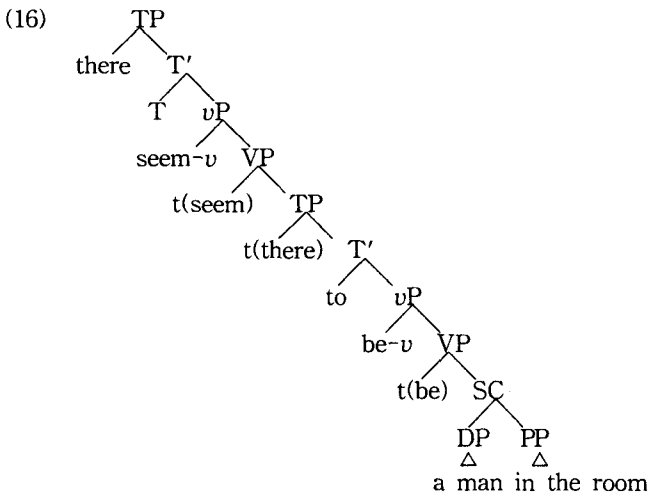
According to Chomsky (2001), there is no intervention effect induced by EXPL in the case of (i). The expletive *there* moves to [Spec,  $vP$ ] when the expletive *there* consists of A-chain and the expletive *there* is the head of the whole A-chain. The expletive *there* is higher than  $v$ . That is why the intervening defective *there* does not induce an intervention effect within Chomsky.

- (14) T seems [ there to be a man in the room ]  
 u[ $\Phi$ -set] u[person] u[person] [ $\Phi$ -set]  
 u[Case]

The operation Agree of (14) proceeds in the following way.

- (15)
- |                  |   |                           |                            |  |
|------------------|---|---------------------------|----------------------------|--|
|                  |   | value                     |                            |  |
| there [person]   | → | T <sub>def</sub> [person] | (T <sub>def</sub> , there) |  |
| probe            |   | delete                    | goal                       |  |
| T [ $\Phi$ -set] | → | there [person]            | (T, there)                 |  |
| probe            |   | goal                      |                            |  |
| T [ $\Phi$ -set] | ↔ | NP u[Case]                | (T, a man)                 |  |
|                  |   | [ $\Phi$ -set]            |                            |  |
| probe            |   | goal                      |                            |  |

In short, in (14) Chomsky assumes that the expletive *there* is not the head of A-chain in accordance with MLC, which is applied only after the movement has occurred.



The expletive *there* has raised to the Spec position of TP of the matrix clause. After this movement, the expletive *there* becomes the head of A-chain and the matching relation holds between the matrix T and *a man*. However, Chomsky assumes that *there* in raising constructions does not induce DIC owing to the maximization principle, though the inactive [person] of *there* intervenes between the matrix T (probe) and the associate NP *a man* in (16).

#### 4.1.2. Agree and DIC in Multiple Participial *there*-constructions

Consider a slightly more complex case of participial passives as in (17a) and (17b) and passive construction with unaccusatives as in (7).

- (17) a. [C [T seem [ EXPL to have been [ caught(PRT) several fish]]]]  
 b. [<sub>IP</sub> v expect [ EXPL to have been [ caught(PRT) several fish]]]]
- (18) a. There is expected to arrive a man.  
 b. T is expected there to arrive a man.
- (19) a. [C [We [<sub>VP</sub> v-expect [EXPL to-arrive a man]]]]  
 b. We expect there to arrive a man.

Again we have a double agreement in (17), that is, the probes (T and v) agree with EXPL and *fish*. T deletes the uninterpretable feature of EXPL and induces raising, as well as assigns Nominative to *fish*, as in (17); v deletes the uninterpretable feature of EXPL but without raising to Spec-v, and assigning Accusative, as in (19). But in (17) there is another possible agreement relation unlike (18) and (19): the participle (PRT) could agree with the direct object (DO) *fish*.

Consider more closely the derivation in (17), repeated here as (20).

- (20) a. [C [<sub>IP</sub> T seem [EXPL to have been [<sub>CP</sub> caught(PRT) several fish<sub>DO</sub>]]]]  
 b. [<sub>IP</sub> v expect [ EXPL to have been [<sub>CP</sub> caught(PRT) several fish<sub>DO</sub>]]]  
 u[ $\Phi$ -set] u[person] u[person] u[ $\Phi$ -](lacking[person]) [ $\Phi$ -set]  
 EPP EPP u[Case] u[Case]

The operation of Agree in the cycle of  $\alpha$  in (20) proceeds as follows:

(21)

PRT [ $\Phi$ -]features:	number, gender	←	value	DO [ $\Phi$ -set] (PRT, <i>fish<sub>DO</sub></i> )
probe			delete	goal

The operation of Agree in the cycle of  $\beta$  in (20) applies in the following way:

(22)

T/v[ $\Phi$ -set]	→	value	there u[person]	(T/v, there)
probe		delete	goal	
T/v[ $\Phi$ -set]	→	PRT u[Case]	(T/v, PRT)	
probe		goal		
T/v[ $\Phi$ -set]	⇔	DO u[Case]	(T/v, <i>fish<sub>DO</sub></i> )	
probe		goal	nom/Acc	

In the first cycle  $\alpha$ , the  $\Phi$ -set of PRT and  $\Phi$ -complete of DO match and Agree, and thus number and gender of PRT receive the value of DO, and then delete. But Case is unvalued for both PRT and DO, and so neither can assign a Case value to each other.

In the next cycle  $\beta$ , there is a double agreement: (probe, *there*) and (probe, DO). At this point, the  $\Phi$ -features of PRT are deleted at stage  $\alpha$  and should therefore be invisible to Match by the probe. However, the Case feature of PRT cannot be valued and the derivation crashes, contrary to the fact.

To solve this problem, Chomsky (2001a) assumes that Spell-Out takes place at the strong phase level. Thus, the  $\Phi$ -features of PRT are still visible at stage  $\beta$  of the cycle, though deleted; they disappear at the strong phase level CP or vP, when the phase is transmitted to the phonological component. At the stage of the cycle  $\alpha$ , the  $\Phi$ -features of

PRT are valued by PRT-DO matching, with the  $u[\text{Case}]$  of PRT not valued, yet.

When the derivation subsequently reaches the derivational point marked  $\beta$ , the  $u[\Phi-]$  features of T value the  $u[\text{person}]$  feature of EXPL, which renders it inactive. At this stage, the probe matches the goal PRT, valuing its Case feature; and the same probe also matches the goal DO, valuing the Case feature of DO as well as its own features, since DO is  $\Phi$ -complete. According to this two-step procedure, at the highest phase level CP/vP, in (20a) and (20b), respectively, the uninterpretable features are eliminated from the narrow syntax as the syntactic object is handed over to the phonological component.

In this sense, the sentences with a participial phrase (20) lead us to the conclusion that triple matching and agreement are possible: (probe, *there*), (probe, DO), and (probe, PRT). PRT and DO agree with one another; directly for number and gender, indirectly for structural Case since each agrees with the same probe. So far we have seen the operation Agree of participial passives under the framework of Chomsky. Now let us return to the relation between Agree and DIC effect in these sentences.

Chomsky (2001a) allows the  $\Phi$ -set of T to enter into the matching relation with the valued  $\Phi$ -features of PRT, though the inactive  $[\text{person}]$  of *there* intervenes between them, in accordance with the maximization principle, and thus the  $u[\Phi]$ -features of T value the  $u[\text{Case}]$  of PRT. In addition, the inactive  $\Phi$ -feature of *there* and PRT may not bar Agree between  $u[\Phi\text{-set}]$  of T and  $\Phi$ -set of *fish*, owing to the maximization principle. Thus, the  $\Phi$ -set of *fish* values the  $u[\Phi\text{-set}]$  of T, with the  $u[\text{Case}]$  of *fish* also valued by the latter. This fact in turn shows that the DIC is inert in this case. That is, Chomsky claims that there is no intervention effect induced by EXPL, or in this case by PRT either. To put it differently, in (17), since there is no raising of PRT, he resorts to the maximization principle in order to account for DIC to be inert in the sentences like (20). Therefore, the maximization principle allows  $u[\Phi\text{-set}]$  of T to probe down and value  $u[\text{Case}]$  of PRT and *fish* in spite of the fact that the inactive  $[\text{person}]$  of EXPL *there* intervenes as in (20).

Consider the following examples.

- (23) a. \*A man T-seems [<sub>TP</sub> *there* to be t in the room]  
 b. \*There T-seems [<sub>TP</sub> *there* to be a man in the room]
- (24) a. \*Several fish T-seem [<sub>TP</sub> *there* to have been [caught (PART) t]]  
 b. \*There T-seem [<sub>TP</sub> *there* to have been [caught (PART) several fish]]

The expletive *there* in raising constructions and participial phrases cannot induce defective intervention effect in the sense of the operation Agree. However, when *there* moves into [Spec, TP] to satisfy the EPP requirement, non-convergent derivations arise, as shown in (23) and (24) above. That is, the intervening *there* does not block the application of Agree between probe (matrix T) and goal (DO), but the situation is different when it moves across an intervening *there*: Move for the satisfaction of the EPP-feature obeys DIC.

This inconsistency between Agree and Move with respect to DIC effects is also shown in *there* of the passive construction as in (18), repeated here as in (25).

- (25) a. There is expected to arrive a man.  
 b. T-is expected there to arrive a man.  
 c. \*A man is expected there to arrive t.

Again this is why Chomsky (2001a) has to assume the unnecessary stipulations such as the maximization principle and the MLC. According to Chomsky (2001), the expletive *there* is the head of the A-chain because the expletive *there* must raise to the Spec position of TP as shown in (25a). The maximization principle induces the raising of expletive and the MLC allows the matching of (T, DO). That is, since expletive is the head of A-chain, it does not induce an intervention effect, blocking Match/Agree of (t, DO). However, in (25c), that the NP *a man* cannot move to the Spec position of the matrix T shows a range of empirical evidence in support of my analysis.

For this reason, two questions arise in this situation. Why is the

expletive *there* "invisible" for Agree between a probe T and its remote NP as a goal as in (25b)? Contrary to this fact, in (25a), why does Move for the satisfaction of the EPP-feature make the expletive *there* remain "visible" to the probe of the matrix T? *There* in raising constructions and participial passives behaves in the same way with the unaccusative raising constructions. These *there*-constructions show that DIC does not block the long-distance agreement between a probe T and its remote associate *a man* across the inactive *there* as in (25b), whereas the movement of the NP *a man* to [Spec, TP] of the matrix clause is barred because the [person] feature of the expletive *there* is visible throughout the computation of (25a-b).

As far as the *there*-movement for the EPP that must raise to the Spec position of TP in *there*-constructions is concerned, I think that it is not necessary for the [person] feature of *there* to be postulated. That is, the expletive *there* in Spec-T does not undergo agreement with T. This inconsistency between Agree and Move is not compatible with Chomsky's (2000, 2001a) assumption that Move is a composite operation consisting of Agree + Identify + Pied-piping.

## 5. Conclusion

By presenting English expletive constructions, I have tried to provide an empirical evidence in which the syntactic object selected by a probe for Agree is different from the syntactic object for Move to satisfy the EPP-feature of the same head. In this sense, it can be argued that Move for the satisfaction of EPP of T does not happen as ancillary operation on Agree, but an independent syntactic operation arising irrespective of the operation Agree. In other words, it is the EPP-feature that is concerned with Move. As a result of this analysis, we can get rid of the inconsistency between Agree and Move in terms of DIC effects.

To clarify my study on the relation between movement and the EPP-feature, I follow the proposal made in Lee (1999a,b) that Move is motivated solely by an EPP-feature in contrast to Chomsky's (2000,



2001a,b) proposal of Move as a composite syntactic operation. In addition, I claim that the movement for the EPP satisfaction that must be raised to the Spec position of TP in *there*-constructions obeys DIC. The following examples provide some supports to this view.

- (26) a. T seems [there to be a man in the room]  
b. [C[T seem [expletive to have been [caught (PRT) several fish]]]]  
c. [<sub>ϕ</sub> v expect [expletive to have been [caught (PRT) several fish]]]]  
d. T is expected there to arrive a man.

It is concluded from the previous discussion that the applicability of raising of the expletive *there* to the Spec-T in raising constructions, participial passives, and unaccusative passives depends upon the possibility of movement for the EPP satisfactions in (26a-d). Based on this fact, I assume that intervening *there* has the effect of restricting of Move for the satisfaction of the EPP in raising constructions.

## References

- Chomsky, N. (1993). A minimalist Program for Linguistic Theory. In K. Hale and S. J. Keyser, eds., *The View from Building 20*, 41-58. Cambridge, Mass.: MIT Press.
- Chomsky, N. (1994). Bare Phrase Structure. *MIT occasional Papers in Linguistics* 5.
- Chomsky, N. (1995). *The Minimalist Program*. Cambridge, Mass.: MIT Press.
- Chomsky, N. (2000). Minimalist inquiries: The framework. In Roger Martin, David Michaels, and Juan Uriagereka, (Eds) *Step by Step: Essays on Minimalist Syntax in Honor of Howard Lasnik*, 89-155. Cambridge, Mass.: MIT Press.
- Chomsky, N. (2001a). Derivation by phase. In Michael Kenstowicz (ed.) *K Hale: A Life in Language*, 1-52. Cambridge, Mass.: MIT Press.

- Chomsky, N. (2001b). Beyond Explanatory Adequacy. Ms., MIT.
- Chomsky, N. and H. Lasnik. (1993). The theory of principles and parameters. In J. Jacobs, A. von Stechow, W. Sternefeld, and T. Vennemann, eds., *Syntax: An International Handbook of Contemporary Research*. Berlin: de Gruyter.
- Collins, C. (1997). *Local Economy*. Cambridge, Mass.: MIT Press.
- Collins, C. (2001). Economy Conditions in Syntax. in M. Baltin and C. Collins, eds., *The Handbook of Contemporary Syntax*, 45-61. Blackwell.
- Epstein, S. D., E. M. Groat, R. Kawashima, and H. Kitahara. (1998). *A Derivational Approach to Syntactic Relations*. Oxford: Oxford University Press.
- Groat, E. M. (1995). English expletives: A minimalist approach. *Linguistic Inquiry* 26, 354-64.
- Groat, E. M. (1999). Raising the Case of expletives. In Samuel David Epstein, and Norbert Hornstein, (eds.) *Working minimalism*, 27-43. Cambridge, Mass.: MIT Press.
- Haegeman, L. (1994). *Introduction to Government and Binding Theory* (2nd ed.). Oxford: Blackwell.
- Hale, K., and S.J. Keyser. (1993). On argument structure and the lexical expression of syntactic relations. In K. Hale and S. J. Keyser, (eds.), *The view from Building 20*. Cambridge, Mass.: MIT Press.
- Lasnik, H., and M. Saito. (1984). On the Nature of Proper Government. *Linguistic Inquiry* 15, 235-89.
- Lasnik, Howard. (1992). Case and expletives: Notes toward a parametric account. *Linguistic Inquiry* 23; 381-405.
- Lasnik, H. (1995a). Case and expletives revisited: On Greed and other human failings. *Linguistic Inquiry* 26, 615-633.
- Lee, H. B. (1997). Economy Conditions in the Minimalist Theory: Local or Global. *Linguistics* 5, 265-287.
- Lee, H. B. (1999a). On Globality. *A Festschrift in Honor of Professor Seunghwan Lee*. Seoul: Hankook Publishing Co.
- Lee, H. B. (1999b). On Defining Move. *Korean Journal of Linguistics* 24-4, 619-37.
- Lee, H. B. (1999c). Agree to Move? *Language Research* 35-4, 523-541.

- Lee, H. B. (2001a). From checking to agreement. *Studies in Modern Grammar* 16, 1-31.
- Lee, H. B. (2001b). *Lectures on Minimalist Syntax*. Seoul: Hanshin Publishing Co.
- Lee, H. B. (2001c). Agreement and Movement. *Korean Journal of English Language and Linguistics* 1-1, 145-162.

Sangoh Lee  
Department of English Language  
Howon University  
727 Impi, Wolha, Kunsan City  
573-718, Korea  
Phone: 82-63-450-7452  
Email: Iso@sunny.howon.ac.kr

Received: 4 October, 2004  
Revised: 22 November, 2004  
Accepted: 29 November, 2004