

# **On Intervention in Move and Agree: A Case of Dependencies across Experiencers\***

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## **Abstract**

The paper examines the varied behavior of A-movement, A'-movement and agreement with respect to the experiencer blocking effect, focusing on a surprising pattern where agreement patterns with A'-movement, but differently from A-movement. It is shown that the existing accounts of the experiencer blocking effect cannot capture the full paradigm in question. A new account is proposed where the locality conditions on Move and Agree are relativized according to their purposes, which also argues for independence of Move and Agree.

*Keywords:* Move, Agree, experiencers, intervention, Superiority effects

## **1. Introduction**

This paper examines locality effects in constructions involving experiencers, which show a surprising pattern where agreement patterns with A'-movement, but differently from A-movement. It will be shown that the surprising pattern can be accounted for if the locality conditions imposed on Move and Agree are relativized according to their purposes. Agree is an operation that gives a value to a feature or features acting as a probe. Therefore, the dependency it creates may be

disrupted by any element with the relevant feature. On the other hand, Move is an operation that dislocates an element to some designated position. So, a locality violation obtains when movement crosses another element that can move to the relevant position. This will be validated based on cross-constructural and cross-linguistic evidence regarding dependencies across experiencer arguments. I show that, though this state of affairs may seem intuitively clear, it poses a number of problems for the previous analyses, including Chomsky's (2000) system of Move and Agree. I develop an alternative analysis under Bošković's (2007) system, where Move and Agree are independent operations.

This paper is organized as follows. Section 2 sets the stage empirically by discussing various types of dependencies across experiencer arguments. Section 3 shows that the previous analyses cannot deal with the phenomena discussed in section 2. Section 4 develops a new analysis. Section 5 concludes.

## **2. Empirical Facts**

This section presents various types of dependencies across experiencers and examines the nature of the locality of Move and Agree.

It is well known that raising in English can apply across an experiencer argument:

- (1) John seems to Mary to be happy.

In (1), the matrix subject *John* licitly moves from the embedded clause across the experiencer argument *to Mary*, which shows that the intervening experiencer does not interrupt A-movement in English. Given this fact, it is rather surprising that the test for Condition C indicates that the experiencer argument c-commands into the embedded clause (Chomsky (1995)),<sup>1</sup> because if the experiencer c-commands

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into the embedded clause, (1) should be ruled out due to a locality violation (e.g. Relativized Minimality (Rizzi (1990)), Minimal Link Condition (Chomsky (1995))).

(2) \*John seems to her<sub>i</sub> to like Mary<sub>i</sub>. (Chomsky (1995))

The above facts are well known. What is generally not discussed is that A'-movement behaves differently from A-movement here. Example (3) shows that A'-movement from the embedded clause is blocked by an intervening *wh*-experiencer, i.e., (3) shows a Superiority effect induced by the experiencer (Collins (2005), Storoshenko (2006)).<sup>2, 3</sup>

(3) \*What does John seem to whom to like *t*? (Storoshenko (2006))

Note that the violation can be remedied by 'extraposing' the experiencer argument so that it no longer intervenes:<sup>4</sup>

(4) What does John seem to like *t* to whom? (Storoshenko (2006))

Turning now to agreement, Boeckx (1999) shows that the experiencer argument also exhibits an intervention effect for Agree (see also Collins (2005)):

(5) a. There seems/\*?seem to Mary to be men in the room.  
b. \*?There seems to be men in the room. (Boeckx (1999))

(5) shows that when there is an experiencer argument, the matrix verb cannot agree with the associate in the embedded clause, resulting in 3sg agreement.<sup>5</sup>

Again, the intervention effect disappears when the experiencer is moved:<sup>6</sup>

(6) To Mary, there seem/\*?seems to be men in the room.

(Boeckx (2008b))

We have seen so far that the experiencer argument in English acts as an intervener for A'-movement and Agree, but not for A-movement. Although it appears surprising, this state of affairs is expected if the locality conditions on Move and Agree are relativized according to their purposes. Since Agree is an operation motivated by feature-valuation, any element with the relevant feature should be an intervener. In the case of (5), the relevant feature is  $\phi$ -features. Therefore, probing induced by the  $\phi$ -features of the matrix T is precluded by the  $\phi$ -features of the experiencer argument. In contrast to Agree, Move is an operation that displaces a given element to a certain position. In (1), *John* undergoes movement to [Spec, TP] of the matrix clause. So movement of *John* should then be blocked by an element that can be moved to [Spec, TP]. Since English does not allow PP subjects (or quirky subjects), movement across the experiencer argument is licit in (1). In the case of A'-movement, movement targets [Spec, CP]. Movement of *what* in (3) is illicit because of the intervening experiencer argument, which can move to [Spec, CP]. Note that this state of affairs basically argues against defective intervention in Chomsky (2000), since it indicates that Move is blocked only by another potentially movable element, i.e. only an active element may be an intervener for Move.

The same kind of conclusion can be obtained from cross-linguistic patterns of movement across experiencer. Ura (1999a) observes that there is a correlation between the availability of quirky subjects and the presence of intervention effects induced by experiencers. Concretely, Scandinavian languages can be classified

into two types according to this correlation. One type is Insular Scandinavian languages (i.e. Faroese and Icelandic), which allow quirky subject constructions (Zaenen et al. (1985)) and disallow raising across an experiencer argument (Sigurðsson (1996), Thráinsson (1979)). The other type is Mainland Scandinavian languages (i.e. Danish, Swedish, and Norwegian), which do not have the quirky subject construction (Holmberg and Platzack (1995)) and allow raising across an experiencer argument (Christensen (1986), Vikner (1995)). The data in (7) show that raising in Icelandic is prohibited when there is an experiencer argument, which itself can undergo movement:

(7) Icelandic

- a. Jón telur [mér<sub>i</sub> virðast t<sub>i</sub> [Haraldur hafa  
 John believes me(DAT) seem(INF) Harald(NOM) have(INF)  
 gert þetta vel]].  
 done this well
- b. \*Jón telur [Harald<sub>i</sub> virðast mér [t<sub>i</sub> hafa  
 John believes Harald(ACC) seem(INF) me(DAT) have(INF)  
 gert þetta vel]].  
 done this well (Thráinsson (1979))

Note that when there is no experiencer, the subject DP in the embedded clause can be raised:<sup>7</sup>

- (8) Haraldur<sub>i</sub> virðist [t<sub>i</sub> hafa gert þetta vel].  
 Harald(NOM) seem(3SG) have(INF) done this well  
 (Ura (1999a))

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- (9) Jón telur [Harald<sub>i</sub> virðast [t<sub>i</sub> hafa gert  
John believes Harald(ACC) seem(INF) have(INF) done  
þetta vel]].  
this well (Ura (1999a))

In contrast to Icelandic, Norwegian and Swedish, which, like English, do not allow quirky subjects, allow raising across an experiencer, again just like English:

- (10) Norwegian  
Jon<sub>i</sub> forkommer oss [t<sub>i</sub> å ha drukket vin].  
John appears us(OBJ) to have(INF) drunk wine  
(Christensen (1986))

- (11) Danish  
a. Sofie<sub>i</sub> forekom ham [t<sub>i</sub> at være helt enig].  
Sofie appears him(OBJ) to be(INF) completely agreed  
(Vikner (1995))  
b. Jan<sub>i</sub> forekommer Marie [t<sub>i</sub> at være træt].  
Jan appears Marie to be(INF) tired (Hartman (2012))

This bifurcation falls into place once we assume that the locality of movement is contravened when a given element moves across another one that can move to the relevant position. Since, in Icelandic, both a quirky experiencer and a subject in the embedded clause can undergo raising, the presence of the former blocks the movement of the latter. On the other hand, an experiencer argument cannot be moved to the subject position in Norwegian and Danish, and therefore it does not block raising.<sup>8</sup>

To summarize, we have seen that cross-constructural patterns from English

and cross-linguistic patterns regarding dependencies across experiencers support the claim made here that locality conditions imposed on Move and Agree are relativized according to their purposes. The intuition here is rather clear. However, its implementation is far from straightforward. The next section reviews previous proposals regarding the relevant phenomena and shows that none of them can account for the facts that we have seen in this section.

### 3. Previous Analyses

#### 3.1. Kitahara (1997), Epstein et al. (1998), Stepanov (2001): Derivational Timing Approaches

Kitahara (1997), Epstein et al. (1998), and Stepanov (2001) all claim that sentences like (12) are grammatical because the experiencer does not c-command into the embedded clause at the derivational point at which raising applies.

(12) John seems to Mary to be happy. [= (1)]

Kitahara (1997) and Epstein et al. (1998) adopt a derivational approach to constraints on movement, and argue that in (12), *Mary* does not block movement of *John* because it is embedded within a PP, and therefore it does not c-command the trace of *John* in the embedded clause. Regarding evidence showing that an experiencer c-commands outside of the PP like (13), they claim that its c-command domain changes at LF.

(13) \*John seems to her<sub>i</sub> to like Mary<sub>i</sub>. [= (2)]

Since the binding theory applies at LF (Chomsky (1993)), the ungrammaticality of (13) is expected if the experiencer c-commands into the embedded clause only in

LF. Kitahara (1997) and Epstein et al. (1998) implement this by arguing that the experiencer adjoins to the preposition in LF, and that the preposition is deleted in LF, respectively. On the other hand, Stepanov (2001) argues that the experiencer PP is an adjunct and can be late-merged in the sense of Lebeaux (1988). Under Stepanov's (2001) account, (12) is grammatical because *to Mary* is absent from the structure when the raising takes place.

These analyses have the virtue of accounting for the apparently contradictory data, (12) and (13). They, however, cannot explain why there is a discrepancy between A-movement and A'-movement regarding the experiencer blocking effect: Under this approach, (3) should be acceptable on a par with (12). Furthermore, these analyses say nothing about the cross-linguistic variation noted in the previous section.<sup>9</sup>

### **3.2. Ura (1999a): A Parameterized Agree Approach**

Ura (1999a) develops his analysis by extending Chomsky's (2000) mechanism of Agree. He proposes a parameter with regards to what features count in determining the closest element for the purposes of Agree. According to this parameter, in some languages, it is both Case- and  $\phi$ -features, and in others, it is only  $\phi$ -features, that are involved in determining the closest goal for Agree. Ura connects this parameter with another hypothesis regarding the availability of quirky subject constructions (Ura (1996, 1999b)). His hypothesis is that "a language  $L_1$  allows QSC [Quirky Subject Constructions] if and only if T's Case-feature and  $\phi$ -features are allowed to establish a checking relation separately from each other in  $L_1$ ." Accepting this hypothesis, in Mainland Scandinavian languages (i.e. Danish, Swedish, and Norwegian), an element must have both Case- and  $\phi$ -features to be the closest target of Agree because Mainland Scandinavian languages do not have quirky subject constructions. On the other



hand, Insular Scandinavian languages (i.e. Faroese and Icelandic), which allow quirky subject constrictions, need only  $\phi$ -features for an element to be the closest target of Agree.

Furthermore, Ura (1999a) assumes that oblique (quirky) case is assigned via theta-role assignment, and that it makes the Case-feature invisible to the search of Agree. Then, it follows that Mainland Scandinavian languages do not show intervention effects with experiencers since in these languages both Case- and  $\phi$ -features are needed for an element to be the goal of Agree, but the experiencers' Case feature is invisible. On the other hand, Insular Scandinavian languages exhibit an intervention effect with experiencers because only  $\phi$ -features suffice for an element to be the target of Agree.

Ura's (1999a) analysis is intriguing in that it makes the correct prediction for the cross-linguistic variation he observes. However, his analysis cannot be extended to the cross-constructural variation within English. Specifically, it is not clear why there is a difference between A-movement and Agree in English (14):

- (14) a. John seems to Mary to be happy. [= (1)]  
b. There seems/\*?seem to Mary to be men in the room. [= (5a)]

Since experiencers do not block A-movement, they should not block Agree either.

More generally, the difference in question poses a serious problem for analyses in which Agree is a subcomponent of Move, as proposed in Chomsky (2000). This type of analyses predicts that whenever there is a violation caused by Agree, we should have a violation with Move, which is not the case as the contrast in (14) shows. This also argues for a dissociation of Move and Agree (Bošković (2007)).

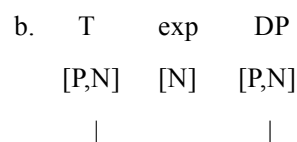
### 3.3. Boeckx (2008b): A Feature-based Relativized Minimality Approach

Boeckx (2008b) adopts the framework of Chomsky (2000), but he avoids the aforementioned problem of this framework by arguing that the contrast in (14) arises because different features do the probing in these examples. Specifically, he argues that person- and number-features act as a probe in (14a), but only the number-feature acts as a probe in (14b). This has ramifications for locality. Boeckx adopts the feature-based version of Relativized Minimality by Starke (2001). In this version, the dependency shown in (15a) is excluded as a Relativized Minimality violation. However, the dependency in (15b) is regarded as legitimate because of the presence of  $\beta$ , which is absent in an intervener.

- (15) a. \*  $\alpha$   $\alpha$   $\alpha$   
           |\_\_\_\_\_|  
       b.  $\alpha\beta$   $\alpha$   $\alpha\beta$   
           |\_\_\_\_\_| ( $\alpha$  and  $\beta$  express a feature type)

In explaining the contrast in (14), Boeckx also makes an assumption that the experiencers' person-feature becomes 'transparent' by being Case-marked by a preposition. Under these assumptions, the derivation of (14b) involves the configuration in (15a), where a violation of Relativized Minimality occurs. On the other hand, such a violation does not take place in the derivation of (14a) because of the person-feature in T.

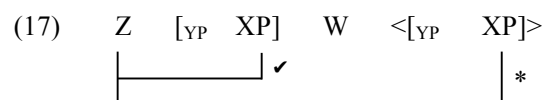
- (16) a. \* T exp DP  
           [N] [N] [N]  
           |\_\_\_\_\_|



Boeckx's proposal is very interesting since it solves the problem residing within the framework of Chomsky (2000), accounting for the contrast in (14). Furthermore, it straightforwardly accounts for the case of A'-movement. It is, however, not without problems. First, the assumption regarding the featural content of experiencers is rather dubious since person-features of experiencers are interpretable, and therefore there is no reason for them to be syntactically inactive. Second, this analysis makes a prediction that in languages where an experiencer is realized as DP, not as PP, blocking effects by experiencers should be observed. This prediction, however, is not borne out. We have already seen in section 2 that Norwegian and Danish allow raising across experiencers. Crucially, experiencers in these languages are not introduced by prepositions (see Ura (1999a) for arguments against the claim that the experiencers in these languages are selected by null prepositions).

### 3.4. Collins (2005): A Smuggling Approach

Collins (2005) accounts for the absence of intervention effects in (1) by proposing a derivational step he calls smuggling. Its gist is illustrated below:



Suppose that Z is a target of movement of XP and W is an intervener for this movement. Then movement of XP from within the lower YP is impossible

because of intervention. However, once movement of YP ‘smuggles’ XP above W, movement of XP becomes possible from that position.<sup>10</sup>

The derivation of raising proceeds as follows:

(18)

- a. The embedded clause is derived as generally assumed, and is selected by the raising verb

[<sub>VP</sub> seem [<sub>IP</sub> John to be <John> nice]]

- b. *John* moves to [Spec, VP]

[<sub>VP</sub> John [<sub>V'</sub> seem [<sub>IP</sub> <John> to be <John> nice]]]

- c. ‘Extrapolation’ of the infinitive applies

[<sub>XP</sub> [<sub>IP</sub> <John> to be nice] [<sub>X'</sub> X [<sub>VP</sub> John [<sub>V'</sub> seem <IP>]]]]]

- d. The experiencer argument is introduced into ApplP

[<sub>AppIP</sub> Mary [<sub>AppI'</sub> Appl [<sub>XP</sub> IP [<sub>X'</sub> X [<sub>VP</sub> John [<sub>V'</sub> seem <IP>]]]]]]]

- e. *v* is introduced and VP is moved into its Spec (smuggling)

[<sub>VP</sub> VP [<sub>V'</sub> v [<sub>AppIP</sub> Mary [<sub>AppI'</sub> Appl [<sub>XP</sub> IP [<sub>X'</sub> X <VP>]]]]]]]

- f. *I* is introduced and *John* is moved into its Spec

[<sub>IP</sub> John [<sub>I'</sub> I [<sub>VP</sub> [<sub>VP</sub> <John> [<sub>V'</sub> seem <IP>]]] [<sub>V'</sub> v [<sub>AppIP</sub> Mary [<sub>AppI'</sub> Appl [<sub>XP</sub> IP [<sub>X'</sub> X <VP>]]]]]]]

The smuggling approach accounts for the cases involving Agree as well as those of A-movement. In the derivation of *there*-constructions, an associate stays within the embedded clause. So the series of movements of the noun phrase illustrated in (18) cannot apply, which means that the associate is within IP that sits in [Spec, XP] at the derivational point of (18f). Since IP in [Spec, XP] is c-commanded by the experiencer, the intervention effect in Agree is captured. However, this approach also has a number of problems. First of all, there is the issue of the

absence of Freezing effects, i.e. the ban on extraction out of moved elements (Takahashi (1994), Wexler and Culicover (1980)). Given this ban, a smuggled element should be trapped within the move element (Collins (2005) notes this issue). Second, even putting this issue aside, it is not clear why smuggling of *wh*-elements is impossible. If a *wh*-element originating in the embedded clause can adjoin to VP in (18b) and then be smuggled in (18e), the Superiority effect we saw in (3) should not arise. Finally, implications of the smuggling approach for the cross-linguistic variation are unclear, especially for Ura's (1999a) observation regarding quirky subject constructions and intervention effects.

To summarize, we have seen that all of the previous analyses have difficulties in accounting for the data we have seen in section 2. In the next section, I present an alternative analysis based on the framework of Bošković (2007).

#### **4. Proposal**

This section presents my proposal regarding the locality of Move and Agree. I adopt the framework of Bošković (2007), where Move and Agree are independent operations.

Bošković (2007) argues that Move is driven by an uninterpretable feature of the moving element. In his system, Agree is not a prerequisite for Move, in contrast to Chomsky (2000), where Move is a composite operation that contains Agree as its subcomponent. Under Bošković's (2007) system, it is reasonable to expect that Agree and Move can be subject to different locality conditions since they are independent. Thus, his system fits well with the facts we have seen in section 2, where the locality of Move and Agree are divorced. In contrast, Chomsky's (2000) conception of Move has a difficulty in explaining these facts, as we have argued in section 3.2. Bošković (2007) further assumes that there is a two-way correlation between acting as a probe and bearing an uninterpretable

feature (see also Epstein and Seely (1999)). This means that an element with an uninterpretable feature must have its target of Agree in its c-command domain.

Under this framework, Move takes place under two kinds of circumstances. First, an element with an uninterpretable feature can be moved to the phase edge to escape the Phase Impenetrability Condition (Chomsky (2000)) effects (i.e., to escape being sent to Spell-Out, in which case its uninterpretable features would never get checked, causing a crash):

- (19) a.  $[_{XP} \dots X \dots Y_{[uF]}]$  XP = phase  
 b.  $[_{XP} Y_{[uF]} X \dots t]$  XP = phase, highlighted part sent to Spell-Out

Second, an element with an uninterpretable feature can undergo movement to get into a configuration in which Agree is possible i.e., a configuration in which the element in question c-commands the target of Agree.

- (20) a.  $[_{XP} \dots X_{[iF]} \dots Y_{[uF]} \dots]$   
 b.  $[_{XP} Y_{[uF]} X_{[iF]} \dots t \dots]$   
 c.  $[_{XP} Y_{[uF]} X_{[iF]} \dots t \dots]$

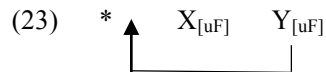
In sum, Bošković (2007) proposes a system in which Agree applies when an uninterpretable feature c-commands its goal as in (21a), whereas Move applies when an uninterpretable feature does not c-command any goal as in (21b). Move then takes place to create a configuration in which the application of Agree is possible, i.e. (21a).

- (21) a.  $X_{[uF]} \quad Y_{[iF]}$   
 b.  $X_{[iF]} \quad Y_{[uF]}$

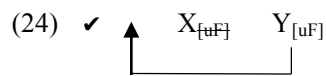
Under this framework, I propose the following locality condition on Move:

- (22) An element cannot move across a c-commanding element with the same type of unvalued uninterpretable feature that motivates the movement.

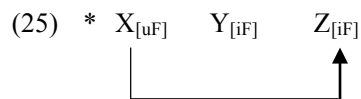
Schematically, (22) prohibits the following configuration:



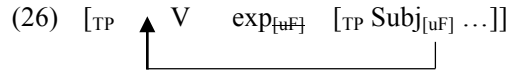
Note that when X's [uF] is given a value, Y's movement is licit.



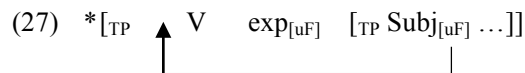
For the locality of Agree, I adopt the widely held condition that Agree takes place under closest c-command and matching. This prohibits the following configuration:



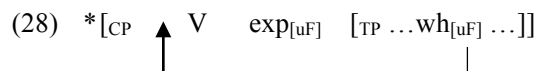
Let us see how these locality conditions account for the facts discussed in section 2. In English and the Mainland Scandinavian languages, the experiencer arguments cannot move to [Spec, TP]. I take this fact to mean that the experiencer argument in these languages has its Case-features valued in its base position. So movement across an experiencer is licit.<sup>11</sup>



On the other hand, in Insular Scandinavian languages, quirky subjects can move to [Spec, TP]. Following a number of authors (Bejar and Massam (1999), Belletti (1988), Bošković (2002), Chomsky (2000, 2008), Cowper (1988), Frampton and Gutman (1999), Freidin and Sprouse (1991), Williams (2006)), Bošković (2007) assumes that quirky subjects are DPs with an inherent case and a structural Case. The former is valued immediately when the DP is introduced into the derivation and the latter gets valued later.<sup>12</sup> This conception of quirky subjects predicts that movement across an experiencer causes a violation of the locality of movement.



The pattern of A'-movement in English follows in the same way. Assume that English *wh*-phrases have an uninterpretable feature, which is involved in, and motivates, *wh*-movement. Then Superiority effects arise as a violation of the locality condition on movement:



Note that for this account of Superiority to be feasible, we must assume that all *wh*-phrases have an uninterpretable feature<sup>13</sup> and therefore move to the initial position of the clause. This account necessitates assuming that in English only the highest *wh*-phrase in [Spec, CP] can be pronounced and the other *wh*-phrases take the option of lower copy pronunciation (see Nunes (2004) and references therein), which was in fact argued for by Pesetsky (2000) on independent grounds.

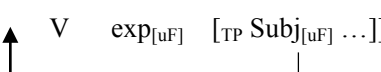
At this point, we need to examine the constructions like Icelandic (29),



where the experiencer argument appears to stay in its base position:

- (29) Það virðist einhverjummanni [ hestarnir vera seinir]  
 EXPL seems some man.DAT the-horses.NOM be slow  
 (Holmberg and Hróarsdóttir (2004))

Above, I have argued that in Icelandic, A-movement across the experiencer argument is illicit because it is an instance of the prohibited configuration in (22):

- (30) \* $[_{TP} \uparrow V \text{ exp}_{[uF]} [_{TP} \text{ Subj}_{[uF]} \dots]]$  [= (27)]
- 

Notice that for this argument to go through, the experiencer argument must always have a structural Case. If a quirky subject optionally bore an uninterpretable Case feature, then raising across the experiencer would be possible, contrary to the fact (This situation is parallel to the Superiority we have just discussed). So, the question arises as to why the experiencer argument in (29) remains in-situ. I would like to suggest here again that the element with an uninterpretable feature (i.e. the experiencer) undergoes syntactic movement, but the pronunciation of its copy is under the influence of a factor relevant to PF.

Chomsky (1995) discusses the multiple subject construction in Icelandic in the context of exploring the consequence of his proposal regarding the elimination of Agr from the lexical inventory. The early minimalist program (Chomsky (1993)) postulates an Agr-phrase above TP, and the transitive subject construction in Icelandic was argued to have the following structure (Bobaljik and Jonas (1996)):

- (31) a. Það klaruðu margarmýs lalveg ostinn  
 there finished many mice completely the.cheese  
 (Bobaljik and Jonas (1996))
- b. [<sub>AgrP</sub> there finished [<sub>TP</sub> many mice [<sub>AgrP</sub> ....

Once Agr loses its status as a head represented in the phrase structure (see Chomsky (1995) for arguments to this effect), however, this analysis becomes unavailable. The elimination of Agr leads to the prediction that the observed order should be as in (32a), not as in (32b).


- (32) a. Expletive [Subj [T XP]]  
 b. Expletive T Subj XP

Chomsky (1995) suggests that (32a), with multiple specifiers of TP, is actually the correct structure in narrow syntax, but we get the word order in (32b) because of permutation at PF motivated by the verb-second property. Bošković (2001, 2002) pursues the same strategy and argues that Subj in (32a) gets pronounced at its lower copy position, i.e. that this is an instance of lower copy pronunciation.

- (33) [<sub>TP</sub> Expletive [<sub>T</sub> ~~Subj~~ V [<sub>VP</sub> Subj ...

Since this analysis is straightforwardly extendable to (29), I continue to assume that experiencer arguments in Icelandic always have a structural Case feature.

Finally, the agreement patterns in *there*-constructions in English are also expected. Since Agree takes place under closest c-command and matching, the intervening experiencer blocks agreement between T and the associate.

$$(34) \quad *[_{TP} T_{[uF]} \text{ exp}_{[iF]} \ [_{TP} \text{ associate}_{[iF]}]]$$


The proposed analysis thus accounts for the full paradigm regarding experiencer blocking effects with A-movement, A'-movement and Agree.

## 5. Conclusions

Based on the varied behavior of A-movement, A'-movement, and agreement with respect to the experiencer blocking effect, this paper has proposed that the locality conditions on Move and Agree are different. Their locality conditions are closely related to the purposes of these operations. I have also shown that these conditions naturally fall out from Bošković's (2007) system. The present discussion of blocking effects by experiencers also argues for independence of Move and Agree.

Another important consequence of the present paper is that it suggests the elimination of defective intervention effects from the theory of grammar. Of course, the facts discussed in this paper do not exhaust all of the cases regarding defective intervention, and there are a number of other relevant constructions (Anagnostopoulou (2003), Hartman (2012), Bruening (2014), among many others). Discussion of these from the present perspective awaits future research.

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### Notes

1) Collins (2005) and Storoshenko (2006) show that other tests, like the licensing of negative polarity items and bound variable readings, give the same result:

- (i) a. John seems to nobody to like anything.
- b. John seems to every boy<sub>i</sub> to like him<sub>i</sub>. (Storoshenko (2006))

2) Collins (2005) and Storoshenko (2006) note the fact in (3), but they do not analyze (or discuss) it in terms of its relevance for experiencer blocking effects.

3) Movement of *to whom* in (3) leads to a marginal status, but there is a clear contrast between (3) and (i):

- (i) ? To whom does John seem to like who?

The marginality of (i) may be due to the fact that movement of *to whom* itself is not perfect:

- (ii) ? To who(m) does John seem to be smart? (Stepanov (2001))

4) Example (4) shows that an ‘extraposed’ experiencer does not c-command into the embedded clause. Other tests for c-command lead to the same conclusion (Storoshenko 2006).

- (i) a. \* John seems to like anything to nobody.
- b. \* John seems to like him<sub>i</sub> to every boy<sub>i</sub>. (Storoshenko (2006))

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I assume, following Storoshenko (2006), that sentences in (ii) have different base-structures, whose relevant parts are shown in (iii):

- (ii) a. John seems to Bill to like Mary.  
 b. John seems to like Mary to Bill.
- (iii) a. VP  
 PP V'  
 exp V TP  
 seem
- b. VP  
 TP V'  
 V PP  
 seem exp

A fact regarding extraction also supports this conclusion. If sentences like (iib) were derived via rightward movement of the experiencer, subextraction from the PP should be impossible because of the ban on extraction from moved elements (Takahashi (1994), Wexler and Culicover (1980)):

- (iv) The woman whom<sub>i</sub> John seems to like coffee to t<sub>i</sub> kept refilling his cup.  
 (Storoshenko (2006))

- 5) Boeckx (1999) argues that 3sg agreement in (5a) is default agreement.
- 6) Boeckx (2008b) reports that there are no intervention effects when experiencers are pronominal:

- (i) There seem/\*?seems to her to be two men in the room.

He claims that unstressed pronouns in English are like clitics and that the pronoun in

(i) has undergone movement. Based on (i) and (6), he argues that raised experiencers cease to be an intervener. For analyses of the lack of intervention effects when interveners are raised, see Boeckx (2008b) and Bošković (2013).

7) As Holmberg and Hróarsdóttir (2004) observe, the experiencer argument in Icelandic also blocks Agree. In (i), the matrix verbs show agreement with the subject within the embedded clause. This kind of agreement is unavailable in (ii), where the dative experiencer intervenes and the matrix verb bears default 3sg form.

(i) Mér virðast  $t_{NP}$  [hestarnir vera seinir].  
 me.DAT seem-PL the-horses be slow  
 (Holmberg and Hróarsdóttir (2004))

(ii) Það virðist/\*virðast einhverjum manni [hestarnir vera  
 EXPL seems/seem some man.DAT the-horses.NOM be  
 seinir].  
 slow (Holmberg and Hróarsdóttir (2004))

8) Ura (1999a) notes that this pattern is also observed within Romance languages. Specifically, he argues that Italian and Spanish have the so-called dative subject construction and show intervention effects in raising, whereas French lacks both of them. Though Ura takes French as a language with no experiencer blocking effects under raising, citing Rouveret and Vergnaud (1980) and Vergnaud (1985), this is controversial. Other literature reported that French raising does not allow an experiencer to co-occur with it (see Chomsky (1995), for example). Also, there is a controversy as to whether ungrammaticality caused by experiencers in Romance languages is due to locality effects imposed on movement. See Bruening (2014) for discussion.

9) Boeckx (1999) claims that the data in (i) poses a problem to Kitahara (1997) and Epstein et al. (1998).

(i) [Picture of himself]<sub>i</sub> seem to John [<sub>t<sub>i</sub></sub> to be ugly] (Boeckx (1999))

His argument runs as follows. First, he assumes, following Chomsky (1995) and Lasnik (1999), that there is no reconstruction with A-movement. Then, the anaphor *himself* must be licensed before the raising to the matrix clause takes place. This requirement, however, is at odds with the assumption that Kitahara (1997) and Epstein et al. (1998) make to allow the raising across the experiencer: that the experiencer does not c-command into the embedded clause at the derivational point of raising.

Boeckx's argument crucially depends on the validity of the claim that reconstruction is unavailable to A-movement. This is, however, far from clear. See Iatridou and Sichel (2011) and references cited there for arguments for reconstruction in A-chains.

10) Crucially, Collins (2005) assumes that there is no freezing effect in the sense of Culicover and Wexler (1980) for smuggling, i.e. there is no ban on extraction out of moved elements, for otherwise a smuggled element would be trapped within the moved element, which would constitute an island.

11) Recall that the situation in (24) argues against defective intervention. The absence of defective intervention for Move is in fact expected under Bošković's (2007) system, because he eliminates the Activity Condition (Chomsky (2000)) as an independent principle for Move, and therefore the notion of 'activeness' or 'defectiveness' loses its theoretical status.

12) Among other things, this dual status of quirky subjects is motivated by the fact that quirky subjects in Icelandic show freezing effects with A-movement. Specifically, like structurally Case-marked NPs (ib), once they reach a Case-checking position, they become frozen for purposes of A-movement (ia):

- (i) a. \**Í dag hefur Jóni virst [t var hjápað].*  
today has John.DAT seemed was helped  
b. \*Today, John seemed [t was helped] (Boeckx (2008a))

13) In this respect, I depart from Bošković (2007). His original proposal is that English *wh*-phrases optionally have an uninterpretable feature that motivates *wh*-movement. A question like (i) is then derived when *who* has an uninterpretable feature, but *what* does not.

- (i) Who bought what?

Bošković's assumption has a problem in accounting for Superiority effects in examples like (ii). Suppose now that instead of *who*, only *what* has an uninterpretable feature. Then we get the sentence in (ii), where a violation of Superiority occurs:

- (ii) \*What did who buy?

This sentence has no problem in terms of feature-checking under Bošković's analysis: *what* has its uninterpretable feature checked as a consequence of *wh*-movement and *who* does not have an uninterpretable feature. Thus, in order to deal with cases of Superiority (and those of movement across experiencers uniformly), I differ from Bošković's (2007) in assuming that the presence of the relevant uninterpretable feature



is not optional with English *wh*-phrases (Bošković (2007) is forced to adopt additional assumptions to deal with Superiority, which is not necessary under the current analysis. See footnote 36 in Bošković (2007) for discussion on how to deal with Superiority effects under his original proposal).

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