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## Neither Unified Nor Free

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# Neither Unified Nor Free: Some Inconsistencies in Problems of Projection

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Jae-Young Shim. 2016. Neither Unified Nor Free: Some Inconsistencies in Problems of Projection. *Studies in Modern Grammar* 91, 151–166. This paper examines the validity of the two claims advocated in Chomsky (2014) and address some inconsistencies in these claims. One claim concerns the proposed unification of the Extended Projection Principle (EPP) and the Empty Category Principle (ECP) under the labeling theory Chomsky advances in the paper. This paper shows that the EPP and the ECP are not in fact given a unified account under labeling theory as proposed but rather they are still approached by the two independent principles, i.e. the EPP by labeling and the ECP by the Phase Impenetrability Condition. The other claim that this paper investigates is on the proposal that the operation Merge can apply freely in relation to other operations in the syntax. This paper shows that at least in certain cases, the timing of the application of Merge cannot be free but should instead be constrained, especially in relation to the operation of Labeling Algorithm.

[Key words: unification, EPP, ECP, free Merge, internal Merge, labeling theory, rule ordering]

## 1. Introduction

Chomsky (2014) claims that the two seemingly independent phenomena of the Extended Projection Principle (EPP) and the Empty Category Principle (ECP) should and can be given a unified account under the same principle that he calls a labeling theory. The rationale behind the unification is that both the EPP and the ECP satisfy the same condition, i.e. the condition that "the SPEC position in [C [SEPC-TP]] must be overtly filled" (Chomsky 2014: 6). This paper shows, however, that the proposed account does not in fact 'unify' the two phenomena but it still is an approach where each phenomenon is dealt with by two independent principles, that is, the EPP is accounted for from labeling considerations, while the ECP is dealt with by the Phase Impenetrability Condition (PIC).

Chomsky (2014) also claims that the timing of the application of Merge is free in relation to other operations in the syntax with the legitimacy of the outcome evaluated at the interfaces. If this claim of '(order–)free Merge' is on the right track, the operation Merge is expected to apply (freely) either before or after other operations and any ill–formed expressions that result from a wrong ordering of Merge can/should nonetheless be ruled out at the interfaces. This paper shows, however, that the timing of the application of Merge cannot be free but it should be constrained in relation to other syntactic operations, especially in relation to the Labeling Algorithm.

The organization of the paper is as follows. In chapter 2, we briefly outline the labeling theory advanced in Chomsky (2013, 2014). In chapter 3, we discuss three issues, i.e. the EPP, the ECP and the notion of free Merge and examine the analyses of each of them proposed in Chomsky (2014). Chapter 4 discusses 1) the proposed unification of the EPP and the ECP and 2) the claim of free Merge and shows that neither claim is genuine.<sup>1</sup> Chapter 5 concludes the paper.

## 2. Labeling Algorithm in Chomsky (2013, 2014)

Chomsky (2013, 2014) claim that a syntactic object (SO) requires a

<sup>&</sup>lt;sup>1</sup> As an anonymous reviewer rightly pointed out, this paper only reveals inconsistencies in the two claims in Chomsky (2014) without providing an alternative account for the claimed inconsistencies. As is referred to at the outset of this paper, however, the very goal of this paper is to critically examine the two claims and to address yet-to-be-noticed inconsistencies in them, not to present an alternative account of them. I will, unfortunately, leave for future research an alternative analysis of the problems discussed in this paper.

label for it to be interpreted at the two interfaces, the Sensorymotor (SM)<sup>2</sup> and the Conceptual–Intentional (CI) interface. He further proposes that identification of a label of an SO is performed by a device that he calls a Labeling Algorithm (LA). LA, which is assumed to apply at the phase level as other operations in the syntax, seeks in principle the least embedded (unique) head H in a given SO, identifying H as the label of the SO. Consider the two SOs in (1) to see in more detail how LA works (H=head; XP, YP=non-heads):

(1) a. SO1 = {H, YP} b. SO2 = {XP, YP}

In (1a), there are two heads, H and the head Y of YP. LA in this case selects H as the label of SO1 because H, not Y, is the closest or the least embedded (unique) head to the eye of LA. In (1b), however, the two heads, namely, X and Y, are equally embedded in the structure so that the identification of a label becomes ambiguous. Chomsky (2014) presents the following two ambiguous contexts where a unique label can, nonetheless, be identified by LA ( $\langle XP \rangle$ =copy of XP; F=a prominent agreeing feature).

(2) a. XP [<sub>α</sub> (XP) YP ]
 b. [<sub>β</sub> XP<sub>[F]</sub> YP<sub>[F]</sub> ]

Unlike XP in (1b),  $\langle XP \rangle$  in SO= $\alpha$  in (2a) is the copy of the moved XP. Chomsky (2014) claims that the head Y is unambiguously identified as the label of  $\alpha$  in (2a) given the assumption that copies such as  $\langle XP \rangle$  are invisible to LA. The other case, where the identification of a label seems ambiguous but a unique label can nonetheless be identified, is (2b) where the two heads

<sup>&</sup>lt;sup>2</sup> For the labeling requirement at SM, Chomsky (2014: 4) writes that "labeling is required [...] for the processes of externalization (though not at SM, which has no relevant structure)." Though interesting, we will not pursue the questions such as what (interpretive) role a label of SO may play in externalization.

share an agreeing feature F (although neither XP nor YP is a copy). In this case, the pair of the shared (agreeing) feature between X and Y (i.e.  $\langle F, F \rangle^3$ ) is assumed to be identified by LA as the label of  $\beta$ .

3. EPP, ECP, and Free Merge

3.1. EPP

Since the advent of the Minimalist Program (MP, Chomsky 1995) the EPP requirement that SPEC-TP be overtly filled has long been argued to be a phenomenon resulting from the effect of some ad hoc features such as the EPP-feature and the Edge Feature of a functional head (Chomsky 2001, 2008). Chomsky (2013, 2014), however, present an alternative analysis of this persistent puzzle of the EPP in terms of the labeling theory he develops. Consider:

- (3) a. John kicked the ball.
  - b.  $[_{\alpha}$  John  $[_{v*P^4} v^* ... ]], \alpha = \{XP(=John), YP(=v^*P)\}$

c. [<sub>TP</sub> John T [ $_{\alpha}$   $\langle$ John $\rangle$  [ $_{v^*P}$  v\* ... ]]],  $\alpha = \{\langle XP \rangle, YP\}$ 

At some point of the derivation of (3a),  $SO=\alpha$  in (3b) is constructed, which is the unlabelable form of {XP, YP}. If *John* in SPEC-v\*P moves out of  $\alpha$ , however, the structure of  $\alpha$  turns into a labelable one as the copy *(John)* left in SPEC-v\*P is (assumed to be) invisible to LA. Chomsky (2013: 44) consequently argues that "EPP [i.e. Internal Merge (IM) of *John* to SPEC-TP in (3c)] is forced in this particular case" and

<sup>&</sup>lt;sup>3</sup> Although the label is indicated in angle brackets, it is not clear that the notation also implies any order (i.e. an 'ordered' pair) between the features inside. Whether the features are ordered or not, however, will not seem to make any difference because they are identical to each other.

<sup>&</sup>lt;sup>4</sup> The notations such as TP and  $v^*P$  are only for expository convenience as we do not assume that there is an independent node above an SO.

that this IM of *John* is not at all feature-driven but driven by labeling failures.<sup>5</sup>

## 3.2. ECP

Certain movements/IMs are known to be constrained by the presence or absence of the complementizer (C) such as that:

(4) a. \*who do you think that ⟨who⟩ read the book?
b. who do you think C=Ø ⟨who⟩ read the book?

As shown in (4a), IM of *who* from the subject position of the embedded clause to the matrix clause renders the sentence ill-formed when the embedded clause contains an overt C(=that), while the same construction becomes legitimate when C in the embedded clause is not (overtly) present as illustrated in (4b). The former case has come to be known in the literature as the (stipulative) *that*-trace effect and it has been attempted to be understood by an ad hoc principle called the ECP.

As with the EPP, however, Chomsky (2014) puts forth an alternative analysis of the ECP. Consider (5):

(5) a. 
$$[_{CP} C=$$
that  $[_{TP} who [_{v*P} \langle who \rangle ... ]]$ ]  
 $\Rightarrow$  Transfer  
b.  $[_{CP} C= \emptyset [_{TP} who [_{v*P} \langle who \rangle ... ]]$ ]  
 $\Rightarrow$  Transfer

At some point of the derivation of (4a,b), the structures in (5a) and (5b)

<sup>&</sup>lt;sup>5</sup> As will be discussed in more detail in Section 3.3 below and Chapter 4, Chomsky (2014) assumes that the operation Merge, whether external or internal, can apply freely. In other words, no demand is required for Merge to operate. Given this assumption, IM of *John* in (3) is not to be understood as if it applies in order to avoid labeling failures; avoidance of labeling failures is the effect of IM of *John*, not the cause of it. See also Epstein *et. al.* (2016) for more discussion on this motivation/demand-free version of Merge Chomsky (2014) advocates.

are respectively generated. Once all the necessary operations such as Agree apply in (5a), the complement of the phase head C, i.e. TP, is (argued to be) transferred for interpretation at the interfaces. Notice that at the time of Transfer in (5a) all the occurrences (or the entire chain) of *who* are handed over to the interfaces along with the rest of the elements inside TP. In other words, once the embedded CP phase in (5a) is completed, *who* in (the embedded) SPEC-TP becomes no longer available to further operations at the next higher phase level. Consequently, the ill-formed expression in (4a) cannot be generated in the first place in this analysis. Consider now (5b). According to Chomsky (2014), all the features

inherited by T (from C) become 'activated' on T 'when C is deleted'<sup>6</sup> and what he calls 'phasehood' (of C) is one of such activated–on–T features. Given these assumptions, what is transferred in (5b) is (not TP as in (5a) but) the complement of T, namely, v\*P, since T has now become an 'active' phase head to determine the domain of Transfer. As a result, *who* in (the embedded) SPEC–TP in (5b) becomes available to further operations at the next higher phase level and the well–formed counterpart in (4b) can thus be (eventually) generated.

#### 3.3. Free Merge

One of the characteristics that distinguishes between Government-and-Binding (GB) Theory and its successor Minimalist Program (MP) is that the operation Move (IM in minimalist terms) was virtually free in the former while it should be motivated in the latter by, for example, satisfying some demand. Thus, the operation Move in the GB era was stated as

<sup>&</sup>lt;sup>6</sup> It is not clear, however, what (feature(s)) is deleted when C is (said to be) deleted. It seems that at least some feature(s) of C should remain if only for theta-marking of the matrix predicate. The content for deletion becomes more confusing considering particularly what Chomsky (2014: 8) writes elsewhere—"The phase head C has *disappeared*." (italics are mine)

'Move- $\alpha$ ' allowing anything to move anywhere and anytime (Lasnik and Saito 1994, Grohmann 2003), while in the MP IM can only be operated so as to check certain (interface-offending uninterpretable) features or to induce some semantic effects (Chomsky 1995, 2000, 2001).

Chomsky (2014), however, abandons the requirement that the operation Move/IM be motivated, claiming instead that all operations including Move/IM are free, i.e. Move/IM need not be motivated.<sup>7</sup> Consider:

(6) a. [α R DP]
b. [v\* [β DP [α R ⟨DP⟩]]]
c. [[R-v\*] [β DP [α ⟨R⟩ ⟨DP⟩]]]

Adopting ideas of Marantz (1997) and Borer (2005a,b, 2013) in Distributed Morphology, Chomsky (2014) assumes that the so-called lexical/substantive categories such as V start out as category-unspecified roots (Rs) and that these Rs' categorial status is 'derived later in the syntax from a merger with a functional element' such as v\*. He further claims that the category-unspecified R is (universally) too weak to serve as a label. Given this claim of invisibility of R to LA, SO= $\alpha$  in (6a) cannot be labeled.<sup>8</sup> If the object DP moves to SPEC-RP as shown in (6b), however, not only the newly created SO= $\beta$  can be labeled by the shared (agreeing)  $\varphi$ -features between R and DP but the previously generated SO= $\alpha$  also turns into a labelable structure since R can now serve as a label after strengthening by SPEC-RP (Chomsky 2014: 7).

Notice, however, that the order of application between IM (of R to v\*)

 $<sup>^7</sup>$  We will discuss a different interpretation of the term 'free' in free Merge in Section 2 of Chapter 4.

<sup>&</sup>lt;sup>8</sup> One may wonder what prevents (6a) from being labeled by the head of DP. We do not have a clear answer to the question but the reason may be that LA identifies R as the label of (6a) but, nonetheless, R cannot serve as a label due to its own defectiveness/weakness. Chomsky (p.c.) also suggests the possibility that "the search procedures, reaching {H, YP}, do not look beyond H."

and the labeling of  $\alpha$  and  $\beta$  in (6c) is crucial for the labeling processes in the R-domain to (successfully) proceed as just described. If, for instance, labeling of  $\alpha$  and  $\beta$  in (6c) applies *after* IM of R (to v<sup>\*</sup>), neither  $\alpha$  nor  $\beta$  can be labeled because what remains in  $\beta$  (or  $\alpha$  for labeling purposes) is the copy of R and as discussed, copies are (assumed to be) invisible to LA. If labeling proceeds *before* IM (of R), however, both  $\alpha$  and  $\beta$  can now be labeled: as just discussed,  $\alpha$  is labeled by the strengthened unique head R and  $\beta$  by the shared features between R and DP. Chomsky (2014) thus claims that the application of the operation LA must precede that of IM. We will discuss in Chapter 4 some potential inconsistencies that arise as to the proposed rule ordering between IM and LA and as to the notion of free Merge.

4. Problems and Inconsistencies: Unification and Free Merge

4.1. Problems of Unification under Labeling Theory

Chomsky (2014: 6) writes that the phenomena of the EPP and the ECP should be 'unified' since "in both cases, the subject must be visible, not a copy, in SPEC position in [C [SPEC-TP]]." Chomsky (2014: 1) further claims that "these [i.e. the EPP and the ECP] can be unified under the labeling theory [he outlines]."

Consider first the case of EPP to see if it can indeed be accounted for by the proposed labeling theory:

(7) [<sub>TP</sub> John T [ $_{\alpha}$  (John) [ $_{v*P}$  read the book]]]

 $SO=\alpha$  in (7) is of the unlabelable form {XP, YP}.<sup>9</sup> If *John* moves, however, to SPEC-TP leaving behind its copy in SPEC-v\*P,  $\alpha$  now turns

 $<sup>^9</sup>$  We follow Chomsky (2013) in assuming that proper nouns such as John in (7) are of a complex non-head form, e.g. {D, {n, R}}.

into a labelable structure since as discussed, there is now a single unique visible head that can serve as the label, namely, the head of  $v^*P$ . The EPP requirement can thus be alternatively accounted for by labeling failures in this case as claimed by Chomsky (2014).

Consider now the following ECP phenomena to see if it can also be dealt with in terms of labeling theory:

(8) a. \*who do you think [C=that [<sub>TP</sub> ⟨who⟩ [<sub>v\*P</sub> ⟨who⟩ read the book]]]
b. who do you think [[C=Ø [<sub>TP</sub> ⟨who⟩ [<sub>v\*P</sub> ⟨who⟩ read the book]]]

(8a) is different from (8b) in that an overt C is present in the embedded clause in the former, while such an overt C is absent in the latter. As discussed in Section 3.2, the presence (or absence) of an overt C affects the domain of Transfer. More specifically, the domain of Transfer of the ill-formed (8a) after the embedded CP phase has been completed is TP where all the occurrences of *who* are situated. In other words, *who* in (the embedded) SPEC-TP is transferred along with the rest of the elements inside TP when TP is handed over to the interfaces by Transfer and thus, under the Phase Impenetrability Condition (PIC)<sup>10</sup>, *who* is no longer available to further operations at the next higher phase level (regardless of whether we assume that the next higher phase is the matrix v\*P or CP).

<sup>&</sup>lt;sup>10</sup> Phase-Impenetrability Condition (Chomsky 2000: 108)

In phase  $\alpha$  with head H, the domain of H is not accessible to operations outside  $\alpha$ , only H and its edge are accessible to such operations [where the edge refers to whatever elements that occur in SPEC-H and the domain includes all the elements in the complement of H].

An anonymous reviewer noted that Chomsky (2014) does not argue for unnecessariness of PIC by claiming that the EPP and the ECP can be given a unified account. The reviewer further commented that what Chomsky (2014) argues is not that the labeling theory alone can account for each and every phenomena once covered by the ECP, but rather that the labeling theory can shed some light on the phenomena. We agree with both the comments; what we attempt to show in Section 4.1 is not that PIC is unnecessary but that it is indeed the relevant condition that distinguishes between (8a) and (8b).

The domain of Transfer in (8b), however, is (the embedded)  $v^*P$ , not (the embedded) TP, because in this case the embedded T is assumed to act as an 'active' phase head since C has become deleted (see also Section 2 in the previous chapter). Consequently, *who* in (the embedded) SPEC-TP is further available, under the PIC, to any relevant operations at the next higher phase level.

Notice that unlike the case of EPP, what accounts for the difference between (8a) and (8b) is not labeling but it is rather the availability of *who* to the next higher phase level under the PIC.<sup>11</sup> Therefore, we argue that the mechanisms employed to account for the EPP and the ECP have yet to be unified contrary to what is claimed otherwise in Chomsky (2014).

4.2. Inconsistencies of Free Merge

Consider:

<sup>&</sup>lt;sup>11</sup> Anonymous reviewers noted that the difference between (8a) and (8b) in grammaticality results from the presence of what Chomsky (2013) calls a force feature F of C and the resulting effect of what Rizzi (2013) calls 'criterial freezing.' To be more specific, Chomsky (2013) claims that the feature F, when inherited by T in the course of derivation, enters into an Agree relation with both the Q-feature and the  $\varphi$ -features of the subject who. As a result, who in (8a) is subject to criterial freezing and hence cannot raise further, while who in (8b) is not since the null C in this case is assumed to lack such F. Though intriguing, the reviewers' comments will not be further discussed in this paper for the following reasons. First, our discussion of ECP above is based on what is outlined in Chomsky (2014). not in Chomsky (2013) on which the reviewers' comments seem to be based. Unlike Chomsky (2013), Chomsky (2014) attempts to account for the legitimacy of (8b) in terms of a change in Transfer domain and the resultant 'accessibility' of who after deletion of C (Chomsky 2014: 8). Second, Chomsky's (2013) proposal that an Agree relation is established between F of T and the Q- and the  $\varphi$ -features of who seems to bring about a labeling problem for (the weak) T (in English) given the assumption that Agree can take place with the goal in-situ. That is, if who in Spec-v\* indeed agrees with F of T, it should be frozen in Spec-v\*' which will in turn lead to a labeling failure for T (and presumably for SO={who, v\*P} as well). For related discussions, see also footnote 19.

(9) a. C [[<sub>NP</sub> young eagles] [<sub>TP</sub> are flying]]

- b. \*eagles [[NP young <eagles>] [TP are flying]]?
- c. are [[<sub>NP</sub> young eagles] [<sub>TP</sub>  $\langle are \rangle$  flying]]?

(modified from Chomsky 2013: 43)

Although both the head  $N^{12}$  *eagles* and the head T *are* are structurally equally close to C, the well-formed interrogative form of (9a) is not (9c) but (9c) where the head T moves to C. To account for what prevents the equally available head N *eagles* from raising to C, Chomsky (2013) proposes that the C-T relation is established before IM of NP *young eagles* to SPEC-TP. In other words, the head N *eagles* is simply not available to C when C enters into a relation with T such as Aux(iliary)–Inversion.

As is well known, however, the proposal above brings about problems in regards to cyclicity of a derivation and is a clear violation of the Extension Condition<sup>13</sup> (or the No Tampering Condition<sup>14</sup> in more recent terms) which guarantees cyclicity. To solve or circumvent this problem of counter-cyclicity<sup>15</sup>, Chomsky (2014) claims that the operation Merge, whether external or internal, applies freely<sup>16</sup>, i.e. it can apply anytime, in

<sup>&</sup>lt;sup>12</sup> We put aside the issue of whether noun phrases are NPs or DPs.

<sup>&</sup>lt;sup>13</sup> The Extension Condition, originally formulated in Chomsky (1995), requires that all movement operations extend the tree at the root.

<sup>&</sup>lt;sup>14</sup> No Tampering Condition (NTC, Chomsky 2005, 2008)

Merge of X and Y leaves two SOs unchanged.

<sup>&</sup>lt;sup>15</sup> See Richards (1997), among many others, for arguments for counter-cyclic operations.

<sup>&</sup>lt;sup>16</sup> Soonhyuck Park (p.c.) points out that the exact definition of the term 'free' in 'free Merge' can be confusing (or even misleading). That is, the term is sometimes used to refer to the 'cost' of an operation (i.e. Merge can apply with 'no cost') but other times it is used in relation to the 'timing' of the application of an operation (i.e. Merge can apply 'anytime' in the course of a derivation). It still can mean 'Merge can apply in 'any order' as in Chomsky (2014). Although the confusion raises many interesting issues and is something that needs to be resolved, I will put them aside and consider here the term 'free' mainly in terms of the 'timing' of the

any order in relation to other syntactic operations, and with no demand. Consider (10) to see what implications the claim of '(order-)free Merge' has for syntactic derivations:

(10) a.  $[_{\alpha} \ R \ DP]$ b.  $[_{\beta} \ DP \ [_{\alpha} \ R \ \langle DP \rangle]]]$  --> IM of DP to SPEC-RP c.  $[v^* \ [_{\beta} \ DP \ [_{\alpha} \ R \ \langle DP \rangle]]]$  --> Labeling of  $\alpha$  and  $\beta$ d.  $[[R-v^*] \ [_{\beta} \ DP \ [_{\alpha} \langle R \rangle \langle DP \rangle]]]$  --> IM of R to  $v^*$ 

Adopting the idea of free Merge as just described above, DP can undergo IM with no demand for it such as the EPP-feature on a functional category. Furthermore, it can move at any point in the course of derivation. That said, DP in (10a) can move to SPEC-RP even before the introduction of the phase head v\* as shown in (10b) and consequently, the aforementioned problem of counter-cyclicity can be circumvented.<sup>17</sup>

What about the movement of R? Can it also apply freely? The answer seems to be yes and no. To see why, consider (11):

(11) a.  $[v^* [_{\beta} DP [_{\alpha} R \langle DP \rangle]]]$ b.  $[[R-v^*] [_{\beta} DP [_{\alpha} \langle R \rangle \langle DP \rangle]]]$ 

Suppose that after the structure in (10a) is constructed, v\* is introduced and undergoes merger with SO= $\beta$  as shown in (11a). Suppose further that in (11b) IM of R to v\* takes place after labeling of  $\alpha$  and  $\beta$ . In this case, both  $\alpha$  and  $\beta$  can be (successfully) labeled, i.e.  $\alpha$  is labeled RP due to the strengthened R by SPEC-RP and  $\beta$  is labeled by the agreeing  $\varphi$ 

application of (External/Internal) Merge, esp. in relation to other operations in the syntax.

<sup>&</sup>lt;sup>17</sup> Notice that given the (order)-free Merge as we discussed it, DP can, in principle, move to SPEC-RP in a countercyclic fashion after v\* and SO= $\alpha$  in (10a) have undergone Merge. We can nonetheless rule out this offending derivation, leaving the idea of (order-)free Merge intact, as long as we assume that conditions such as the Extension Condition and the NTC are operative in the syntax (or at the CI-interface).

-features between R and DP.<sup>18</sup> What if the order of application between IM (of R) and labeling is reversed? In other words, what if IM of R applies before labeling? In that case, neither  $\alpha$  nor  $\beta$  can be labeled due to the invisibility of the copy (of R).

Notice, however, that the labeling failure in our second scenario (i.e. IM before labeling) does not amount to saying that IM is thus not free because the unwanted derivation, where neither  $\alpha$  nor  $\beta$  can be labeled, will eventually be taken care of by independently-motivated conditions such as the Extension Condition (see also footnote 15). Therefore, the timing of the application of IM in relation to other operations (labeling in our case) is indeed still free even when interface-offending derivations are generated as a result.

Consider finally the following ECP phenomena to see if free Merge can still hold in these cases:

- (12) a.\*who do you think [CP that read the book]
  - b. [C=that [ $_{TP}$  who [ $_{v*P}$  (who) read the book]]]

At some point of the derivation of (12a), the embedded CP phase in (12b) is constructed. Once the CP is completed, the complement of CP (i.e. TP) is handed over to the interfaces by Transfer. *Who* in (the embedded) SPEC-TP is therefore no longer available to further operations at the next higher phase level and as a result, the ill-formed construction in (12a) cannot be generated (in the first place).

Notice, however, that (12b) is not the only derivation which we can conceive of given free Merge. Consider:

<sup>&</sup>lt;sup>18</sup> Chomsky (2014) further claims that IM of R to v\* renders v\* invisible so that phasehood becomes activated on the copy of R. If the claim is on the right track, DP in (10a) must move to SPEC-RP especially when DP is a wh-phrase. Otherwise, no wh-phrase can be left available to the next higher phase level because it would have been transferred once the v\*P phase is completed.

(13) [<sub>CP</sub> who C=that [<sub>TP</sub>  $\langle$ who $\rangle$  [<sub>v\*P</sub>  $\langle$ who $\rangle$  read the book]]]

Given free Merge, *who* in SPEC–TP can, in principle, move one step further to SPEC–CP after labeling of TP.<sup>19</sup> If that happens, *who* will be still available to further operations at the next higher phase level since the edge of a phase head (i.e. *who* in SPEC–CP and C itself) is left behind when TP is transferred. Of more importance is the fact that such an alternative derivation does not violate any other condition as we know it. The expression will therefore be interpreted as well–formed contrary to the fact.

A possible way to prevent such an unwanted derivation as (13) seems to prevent IM from applying after labeling. But we already know that it cannot be a genuine solution because such a stipulation/postulate will have the burden to account for what it is possible for R to be able to/have to undergo IM after labeling as we saw in (11). Furthermore, the very idea of 'preventing' IM after certain operation is against the very spirit of free Merge.

## 5. Conclusion

In this paper, we have examined the validity of the two claims advocated in Chomsky (2014), namely, the claim of the unification of the EPP and the ECP and the claim of free Merge. For the unification of the EPP and the ECP under labeling theory, we have shown that the proposed unification is not in fact genuine but the EPP and the ECP are still

<sup>&</sup>lt;sup>19</sup> As an anonymous reviewer pointed out, one may wonder whether IM of *who* from Spec-T to Spec-C is possible given 'criterial freezing' as suggested in Rizzi (2013). The answer seems to depend on whether one adopts criterial freezing as a principled condition that can be derived from third factor considerations. As Chomsky (2013: 5) goes 'beyond' criterial freezing by asking "what then bars (1) [(1) *\*which dog do you wonder (which dog) C John likes*], in which *which dog* has raised from its criterial position?," our primary concern here is with the very idea of 'free' Merge and to illustrate some inconsistencies in it, while putting aside an operative role of criterial freezing.

accounted for by the two independent principles, i.e. the phenomena of the EPP are accounted for by labeling failures while those of the ECP are by the Phase Impenetrability Condition.

For the suggested free Merge, we have shown that the order of the application of Merge is not genuinely free but it should be strictly ordered, especially in relation to the timing of labeling.

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