

## On the Categorical Restriction of Clefted XPs in English\*

Sun–Woong Kim  
(Kwangwoon University)

**Kim, Sun–Woong. 2019. On the categorical restriction of clefted XPs in English.** *Korean Journal of English Language and Linguistics* 19–3, 289–308. The primary concern of this paper is why clefted XPs in English cleft sentences are categorially restricted: VP (and V as well), AP, and non–finite CP (CP[–fin]) are not eligible for clefting, while DP, PP, and finite CP (CP[+fin]) are. Under the assumption that cleft sentences in English can be derived either by movement or by base–generation of the clefted XP, it is claimed that the source of the categorial restriction can be both representational and derivational. The base–generation (or matching), requires a null operator (Op) movement for independent reasons, and this Op forms a relative clause with the clefted XP as its head noun (antecedent). Due to its non–nominal nature of AP, VP, or CP[–fin], those categories are not eligible for the antecedent of a relative clause with the null operator. This is a violation of the representational constraint. When the direct movement of the clefted XP is involved, this must obey a phase–based restriction on the deletion of the lower copy. When this condition is not met, the derivation crashes. This is a violation of the derivational constraint. Both representational and derivational considerations must be taken into to explain the categorial restriction. Two additional topics in clefts regarding “additional CP effect” and morphological mismatch are also discussed as extensions of the proposed analysis in the appendix.

**Keywords:** cleft sentence, clefted XP, focus, categorial restriction, phase, Relator, RP

### 1. Introduction

The goal of this paper is to explore why the clefted XP of cleft sentences in English

---

\*An earlier version of this paper was presented at Dongguk Workshop on Clefts, June 6, 2019, Dongguk University. I would like to thank the participants for their comments and ideas about clefts and for the discussion we shared about cleft sentences. I owe much to three anonymous reviewers of *Korean Journal of English Language and Linguistics* for the improvement of the earlier draft. This work was supported by the Ministry of Education of the Republic of Korea and the National Research Foundation of Korea (NRF–2018S1A5A2A01031269).

is categorially restricted.<sup>2</sup> Look at the following examples (Reeve 2013a):

- (1) a. A: What was it that Adrian drank?  
       B: It was [<sub>DP</sub> coffee] that she drank.  
       b. A: What was it that Adrian wants to do above all?  
       B: #It was [<sub>VP</sub> drink coffee] that she wants to do.<sup>3</sup>

As is well-known, the clefted XP of cleft sentences can be DP but not VP as shown in (1aB) and (1bB) respectively. This also holds for truncated clefts in which the string after the clefted XP is deleted. Even if (B) of the above dialogs is replaced by (B') as below, grammaticality does not change:

- (2) a. B': It was [<sub>DP</sub> coffee].  
       b. B': #It was [<sub>VP</sub> drink coffee].

In contrast to clefts (*it*-clefts), pseudoclefts (*wh*-clefts) do not show the difference with respect to the categorial status of the clefted XP.

- (3) a. What Adrian wants is [<sub>DP</sub> coffee].  
       b. What Adrian wants to do is [<sub>VP</sub> drink coffee].

In a nutshell, this paper explores why DP is possible as a clefted XP but VP is not in cleft sentences. It is an interesting research question why the same focused XP has categorial restriction in clefts but not in pseudoclefts. Although this restriction has been mentioned in previous research, no explanatory analysis does not seem to have yet been made. The remainder of this paper consists of the following sections. Section 2 discusses the derivation of cleft sentences with a review of previous analyses. Section 3 proposes a dipartite approach to clefts. Section 4 wraps up the discussion. The appendix explores a possibility that the proposed analysis can be applied to the

---

<sup>2</sup>For consistency reasons, this paper uses the following terms: *clefted XP* for the focused elements in the post-copular position, *cleft clause* for the embedded clause of the *cleft sentence*, and *cleft sentence* for the whole clause. In addition, *it*-clefts refer to the cleft sentence with *it* (or definite pronouns like *that* or *the thing*) if used.

<sup>3</sup>A search for the clefted V or VP has been conducted during the research period (2018–2019) on COCA and *iWeb*. The search was not able to find a single attestation of such clefts. Readers are referred to Kim (2007) for an earlier report.

seemingly unrelated phenomena with respect to “additional CP effects” and morphological mismatch in VP ellipsis.

## 2. Derivation of Cleft Sentences

### 2.1. More about Data

Regarding the categorial restriction on the clefted XP, the simple set of data above can be expanded to a wide variety of categories. Look at (4) (Reeve 2013a, except (4b and d)):

- (4) a. A: Where was it that Adrian drank?  
       B: It was [<sub>PP</sub> in the billiard room] that she drank.
- b. A: What was it that Adrian wants?  
       B: It was [<sub>CP[+fin]</sub> that you drank all the coffee] that Adrian wants.
- c. A: What was it that Adrian is above all?  
       B: #It's [<sub>AP</sub> thirsty] that she is.
- d. A: What was it that annoyed Adrian?  
       B: #It was [<sub>CP[-fin]</sub> to drink all the coffee] that Adrian wants.

As a clefted XP, not only DP but also PP and finite CP (CP[+finite]) are allowed as shown in (4a–b). In contrast, AP and nonfinite CP (CP[-fin]) as well as VP are not possible as a clefted XP as shown in (4c–d). What makes the restriction more interesting is that in pseudoclefts these categories are free to become a focused element.

- (5) a. What Adrian drank was coffee. (DP)  
       b. Where Adrian drank coffee was in the cafe.(PP)  
       c. What Adrian wants was that you rank all the coffee. (CP[+fin])  
       d. What Adrian was above all was thirsty. (AP)  
       e. What Adrian wants to do was drink coffee. (VP)  
       f. What Adrian wants was to drink coffee. (CP[-fin])

In (5b) and (5c), not only DP, PP, and CP[+fin], but also AP, VP, and CP[-fin]

are all allowed as a focused element in pseudoclefts. Why is there such a category restriction on the postcopular position in clefts but not in pseudoclefts? Next section discusses previous approaches to this question.

## 2.2. Derivation of Clefts

The categorial restriction on clefted XPs has long been observed by many linguists. Aarts (2018), based on Huddleston and Pullum (2002), for example, introduces “information packaging” devices in English, the most prominent example of which is cleft sentences. He says that “verbs and verb phrases are excluded from this position (Aarts 2018: 267).” But the question is why. He gives neither an answer nor a clue for this question.<sup>4</sup>

Many different researchers have proposed various analyses about the derivation of clefts. They can be classified into three tracks (Thornton et al. 2018). First, the base-generation and null operator (Op) analysis was proposed by Chomsky (1977) and has been since considered as a standard analysis. In this analysis, it is an expletive (*it*) that takes the cleft clause as an adjoined constituent (Chomsky 1977). The clefted XPs are considered as base-generated in situ (Culicover and Rochemont 1990) and are linked to the Op in the cleft clause. Second, the extraposition analysis was proposed by Akmajian (1970) and later elaborated by Percus (1997).<sup>5</sup> In this analysis, *it* and the cleft clause form a discontinuous definite description before clefting. The cleft clause moves rightward in terms of extraposition (Percus 1997). Third, there comes the (movement and) reconstruction analysis (Kayne 1994). In this analysis, the cleft XP directly moves from its original position in the embedded clause to the cleft XP position to get focus. These analyses are shown below. (6) can be analyzed in three different ways as in (7a) through (7c).

(6) It was the coffee that John drank yesterday.

---

<sup>4</sup>Reeve (2011, 2013a, 2013b) divides the approaches from a different point of view. He calls (7b) the specificational approach, and (7a) the expletive approach. In actuality, the specificational approach has two different ways to work out: the movement derivation and the base-generation derivation. He refers to Percus (1977) for the former and to Culicover and Rochemont (1990) for the latter. He refers Chomsky (1977) for the expletive approach.

<sup>5</sup>See also Moon (2013), who argues that “the cleft clause is base-generated at the position adjacent to the cleft pronoun *it*, and then extraposed to the adjunct position of IP by means of rightward movement at PF.”

(7) a. It was the coffee<sub>i</sub> [Op<sub>i</sub> that [John drank t<sub>i</sub> yesterday]].



(Chomsky 1997, Culicover and Rochemont 1990)

b. [It t<sub>CP</sub>] was the coffee [CP Op<sub>i</sub> that John drank t<sub>i</sub>]. (Percus 1977)



c. It was the coffee<sub>i</sub> [that John drank t<sub>i</sub>]. (Kayne 1994)



Each analysis has its own merits and demerits.<sup>6</sup> But one thing to say against the extraposition analysis (most notably by Percus 1977) is that although the analysis parallels clefts with pseudoclefts (and specificational copular sentences in turn), there are counterexamples reported which would be a hard nut to the parallel view. Look at (8) and (9) for instance (Thornton et al. 2018).

(8) a. \*It is proud of John<sub>i</sub> that he<sub>i</sub> seems to be.

b. \*What he<sub>i</sub> is is angry with John<sub>i</sub>.

c. \*One thing that he<sub>i</sub> isn't is angry with John<sub>i</sub>.

(9) a. It was his<sub>i</sub> mother that every boy<sub>i</sub> saw.

b. What every boy<sub>i</sub> saw was his<sub>i</sub> mother.

c. The one that every boy<sub>i</sub> saw was his<sub>i</sub> mother.

(8) shows that clefts, pseudoclefts, and specificational sentences keeps connectivity with respect to Principle C. The same connectivity holds true with respect to bound variable reading of a pronoun as given in (9). This parallel, however, does not seem to be consistent when we consider the following unparalleled examples (Thornton et al. 2018).

(10) a. It was every dog that ate a chicken. (*every* > *a*)

b. It was a different chicken that every dog ate. (*every* > *a*)

c. It's careful track that she's keeping of her expenses. (idiom)

(11) a. What ate a chicken is every dog. (\**every* > *a*)

b. What every dog ate was a different chicken. (\**every* > *a*)

c. What she's keeping of her expenses is careful track. (\*idiom)

<sup>6</sup> This paper does not discuss much about this. Readers are referred to Reeve (2011) for an extensive review on the issue.

While *every dog* has wide scope over *a chicken* in clefts (10a, b), it is not the case with pseudoclefts (11a, b). In addition, idiomatic reading is kept intact in (10c) but not in (11c). For these reasons, this paper simply disregards the extraposition analysis, its technical problems notwithstanding.<sup>7</sup>

As noted in footnote 4, a recent consensus is that the cleft clause is related to the focused element in two different ways (Reeve 2011, 2013a, 2014, Thoms and Walkden 2017). The essence of the distinction is that cleft sentences are the result of two different derivational processes. One is matching (or base–generation) and the other is promotion (or movement). By matching Reeve (2013a) means that the clefted XP of cleft sentences is base–generated and the cleft clause is an adjunct; by promotion he means that the cleft XP moves to the position out of the embedded CP which is the complement of T. Derivations are represented as follows. In fact, matching corresponds to (7a) and promotion to (7c) above:

- (12) a. It was [<sub>DP</sub> the coffee<sub>i</sub>] [<sub>CP</sub> Op<sub>i</sub> that Adrian drank t<sub>i</sub>].  
(Matching/Base–generation)  
 b. It was [<sub>DP</sub> the coffee<sub>i</sub>] [<sub>CP</sub> that Adrian drank t<sub>i</sub>]. (Promotion/Movement)

In (12a), [<sub>DP</sub> the coffee] is base–generated in the post–copular position and is related to Op, which is assumed to have moved to the embedded Spec–CP from the object position (t<sub>i</sub>). In (12b), [<sub>DP</sub> the coffee] has directly moved from the embedded clause to the post–copular position as is standardly assumed.<sup>8</sup>

In this regard, this paper assumes that there are two derivational options possible for cleft sentences. That is, cleft sentences can be derived either by the movement of the clefted XP to the post copular position or by the base–generation of the clefted XP directly in the post copular position. Since there are two theoretical options, the question is naturally raised about which option is taken for which clefted XPs. This

<sup>7</sup> Readers are referred to Thornton et al. (2018) for more details.

<sup>8</sup> There is a notable difference between Reeve (2013a) and Reeve (2014), regarding reduced (or truncated) clefts. Reeve (2014) proposes that the reduced DP and AP clefts are Type A and that reduced VP clefts are Type B. Then there seems to be a mismatch in his distinction of the clefted XPs of reduced clefts. Reeve (2013a) argues that DP, PP (locative/temporal), CP [+fin] belong to Type A (matching/base–generation) structure, while PP (other), AP, VP, and CP [–fin] belong to Type B (promotion/movement) structure. Although the distinction of derivation does not exert an influence to the conclusions of this paper, one thing to notice is that the distinction was originally purposed to the observed distributional similarity between reduced clefts and gapping.

must be determined on the basis of both theoretical (conceptual) and empirical consideration. From a conceptual/theoretical point of view, a standard assumption is that the clefted XP and the cleft clause form a kind of a relative clause: that is, a head XP and a relative clause (Huddleston and Pullum 2002). Reeve (2013a) assumes that a null operator must be categorially restricted in the sense that the null operator must be categorially same with the cleft focus. This paper assumes that Reeve's (2013a) proposal means that the head of a relative clause must be of  $[-V]$  category: N, P, and their projections.<sup>9</sup> His discussion, however, is not very persuasive in that the null operator should be possible for other (or maybe all) kinds of categories as well. For example, Thornton et al. (2018:412) points out that the null operator is related to the whole focused XP that does not fare well with a null operator.

(13) It is  $[_{AP}$  proud of himself/\*him<sub>i</sub>/\*John<sub>i</sub>]<sub>j</sub> Op<sub>j</sub> hei seems [to be t<sub>j</sub>].

In (13) Op is related to the AP, which is dubious as the head XP for Op. One more example comes from comparative (subdeletion) constructions. Comparatives (and comparative subdeletion) are known to involve a null operator movement (Chomsky 1977). Look (15) for example:

(14) a. She is more smart than [Op<sub>i</sub>  $[_{AP}$  x<sub>i</sub> clever]].  
 b. She is smarter than [Op<sub>i</sub> he  $[_{PredP}$  x<sub>i</sub> is clever]].

Even though the above examples involve adjectives in (14a) and PredP that contains an adjective in (14b), they are all compatible with null operators. Reeve (2013a) will need an extra assumption that comparatives are exceptional in that null operators can be available to adjectives in the least. Additionally even APs can be a clefted XP as in the following (Kiss 1998).

(15) A: Her eyes are green.  
 B: No, it's blue that her eyes are, not green.

---

<sup>9</sup> Since DP, PP, and  $[+fin]$ CP are available for a null operator, those categories are available to the matching structure. In contrast, since a null operator is not available to VP, AP, CP $[-fin]$ , those categories are only for the promotion/movement structure. Ellipsis of the embedded clause follows the promotion of the focused element.

If an adjective is used in a contrastive context, it is known to be allowed as the clefted XP. This runs afoul of the proposals of Reeve (2013a).

From an empirical point of view, connectivity and locality must be considered. The fact is that evidence both for and against movement coexist. The first evidence of movement comes from locality. At least reduced clefts are island–sensitive. Assuming (16) as the derivation, look at (17)<sup>10</sup>:

(16) It be [<sub>FocP</sub> [clefted XP<sub>i</sub>] [<sub>CP</sub> that ... t<sub>i</sub> ... ]].

(17) a. \*If a politician who is something in particular will succeed, it's arrogant.

(Subject Island)

b. \*If they hired a good–looking linguist, it's too good–looking. (Left Branch)

Examples in (17) demonstrate that the focused elements violate island constraints while moving to the post–copular position resulting in ungrammaticality.

The second evidence concerns the connectivity effect. Look at the following clefts:

(18) a. It is proud of himself/\*him<sub>i</sub>/\*John<sub>i</sub> that he<sub>i</sub> seems to be. (=13)

b. It is his<sub>i</sub> final<sub>s</sub> that no student<sub>i</sub> enjoys.

If the clefted XP is reconstructed to its original position in the embedded clause, the connectivity is well explained regarding Condition A, B, C, and variable binding as well.<sup>11</sup>

Third, as was discussed before, the clefted XPs can have an obligatory contrastive reading. Compare the following:

(19) a. A: What color are her eyes?

B: #It's green that her eyes are.

<sup>10</sup>One thing that must be further considered in this context is that truncated/reduced clefts are insensitive to some island conditions: CNPC and Adjunct Island for instance.

(i) a. If they didn't hire anyone who was something in particular, it was good–looking.

(CNPC)

b. If they arrested him because he was something in particular, it was good–looking.

(Adjunct Island)

I don't have a reasonable answer for their grammaticality.

<sup>11</sup>More examples of the same sort are given below about intensionality reading and scope interaction (Reeve 2011):

(i) a. It is a unicorn that John seeks.

(Intensionality)

b. It was a chicken that every dog ate.

(every dog > a chicken)



- b. A: Her eyes are green.  
 B: No, It's blue that her eyes are, not green.

Clefts with a clefted AP cannot be used as an answer to a *wh*-question as in (19a) while it can be if used contrastively as in (19b). If the observation that an A'-moved focus is known to carry a contrastive reading (Kiss 1998), (19b) demonstrates that the clefted AP has undergone movement.<sup>12</sup>

However, there is evidence that movement is not involved in clefts formation. The first evidence comes from NPI (Negative Polarity Item) licensing. If an NPI comes as the clefted XP, the whole string becomes ungrammatical as in (20) (Reeve 2011):

(20) \*It was any bread that I don't have.

If *any bread* could be reconstructed, (20) would be grammatical. The ungrammaticality of (20) demonstrates that the clefted XP does not move from its original position.<sup>13</sup> The second evidence has to do with P-stranding, which has been used as a good test for movement.

- (21) a. \*It is the café that John drank coffee in.  
 b. It is in the café that John drank coffee.  
 c. Which café did John drink coffee in?

(21c) simply shows that *wh*-movement can be done with a preposition stranded; but (21a) demonstrates the P-stranding is not allowed in clefts. This evidences that movement is not involved in cleft sentences.<sup>14</sup>

---

<sup>12</sup> The only examples that are against movement/raising seems to be the following:

(i) a. \*It was any bread that I don't have.

b. It was a doctor with any real knowledge of acupuncture that wasn't available.

(ia) seems to be bad since a negative licenser is c-commanded by the NPI *any bread*, satisfying the anti-c-command condition. (ib) supports the view in that *any real knowledge* does not c-command a negator. But this example simply shows that the anti-c-command condition of a negative element by an NPI is real.

<sup>13</sup> A reviewer correctly points out that NPI moves to a position where it is not c-commanded by a negative licenser. This paper, however, limits the discussion to cleft issues.

<sup>14</sup> Why is (21a) not allowed? This seems to have much to do with the base-generation of DP in the focus position from which its connection with the P in the embedded clause would be hard to get. This may bring about a parsing problem.

To wrap up, there are conflicting sets of data that support or challenge the movement of the clefted XP. The task is to check on possible derivations of clefts with respect to movement and non–movement (or base–generation).

### 3. Proposed Analysis

To give an answer to the categorial restriction on cleft XPs, some assumptions about theoretical devices of this paper are in order. This paper looks for a solution based on the notion of phase. The proposed analysis crucially assumes that phases are defined dynamically in line with den Dikken (2007a) and Bošković (2014, 2018). The “dynamic phasehood” is in contrast with Chomsky (2008), who assumes that phases are CP and vP in that they are propositional. With respect to ellipsis (and movement), the notion of phases is crucial in that the following additional condition hold. (23) is the essence of Bošković’s (2014) proposal about ellipsis.

(22) Elidability Condition for Ellipsis

A phase and the complement of its head are elidable, but the complement of the complement is not.

With this much introduction, let us turn to this paper's proposal about the category restriction of clefted XPs. First, consider representational conditions. For cleft formation, this paper has discussed that clefts can come via two different derivations. As was argued before, this paper pays attention to the standard view that the postcopular part of a cleft sentence is a “relative clause” (Huddleston and Pullum 2002, among others). We take the “relative clause” as Relator Phrase (RP) which is proposed by den Dikken (2007a, 2007b). According to him, R is a functional category that relates the subject and the predicate to form a predication unit which is a basic and sufficient condition for phasehood. A subject must be sufficiently “nouny” to become an argument in the sense of Ross (1972). An RP may be a relative clause if it contains an operator, whether overt or null.<sup>15</sup> A relative clause can be formed either by the movement of a *wh*–phrase or a null operator (Op) if there is no overt

---

<sup>15</sup> In this regard, I would like to assume that the hallmark of a relative clause is the operator movement, whether overt or covert, but not the adjunction structure.

*wh*-relative pronoun (Chomsky 1977). On top of it, the antecedent and the relative clause form a predication relation in terms of coindexing (Browning 1987).<sup>16</sup>

All in all, this paper argues that (23) has (24) or (25) as its representation. (24) is for base-generation (matching); (25) is for movement (movement).

(23) It was [<sub>DP</sub> coffee] that Adrian drank.

(24) [<sub>TP</sub> It [<sub>T</sub> was<sub>j</sub>] [<sub>VP</sub> t<sub>j</sub> [<sub>RP</sub> [<sub>DP</sub> coffee]<sub>i</sub> R [<sub>CPi</sub> Op<sub>i</sub> that [<sub>TP</sub> ... [<sub>VP</sub> ... drink t<sub>i</sub>]]]]]]]

(25) [<sub>TP</sub> It [<sub>T</sub> was<sub>j</sub>] [<sub>VP</sub> t<sub>j</sub> [<sub>FocP</sub> [<sub>DP</sub> coffee]<sub>i</sub> [<sub>CP</sub> that [<sub>TP</sub> ... [<sub>VP</sub> ... drink t<sub>i</sub>]]]]]]]

For matching, [the coffee] is base-generated in Spec-RP. This forms a predication relation with the following CP with help of Op movement which has moved from the original position. For movement, [the coffee] directly moves from its original position to the postcopular one via embedded Spec-CP as in (25). Under this analysis, DP can be in Spec-RP in that they can be a subject in subject-predicate composition.

Now, what about clefted PPs?

(26) It was [<sub>PP</sub> in the café] that Adrian drank.

(27) It was [<sub>RP</sub> [<sub>PP</sub> in the café]<sub>i</sub> R [<sub>CP</sub> Op<sub>i</sub> that [<sub>TP</sub> ... [<sub>VP</sub> ... drink t<sub>i</sub>]]]]]

(It was [<sub>RP</sub> [<sub>PP</sub> in the café]<sub>i</sub> R [<sub>CP</sub> that [<sub>TP</sub> ... [<sub>VP</sub> ... drink t<sub>i</sub>]]]]])

Theoretically two types of structure are equally available for PP clefts. However, based on P-stranding facts, only the option that the clefted PP is base-generated is taken.<sup>17</sup> Since [<sub>PP</sub> in the café] has [-V] feature, (27) satisfies the representational condition for the derivation. This explains why (26) is grammatical.

Next, what about CP[+fin] clefts? Under the matching structure, the representation would be something like (28) below:

(28) It was [<sub>CP</sub> that John drank coffee] that Adrian wants.

---

<sup>16</sup> An immediate question is about whether the two conditions are applied conjunctively or disjunctively. If disjunctive, which one is prior to the other? The present paper is not yet in a position to answer the question. Nevertheless, the track which this paper takes is that they apply disjunctively, which means that a cleft sentence must not violate both conditions at the same time.

<sup>17</sup> Even if matching structure (27) is assumed, this derivation does not bring about the problem since it does not violate any derivational constraints at issue.

- (29) a. It was [<sub>RP</sub> [<sub>CP</sub> that John drank coffee]<sub>i</sub> R [<sub>CP</sub> Op<sub>i</sub> that [Adrian wants t<sub>i</sub>]].<sup>18</sup>  
 b. It was [<sub>CP</sub> that John drank coffee]<sub>i</sub> [t<sub>i</sub> that [Adrian wants t<sub>i</sub>]].

(28) has two possible derivations: (29a) and (29b). They turn out to be good since they do not violate major representational constraints in that CP[+fin] has [–V] feature. This is not implausible since CP[+fin] can be paralled with nominals since Chomsky (1970) among others. Under the movement derivation, the deletion of the lower CP[+fin] copy has no problem since it is a phase. If it is correct, the movement option is also available to CP[+fin] as a clefted XP.

Next, consider clefted VP examples. In this case too, theoretically both derivations are possible. Consider the base–generation derivation first:

- (30) \*It was [<sub>RP</sub> [<sub>VP</sub> drink coffee]<sub>i</sub> R [<sub>CP</sub> Op<sub>i</sub> that [<sub>TP</sub> Adrian did t<sub>i</sub>]]].

(30) is ruled out by the representational condition that the Spec–RP must be a [–V] projection. Alternatively, if a direct movement analysis is adopted instead, we get the same result under the dynamic phasehood.<sup>19</sup>

- (31) \*It was [<sub>FocP</sub> [<sub>VP</sub> drink coffee]<sub>i</sub> [<sub>CP</sub> that [<sub>TP</sub> Adrian T [<sub>vP</sub> <VP<sub>i</sub> >]]]].

Under the copy theory of movement, if [<sub>VP</sub> drink coffee] moves up to Spec–FocP, the lower VP must be elided before Spell–Out, but this ellipsis is not possible since the lower copy is the complement of a complement head T. The embedded CP is a phase, and consequently VP becomes the complement of a complement of a phase head T due to the intervening TP. This paper therefore suggests that the crash is due to the violation of a solid derivational constraint about ellipsis. All in all, no possible derivation can be available for VP clefts. AP clefts fall under the same reasoning.

Finally, consider CP[–fin]:

- (32) \*It was [<sub>CP</sub> to drink coffee] that Adrian wants.

<sup>18</sup> This needs further justification. One note is that null operator movement is different from other A'–movement in some respects. Null operator, for example, does not show reconstruction effects (Thoms and Walkden 2017).

<sup>19</sup> Only the matching structure is available for VP clefts since VP–fronting has many reasons to be base–generated in situ as is extensively discussed in Ott (2018).

- (33) a. It was [<sub>RP</sub> [<sub>CP</sub> to drink coffee]<sub>i</sub> R [<sub>CP</sub> Op<sub>i</sub> that [Adrian wants t<sub>i</sub>]]].  
 b. It was [<sub>CP[-fin]</sub> to drink coffee]<sub>i</sub> that [<sub>TP</sub> Adrian [<sub>VP</sub> wants <<sub>CP[-fin]</sub><sub>i</sub> >]]].

(33a) is bad since it violates the representational constraint that the Spec–RP has [–V] category. (33b) is bad since it violates a derivational constraint on ellipsis in that the lower CP copy is not to be elided since it is neither a phase nor its complement. CP[–fin] is not a phase since it is not predicational (and not propositional either).<sup>20</sup> The deletion of a non–phase is banned by the Elidability Condition given in (22). The appendix discusses some related consequence of the proposal with respect to the additional CP effect and morphological mismatch.

#### 4. Conclusion

The starting point of interest of the present paper is why clefted XPs in English cleft sentences are categorially restricted. VP (and V as well), AP, and CP[–fin] are not eligible for clefting; while DP, PP, and CP[+fin] are. Under the assumption that cleft sentences in English can be derived either by movement or by base–generation of the clefted XP, it is claimed that the source of the categorial restriction is the derivation by base–generation. The base–generation, or matching, requires a null operator movement for independent reasons, and this forms a relative clause with the clefted XP as its head noun (antecedent). Due to its non–nominal nature of AP, VP, or CP[–fin], those categories are not eligible for the antecedent of a relative clause with the null operator. If null operator movement is not involved, no categorial restriction is expected as has been discussed with the derivation by direct movement. Two additional topics in clefts regarding “additional CP effect” and morphological mismatch are also discussed below in Appendix as extensions of the proposed analysis.

---

<sup>20</sup> A reviewer points out that if PRO is assumed as a subject CP[–fin] is predicational. But under den Dikken’s (2007a) theory about phasehood needs R for its head. Whether or not the CP[–fin] has R needs further scrutiny.

## References

- Aarts, Bas. 2018. *English Syntax and Argumentation* (5th ed.). London: Palgrave.
- Akmajian, Adrian. 1970. On deriving cleft sentences from pseudo-cleft sentences. *Linguistic Inquiry* 1, 149–168.
- Bošković, Željko. 2014. Now I'm a phase, now I'm not a phase: On the variability of phases with extraction and ellipsis. *Linguistic Inquiry* 45, 27–89.
- Bošković, Željko. 2018. On movement out of moved elements, labels, and phases. *Linguistic Inquiry* 49, 247–282.
- Browning, Marguerite. 1987. *Null Operator Constructions*. Doctoral dissertation, MIT.
- Carrera Hernández, Ana. 2007. Gapping as a syntactic dependency. *Lingua* 117, 2106–2133.
- Chomsky, Noam. 1970. Remarks on nominalization. In R. Jacons and P. Rosenbaum, eds., *Readings in English Transformational Grammar*, 184–221. Waltham, Mass.: Ginn and Co.
- Chomsky, Noam. 1977. On *wh*-movement. In P. Culicover, T. Wasow and Adrian Akmajian, eds., *Formal Syntax*, 71–132. New York: Academic Press.
- Chomsky, Noam. 2008. On phases. In R. Freidin, C. P. Otero and M. L. Zubizarreta, eds., *Foundational Issues in Linguistic Theory: Essays in Honor of Jean Roger Vergnaud*, 133–166. MIT Press: Cambridge, Mass.
- Culicover, Peter and Michael Rochemont. 1990. Extraposition and the complement principle. *Linguistic Inquiry* 21, 23–47.
- den Dikken, Marcel. 2007a. Phase extension: Contours of a theory of the role of head movement in phrasal extraction. *Theoretical Linguistics* 33, 1–41.
- den Dikken, Marcel. 2007b. Specificational copular sentences and pseudoclefts. In M. Everaert and H. van Riemsdijk, eds., *The Blackwell Companion to Syntax*, 292–409, Oxford and Boston: Blackwell.
- Huddleston, Rodney and Geoffrey K. Pullum. 2002. *The Cambridge Grammar of the English Language*. Cambridge: CUP.
- Kayne, Richard. 1994. *The Antisymmetry of Syntax*. Cambridge, MA: MIT Press.
- Kim, Jong–Bok. 2007. Syntax and semantics of English *it*-cleft constructions: A constraint-based analysis. *Studies in Modern Grammar* 48, 217–235.
- Kiss, É. Katalin. 1998. Identificational focus versus information focus. *Language* 74, 245–73.

- Lasnik, Howard. 1995. Verbal morphology: Syntactic structures meets the Minimalist Program. In H. Campos and P. Kempchinsky, eds., *Evolution and Revolution in Linguistic Theory: Essays in Honor of Carlos Otero*, 251–275. Georgetown: Georgetown University Press.
- Miller, Philip and Barbara Hemforth. 2014. Verb Phrase Ellipsis with Nominal Antecedents. Ms. Université Paris Diderot.
- Moon, Gui–Sun. 2013. The syntax and semantics of *it*–clefts. *Studies in Generative Grammar* 23, 4, 295–320.
- Ott, Denis. 2018. VP–fronting: Movement vs. dislocation. *The Linguistic Review* 35, 243–282.
- Percus, Orin. 1997. Prying open the cleft. *North East Linguistic Society (NELS)* 27, 337–351.
- Reeve, Matthew. 2011. The syntactic structure of English clefts. *Lingua* 121, 142–171.
- Reeve, Matthew. 2012. *Clefts and their Relatives*. Amsterdam: John Benjamins.
- Reeve, Matthew. 2013a. Conditions on ellipsis licensing: Evidence from gapping and cleft ellipsis. *UCL Working Papers in Linguistics* 25, 144–175.
- Reeve, Matthew. 2013b. The cleft pronoun and cleft clause in English. In K. Hartmann and T. Veenstra, eds., *Cleft Structures*, 165–86. Amsterdam: John Benjamins.
- Reeve, Matthew. 2014. If there's anything cleft ellipsis resembles, it's (pseudo)gapping. In *Proceedings of the 31st West Coast Conference on Formal Linguistics*, 351–360. Somerville, MA: Cascadilla.
- Ross, John Robert. 1972. *Nouniness*. Cambridge, MA.: MIT Press.
- Sugimoto, Kenji. 2018. An argument structure alternation of change–of–state verbs under VP deletion. *JELS* 35, 145–151.
- Thoms, Gary and George Walkden. 2017. vP–fronting with and without remnant movement. Ms.
- Thornton, Rosalind, Hirohisa Kiguchi and Elena D'Onofrio. 2018. Cleft sentences and reconstruction in child language. *Language* 94, 405–431.
- Warner, Anthony R. 1993. *English Auxiliaries: Structure and History*. Cambridge: Cambridge University Press.

Examples in: English

Applicable Languages: English

Applicable Level: Tertiary

Kim, Sun-Woong  
Professor, Department of English and Industry  
Kwangwoon University  
20 Kwangwoon-ro, Nowon-gu  
Seoul, Korea  
Tel: (02)940-5364  
E-mail: swkim@kw.ac.kr

Received: July 07, 2019

Revised: September 10, 2019

Accepted: September 17, 2019

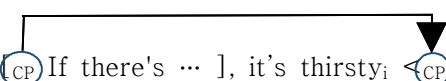


## Appendix

If a CP is added to the truncated/reduced cleft sentence, grammaticality improves a lot (Reeve 2011, 2013a, 2013b). Look at the following examples:

- (34) a. If there's anything Adrian is, it's thirsty. (AP)  
 b. If there's anything Adrian wants to do, it's drink coffee. (VP)  
 c. If there's anything Adrian wants, it's to drink coffee. (CP[–fin])

This improvement comes from the presence of an added CP in the preceding clause. According to him, the added CP makes possible the ellipsis of CP in the subsequent clause.

- (35)  (CP) If there's ... ], it's thirsty<sub>i</sub> <CP> that Adrian is t<sub>i</sub>>.

To guarantee the deletion of CP in the truncated clefts, Reeve (2013a) adopts Carrera–Hernandez's (CH) 'syntactic dependency through heads' analysis. His observation is that addition of a different CP normally turns otherwise ungrammatical truncated clefts into grammatical ones in terms of head–head relation. He associates this with the observation that specificational *wh*-clefts permit VP and CP[–fin] as focus.

- (36) a. What Adrian wants to do is [drink coffee].  
 b. What Adrian wants is [to drink coffee].

(36a) shows that not only “If there's anything Adrian is” but also “What Adrian wants is” can improve grammaticality of the whole string.

Nevertheless, Reeve's (2011) solution to the grammaticality improvement dismisses the basic observation that the role of CP in both examples are syntactically different. “If there's anything” in (34) is an adjunct (adverbial), while the *wh*-clause in (35) is an argument (subject) clause. This difference is as big as the difference between argument and adjunct themselves. The prediction that a simple addition of CP will make all truncated/reduced cleft possible would be in danger of overgeneration. Furthermore, regarding (34) again, it looks like the preceding CP makes ellipsis

possible in the following clause (CP) (Reeve 2013a, 2013b). This is a correct generalization, but if not explained in terms of deeper linguistic principles it is nothing but a mere restatement of the same problem. What is then the function of the preceding CP to ellipsis? This paper adopts den Dikken’s (2007a, 2007b) view that specificational pseudoclefts are a question–answer pair. The subject position is filled with a question CP and the predicate position is filled with a focused XP. Since predicates have almost no categorial restriction, AP, VP, and CPs have no reason why they cannot be predicates. The additional CP “if there’s anything …” also makes a Q–A pair. This is supported by the fact that *wh*–words correspond to DP, PP, and CP[+fin]. In fact, they can be paraphrased into DP or PP: *what*, *which*, *who*, *where* (*to what*), *why* (*for what*), and *how* (*by what*). In addition, “If there’s anything” and “What Adrian wants …” sort of phrases require “anything” or “what” sort of a thing, which is very high in its nouniness in the sense of Ross (1972).<sup>21</sup>

In support of the proposal, consider an interesting contrast reported about infinitival IPs (Thoms and Walkden 2018:43). Look at the following:

- (38) a. \*It was [to become a genius] that John was likely \_\_\_\_\_. (Raising)  
 b. \*It was [to be a genius] that they believe John \_\_\_\_\_. (ECM)  
 c. \*It was [to leave early] that John forced me \_\_\_\_\_. (Object control)
- (39) a. It was [to leave early] that John wanted \_\_\_\_\_. (Subject control)  
 b. It was [to leave early] that John promised me \_\_\_\_\_. (Subject control)

If *to*–infinitives are used as a clefted XP, Reeve (2013a) would predict that all cleft sentences would be bad. But actually the examples diverge in grammaticality. Raising, ECM, and object control *to*–infinitives are ungrammatical as in (38), while subject control *to*–infinitives, whether regular or transitive, can be used as a clefted XP as in (39). The question is where does the difference come from? The essential clue comes again from the degree of nouniness of *to*–infinitives (Ross 1972). Since raising, ECM, and object control *to*–infinitives are less “nouny”, it is implausible that they can be used as a clefted XP. The claim is supported by the observation that subject control

---

<sup>21</sup> Adopting the question–answer pair (Q–A pair) approach of den Dikken (2007b), this paper assumes that the question requires an answer to be kind of argument, which makes predicative VP, AP, CP[fin] into something that is required by the *wh*–phrase. We understand this as an increase of nouniness of the category (Ross 1972). This is why those categories are all allowed to come as the focus of pseudocleft.

*to*-infinitives can be replaced by a pronominal, but not other *to*-infinitives cannot.

- (40) a. \*John is likely that.  
 b. \*The believe John that.  
 c. \*John forced me that.
- (41) a. John wanted that.  
 b. John promised me that.

In sum, this paper does not have to assume otherwise unnecessary stipulation like head dependency. Rather this paper's solution is based on better-motivated principles of grammar about the basics of argument–predicate structure.

With respect to the additional CP effect, let us consider two remarkable mismatches in VP movement. First, Thoms and Walkden (2017) report the following interesting set of examples regarding VP-fronting:

- (42) a. We thought she would lose her temper, and [<sub>VP</sub> lose her temper] she has.  
 b. She has {\*lose/lost} her temper.

(42a) is grammatical, although the fronted VP has no past participle form in the second conjunct, which is required in normal perfect aspects as in (42b). (42a) is supposed to have the following lower copy.

- (43) ... [lose her temper] she has –ed <lose her temper>. (Affix bleeding)

(43) involves a failure of affix hopping to the following verb. They dub this affix bleeding. Affix bleeding is a clear violation of Stray Affix Filter (Lasnik 1995), which bans unattached affixes during derivation. But the sentence is judged good. Now, consider the following examples with respect to the role of additional CP:

- (44) If there's anything that she has, it was [lose her temper] (that she has).  
 (cf. If there's anything that she did, it was [lost her temper] (that she did)).

Morphological mismatch is found in clefts as in regular coordinated clauses like (42a). I argue that (42a) and (44) have something in common that they follow kind of an "additional CP". The grammaticality of (44) above seems to have to do with the

following VP ellipsis examples:

- (45) a. Jack [fell down] and Jill did <fall down> too.  
 b. I didn't [touch the TV set], but Percy might have <touched the TV set>.  
 c. If you haven't [told them] yet, you really should <tell them>.  
 d. Are you [arguing]? Yes, they always do <argue>.

According to Warner (1995) and Lasnik (1995), main verbs in English can be elided even though they are not in exact morphological match with the preceding verb. Lasnik (1995) argues that this is because main verbs in English are in bare forms when being elided. This paper adopts his idea under the understanding that main verbs in English can be elided before the exact morphological match is completed. In other words, affix bleeding is understood as a matter of ellipsis timing.<sup>22</sup> This explains the grammaticality of (44).

One more case of loose mismatch would be the category mismatch found in VP ellipsis with nominal antecedents (Miller and Hemforth 2014). Look at the following examples:

- (46) a. We should suggest to her that she officially appoint us as a committee and invite faculty participation. They won't, of course.  
 b. Mubarak's survival is impossible to predict and, even if he does, his plan to make his son his heir apparent is now in serious jeopardy.

Nouns like *participation* and *survival* trigger VP–ellipsis in the second conjunct. This provides a helpful hint for the present proposal that VP–ellipsis has much to do with the timing when no auxiliary verbs are included.<sup>23</sup>

---

<sup>22</sup> See Bošković (2018) for the importance of timing in grammar.

<sup>23</sup> Regarding category mismatch in VP ellipsis, see Sugimoto (2018) for a more recent development.