

On Gapping and Multiple Sluicing in English

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On Gapping and Multiple Sluicing in English*

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1. Introduction

This paper aims to examine two elliptical constructions, gapping and multiple sluicing in English, mainly on the basis of the difference in island sensitivity. It has been observed that there are some similarities between the two constructions, e.g. they have multiple remnants, and there are no tensed elements in the following conjuncts as illustrated in (1) ((1a) is gapping, and (1b) is multiple sluicing).

- (1) a. Mary bought a car and Sam, a bike.
b. Mary said everybody talked about something, but I don't know who about what

However, these constructions differ in terms of island sensitivity. As for gapping, as argued by Coppock (2001), it does not show so-called island repair. For instance, in (2b), an element *Martha* in the adjunct clause, *sport* in the wh island in (3b), and *Proctor* in the subject island in (4b) remain as remnants and they are all ungrammatical.

- (2) a. John must be a fool to have married Jane, and Bill must be a fool to have married Martha.
b. *John must be a fool to have married Jane, and Bill, Martha.

(Coppock 2001)

(3) a. Suzy doesn't like men who play instruments, and Mary doesn't like men who play sports.

b. *Suzy doesn't like men who play instruments, and Mary, sport.

(ibid.)

(4) a. That Abigail is lying is Danforth's opinion, and That Proctor is lying is the jury's opinion.

b. *That Abigail is lying is Danforth's opinion, and Proctor, the jury's.

(ibid.)

On the other hand, multiple sluicing shows island repair.¹ For example, when the remnants *which of the teachers* and *about what* crosses over adjunct clause as in (5a), the sentence will be ungrammatical. However, if the part containing the adjunct clause is elided, the grammaticality will be remedied as shown in (5b). The same process holds true for island repair in wh islands and subject islands as in (6) and (7) respectively. Specifically, *what* and *to which* are extracted from the wh island in (6) and *what* and *to who* from the subject island in (7).

(5) a. *Ben will be mad if Abby talks to one of the teachers about something, but she couldn't remember which of the teachers about what Ben will be mad if she talks to.

b. ?Ben will be mad if Abby talks to one of the teachers about something, but she couldn't remember which of the teachers about what.

(6) a. *She kissed a man who told something to one of my friends, but Tom does not know what to which (one of my friends) she kissed the man who told.

b. ?She kissed a man who told something to one of my friends, but Tom does not know what to which (one of my friends).

(7) a. *That he will talk about something secret to someone is possible, but I will not divulge about what to whom that he will tell is possible.

b. ?That he will talk something secret to someone is possible, but I will not divulge about what to whom.

This paper is organized as follows. In section 2, we will survey the size of coordination and the directionality of movement in gapping and multiple sluicing, specifically reviewing the Across the Board (ATB) movement approach for gapping, which was argued by Johnson (1996, 2006, 2009) and the TP deletion approach for multiple sluicing, which was proposed by Lasnik (2007). In section 3, I will make a suggestion concerning the derivational processes of the two constructions based on the discussion made in section 2 and offer a straightforward account of island sensitivity. I conclude the paper by summarizing the main results of my research.

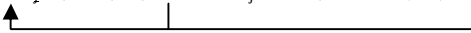
2. Previous Analyses

2.1 The Size of the Coordination

Johnson (1996, 2006, 2009) proposes a new approach to gapping, in which it is derived from Across the Board (ATB) movement. According to his suggestion, conjuncts in gapping consist of vP coordination as illustrated in (8).

(8) a. Some will eat beans and others rice.

b. [_{TP} Some_i will [_{PredP} [_{VP} eat t_i] [_{VP} t_i [_{VP} [_{VP}] beans_j]] and [_{VP} others[_{VP} [_{VP}] rice_j]]]]]

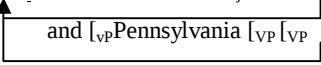


In (8b), the constituent [*eat t*] moves to Spec-PredP in ATB fashion after each element *beans* and *rice* in both conjuncts adjoins rightward to VP. Afterward, the subject in the first conjunct moves to Spec-TP to check EPP feature. However, this approach faces some serious problems.

First, we find gapping cases in which discontinuous strings are elided as in (9).

(9) a. Arizona elected Goldwater senator, and Pennsylvania Schweiker.

b. [_{TP} Arizona_j [_{PredP} [_{VP} elected t_i senator] Pred [_{VP} [_{VP} t_j [_{VP} [_{VP}] Goldwater_i], and [_{VP} Pennsylvania [_{VP} [_{VP}] Schweiker_i]]]]].



According to his approach, the correlate *Goldwater* and the remnant *Schweiker* first adjoin to VP, then VP [*elected t senator*] moves to Spec-PredP in an ATB way. Further, the subject *Arizona* moves to Spec-TP. However, the resulting derivation in (9b) is different from (9a) in word order. Thus, his approach cannot correctly account for cases like (9).

Second, if remnants in gapping include sentence adverbs, there are no places for them to adjoin in the second conjunct, for it is generally said that they are originally adjoined to TP:

(10) The boy played with a toy car yesterday, and the girl with a doll today.

Finally, as adduced by Repp (2009), gapping can include *wh* elements such as *when* and *why* as remnants as illustrated in (11).

(11) a. When did John arrive and when Mary?

b. Why did John go by train and Why Mary by car? (Repp 2009)

Specifically, *why* is generally considered to be generated in the domain of CP not by movement from some position lower than CP. Thus, Johnson's approach cannot account for the case in (11).

From the counterexamples above, we can conclude that the ATB movement approach proposed by Johnson cannot properly capture the facts in gapping.

2.2 The Directionality of Movement

Lasnik (2007) offers a rightward focus movement approach for multiple sluicing. He observes that the requirement for the rightward movement that only the objects of prepositions cannot be extraposed is also seen in the cases of multiple sluicing as indicated in (12a). In (12a), the first remnant *what* can appear without the preposition *about*, but the second remnant *whom* cannot occur without the preposition *to*. The structure of (12a), which Lasnik proposes, is the one in (12b).

- (12) a. Peter talked about something to somebody, but I can't remember (about) what *(to) whom.

b. but I can't remember [_{CP} what_i [_{TP} ~~Peter talked [about t_i] [t_j]] [to whom_j]]~~

In (12b), the first remnant *what* moves to Spec-CP and the second one *to who* adjoins rightward to CP. After that, TP is deleted at PF.

However, as we will see in the following, Lasnik's approach faces some serious problems. The first issue is raised by Park and Kang (2007).

- (13) a. Who_i did Mary talk to t_i t_j yesterday about phonology_j?

b. *I know who Mary talked to yesterday about phonology, but I don't know who about semantics. (Park and Kang 2007)

(13a), in which the *wh* element *Who* moves to Spec-CP and *about phonology* adjoins rightward to VP (or possibly *vP*), indicates that the application of both *wh* movement and the right adjunction is legitimate. Therefore, one would predict, following Lasnik's approach, that multiple sluicing, in which the first remnant is *wh* element while the second remnant is non-*wh* element, is grammatical, contrary to fact. However, when multiple sluicing applies, the sentence is illegitimate, as illustrated in (13b). This fact strongly suggests that the second remnant in multiple sluicing does not adjoin rightward.

The second problem concerns the ECM construction. Generally, an ECM subject cannot be right adjoined. Therefore, *the politician with high profile in international affairs* cannot be heavy NP shifted as in (14b).

- (14) a. I believe the politician with high profile in internal affairs to be honest.

b. *I believe to be dishonest the politician with high profile in international affairs.

However, in fact, multiple sluicing allows the ECM subject to be a remnant, as in (15).

- (15) One of the boys believes behind one of the trees to be the best place to hide, but
I don't know which behind which tree.

As is clear from the above, Lasnik's approach cannot correctly account for the properties of multiple sluicing. Namely, those cases in question strongly suggest that the second remnants in multiple sluicing do not move rightward. Moreover, we face a fatal problem about the *wh* remnants. Given that *wh* elements need to check the *wh* feature of C, it is natural to assume that those elements should move leftward, not rightward.

In the next section, we will present a new approach to gapping and multiple sluicing which can account for the problematic data of the preceding analyses.

3. An Alternative Analysis

3.1 The Size of the Coordination

Based on the previous discussion of the size of the coordination and the directionality of the remnant, we will present a new account for the structure of gapping and multiple sluicing.

First let us consider the size of the coordination of the two constructions. As shown above, Repp (2009) provides evidence such as (16a), which shows gapping can consist of the coordination of the CP domain. According to Rizzi (2004), *why* is generated in the Int(errogative) Phrase. If so, we have roughly the structure in (16b). In (16b), *why* is base-generated in Spec IntP, *Mary* moves to Spec FocP out of TP and *by car* moves rightward and adjoins to FocP. As for multiple sluicing, given that the deletion operation at PF is applied to a constituent, both of the *wh* phrases move overtly above TP, that is to the CP domain, because the tensed elements are included in the deletion domain, as illustrated in (17b).

- (16) a. Why did John go by train and why Mary by car? (Repp 2009)

b. [_{IntP} why [_{FocP} Mary_i [_{TP} ~~t_i did go t_j~~ by car_j]]

- (17) a. Someone was talking to someone, but I don't know who to who

(Lasnik 2007)

b. Someone was talking to someone, but I don't know who_i to who_j [~~t_i was talking t_j~~]

Therefore, it can be concluded that the remnants can finally move to the CP domain both in gapping and multiple sluicing.

3.2 The Directionality of Movement

Next, we will discuss the directionality of the movement of the second remnants in gapping and multiple sluicing.

As for gapping, let us first survey the data concerning Heavy NP shift, which is said to be related to gapping in some respect, as first argued by Jayaseelan (1990).

- (18) a. *John looked at t_i in the living room yesterday [the man who lived next door]_i.

b. John looked in the living room yesterday at the man who lived next door.

In (18a), the sentence is ungrammatical, for only the object of a preposition moves rightward. On the other hand, if a prepositional phrase (PP) as a whole moves rightward, the sentence becomes grammatical. As Jayaseelan points out, this property also holds in gapping:

- (19) a. John talked to about Bill and Mary about Susan.

b. ?*John talked about Bill and Mary Susan.

If we omit the preposition *about* in the second conjunct, as in (19b), the sentence

would be degraded. However, when the PP remains as a remnant, the sentence is grammatical, as shown in (19a). Further, this rightward movement (Heavy NP shift) approach also captures the following case in (20).

(20) a. *John gave $t_i t_j$ yesterday the tall man_i the book written by the professor at MIT_j.

b. *John gave Susan an eggplant, and Henry Martha a potato sandwich.

(Hankamer 1971)

Some scholars consider multiple application of rightward adjunction impossible. Thus, (20a) is ungrammatical since this adjunction applies to both *the tall man* and *the book written by the professor at MIT*. If the movement of remnants in gapping involve this operation, we can properly account for the ungrammaticality of (20b), in which both of *Martha* and *a potato sandwich* adjoins rightward in the second conjunct, and the omission of *gave* occurs afterwards.

Next, let us consider the directionality of the second *wh* remnants in multiple sluicing. Generally, in English, only one *wh*-phrase moves in multiple questions as in (21). However, we assume that the second *wh* phrase also moves to Spec FocP even though there are two *wh* phrases, specifically in multiple sluicing. Thus, the question why the second *wh* phrase moves leftward overtly in multiple sluicing arises. To deal with this problem, we assume that the second *wh* phrase has a feature to be checked which the second *wh* phrase in normal multiple *wh* questions do not have: (contrastive) focus feature. Therefore, the second *wh* phrase needs to move overtly.

(21) What did John give to who?

(Bošković 2002)

Regarding the directionality of the remnants in multiple sluicing, as we alluded above, not only the first remnant but also the second remnant moves leftward to check the focus feature. Moreover, we assume that the remnants in gapping also

have focus feature. As for *wh* remnants in multiple sluicing, it is generally conceived that *wh* phrases have focus property, and remnants in gapping, as pointed out by Féry and Hartmann (2005), have contrastive focus (though we shall not discuss the difference between focus and contrastive focus here). Specifically, the first remnant in gapping moves leftward to check focus feature, and the second remnant moves rightward, although this remnant does not check any features. Moreover, both remnants move to Focus Phrase (FocP) in the CP domain. Similarly, as with multiple sluicing, both remnants move to Spec FocP not only to check the *wh* feature but also to check the focus feature. We will look at specific derivations of gapping and multiple sluicing in section 3.3.

3.3 The Size of the Coordination and the Directionality of Movement

Taking above discussion into consideration, we have the following assumptions with respect to the size of the coordination and the directionality of movement.

(22) Assumptions

- a. Gapping and multiple sluicing consist of the coordination of the CP domain, specifically FocP.
- b. In gapping, the first remnant moves leftward, and the second one adjoins rightward, while in multiple sluicing, both of the two remnants (*wh* phrases) move leftward.

Now, let us consider the directionality of movement in detail. As we discussed in section 3.2, in gapping the second remnant moves rightward, and in multiple sluicing the second *wh* remnant moves leftward to check *wh* and focus features. Moreover, following Tanaka (2012), we assume the directionality of movement is regulated by the existence of feature checking. Generally, the rightward movement is considered to be conducted only one time. However, if we assume that, for example, the tensed elements and verbs in TP are deleted and the deletion operation

is applied to the constituents, it is plausible to suppose that the second remnants move to some position above TP and move successively. To work out this assumption, we have the following economy condition.

(23) A Condition on Superfluous Movement

If an element moves rightward above vP successively, the maximal projection (vP) is assigned @ marking which shows the superfluous movement.

Next, we will discuss the locality of movement. As for locality, some linguists (Chomsky (1972), Merchant (2008), Bošković (2011), among others) argue that when the locality is not observed, * is assigned to an offending node (Chomsky (1972)) or to a troublemaking copy (Merchant (2008), Bošković (2011)).³ Specifically, following Merchant (2008), we assume the following condition in (24).

(24) A Locality Condition

* features are assigned to copies when they cause the locality violation.

Let us first review Merchant's approach based on island repair in sluicing.

(25) a. *They want to hire someone who speaks a Balkan language, but I don't remember which they want to hire someone who speaks.

b. They want to hire someone who speaks a Balkan language, but I don't remember which.

(25a) shows island violation: *which* moves across wh island. However, when the TP clause is deleted, the sentence becomes grammatical as shown in (25b). This is called island repair. The specific derivation is as follows.

(26) a. They want to hire someone who speaks a Balkan language, but I don't remember which.

- b. [_{CP} *which*₂ C [_{TP} ~~*t'~~ [_{TP} ~~they~~ [_{VP} ~~*t~~ [_{VP} ~~want to hire~~ [_{NP} [_{NP} ~~someone~~ [_{CP} ~~*who* speaks t₂~~]]]]]]]]]

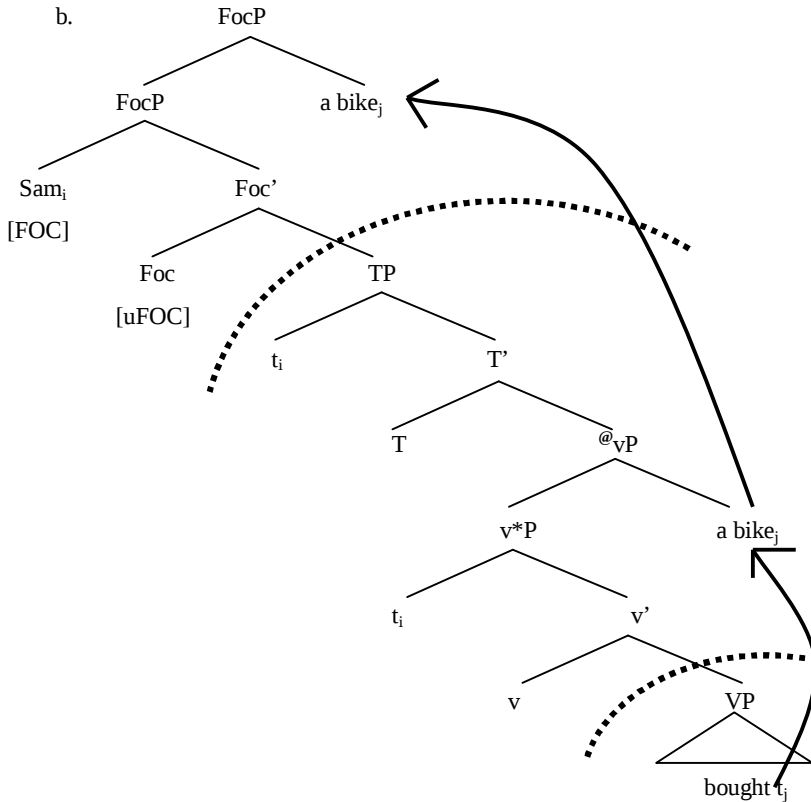
In (26b), first *which* moves out of wh island and adjoins to VP, thereby it (*t₂) gets * feature. Next, the copy adjoins to TP and the * feature on this copy is also copied (*t₂'). Finally, it moves to Spec Spec CP. Since C [+wh, Q], which licenses the movement of *which* to Spec CP, can check * feature of the topmost copy of *which*, the * on it is deleted. After that, the deletion of all copies with * feature takes place because TP is deleted at PF. Thus, the sentence would be grammatical, as in (26a).

3.3 Derivations of Gapping and Multiple Sluicing

Following Merchant's account for sluicing, we propose the derivation of the two constructions, gapping and multiple sluicing, as follows.

First, let us consider the derivation of gapping. Taking the assumptions made in section 3.1 and 3.2 into account, we have the following derivation.

(27) a. Mary bought a car and Sam a bike.

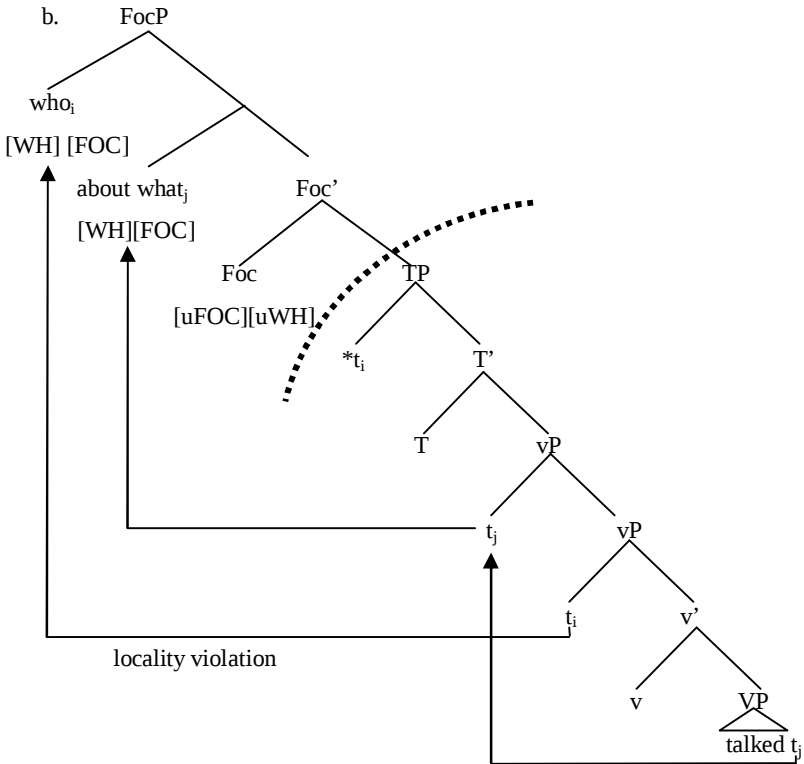


In (27b), the second remnant *a bike* adjoins rightward to vP. After *v* is introduced in the derivation and the second remnant adjoins to vP, the complement of *v*, namely, VP is transferred. Further, a head *T* is introduced in the derivation, and the first remnant *Sam* in Spec vP moves to Spec TP to check the EPP feature of *T*. Then, a head *Foc* is merged. Afterward, the first remnant moves to Spec FocP to check an uninterpretable focus feature of *Foc*.⁴ In order for the two remnants to be in a same tensed clause (cf. clausemate restriction proposed by Takahashi (1994)), the second remnant *a bike* also needs to move to the domain of FocP. Therefore, we assume that *a bike* again adjoins rightward to FocP. This movement is superfluous and this

violates the condition in (23). Therefore, when the element moves rightward further across the vP (namely a superfluous movement), the node, which is crossed by the element, is assigned @ marker. After the two remnant move to FocP domain, the complement of FocP, that is, TP is transferred and deleted at PF. As a result, by deletion of TP, @ marking is also deleted. Thus, the sentence in (27a) converges.

Next, let us look at the derivation in multiple sluicing.

(28) a. Mary said everybody talked about something, but I don't know who about what.



In (28b), first the second remnant *about what* moves out of VP and lands at outer Spec vP. Next, the first remnant *who* moves to Spec TP and Spec FocP

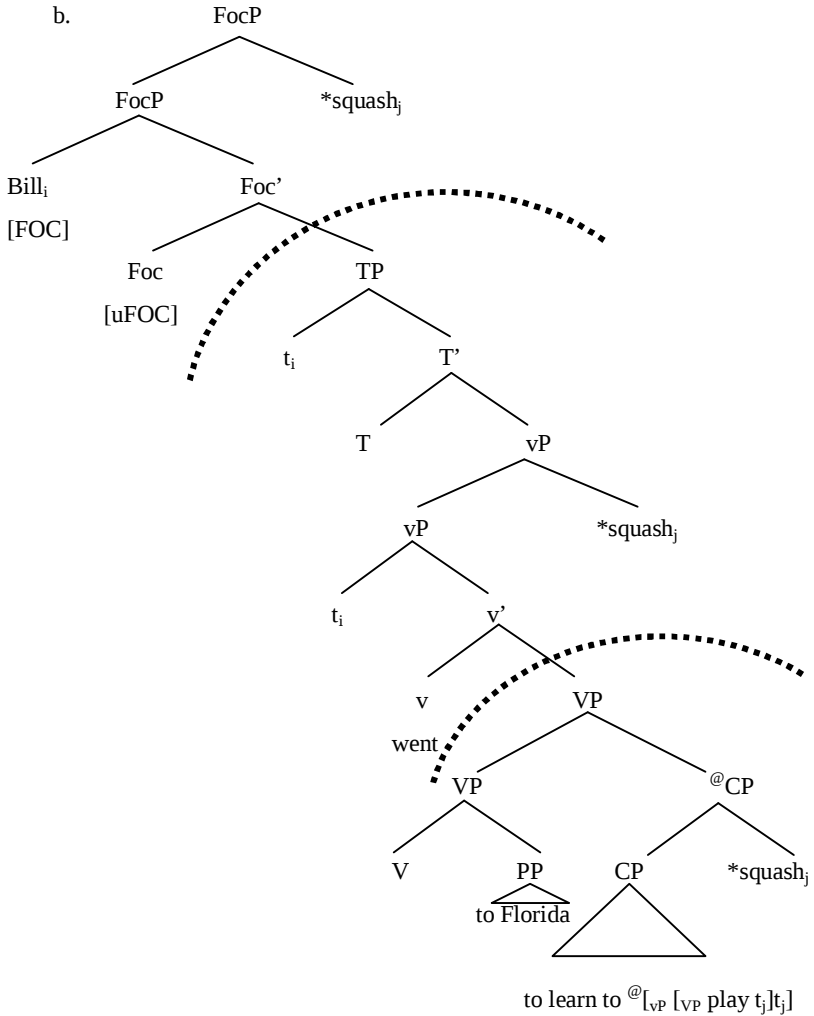
simultaneously (e.g. Chomsky (2008)). However, these movements cause the minimality violation, for the movements of *about what* to Spec TP and Spec FocP are shorter than those of *who* to those positions. Therefore, a copy of *who* at Spec TP and the one at Spec FocP both get * features. However, a head Foc [uFOC] [uWH] can check * feature of *who* at Spec FocP and this feature is deleted. Third, the second remnant at Spec vP moves to inner Spec FocP by a tucking in operation (Richards (2001)). Finally, the complement of FocP, TP, is transferred and deletion of TP occurs. As a result, the *feature of copy of *who* at Spec TP is deleted and the derivation converges.

4. An Approach to Island Repair Phenomena

4.1 Non Island Repair in Gapping

In this subsection, we will show that the difference between gapping and multiple sluicing with respect to island repair can be explained by the approach adopted here. Let us first look at the case of gapping, in which island repair effect cannot be observed. The derivation of (29a) is represented as in (29b).

(29) a. *Tom went to Florida to learn to play tennis, and Bill, squash. (Coppock 2001)



(29a) causes the adjunct island violation. In (29b), the second remnant *squash* first adjoins to the most embedded vP in the adjunct island. Since this movement does not cross over the adjunct island, it is not assigned * feature at this point. However, the next

movement of the second remnant, which adjoins rightward to CP, causes the island violation and this is a superfluous movement. Thereby, it gets * feature and CP is assigned @ mark. However, this remnant needs to be in the FocP domain in the end. Therefore, after v is introduced in the derivation, the second remnant moves rightward and it adjoins to higher vP, where the * feature also is copied. After this movement, VP is transferred and deleted at PF. Afterward, T is introduced and the first remnant moves to Spec TP to check the EPP feature of T. Finally, Foc head in the CP domain is introduced in the derivation. The first remnant in Spec TP moves to Spec FocP and check the focus feature. After that, the second remnant again moves and adjoins to FocP. Subsequently, TP is transferred. However, the derivation crashes because * feature on the second remnant remains unchecked.

- (30) a. *Suzy doesn't like men who play instruments, and Mary, sports. (ibid.)
 b. [_{FocP} Mary₁ [_{TP} t₁ doesn't [_{VP} t₁ [_{VP} like [_{DP} men [_{CP} who [_{TP} v [_{VP} play t₂] t₂]
 *t₂]]]]] *t₂]] *sport₇]

(30) is ungrammatical because the second remnant *sports* corresponds to the correlate *instruments* in the first conjunct and this shows that the second remnant is originally generated in and extracted from the complex NP island. Specifically in (30b), the second remnant *sports* first adjoins rightward to vP. However, the first remnant is not introduced in the derivation yet, and therefore the second remnant needs to keep moving rightward. After the most embedded CP is constructed, the second remnant adjoins to this CP. Here, since this movement is superfluous and crosses vP, it gets @ mark. Further, this adjunct causes the island violation since the second remnant moves out of island. Consequently, this remnant gets * feature. Next, it adjoins to the upper vP and the first remnant moves to Spec TP to check EPP feature of T. Finally, it moves to Spec FocP to check focus feature. Then, the second remnant adjoins to FocP. Afterward, TP is transferred and deleted at PF. However, the * feature on the second remnant remains to be unchecked. Therefore, the sentence is ungrammatical.

(31) a. *John wondered what to cook for Tom, and Peter, for Mary.

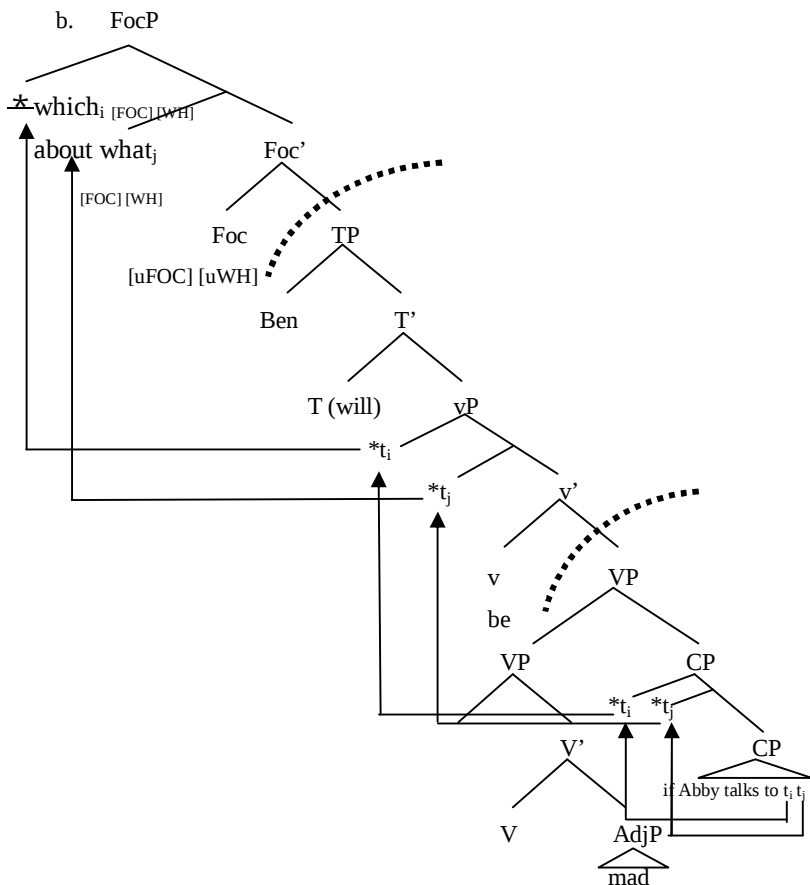
b. [_{FocP} Peter₁ [_{TP} t₁ [_{vP} t₁ wondered [_{CP} what [_{TP} t_{1P} to [_{v*P} [_{vP} cook t₂] *t₂] *t₂]]
*for Mary₂]

(31a) is ungrammatical for there is a wh island violation. In (31b), the second remnant *Mary* first adjoins to v*P. However, this remnant then crosses a wh island, therefore the second remnant gets * feature. Further, this movement is a superfluous movement and causes an upward boundedness violation, v*P gets @ mark. Then, the second remnant adjoins to higher vP. Further, the first remnant moves to Spec TP to check EPP feature of T. After C is introduced in the derivation, the first remnant moves to Spec FocP to check focus feature. Finally, the second remnant with * feature further adjoins to FocP. Afterward, TP is transferred and deleted at PF under identity with the first conjunct. However, the * feature on the second remnant remains to be unchecked and the derivation crashes.

4.2 Island Repair in Multiple Sluicing

In this subsection, we will see how the island repair is observed in multiple sluicing. First, let us look at a case in which the first and second remnants both seem to be extracted from the adjunct island.

(32) a. ?Ben will be mad if Abby talks to one of the teachers about something, but she couldn't remember which (of the teachers) about what.



In (32), the first remnant *which* moves to the edge of CP and, similarly, the second remnant *about what* moves to the inner edge of CP by tucking in. Here, both of them get * features as they move out of an adjunct island and violate (24). Next, the first remnant with * feature moves to the Spec vP, and the second remnant with the one moves to the inner Spec vP by tucking in. Then, the complement of vP, namely, VP is transferred. Afterward, the first remnant moves to Spec FocP, then the second remnant tucks in to the inner Spec FocP and checks wh feature and focus feature of Foc. At that time, * features of both remnants are checked by agreement between the

remnants and the head Foc. Finally, the complement of CP, TP is transferred and deleted at PF. Consequently, no *features remain and the derivation properly converges.

Next, let us look at the other cases, such as a *wh* island and a subject island.

- (33) a. ?She kissed a man who told something to one of my friends, but Tom does not know what to which (one of my friends).

b. [_{FocP} what₁ to which₂ Foc [_{TP} ~~She~~ [_{vP} *_t₁ *_t₂ [_{vP} ~~kissed~~ [_{DP} ~~a man~~ [_{CP} *_t₁ *_t₂ ~~who~~ [_{vP} ~~told~~ _t₁ _t₂]]]]]]]]

The derivation of (33a) proceeds as in (33b). In (33b), the first remnant *what* moves to the edge of CP crossing the *wh* island. There, this remnant gets * feature because this movement violates the condition in (24). The second remnants *to which* moves to the inner edge of CP by tucking in. As this remnant also crosses the *wh* island and violates (24), it gets *feature. Then, the first remnant moves to the higher edge of vP and the second remnant, to the inner edge of vP. After that, the complement of vP, namely, VP is transferred. After the head T is introduced in the derivation and the subject in Spec vP moves to Spec TP, the head Foc is introduced. The first remnant moves to Spec FocP and agreement between Foc and the first remnant occurs. Then, the second remnant moves to inner Spec of FocP by tucking in and agrees with the Foc head. Afterward, TP is transferred and deleted at PF and the derivation successfully converges.

- (34) a. That he will talk something secret to someone is possible, but I will not divulge what to whom.

b. [_{Foc} what₁ to whom₂ Foc [_{TP} [_{CP} *_t₁ *_t₂ ~~that~~ [_{TP} ~~he~~ ~~will~~ [_{vP} _t₁ _t₂ [_{vP} ~~talk~~ _t₁ _t₂]]]]]] is possible]

In (34b), the remnants *what* and *to whom* move out of the subject island. Looking at

the derivation in detail, first the object of *talk*, *what* moves to the edge of vP out of VP. Similarly, the second remnant *to whom* moves to the inner edge of vP out of VP. Next, after T is introduced in the derivation, the subject *he* in subject clause moves to Spec TP to check the EPP feature of T. Then, after C is introduced, the first remnant moves to Spec CP and the second remnant moves to inner Spec CP. There, they cause an island violation as they move out of the subject island and, following the condition in (24), they both get * features. To check the focus feature and wh feature of Foc, both remnants move to Spec FocP; the first remnant moves to Spec FocP. The second remnant moves to inner Spec FocP by tucking in since the closest landing position for the second remnant is the inner Spec FocP not the outer one. Afterward, TP is deleted at PF under identity with the antecedent clause and the derivation converges.

Thus, we can successfully capture the grammaticality of multiple sluicing, in which the remnants move out of islands.

5. Conclusion

This paper discussed the difference of syntactic behavior between gapping and multiple sluicing centered on island repair phenomena. In section 2, we considered the size of the coordination and the directionality of movement based on previous analysis, Johnson (1996, 2006, 2009) and Lasnik (2007), and pointed out their problems. In section 3, we presented a new account for gapping and multiple sluicing. We suggested that gapping also consists of coordination of FocPs and that TP deletion takes place. Further, we proposed that the first remnant moves leftward to check focus feature and the second remnants successively adjoin to phase projection. As for multiple sluicing, we argued that both remnants actually move leftward to check wh feature and focus feature. Further, we suggested that TP is deleted at PF as is the case with gapping. In section 4, we went on to show why gapping cannot exhibit island repair while multiple sluicing can: in gapping the * features on the second remnants cannot be checked while those on the remnants in multiple sluicing can be checked by Foc head.

Notes

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1. At first, some informants judged multiple sluicing difficult to accept because of multiple wh phrases. However, if they put a pause between the first and the second remnant, they find that such sentences more acceptable.

2. As to this discussion, Takahashi (1994) proposes the next restriction.

Clausemate Restriction

Remnant wh-phrases are clausemates to each other (Takahashi 1994: 285)

3. Merchant (2008) proposes that * is a feature of a trace while Chomsky (1972) argues that * is a feature which is assigned to an island node.

4. I follow Rizzi (1997), who proposes the fine structure of CP, as illustrated below.

[_{ForceP} Force [_{Top*P} Top* [_{FocP} Foc [_{Top*P} Top [_{FinP} Fin [_{TP} T]]]]]] (Rizzi 1997)

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