a. John believes Mary to be honest and Bill Susan.

b. 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].

Sentences where the rightward movement is impossible contain ‘believe’ or ‘expect’. Therefore, the object of ‘believes’ in (8a) never moves rightward in Gapping because Gapping is based on Extraposition. Lasnik argues that the second element(Susan) moves to the end of the clause, but this argument cannot be acceptable. In (8b), PP, which is the second survived element, cannot move rightward. PP in the second clause shows leftward movement. Moreover, PP in the first clause comes to the subject position of the clause. This generally does not occur but an invisible noun (a place) is thought to exist. That is why this sentence is grammatical even though PP appears in the subject position. However, multiple Sluicing can appear in the sentences that contain ‘expect’ or ‘believe’ and leftward movement occurs in multiple Sluicing.

In short, the Gapping analysis of multiple Sluicing in English (Nishigauchi&Lasnik) is incorrect even though there are undeniable facts. Gapping cannot be applied to analyzing multiple Sluicing because of some problems.

4.3 VP ellipsis vs. TP ellipsis in terms of an extraction out of ellipsis (Lasnik&Park)

There are differences between VP ellipsis and TP ellipsis in terms of an extraction out of the elided element. This means that VP ellipsis will be impossible if there is the extraction out of ellipsis:

- **VPE:** $[T_P \ S \ Aux \ [V_P \ T_V \ C_P \ T_P]$
- **TPE:** $[T_P \ T_P]$

46
In the case of VP ellipsis, there is always an auxiliary verb before VP ellipsis, and a subject or the auxiliary verb receive contrastive accent. Also, VP has to be simple structurally. If VP is complex, a movement out of the deleted part will be impossible. On the other hand, the extraction out of TP ellipsis is grammatical even though TP is complex as it is shown above.

Besides, VP ellipsis is not able to repair impossible movements in sentences; however, TP ellipsis is able to do that. Examples are shown in the following:

(1) a. *They want to hire someone who speak a Balkan language, but I don’t know which they do [\textsubscript{VP want to hire someone who speaks \textsubscript{1}}]. –complex NP constraint

b. *It appears that a certain senator will resign, but which senator, it does [\textsubscript{VP appear that \textsubscript{1} will resign}] is still a secret. –that-trace

c. *Sally asked if somebody was going to fail Syntax One, but I can’t remember who, she did [\textsubscript{VP ask if \textsubscript{1} was going to fail Syntax One}]–if-trace

d. *She said that a biography of one of the Marx brothers is going to be published this year, but I don’t remember which she did [\textsubscript{VP say that a biography of \textsubscript{1} is going to be published this year}]–subject condition

(2) a. They want to hire someone who speak a Balkan language, but I don’t know which.

b. It appears that a certain senator will resign, but which senator is still a secret.

c. Sally asked if somebody was going to fail Syntax One, but I can’t remember who.

d. She said that a biography of one of the Marx brothers is going to be published this year, but I don’t remember which.

Examples in (1) show that the impossible movement of subject cannot be repaired by VP ellipsis; however, examples in (2) indicate that the ungrammatical sentences can be repaired by TP ellipsis. In the case of movement of an object, this repair-by-ellipsis is also
applied identically:

(3) a. They studied a Balkan language, but I don’t know which Balkan language they studied. –original sentence

b. They studied a Balkan language, but I don’t know which Balkan language –TPE

c. ?? They studied a Balkan language, but I don’t know which Balkan language; they did [VP study].

(?? denotes that most people do not accept this sentence.)

Despite the fact that VP ellipsis is impossible when the extraction occurs out of ellipsis, Jason Merchant (2001) proposes that VP ellipsis is possible even though there are extractions out of VP ellipsis. Look at the examples below:

(4) a. What VP Ellipsis CAN do, and what it CAN’T<de>.

b. GREEK, you should take; DUTCH, you shouldn’t<take>.

c. I think YOU should ride the TALLEST camel, but I don’t know which one PHIL should<ride>.

Examples in (4), both stressed elements in each sentence are in contrast each other in terms of meaning, and simple verbs are used in the sentence, so VP ellipsis is grammatical. In (4a), auxiliary verbs receive stress. Also, in (4b) and (4c), objects and subjects receive accents respectively. The reason why these elements receive stress is to call attention to the hearer.

Merchant also suggests MaxElide analysis, which is that larger part of a phrase has to be deleted. If both VP ellipsis and TP ellipsis are possible in the sentence, the bigger phrase, TP, has to be deleted. The examples in (1) are incorrect since the smaller phrase, VP is elided in these sentences.

However, Marchant’s analysis has a problem. Look at the examples in the following:
(5) a. *ABBY wants to hire someone who speaks a Balkan language, but I don't know what kind of language, BEN does \[vp \text{ want to hire someone who speak } t \].

b. *It DID appear that a certain senator had resigned, but which senator, it DOES \[vp \text{ appear that } t \text{ resigned } \] is now hush-hushed.

The subject in (5a) and the auxiliary verb in (5b) receive accent, so it is predicted that this sentence might be grammatical; however, these examples are ungrammatical. Hence, Merchant’s proposal is no longer valid.

Lasnik and Park (2003) propose two ideas about VP ellipsis in terms of the extraction out of ellipsis: identity and types of movement. First idea, which is identity, means that next higher phrase is identical to preceding CP or VP, and the repeated one is going to be deleted because there is the same one in the preceding phrase. Also, the moved element is included in the next higher phrase.

\[ \text{[ VP } [\text{ Antecedent VP } \ ] = [[\text{ VP } [\text{ Elliptical VP } \ ] ] ] \]

\[ \text{[ TP } [\text{ Antecedent TP } \ ] = [[\text{ TP } [\text{ Elliptical TP } \ ] ] ] \]

If both antecedent XP and elliptical XP is identical, some elements can move out of the deleted phrase. At first, vP is the next higher phrase in the case of VP ellipsis. In other words, vP is a domain for identity.

(6) I love you.
As it can be drawn, vP and v refers to new addition for structure of the sentence. In VP ellipsis in terms of extraction out of ellipsis, when VP is deleted, vP has to be required for the sake of identity. Also, the object (you) always goes to the edge of vP. In the case of TP ellipsis, CP itself cannot be elided as CP is a domain for identity.

The second idea is types of movement in terms of a record of the positions through which a moving element moves. There are three kinds of movement in the following:

$$\begin{array}{l}
\text{A-movement: } (A, A, A) \\
\quad \text{Argument movement: } (A', A', A) \\
\quad \text{A'-movement} \\
\quad \quad \text{Adjunct movement: } (A', A', A')
\end{array}$$

A-movement refers to argument movement, and the final position of the movement is subject or object position. Look at the example of A-movement:

\[(7) \text{ John, seems } t \text{ to be praised } t_i \text{ by his teacher.}\]

The positions that the moved elements dropped by are A-positions, so A-movement is a uniform chain, which is a chain of A-positions. In contrast, A’-movement refers to non-argument movement, and the final position of this movement is non-subject or non-object position. A’-movement consists of two types: argument movement and adjunct movement:

\[(8) \text{ a. } \textbf{What}/\textit{Who(m)}/\textbf{Which}, \text{ do you think } t \text{ Bill praised } t_i? \quad \text{--Argument movement}\]

\[\quad \text{b. } \textbf{How}/\textit{Why}/\textbf{When}/\textbf{Where}, \text{ did you think (that) } t \text{ Mary met Bill } t_i? \quad \text{--Adjunct movement}\]
Like A-movement, adjunct movement also shows uniform chain in (8b). On the other hand, argument movement shows non-uniform chain in (8a). In the case of uniform chain, Noam Chomsky (1986) says that all the stop over positions are important for the sake of meaning of movement; however, in the case of non-uniform chain, intermediate position is unimportant for the structure of sentence. The only important positions are the starting and the final destination position of movement.

Besides, combination of A’&A-movement is possible, which means that straddling can be allowed:

(9) a. Mary thinks Bill praised someone,
   
   but I don’t know \([_{CP \text{who}(m)},]_{TP \text{Mary thinks}} t \text{ that } Bill t \text{ praised } t_1\].

b. Mary thinks Bill praised someone,
   
   *but I don’t know who, she does \([_{Vp t}[_{VP \text{thinks}} t \text{ that } Bill t \text{ praised } t_1]\].

From this, this conclusion can be summarized:

\[ \text{A'...A} \]

\[ \ast \text{A...A'} \]

The former one is grammatical because it starts with A-movement (basic movement) and ends up with A’-movement (abstract movement); however, the latter one is not.

As mentioned before, subjects or auxiliary verbs receive stress outside of VP ellipsis. There is an example about receiving accent:
(10) I know what I CAN do and what I CAN’T <do t>.

As it is shown, both auxiliary verbs receive contrastive stress in the sentence. VP ellipsis can be grammatical when not only either the subject or the auxiliary verbs have to receive contrastive accent, but also an the object of transitive verb (moving element) has to always drop by an edge of vP.

The reason why the subject and the auxiliary verb receive stress outside of VP ellipsis can be explained by Pseudogapping and a non-restrictive clause. First, in Pseudogapping, the moving element has to receive stress as in (11).

(11) John will select me, and Bill will YOU i [vP select t]_

In the non-restrictive clause, the direct object of transitive verb, which is a relative pronoun, has to drop by the edge of vP.

(12) a. ?Dullas suspected Philby, who i ANGLETON did not [vP [vP suspect t]].

b. ?We spoke to Philby, who i ANGLETON did not [vP [vP speak to t]].

c. *John stood near Mary, who i Bill did [vP [vP stand near t]] as well.

d. *They heard a lecture about a Balkan language, but I don’t know which Balkan language, they did [vP [vP hear a lecture about t]].

e. *John showed Mary the new teacher, who i Bill did [vP [vP show Mary t]] as well.

f. *Dullas is praising Philby, who i he has been [vP [vP is praising t]].

g. *I think you should adopt One of these puppies, but I don’t know [WHICH one] you should [vP [vP adopt t]].

Like in (12a), the edge of vP position has to be used when the direct object of transitive verb moves. People might think ‘speak to’ in (12b) is not the transitive verb, but
‘speak to’ is used like idiom and it has a meaning of ‘consult’. However, ‘stand near’ in (12c) cannot be used like idiom. Thus, the vP position cannot be used in this case. In addition, the object of preposition in (12d) cannot drop by this position. Even though the second DP in (12e) is called direct object, the object of transitive verb, which is immediately after the verb can be the direct object structurally, and only this object can go through the vP position. In the case of (12f), the sentence is ungrammatical because the subject of the auxiliary verbs do not receive stress, though there is the movement of the object of transitive verb. Last example (12g) is also bad since the moving element ‘which one you should’ receive contrastive accent. In other words, only in the case of VP ellipsis involving extraction out of ellipsis, the subjects or the auxiliary verbs have to receive contrastive stress.