JAPANESE MULTIPLE RIGHT DISLOCATION*

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1 Introduction

It has been widely assumed in the literature (see, *inter alia*, Haraguchi 1973; Kuno 1978, Simon 1989, Rosen 1996, Tanaka 2001, and Abe to appear) that Japanese right dislocation is derived by syntactic movement, though details differ among these analyses. In (1), for example, the embedded object *sono yubiwa-o* 'that ring-Acc' undergoes syntactic right dislocation:

(1) Tentyoo-ga [John-ga kayku-ni ***e*** watasi wasureta to] omoteiru yo, **sono yubiwa-o**
manger-Nom John-Nom guest-Dat give forgot C think Prt **that-ring-Acc**
'The manger thinks that John forgot to give that ring to the guest.'

This paper discusses multiple right dislocation such as (2), which has never been studied in detail. In (2), the embedded indirect object *kyaku-ni* 'guest-Dat' and the embedded object *sono yubiwa-o* 'that ring-Acc' undergo multiple right dislocation:

(2) Tentyoo-ga [John-ga ***e*** ***e*** watasi wasureta to] omoteiru yo,
manger-Nom John-Nom give forgot C think Prt
kayku-ni **sono-yubiwa-o**
guest-Dat **that-ring-Acc**
'The manger thinks that John forgot to give that ring to the guest.'

* This is a revised version of the paper presented at WAFL 14. I would like to thank the audiences at the conference for helpful comments and suggestions. Remaining errors and omissions are, of course, the sole responsibility of the author. This work is supported in part by the Japan Society for the Promotion of Science under grant Scientific Research C 18K00666 .

I propose that multiple right dislocation be derived not by syntactic movement but by PF movement, which I call *prosodic* right dislocation.

The organization of this paper is as follows. Section 2 presents evidence against a syntactic movement analysis of multiple right dislocation. It is shown that multiple right dislocation neither obeys any syntactic constraints nor has any LF effects. Section 3 proposes a PF movement analysis of multiple right dislocation. I will argue that in multiple right dislocation, targeted materials are packed into a prosodic constituent and then undergo *prosodic* right dislocation to the right edge of an intonation phrase in the PF-component. Section 4 makes a concluding remark.

2 Evidence against a Syntactic Movement Analysis of Multiple Right Dislocation

This section presents evidence against a syntactic movement analysis of multiple right dislocation. It is shown that unlike single right dislocation, multiple right dislocation neither obeys any syntactic constraints nor has any LF interpretive effects.

2.1 Island Constraints

A first evidence against a syntactic movement analysis of multiple right dislocation can be formulated in relation to island constraints. It has been pointed out by, among others, Simon (1989), Rosen (1996), and Tanaka (2001), single right dislocation is subject to syntactic island constraints as shown in (3):

(3) a. *?Tentyoo-ga **[ComplexNP** [John-ga kyaku-ni ***e*** watasi wasureta]
manger-Nom John-Nom guest-Dat give forgot
nitizi**]**-o oboeteiru yo, **sono-yubiwa-o**
date-Acc remember Prt **that-ring-Acc**
'The manger remembers the date when John forgot to give that ring to the guest.'

b. *? Tentyoo-ga **[Adjunct** John-ga kyaku-ni ***e*** watasi wasureta kara**]**
manger-Nom John-Nom guest-Dat gave forgot because
okotteiru yo, **sono-yubiwa-o**
be.angry Prt **that-ring-Acc**
'The manger is angry because John forgot to give that ring to the guest.'

In (3a), *sono yubiwa-o* 'that ring-Acc' is right-dislocated out of the complex NP. In (3b), *sono yubiwa-o* 'that ring-Acc' is right-dislocated out of the adjunct. Both (3a) and (3b) are deviant. Multiple right dislocation, on the other hand, does not show any island effects as shown in (4):

(4) a. Tentyoo-ga **[ComplexNP** [John-ga ***e e*** watasi wasureta] nitizi**]**-o
manger-Nom John-Nom give forgot date-Acc
oboeteiru yo, **kyaku-ni** **sono-yubiwa-o**
remember Prt **guest-Dat** **that-ring-Acc**
'The manger remembers the date when John forgot to give that ring to the guest.'

b. Tentyoo-ga **[Adjunct** John-ga ***e e*** watasi wasureta kara**]**
manger-Nom John-Nom gave forgot because
okotteiru yo, **kyaku-ni** **sono-yubiwa-o**
be.angry Prt **guest-Dat** **that-ring-Acc**
'The manger is angry because John forgot to give that ring to the guest.'

In (4a), *kyaku-ni* 'guest-Dat' and *sono yubiwa-o* 'that ring-Acc' undergo multiple right dislocation out of the complex NP. In (4b), they undergo multiple right dislocation out of the adjunct. Both (4a) and (4b) are acceptable. If multiple right dislocation were syntactic, (4) should be worse than (3), where only one constituent is right-dislocated out of an opaque domain. The result, however, is the opposite of what any syntactic analysis of multiple right dislocation predicts.

2.2 Right Dislocation of a Nominative Phrase

Single right dislocation of a nominative phrase is not allowed as shown in (5) (see Tanaka 2001):

(5)*?John-ga [***e*** Tookyoo-ni tuita to] omotteiru yo, **sono ressya-ga**
John-Nom Tokyo-in arrive C think Prt **that train-Nom**
'John thinks that that train has arrived in Tokyo.'

In (5), the nominative phrase *sono ressya-ga* 'that train-Nom' undergoes single right dislocation; the result is deviant. When a nominative phrase undergoes multiple right dislocation with another element, however, the result becomes acceptable as exemplified by (6):

(6) John-ga [***e e*** tuita to] omotteiru yo, **sono ressya-ga** **Tookyoo-ni**
John-Nom arrive C think Prt **that train-Nom** **Tokyo-in**
'John thinks that that train has arrived in Tokyo.'

In (6), the nominative phrase *sono ressya-ga* 'that train-Nom' undergoes multiple right dislocation with *Tookyoo-ni* 'to Tokyo'. Whatever syntactic constraint we adopt to rule out single right dislocation of a nominative phrase, the acceptability of (6) indicates that multiple right dislocation is not subject to that syntactic constraint. If the movement in multiple right dislocation were syntactic, it is hard to account for why moving a nominative phrase together with XP is acceptable while simply moving the nominative phrase is not.

2.3 Right Dislocation of an Adjunct

It has been pointed out by, among others, Tanaka (2001) that single right dislocation of a 'true adjunct' is not allowed as shown in (7):

(7)*?John-ga [Mary-ga ***e*** sono riron-o sinziteiru to] omotteiru yo, **riyuu-mo-naku**
John-Nom Mary-Nom that theory-Acc believe C think Prt **reason-even-without**
'John thinks that Mary believes in that theory without any reason.'

In (7), the 'true adjunct' *riyuu-mo-naku* 'without any reason' undergoes single right dislocation; the result is deviant. When an adjunct undergoes multiple right dislocation with another element, however, the result becomes acceptable as shown below:

(8) John-ga [Mary-ga ***e*** ***e*** sinziteiru to] omotteiru yo,
John-Nom Mary-Nom believe C think Prt
riyuu-mo-naku **sono riron-o**
reason-even-without **that theory-Acc**
'John thinks that Mary believes in that theory without any reason.'

In (8), the adjunct *riyuu-mo-naku* 'without any reason' undergoes multiple right dislocation with *sono riron-o* 'that theory-Acc'. Whatever LF interpretive constraint we adopt to rule out single right dislocation of a 'true adjunct' such as (7), the acceptability of (8) indicates that multiple right dislocation is not subject to that LF interpretive constraint. This fact straightforwardly follows if multiple-right-dislocated phrases are interpreted *in-situ* at LF. No syntactic movement analysis of multiple right dislocation can ever give a principled account of this fact.

2.4 Right Dislocation of a *Wh*-Phrase

It has been pointed out by, among others, Tanaka (2001) and Fukutomi (2007) that single right dislocation of a *wh*-phrase is not allowed as shown in (9):

(9) *John-wa [Mary-ga Bill-ni ***e*** naisyode ageta ka] siritagatteiru yo, **nani-o**
John-Top Mary-Nom Bill-Dat secretly gave Q want.to.know Prt **what-Acc**
'John wants to know what Mary gave to Bill.'

In (9), the *wh*-phrase *nani-o* 'what-Acc' is right-dislocated; the result is deviant. When a wh-phrase undergoes multiple right dislocation with another wh-phrase, however, the result becomes acceptable as shown in (10):

(10) John-wa [Mary-ga ***e e*** naisyode ageta ka] siritagatteiru yo, **dare-ni** **nani-o**
John-Top Mary-Nom secretly gave Q want.to.know Prt **who-Dat** **what-Acc**
Lit. 'John wants to know to whom what Mary gave.'

In (10), the *wh*-phrase *nani-o* 'what-Acc' undergoes multiple right dislocation with another *wh*-phrase *dare-ni* 'who-Dat'. Whatever LF interpretative constraint we adopt to rule out single right dislocation of a *wh*-phrase (9), the acceptability of (10) shows that multiple-right-dislocated phrases are interpreted *in-situ* at LF. This cannot be accounted for by any syntactic movement analysis of multiple right dislocation.

2.5 Quantifier Scope

Another evidence against a syntactic movement analysis of multiple right dislocation can be formulated in relation to quantifier scope facts. As first pointed out by Kuroda (1970) and further supported by Hoji (2003), examples like (11) are unambiguous:

(11) Mittu-no ginkoo-ga Toyota-dake-ni monku-o itta yo
three-Gen bank-Nom Toyota-only-Dat complaint-Acc said Prt
'Three banks complained only to Toyota.'

(11) has only the interpretation where the subject QP *mittu-no ginkoo-ga* 'three banks' has scope over the indirect object QP *Toyota-dake-ni* 'only Toyota'. To be more concrete, (11) is true under situation (12a) but not under situation (12b). In (12), 'A →B' indicates that A complains to B:

(12) a. Situation 1
There are six banks (1-6) and three companies (T(oyota), N, M). Three out of six banks complained only to Toyota:
1 → T; 2 → T; 3 → T; 4 → T, N, M; 5 → N, M; 6 → M
b. Situation 2
There are three banks (1-3) and three companies (T(oyota), N, M). It is only Toyota that three banks complained to:
1 → T; 2 → T, N; 3 → T, N, M

As pointed out by Abe (to appear), when the object QP undergoes single right dislocation, the result becomes ambiguous due to a syntactic movement of the indirect object QP as shown in (13):

(13) Mittu-no ginkoo-ga ***e*** monku-o itta yo, **Toyota-dake-ni**
three-Gen bank-Nom complaint-Acc said Prt **Toyota-only-Dat**
'Three banks complained only to Toyota.'

(13), where the indirect object QP *Toyota-dake-ni* 'only to Toyota' undergoes single right dislocation, is ambiguous; either the subject QP has scope over the indirect object QP or the indirect object QP has scope over the subject QP. In other words, (13) is true under either situation (12a) or situation (12b). When the indirect object QP *Toyota-dake-ni* 'only to Toyota' undergoes multiple right dislocation together with another XP, on the other hand, the ambiguity disappears:

(14) Mittu-no ginkoo-ga ***e e*** itta yo, **Toyota-dake-ni** **monku-o**
three-Gen bank-Nom said Prt **Toyota-only-Dat** **complaint-Acc**

In (14), the indirect object QP *Toyota-dake-ni* 'only to Toyota' undergoes multiple right dislocation with the object *monku-o* 'complaint-Acc'. (14) is unambiguous; it has only the interpretation where the subject QP has scope over the indirect object QP. In other words, (14) is only true under situation (12a). This indicates that the indirect object QP *Tokyota-dake-ni* 'only to Toyoda' is interpreted *in-situ* at LF in multiple right dislocation (14). This quantifier scope fact cannot be accounted for by any syntactic movement analysis of multiple right dislocation.

2.6 Reconstruction with Binding Condition C

A final evidence against a syntactic movement analysis of multiple right dislocation comes from an argument/adjunct asymmetry with reconstruction effects with Binding Condition C. As pointed out by van Riemsdijk and Williams (1981), Lebeaux (1988), Chomsky (1995), Ishii (1997) , *inter*

alia, there is an argument/adjunct asymmetry regarding reconstruction effects with Binding Condition C in English *wh*-movement as exemplified by (15):

(15) a. *?[Which pictures of **John$_1$**] do you think that **he$_1$** likes *t* best?
b. [Which pictures near **John$_1$**] do you think that **he$_1$** likes *t* best?

While *John* and the pronoun *he* can be coreferential in (15b), they cannot be coreferential in (15a). The difference between (15a) and (15b) resides in the fact that while *John* is the complement of the noun in (15a), it is within the adjunct modifying the noun in (15b). Although there are various approaches to this argument/adjunct asymmetry with reconstruction effects, this paper assumes the late Merge approach to adjuncts advocated by, among others, Lebeaux (1988) and Ishii (1997) for an expository purpose. Under the late Merge approach to adjuncts, in (15a), *John* is the argument of *pictures* and thus merged when *pictures* first appears. The copy of *John* is visible in the base position of the *wh*-phrase, which results in a Condition C violation. In (15b), on the other hand, *John* is within the adjunct modifying *pictures*. *John* may be late-merged after *wh*-movement has taken place; there is no Condition C violation.

Such an argument/adjunct asymmetry with reconstruction effects also appears with single right dislocation in Japanese as shown in (16):

(16) a. *?**Kare$_1$**-ga [Mary-ga ***e*** osietekurata to] itta yo,
he-Nom Mary-Nom told.him C said Prt
[minna-no John$_1$-no hihan-o]
everyone-Gen John-Gen criticism-Acc
'He$_1$ said that Mary told him about everyone's criticism of John$_1$.
b. **Kare$_1$**-ga [Mary-ga ***e*** osietekurata to] itta yo,
he-Nom Mary-Nom told.him C said Prt
[minna-ga John$_1$-kara kakusiteita hihan-o]
everyone-Nom John-from was.hiding criticism-Acc
'He$_1$ said that Mary told him about the criticism everyone was hiding from John$_1$.'

The contrast in (16) can be accounted for by the late Merge approach to adjuncts. In (16a), *minna-no John-no hihan-o* 'everyone's criticism of John' undergoes single right dislocation. *John* is the argument of *hihan* 'criticism' and thus merged when *hihan* 'criticism' first appears. The copy of *John* is visible in the base position, which results in a Condition C violation. In (16b), on the other hand, *minna-ga John-kara kakusiteita hihan-o* 'the criticism that everyone was hiding from John' undergoes single right dislocation. Since *John* is within the adjunct modifying *hihan* 'criticism', it may be late-merged after right dislocation has taken place; there is no Condition C violation.

In multiple right dislocation, however, the argument/adjunct asymmetry with reconstruction effects disappears as shown in (17):

(17) a. *?**Kare$_1$**-ga [Mary-ga ***e e*** barasita to] itta yo,
he-Nom Mary-Nom disclosed C said Prt
[ooku-no tomodati]-ni [minna-no John$_1$-no hihan-o]
many friend-Dat everyone-Gen John-Gen criticism-Acc
'He$_1$ said that Mary disclosed everyone's criticism of John$_1$ to many friends.'

b. *?**Kare$_1$**-ga [Mary-ga ***e e*** barasita to] itta yo,
he-Nom Mary-Nom disclosed C said Prt
[ookuno tomodati]-ni [minna-ga John$_1$-kara kakusitetita hihan]-o
many friend-Dat everyone-Nom John-from was.hiding criticism-Acc
'He$_1$ said that Mary disclosed the criticism everyone was hiding from John$_1$ to many friends.'

In (17b), *minna-ga John-kara kakusiteita hihan-o* 'the criticism that everyone was hiding from John' undergoes multiple right dislocation with *ookuno tomodati-ni* 'to many friends'. Although *John* is within the adjunct, *John* and *kare* 'he' cannot be coreferential. This indicates that the multiple-right-dislocated phrases are interpreted *in-situ* at LF, which cannot be accounted for by any syntactic movement analysis of multiple right dislocation.

3 A Proposal

The last section has presented evidence against a syntactic movement analysis of multiple right dislocation by showing that multiple right dislocation neither obeys any syntactic constraints nor has any LF effects. This section proposes a PF movement analysis of multiple right dislocation.

3.1 Information Structure and Right Dislocation

It has been claimed by, among others, Kuno (1978) that right dislocation changes Information Structure. Kuno observes the contrast between (18B) and (18B'), arguing that the target of right dislocation cannot be new information. While (18B) is acceptable as an answer to the question (18A), its right dislocation version (18B'), where *1968-nen-ni* 'in 1968' is right-dislocated, is not acceptable as an answer to (18A). This is because *1968-nen-ni* 'in 1968' is new information in (18) so that it cannot be the target of right dislocation:

(18) A: 1968-nen-ni umaremasita ka?
1968-year-in were.born Q
'Were you born in 1968?'
B: Hai, 1968-nen-ni umaremasita.
yes 1968-year-in were.born
B': *Hai, ***e*** umaremasita yo, **1968-nen-ni**.
yes were.born Prt **1968-year-in**
'Yes, I was born in 1968.'

Based on the insight into Japanese multiple scrambling proposed by Agbayani, Golston, and Ishii (2015), I argue that (i) the effects induced by Information Structure in right dislocation are not limited to syntax or phonology, but to both; (ii) Material for right dislocation is targeted/marked within syntax and moved either in syntax or phonology; (iii) Any material targeted for right dislocation must be contained in a single constituent, either a syntactic constituent or a phonological constituent. I then propose the following analysis of right dislocation:

(19) a. If target material can undergo right dislocation syntactically, it does.
b. If target material is not *a single syntactic XP eligible for right dislocation*, then that material is packed into a prosodic constituent and undergoes *prosodic* right dislocation to the right edge of an intonational phrase ι in the PF-component.

I claim that the target prosodic constituent in right dislocation is a major phrase, and a major phrase consists of recursive phonological phrases Φ's as argued by Itô and Mester (2007). This paper takes the restrictive view that the interaction between syntax and phonology begins and ends with the mapping from syntactic constituency (clause, XP, X^0) to phonological constituency (ι, Φ, ω) within a model, where syntax derivationally precedes and feeds phonology, *i.e.*, syntax receives no feedback from phonology. (19) then straightforwardly follows if we assume that right dislocation is subject to the derivational principle of Earliness (20) proposed by Pesetsky (1989), which requires that all principles should be satisfied as early as possible within a derivation:

(20) Earliness Principle
Satisfy principles as early as possible on the hierarchy of levels (DS) > SS > LF > LP.

3.2 Multiple Right Dislocation as a PF Movement

Let us look at how our analysis accounts for multiple right dislocation, taking (2) (repeated here as (21)) as an example:

(21) Tentyoo-ga [John-ga ***e e*** watasi wasureta to] omoteiru yo,
manger-Nom John-Nom give forgot C think Prt
kayku-ni sono-yubiwa-o
guest-Dat that-ring-Acc
'The manger thinks that John forgot to give that ring to the guest.'

Under our analysis, the derivation of (21) proceeds as represented below:

(22) a. Syntax
... X ...[XP <u>*kyaku-ni* 'guest-Dat'</u>] [XP <u>*sono-yubiewa-o* 'ring-Acc'</u>] ... Y ...
b. Phonology
(ι ... X ... (Φ (Φ .....) (Φ .....)) ... Y ...)ι

In (22), suppose that the indirect object XP *kyaku-ni* 'guest-Dat' and the direct object XP *sono yubiwa-o* 'that ring-Acc' are targeted for right dislocation within syntax. Double underline indicates that that element is targeted for right dislocation. Since the indirect object and the direct object do not form a single syntactic constituent eligible for right dislocation, they cannot undergo right dislocation syntactically. For them to undergo right dislocation as a single constituent, a major phrase must be created in phonology and moved in the PF component. In the prosodic structure of Japanese, we can create a major phrase out of individual phonological phrases Φ's, which correspond to independent XPs, *i.e.*, the indirect object XP and the direct object XP in this case. The two phonological phrases Φ's are then packed into a single phonological phrase Φ in terms of recursive phonological phrase Φ-formation. That phonological phrase undergoes *prosodic* right

dislocation to the right edge of the intonational phrase ι. According to our analysis, since multiple right dislocation is derived by *prosodic* right dislocation in the PF-component, we can correctly predict that multiple right dislocation neither obeys any syntactic constraints or has any LF interpretive effects as presented in section 2. This analysis can also capture the fact that there is a pause before the multiple-right-dislocated phrases because of an intonational phrase ι-boundary, though multiple right dislocation has a mono-clausal structure.

This analysis gives further support for a PF-movement analysis of multiple scrambling proposed in Agbayani, Golston, and Ishii (2015). Syntactic movement has been claimed to be asymmetric in that it always goes upward (to a structurally higher position) but not downward (to a structurally lower position). On the other hand, we should expect that PF movement, which is not based on hierarchical structures but on linear ordering, is symmetric in nature, *i.e.*, PF movement can be either leftward or rightward. If the proposed analysis is on the right track, multiple scrambling and multiple right dislocation are symmetrical to each other. Both multiple scrambling and multiple right dislocation target the edge of an intonational phrase ι. The only difference between them is that while multiple scrambling is leftward movement, multiple right dislocation is rightward movement.

One might raise a question as to why the indirect object and the direct object cannot undergo syntactic right dislocation because they would form a syntactic constituent VP under the Larsonian analysis of the double object construction (see, among others, Larson 1988) if we assume overt verb raising to a functional head above VP in Japanese as represented in (23):

(23)	John-ga	[$_{VP}$	kayku-ni	sono-yubiwa-o	t_V]	watasi	wasureta
	John-Nom		guest-Dat	that-ring-Acc		give	forgot

Right dislocation, however, can only apply to non-predicative (saturated) XPs but not to predicative (unsaturated) XPs as exemplified below:

(24)	a.		John-ga	kinoo		sono hon-o	yonda	yo		
			John-Nom	yesterday		that book-Acc	read	Prt		
	b.	*	John-ga	kinoo	***e***	yo,	**sono hon-o**	**yonda**		
			John-Nom	yesterday		Prt	that book-Acc	read		
			'John read that book yesterday.'							
(25)	a.		John-ga	sono	eigasutaa-ni	mutsuu	datta	yo		
			John-Nom	that	film.star-Dat	crazed	was	Prt		
	b.	*	John-ga	***e***	datta	yo,	**sono**	**eigasutaa-ni**	**mutsuu**	
			John-Nom		was	Prt	that	film.star-Dat	crazed	
			'John was crazed about that film star.'							

In (24), the verbal constituent *sono-hon-o yonda* 'read the book', being predicative (unsaturated), is right-dislocated; the results is deviant. In (25), the predicative (unsaturated) nominal *sono eigasutaa-ni mutsuu* 'crazed about that film star' is right-dislocated; the result is also deviant. Under our analysis, non-applicability of right dislocation to predicative (unsaturated) XPs can be captured by claiming that predicative (unsaturated) XPs cannot be targeted for right dislocation in syntax to begin with, thereby not being subject to right dislocation whether it is syntactic or prosodic. Hence, although the indirect object and the direct object would form a syntactic constituent VP under the Larsonian analysis of the double object construction as shown in (23), that VP constituent, being

predicative (unsaturated), cannot be targeted for right dislocation in syntax. That constituent is not eligible for right dislocation, therefore not being subject to syntactic right dislocation. On the other hand, since the indirect XP and the direct XP, being non-predicative (saturated) XPs, are eligible for right dislocation, they each can be targeted for right dislocation in syntax as shown in (22a). Since these two XPs are independent syntactic constituents, they cannot undergo syntactic right dislocation. They can, however, form a single phonological phrase Φ in terms of recursive phonological phrase Φ-formation and undergo *prosodic* right dislocation to the right edge of the intonational phrase ι in the PF-component as shown in (22b).

Multiple right dislocation can also apply to cases in which the targeted XPs are non-contiguous in the canonical ordering as exemplified by (26):

(26) a. John-ga [Bill-ga Mary-ni sono mame-o watasita to]
John-Nom Bill-Nom Mary-Dat that bean-Acc handed C
omotteiru yo
think Prt

b. John-ga [***e*** Mary-ni ***e*** watasita to] omotteiru yo,
John-Nom Mary-Dat handed C think Prt
Bill-ga sono mame-o/sono mame-o Bill-ga
Bill-Nom that bean-Acc that bean-Acc Bill-Nom
'John thinks that Bill handed that bean to Mary.

In (26), the subject XP *Bill-ga* 'Bill-Nom' and the direct object XP *sono mame-o* 'that bean-Acc' within the embedded clause are non-contiguous targets for right dislocation, assuming that the canonical ordering in Japanese is Subj–IO– DO. The targeted XPs, not being adjacent to each other in the base structure (26a), would be impossible to undergo right dislocation as a single syntactic constituent or as a single prosodic constituent. They can, however, be adjacent to each other through application of syntactic scrambling:

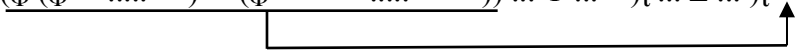
(27) a. ... [[$_{TP}$ **Bill-ga$_1$** [$_{TP}$ **sono mame-o$_2$** [$_{TP}$ ***t$_1$*** Mary-ni ***t$_2$*** watasita]]] to] ...
Bill-Nom that bean-Acc Mary-Dat gave C

b. ... [[$_{TP}$ **sono mame-o$_1$** [$_{TP}$ **Bill-ga** Mary-ni ***t$_1$*** watasita]] to] ...
that bean-Acc Bill-Nom Mary-Dat gave C

In (27a), both *Bill-ga* 'Bill-Nom' and *sono mame-o* 'that bean-Acc' undergo syntactic scrambling. In (27b), *sono mame-o* 'that bean-Acc' undergoes syntactic scrambling. This paper claims with Saito (1985) that syntactic scrambling is an adjunction operation to TP. The derivations of (27a) and (27b) then proceed as represented in (28) and (29) respectively:

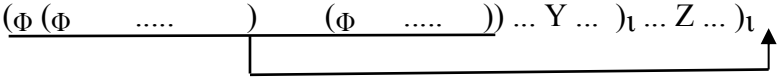
(28) a. Syntax
[$_{TP}$ ... X ... [$_{TP}$ [$_{XP}$ Bill-ga] [$_{TP}$ [$_{XP}$ sono mame-o] ... Y ...]] ... Z ...]
Bill-Nom that bean-Acc

b. Phonology
(ι ... X ... (ι (Φ (Φ .....) (Φ .....)) ... Y ...)ι ... Z ...)ι



(29) a. Syntax
[$_{TP}$ ... X ... [$_{TP}$ [$_{XP}$ sono mame-o] [$_{TP}$ [$_{XP}$ Bill-ga] ... Y ...]] ... Z ...]
that bean-Acc Bill-Nom

b. Phonology
(ι ... X ... (ι (Φ (Φ .....) (Φ .....)) ... Y ...)ι ... Z ...)ι



The two XPs targeted for right dislocation (the double underlined elements), *i.e. Bill-ga* 'Bill-Nom' and *sono mame-o* 'that bean-Acc', are adjacent to each other at the left edge of the embedded clause as represented in (28a) and (29a). They do not form a syntactic constituent so that they cannot undergo syntactic right dislocation. They can, however, be packed into a single phonological phrase Φ in terms of recursive phonological phrase Φ-formation. That phonological phrase undergoes *prosodic* right dislocation to the right edge of the matrix intonational phrase ι as represented in (28b) and (29b). A question arises, however, whether phonological phrase Φ-formation in (28b) and (29b) is legitimate, since it is plausible to assume that no phonological phrase Φ-formation cannot apply across an intonational boundary, which corresponds to a clause in syntax. This paper adopts Selkirk's (2009) view on the syntax-prosodic structure interface that the TP complement of C, *i.e.* the PF-transfer domain in a CP phase, counts as a clause which is mapped to an intonational phrase ι. Then, it is the uppermost segment of TP, but not the lower segments of TP, that corresponds to an intonational phrase ι in (28) and (29). Hence, in prosodic structures (28b) and (29b), there is no intervening intonational boundary ι between the two phonological phrases which are packed into a single phonological phrase Φ through phonological phrase Φ-formation, though the lower segment of TP intervenes between the two target XPs for right dislocation in syntactic structures (28a) and (29a).

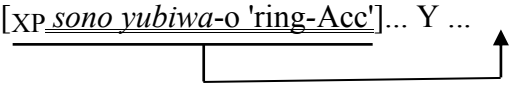
3.3 Single Right Dislocation as a Syntactic Movement

Let us finally consider single right dislocation, taking (1) (repeated here as (30)) as an example:

(30) Tentyoo-ga [John-ga kayku-ni ***e*** watasi wasureta to] omoteiru yo,
manger-Nom John-Nom guest-Dat give forgot C think Prt
sono yubiwa-o
that-ring-Acc
'The manger thinks that John forgot to give that ring to the guest.'

The embedded object XP *sono yubiwa-o* 'that ring-Acc' is targeted for right dislocation in syntax. Since *sono yubiwa-o* 'that ring-Acc', being a non-predicative (saturated) XP, is a single syntactic constituent eligible for right dislocation, it undergoes syntactic right dislocation because of the Earliness Principle (20) as represented in (31):

(31) Syntax
... X ... [$_{XP}$ *sono yubiwa*-o 'ring-Acc']... Y ...



Since this right dislocation applies in syntax, it obeys syntactic constraints and has LF interpretive effects as shown in section 2.

4 Conclusion

This paper has first presented evidence against a syntactic movement analysis of multiple right dislocation. It was shown that unlike single right dislocation, multiple right dislocation neither obeys any syntactic constraints or has any LF effects. I have proposed a PF movement analysis of multiple right dislocation, which accounts for the immunity of multiple right dislocation from syntactic constraints and LF interpretive effects.

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