

Sentence Polarity and the Correlation with Predicate Doubling and *Suru*-Support Construction in Japanese*

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1. Introduction

This paper is concerned with the construction so-called predicate doubling (PDC) and the construction with *suru*-support (SSC). They are illustrated as follows:

- (1) a. John-ga computer-o kat-ta-koto-wa kat-ta.^{1, 2}
 John-NOM computer-ACC buy-PST-that-wa buy-PST
 ‘John did buy a computer.’
- b. John-ga computer-o kai-wa si-ta.
 John-NOM computer-ACC buy-wa do-PST
 ‘John did buy a computer.’

(Nishiyama and Cho (1998:463-464))

Nishiyama and Cho (1998) have claimed that the two constructions have in common in a structural sense by virtue of both having contrastive *wa* and the same discourse effect affected by the phrase. For example, the sentences in (1) assert that the proposition that John bought a computer is true and evokes an implicature that another proposition which is associated with the existing one is not true. The former, the effect of emphasis on truth of the sentence, is argued to be called *verum focus* first advocated by Höhle (1992) from German data (see also Romero and Han (2002),

* I would like to appreciate Hiroko Wakamatsu, Yukihiro Kanda, and Yoichiro Akaishi for their valuable comments. All remaining errors are my own.

¹ The two *wa*-particles are found in Japanese. One marks contrast and is allowed to occur in any positions (Kuroda (1965), Kuno (1973), among others); the other does non-contrastive topic and must be located in initial position of matrix clause. Thus the following example is ambiguous in the sense of contrastivity:

- (i) A: kinou Taro-wa paatii-ni ki-ta no?
 yesterday Taro-TOP party-to come-PST Q
 ‘Did Taro come to the party yesterday?’
- B: Kare-wa ki-ta yo.
 He-CONT / TOP come-PST PTCL
 ‘CONT reading: He did(, but Mary did not).’
 ‘TOP reading: Yes, he did.’

Hereafter, I will use *wa* italicized in gloss to intend a contrastive topic (i.e. CONT above) and TOP to intend a non-contrastive topic.

² Abbreviations are as follows: ACC=accusative, CAUS=causative, COP=copula, DAT=dative, HNR=honorific expressions, NEG=negation, NOM=nominative, TOP=topic, PASS=passive, PRS=present, PST=past, PTCL=particle, Q=question.

Gutzmann and Castroviejo Miró (2011); cf. Nagata (in this volume)).³ As far as PDC is concerned, there is an important issue for linearization. First, what factor determines that a language exhibits PDC instead of predicate fronting without doubling such as VP fronting in English. Many researchers relying on Copy Theory of movement (Chomsky (1995)) rather than the traditional notion *trace*, have argued that PDC is yielded derivationally, which means that it involves movement of predicate rather than base-generation.⁴ More particularly, it has been analyzed by such researchers as the pronunciation of the lower copy. For example, Vicente (2007) has argued that the presence of the doubling in Spanish is attributed to the presence of V-to-T movement (cf. Aboh and Dyakonova (2009) for parallel chain analysis for Russian). However, this line of reasoning is confronted with difficulty in that it must predict that a language with V movement would always exhibit the doubling, and it is not the case for German (cf. den Besten (1982)). In addition, this analysis is not easy to carry over into Japanese because it remains unclear and thus controversial whether the language has V movement that affects the word order (i.e. string-vacuous) (e.g. Otani and Whitman (1991), Koizumi (2000) for its presence; Hoji (1998) and Fukui and Sakai (2003) against it).

There is another important issue concentrating on PDC and SSC: whether *wa* in the constructions is the same or not. As for the constructions being discussed here, while Nishiyama and Cho (1998) see these *wa* as non-topical *wa* functioning as contrast, Ishihara (2010, 2013) argues against them and *wa* in PDC is a contrastive topic marker. In section 3, however, I will argue that it is empirically difficult to regard the *wa* as a contrastive topic marker because the use of PDC is infelicitous in a context in which the contrastive topic is preferable (cf. Buring (2003)), although we cannot yet completely capture the characteristics of *wa* in both constructions. Nonetheless, I will see that these *was* are sensitive to sentence polarity and differ in this respect. I hope that the successful investigation may further shed light on the more general issue concerned with *thematic vs. contrast wa* first advocated by Kuno (1973) and two types *wa* subsumed under the latter (cf. Heycock (2009), Vermeulen (2013)).

This paper is organized as follows: section 2 reviews the literature dedicated to the constructions; in particular, Nishiyama and Cho (1998) and Ishihara (2010, 2013). Section 3 argues some problems raised in Ishihara but ignored therein, claims that Ishihara's partial TP movement analysis, with which he deals with non-identical

³ I do not cite Höhle's (1992) original examples in German here for space while so-called emphatic *do* in translation is implied to be a reflex of verum focus in English (cf. Wilder (2013), Gutzmann and Castroviejo Miró (2011)).

⁴ Cable (2004) is different from others in that he analyzes the construction in Yiddish in terms of base-generation and chain.

PDC, be replaced with (throughout) full-fledged TP movement with less-specified realization, and for Nishiyama and Cho to be elaborated. Section 4 observes that the two are distinct with respect to contrastivity. Section 5 proposes that one of some asymmetries between the constructions can be straightforwardly accounted for in terms of Kobayashi's (2009) focus licensing mechanism. In particular, the fact to be seen that the contrasted phrase triggered by the preceding SSC is sensitive to polarity of the sentence and the size of the available phrase is claimed to be reduced to be the establishment of Agree relation with [uF] and intervention effects among features. Finally, section 6 draws a conclusion of the paper and provides some remaining issues to be resolved.

2. Previous Analyses

In this section, I outline the previous literature dedicated to PDC. Before that, it should be noted that PDC is observable in many languages in different language families (Abels (2001), Aboh and Dyakonova (2009) for Russian, Vicente (2007) for Spanish, Cheng and Vicente (2013) for Mandarin Chinese, Cable (2004) for Yiddish, and among others; cf. Trinh (2009)). Particularly interesting is that PDC in such languages bears a common discourse effect in a similar vein with Japanese, that is, verum focus with adversative readings (e.g. Aboh and Dyakonova (2009) for Russian, Vicente (2007) for Spanish, Ishihara (2010) for Japanese, Cheng and Vicente (2013) for Mandarin Chinese, among others).

2.1. Nishiyama and Cho (1998)

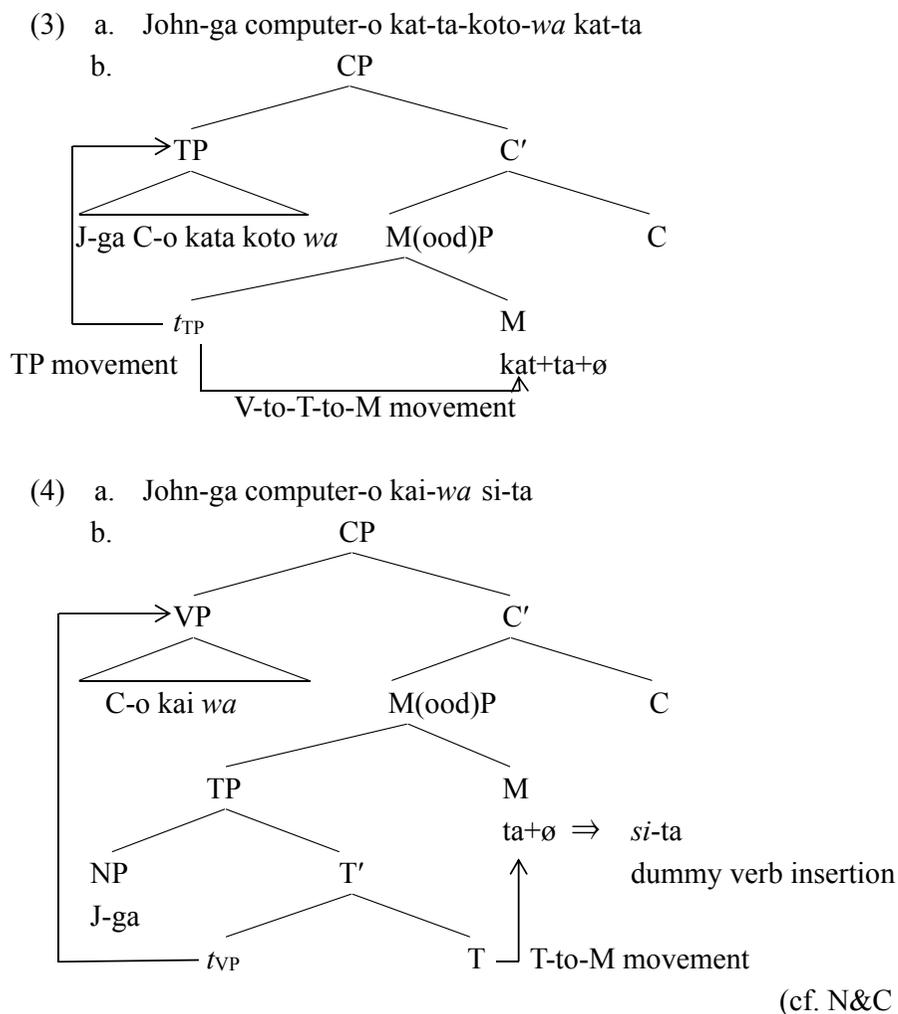
Nishiyama and Cho (1998, henceforth N&C) first noticed the construction in the linguistic perspective and analyzed it in comparison with the construction where the *toritate* particle *wa* attaches to a verbal domain, with the occurrence of *suru*-support consequently, since the two constructions apparently share a certain discourse effect (i.e. concessive).⁵ This subsection sees N&C's arguments. N&C provide the two types of construction both in Japanese and in Korean and claim that the subtle differences between these languages are attributed to those of syntactic categories to be realized as dummy verbs (i.e. *suru* in Japanese and *hae* in Korean). Adapting their analysis, I will address the question of whether PDC (1a) is semantically equivalent to SSC (1b), repeated here:

- (2) a. John-ga computer-o kat-ta-koto-wa kat-ta.
 John-NOM computer-ACC buy-PST-that-wa buy-PST

⁵ The *toritate* particle is a term in Japanese linguistics and roughly defined as a kind of focus particles in that an element attached to it evokes new information.

- ‘John did buy a computer.’
 b. John-ga computer-o kai-wa si-ta.
 John-NOM computer-ACC buy-wa do-PST
 ‘John did buy a computer.’

They claim that the two constructions are derived by TP/VP movement, with the assumption that the sentence initial *wa* phrase undergoes movement (see Saito (1985), Hoji (1985)). Consider the derivations illustrated below:⁶



⁶ Although N&C uses the label F(ocus) here instead of C, the label is immaterial, as they note, because particularly crucial is the fact that the constructions undergo TP/VP movement.

In the derivation of PDC illustrated in (3b), the presence of the V-to-T-to-M movement accounts for the doubly pronunciation of verbs. In other words, in order to realize the M head, the V-T complex supports it and is pronounced as a lexical verb. Meanwhile, in the derivation of SSC (4b), since V-to-T movement lacks here, the morphological support for the T-M complex is succeeded by the insertion of *suru* as a tense supporter.

One should doubt, however, whether the derivation (3b) results in an OV_{wa}S(T) word order, namely *computer-o kai-wa John-ga sita*. Before discussing N&C's solution to this criticism, let us examine whether the movement account is relevant. As shown below, PDC is sensitive to island effects, which are diagnostics for the presence of movement:

- (5) * [[_{TP} computer-o kat-ta-koto-wa]_i [_S boku-ga [_{NP} [_S *t_i* kat-ta-] compter-ACC buy-PST-that-wa I-NOM buy-PST hito-wo] sitteiru]]
 person-ACC know

(N&C (1998:466), with modifications)

The fact that the constituent cannot be extracted out of the relative clauses (i.e. Complex NP Constraint) leads the authors to conclude that the initial constituents undergo movement. Additionally, it is reported that the doubling construction is more restricted: it must be clause-bounded, whereas the other does not.

- (6) a. * [[_{TP} computer-o kat-ta-koto-wa]_i [_S boku-wa [_S *t_i* kat-ta] compter-ACC buy-PST-that-wa I-TOP buy-PST to] omou]]
 that think
 b. [[_{VP} computer-o kai-wa]_i [_S boku-wa [_S *t_i* si-ta] to] omou]]
 compter-ACC buy-wa I-TOP do-PST that think

(N&C (1999:466), with slight modifications)

The structures in (3b) and (4b) predict that TP movement would include the pied-piped subject but VP movement would not, although both contain an object. The prediction is born out:

- (7) a. * computer-o kat-ta-koto-wa John-ga kat-ta.
 computer-ACC buy-PST-that-wa John-NOM buy-PST

- (9) a. Hanako-wa Taro-ni kusuri-o nom-ase-**ta**-koto-wa
 Hanako-TOP Taro-DAT medicine-ACC drink-CAUS-**PST**-*wa*
 nom-ase-*ta* (ga, byooin-e turete iki-wa si-nakat-*ta*).⁸
 drink-CAUS-PST but hospital-to take go-*wa* do-NEG-PST
- b. Hanako-wa Taro-ni kusuri-o nom-ase-**ru**-koto-wa
 Hanako-TOP Taro-DAT medicine-ACC drink-CAUS-**PRS**-*wa*
 nom-ase-*ta* (ga, byooin-e turete iki-wa si-nakat-*ta*).⁹
 drink-CAUS-PST but hospital-to take go-*wa* do-NEG-PST
 ‘As for making Taro take medicine, Hanako did make him do it (, but she didn’t take him to the hospital).’
 (Ishihara (2010:44), with slight modifications)

Not only the data identified as TP-movement by N&C is grammatical, but also the data with non-identical verb form as in (6b) is perfectly acceptable.¹⁰ Meanwhile, the example, where the tense-specified predicates are switched with each other (10a), is not acceptable; even if the past-morpheme (*-da* or *-ta*) exist in both positions and a complex verbal predicate (i.e. *nom-ase-ta*) is full-fledged in the sentence final position, the lack of a causative morpheme (*s*)*ase* in the sentence initial makes (10b) ungrammatical:¹¹

- (10) a. * Hanako-wa Taro-ni kusuri-o nom-ase-**ta**-koto-wa
 Hanako-TOP Taro-DAT medicine-ACC drink-CAUS-**PST**-*that-wa*
 nom-ase-**ru**.
 drink-CAUS-**PRS**
- b. * Hanako-wa Taro-ni kusuri-o non-**da**-koto-wa
 Hanako-TOP Taro-DAT medicine-ACC drink-**PST**-*that-wa*
 nom-**ase-ta**.

⁸ Ishihara (2010, 2013) shows data with some kinds of nominalizers attaching to a preposed predicate such as *ni* and *no*, besides *koto*. They are well-formed as well as *koto*. However, the question of what these particles exactly are does not concern my interest (see Ishihara (2013) for a detailed discussion). Thus, I tentatively accept his view that these particles are nominalizers without syntactic status to allow a predicate to be fronted as a nominal.

⁹ Tentatively, I regard *ru* form as present (i.e. PRS). Nonetheless, we will later see Ishihara’s argument against the view.

¹⁰ There are, however, some informants who do not accept the non-identical counterpart, which is pointed out also by Potts et al. (2009) and cited in Ishihara (2013), although they do not report that some people do not accept even a simple case of the construction such as (12b). Later section will argue that why they do not accept it may be responsible for how they identify the (*r*)*u* morpheme. Interestingly, this may be further extended to idiolectal variations for acceptability in any non-identical cases.

¹¹ The choice of the two optional morphemes depends on a verb (or an adjective) they attach to.

drink-CAUS-PST

(Ishihara (2010:44), with slight modifications)

Accordingly, the reason why (10) is ruled out is accounted for in terms of the notion of less-specificity: in (10a), the fronted predicate contains the past tense morpheme *-ta* despite that it is not realized in the original position; in (10b), while the past morpheme (*-da*) is realized in the fronted position, the element which should intervene between *non* ‘drink’ and the past morpheme (i.e. the causative morpheme *-ase*) is excluded there.

To summarize the observations above, the size of moved predicate is generalized as follows:¹²

- (11) a. P_1 can be the same as, or in a less specified form than P_2 , but not vice versa.
 b. The root of P_1 must be followed by subsequent morphemes in the same order as in P_2 without skipping any morphemes, except when P_2 ends with *-(r)u*.

(Ishihara (2013:280))

As far as the generalizations are concerned, his analysis that the non-identical construction is derived via partial TP-movement is tenable, for these are interpreted, in a structural sense, as the suggestion that a structurally higher element must not be moved without a lower one being moved. For example, in order to move a tense morpheme (e.g. *-da*), *(s)ase* morpheme must also be moved, but reverse does not hold (cf. (9b) and (10b)). One problem against the movement analysis will arise as far as the *(r)u* form is identified as present form, as Ishihara notes. If we identified the *(r)u* form as a present tense morpheme, the example (9b), repeated here, would be regarded as cases in which tense morpheme *(r)u* skips *(s)ase* and *kake* respectively:

¹² Less-specificity stems from Barbiers et al.’s (2008) suggestion accounting for the contrast below; as far as we assume that a set of feature combining *wh* with *person* instantiated as *wie* ‘who’ is more specified than a single feature *wh* as *wat* ‘what’:

- (i) a. Wat denk je wie ik gezien hab?
 what think you who I seen have
 ‘Who do you think I have seen?’
 b. * Wie denk je wat ik gezien hab?
 who think you what I seen have

(Barbiers et al. (2008:79))

- (12) a. Hanako-wa Taro-ni kusuri-o nom-**u**-koto-wa
 Hanako-TOP Taro-DAT medicine-ACC drink-PRS-koto-*wa*
 nom-ase-ta.
 drink-CAUS-PST
- b. Taro-wa sono ringo-o tabe-**ru**-koto-wa
 Taro-TOP the apple-ACC eat-begin-PST/-PRS-that-*wa*
 tabe-kake-ta.
 eat-begin-PST

(Ishihara (2010:44))

Maintaining the partial TP movement analysis, Ishihara states that we “treat (*r*)*u*, which occurs with verbs, and *i*, which occurs with adjectives, preceding [*k*]oto-*wa* not as tense-morpheme, but as elements that are inserted phonologically to make an adnominal verb/adjective form, even though they happen to have the same phonological form as nonpast tense morphemes” (Ishihara (2010:50)). He argues that the nominal adjectives support the view; in this kind of adjective, unlike verbs and Japanese adjectives, the adnominal form (i.e. *rentai*) is distinct from the conclusive form (i.e. *shuusi*):

- (13) a. Hanako-wa kirei-**na** {koto/no}-wa kirei-**da**.
 Hanako-TOP beautiful-*na* that/of-*wa* beautiful-COP.PRS
- b.* Hanako-wa kirei-**da** {koto/no}-wa kirei-**da**.
 Hanako-TOP beautiful-COP that/of-*wa* beautiful-COP.PRS

(Ishihara (2010:50), with slight modifications)

Ishihara extends the asymmetry (13) to verbal cases and concludes that the (*r*)*u* form is the adnominal form rather than the conclusive form, which consequently leads him to analyze the construction in terms of movement, with the solution of the skipping problem.¹³

To simplify his account, PDC with (non-) identical form is roughly illustrated as follows:

- (14) a. *PDC with identical form*
 [CP [TP *SBJ OBJ V+T*]_i ... [TP ~~*SBJ OBJ V+T*~~]_j]
- b. *PDC with non-identical form*

¹³ A discussion of how *koto*, which attaches to the adnominal form, is determined as a nominalizer is what is in the heart of Ishihara (2013). I lead interested readers to the original article, whereas I do not discuss it for its irrelevance.

[_{CP} [_{VP} *SBJ OBJ V*]_i ... [_{TP} [_{VP} ~~*SBJ OBJ V*~~]_i +T]]¹⁴

Note that he explains why the lower copy is allowed to be pronounced, although it seems unacceptable and less falsifiable.¹⁵ Thus, I do not discuss his account of the derivation more in detail. Instead, his observations for the non-identical form are worth discussing. He provides the following four types of complex verbal predicates as shown below. Note that we use the abbreviation *-ru* to be replaced with *PRS* to indicate an adnominal form rather than a present tense morpheme for convenient sake:

(15) a. *Passive*

Taro-wa Jiro-ni nagur-**{are-ta/u}**-koto-wa nagur-are-ta
 Taro-TOP Jiro-by hit-PASS-PST/**ru**-that-wa hit-PASS-PST
 (ga, koros-are-wa si-nakat-ta).
 but kill-PASS-wa do-NEG-PST

‘As for being hit by Jiro, Taro was hit by him (, but not killed).’

b. *Restructuring*

Taro-wa sono ringo-o tabe-**{kake-ta}/**{kake-ru}**/**{ru}****-koto-wa
 Taro-TOP the apple-ACC eat-**begin-PST/begin-PRS/ru**-that-wa
 tabe-kake-ta (ga, tabe-kire-nakat-ta).
 eat-begin-PST but eat-finish-NEG-PST

‘As for eating the apple, Taro did start eating it (, but he couldn’t finish it).’

c. *TP-selecting modality predicate*¹⁶

Taro-wa sikar-are-***{ta-youna}/**{ta}**/**{ru}****-koto-wa

¹⁴ The movement of the subject to Spec TP is omitted for convenient sake.

¹⁵ Although Ishihara does explain the constraints on phonological realization in both chains following Barbiers et al. (2008), but his account of why doubly realized in terms of Anti-Locality (Grohmann (2003)) is doubtful in the first place. In particular, his claim that TP movement to Spec TP involves Grohmann’s Condition on Domain Exclusivity, namely that TopP and TP are in the same prolific domain (i.e. Ω), should be examined more.

¹⁶ Indeed a modality predicate *yooda* ‘likely’ cannot included in the fronted constituent, as Ishihara notes. However, *rasii* ‘hear’ can in my intuition:

- (i) a. * Taro-wa sikar-are-ta-youna-koto-wa sikar-are-ta-youda
 Taro-TOP scold-PASS-PST-likely-that-wa scold-PASS-PST-likely
 b. Taro-wa gakko-ni i-tta-rasii-koto-wa i-tta-rasii
 Taro-TOP school-to-go-PST-hear-that-wa go-PST-hear

(adopted from Ishihara (2010:46))

This contrast suggests that TP-selecting modality predicate categorized by Ishihara should be subcategorized with respect to movability in the doubling construction. However, this issue is beyond the scope of this paper. Thus, it is left for future research.

Taro-TOP scold-PASS-PAST-likely/PST/ru-that-wa
 sikar-are-ta-youda.
 scold-PASS-PST-likely
 ‘As for Taro’s being scolded, it seems that he really was.’

d. *Negation*

Taro-wa tabako-o suw-**ana**-i-koto-wa
 Taro-TOP cigarette-ACC smoke-NEG-PRS-that-wa
 suw-ana-i (ga, tabako-ga kirai-de-mo-na-i)
 smoke-NEG-PRS but cigarette-NOM dislike-COP-PTCL-NEG-PRS
 ‘As for Taro’s not smoking, he does not smoke (, but it is not that he
 does not dislike cigarettes).’

(adopted from Ishihara (2010))

It should be noted that Ishihara (2010) judges (14a) as grammatical without any attentions (e.g. ‘?’ or ‘*’). However, many informants, including me, do not. As mentioned at the beginning of the subsection, many of his judgements differ from ours, which will be examined more in detail in section 3; nonetheless, here I follow his original judgement, thus no attentions. These examples above further lend support to the hypothesis that PDC undergoes (partial) TP-movement (cf. (14a) and (14b)), but not larger constituents such as CP (cf. (15c)). Further notable observations are involved in negation for its peculiar behaviors. PDC with negation requires both moved and in-situ predicates to have the same polarity (i.e. negative) value:

- (16) * Taro-wa tabako-o su-**u**-koto-wa suw-ana-i.
 Taro-TOP cigarette-ACC smoke-**ru**-that-wa smoke-NEG-PRS
 (cf. Taro-wa tabako-o-suw-ana-i-koto-wa suw-ana-i) (= (14d))
 (adopted from Ishihara (2010:46))

This would be considered problematic if we employ TP-movement analysis. Ishihara suggests that any size of predicate within TP-domain is allowed to undergo movement, unless it does not violate the generalizations (cf. (11)). Assuming that NEG (i.e. *nai*) is located below T, as the order *suw-ana-i* alludes (cf. Laka (1990)), Ishihara would rather predict (16) to be grammatical. In fact, Ishihara ascribes the undesirable fact to the function inherent in the construction, namely pragmatic requirements, although I do not draw on this idea for theoretical simplicity.

2.3. *Interim Summary and Some Problems*

N&C (1998) first argue that PDC in Japanese shares a unique underlying structure with SSC since they exhibit the same discourse effect: the adversative reading of the proposition. The only difference is the presence or absence of V-movement to T; if V moves to T, a focus assigned to the V+T complex is checked by the movement of the whole TP to CP (i.e. Spec-Head agreement) and subsequently the morphological repair helps the traced TP to be pronounced as the lexical V. Meanwhile, if V does not move to T, Spec-Head-agreement with C is established by movement of VP itself, then a V feature left behind by the movement is morphologically realized as *suru*: *suru*-support as a consequence.

Ishihara (2010), however, abandons N&C's analysis by claiming that although PDC, whether identical or non-identical, does move to the left periphery, SSC does not.^{17, 18} According to him, the non-identical PDC involves the partial TP-movement, that is *v*P-movement, although the claim that the identical one is derived by TP-movement is on a par with N&C. To summarize the literature from the view of the comparison between PDC and SSC, see the table below:

Table 1: *Size of Movement in Previous Literature*

	PDC with IF ¹⁹	PDC with non IF	SSC	<i>wa</i>
N&C (1998)	TP-movement	N/A	VP(<i>v</i> P)-movement	same (i.e. focus)
Ishihara (2010, 2013)	TP-movement	partial TP-movement	in-situ with focus particle	distinct (i.e. topic vs. focus)

¹⁷ Because Ishihara (2013) puts nominalizer *koto* and *no* at the heart of the article, he does not discuss *suru*-support.

¹⁸ More precisely, Ishihara (2010, 2013) identifies the landing site of (partial) TP as TopP (cf. Rizzi (1997)), which is headed by Topic marker *wa*, not a focus particle *wa*, from the following observation that PDC is not necessary to yield adversative readings (i.e. concessive) unlike SSC:

- (i) Taro-*wa* RINGO-O mui-ta-koto-*wa* mui-ta
 Taro-TOP apple-ACC peal-PST-that-*wa* peal-PST
 (**ga*, tabe-nakat-ta).
 but eat-NEG-PST

(Ishihara (2010:58), with slight modifications)

An adversative reading is illicit when a constituent within a fronted TP (i.e. *ringo*) is focalized. He further points out that if we treat the TP as a focus, which is what N&C suggests, the lack of concessive in (i) cannot be captured. Indeed, it seems to me that the concessivity of (i) is more opaque than that of its non-focalized counterpart (e.g. *Taro-wa ringo-o muita-koto-wa muita*). Nonetheless, I cannot regard it acceptable without the adversative reading. Thus, it is difficult to regard *wa* in the doubling as an aboutness topic marker.

¹⁹ (non) IF=(non) identical form

N&C's observations and analysis are indeed interesting and attractive in that they offer a single mechanism which directly derives the two constructions: their discourse similarity can be captured straightforwardly. However, their assumption that V optionally moves to T in Japanese is not independently motivated and the account of how the unmarked word order SOV_{wa}T is derived is also doubtful since they assume that movement of the subject to Spec TP is also optional without any discourse constraints imposed on the subject (cf. Mapping Hypothesis advocated by Diesing (1992)). Meanwhile, Ishihara's (partial) TP-movement account successfully captures multiple pronunciations in PDC with non-identical form as well as identical. The account needs scrutinizing mainly in two aspects however. First, Ishihara (2010, 2013) sweeps some empirical facts under the carpet. For instance, I have stated that his examples concerning passive environments with the non-identical are hard to regard as acceptable. Further, (partial) TP-movement account would predict the separation of the lexical part from negation in the non-identical form, which is actually not borne out. Second, his account should also predict there to be some interpretational differences between the identical and the non-identical as far as we assume that (partial) TP movement (roughly, ν P-movement) is employed for the latter, because a syntactic structure, which is yielded for example via a movement to a certain position, whether TopP or FocP, of a given constituent, should be mapped not only onto PF, but onto LF, which contributes to interpretation. For the account to be examined in the two aspects, we aim to render it more sophisticated in the next section.

3. Elaborations of (Partial) TP-movement Account

3.1. *Toward Idiolectal Variations*

The subsequent subsections will address where the idiolectal variations with respect to the non-identical form stem from. The observable tendencies are illustrated as follows:

- (17) (i) Low acceptability of the non-identical form with passive
- (ii) Low acceptability of separation of the predicate from the negation
- (iii) Wider ranges of idiolectal variations in the use of the non-identical

I claim that the low acceptability in the two domains ((i) and (ii)) and the idiolectal facts are convergent at a certain assumption: the violation of less-specificity.

3.1.1. *Passive in Non-identical Form*

Let us first argue passive cases; Ishihara (2000) provides an example that shows the passive form can be non-identical (15a). Note that Ishihara (2010) does not even allude that this example is hard to accept, thus no attentions (* or ‘?’). Many of my informants, including me, however, report that this is completely unacceptable; at least, there is a notably big gap compared to the causative ((s)ase) counterpart (14a). Hereafter, we use the judgement with box (i.e. ☐*) to indicate that the relevant example is judged (completely) acceptable in Ishihara (2010, 2013), but worse in my research.

- (18) ☐*? Taro-wa Jiro-ni nagur-u -koto-wa nagur-are-ta (= (15a))
 Taro-TOP Jiro-DAT hit-ru-that-wa hit-PASS-PST
 ‘As for being hit by Jiro, Taro was hit by him (,but not killed).’

- cf. Taro-wa Hanako-ni kusuri-o nom-u-koto-wa
 Taro-TOP Hanako-DAT medicine-ACC drink-ru-that-wa
 nom-ase-ta. (= (9a))
 drink-CAUS-PST

If we maintain that the non-identical doubling involves any size of TP- movement, we should be compelled to conclude that the domain associated with passive is outside of the movable TP-domain. This is undesired since passive clearly belongs to predicate. In this connection, let us cite Ishihara’s (2013:278) comment on speakers who do not allow the apparent tense mismatches in (12a): “[p]robably, these speakers treat -(r)u and -ta as Tense morphemes, unlike the speakers [who accept it].” In other words, the speakers that do not allow (12a) may interpret (r)u as a conclusive form with present form, which is in fact an adnominal form. Thus, the violation of the less-specified condition, originally suggested by Barbiers et al. (2008), turns out to be attributed to the unacceptability for the speakers.

With this in mind, let us take *activity* and *passivity* into consideration in line with the discussion of (r)u as present tense. One may expect that speakers disallowing (18) wrongly interprets the (r)u form as a hallmark of active voice; this amounts to violating the less-specified condition, thus led to unacceptability. Schematically, such speakers construct a structure in which the less-specificity is violated because the latter predicate (i.e. P₂) does not contain active, while it is included in the fronted (i.e. P₁) for them.

- (19) * [P₁ V+active]...[P₂ V+passive+tense] (not less-specified)
 (cf. ^{ok}[P₁ V]...[P₂ V+passive+tense]) (less-specified)

With the assumption that active voice normally guarantees agentivity, the above explanation further predicts that if a verb with less or no agentivity is passivized, we will judge the sentence as more acceptable than (18). In order to justify the prediction, I use a kind of indirect passives so-called *higai-ukemi*:²⁰

- (20) a. Taro-wa ame-ni fur-are-ta-koto-wa fur-are-ta.
 Taro-TOP rain-by fall-PASS-PST-that-*wa* fall-PASS-PST
 ‘*lit.* Taro was watered by rain.’
- b. Taro-wa ame-ni fur-**are**-ru-koto-wa fur-are-ta.
 Taro-TOP rain-by fall-**PASS**-ru-that-*wa* fall-PASS-PST
- c.? Taro-wa ame-ni fur-**u**-koto-wa fur-are-ta.
 Taro-TOP ame-by fall-**ru**-that-*wa* fall-PASS-PST

Although it may be hard to judge (20c) as perfectly grammatical, it is convincing that there is at least a gap on acceptability between (18) and (20c). If this is on the right track, it is not necessary to say that the passive domain is exceptional; this supports Ishihara’s (partial) TP-movement account.

3.1.2. Unseparability of Predicate and Neg

Let us consider the special behavior of negation; the remarkable, peculiar property of this element is that it is extremely hard for negation to be separated from (theoretically) lower (lexical) predicate in spite of being within TP-domain, as the word order in Japanese suggests (cf. Laka (1990)). In particular, it has been observed already by Ishihara (2010) that the separation between a predicate and *na(i)* (i.e. NEG) is strictly prohibited for all Japanese speakers. This cannot be responsible for idiolectal variations since no native speakers accept the case:

- (21) * Taro-wa tabako-o su-u-koto-wa suw-ana-i.
 Taro-TOP cigarette-ACC smoke-ru-that-*wa* smoke-NEG-PRS
 (= (16))

If we should revise Ishihara’s (partial) TP-movement, we would make the statement that PDC is derived either by full-fledged TP-movement for the identical form or by partial TP-movement lower than a projection involving sentence polarity (e.g. Σ P by Laka (1990) or Pol(ality)P). However, it is not elegant from the viewpoint of

²⁰ In Japanese, intransitive verbs can often be passivized, thereby an NP bearing patient role is realized with the dative marker *ni*.

theoretical simplicity. With this background in mind, I attempt to propose a solution to the problem in what follows.

As already mentioned, the Japanese language possesses the hierarchy in TP domain, roughly illustrated as follows:

- (22) (i) *tabe sase kake nakat ta* (rasii)
 (ii) V Causative Aspect Polarity Tense (Modality)

If (partial) TP-movement is on the right track and durable throughout, the configuration (22) alludes that any verbal (sub)domain from V (*tabe*) to Tense (*ta*) should be doubled; we have seen that this is indeed the case, with the exception of negation. In this respect, let us adopt the explanation again. It has been argued that the idiolectal variations are ascribed to how wrongly the relevant morphemes are interpreted by speakers who do not allow such examples. I concede that the cases described in the preceding subsections are idiolectal. Nonetheless, the fact that certainly all speakers do not allow the unseparability in question may be also accounted for by the morphological misunderstanding, in accordance with the solution to the idiolectal variations. If *tabe-sase-kake* is separated from *nakat-ta*, the adnominal form (*ru*) is inserted into *kake* to attach to the nominalizer *koto*, as *tabe-sase-kake-ru-koto-wa*. From the structural point of view, the (*ru*) form inserted in such environments should not have any status. If there exist speakers who allow (21), it is predicted that they would correctly analyze *r(u)* here as an adnominal form. On the contrary, other speakers, including me, might misunderstand it as a null polarity morpheme: *Aff* advocated by Laka (1990), which is counterpart to the negative morpheme *na(i)* in Japanese just because we normally do not yield outputs in which a verb is attached to neither the null morpheme *Aff* nor NEG *-na(i)*. For example, the basic form of *tabe* ‘eat’ is *tabe-ru*; this should be neutral with respect to polarity; then let us imagine a pos(itive)/neg(ative) pair of *tabe*; we will obtain the pair *tabe-ru* and *tabe-nai*. The point is that when we see the form *tabe-ru*, we are forced to analyze it as a counterpart to *tabe+nai*; I claim that this is attributed to why perhaps all speakers disallow the separation in the negative domain.^{21, 22} This situation is roughly illustrated as follows:

- (23) * [P₁ V+causative+aspect+pos]...[P₂ V+causative+aspect+neg+past]

²¹ Ishihara (2010) offers another explanation. According to him, the unseparability of this domain is responsible for some pragmatic requirements.

²² In addition, some of those speakers wrongly analyze the form as a complex morpheme bearing *Aff*+present tense, such speakers judge all kinds of the non-identical form as unacceptable as a result.

(cf. ^{ok}[P₁ V+causative+aspect]...[P₂ V+causative+aspect+neg+past])

Unfortunately, however, I have not found any ways to exemplify this line of reasoning so far. If there should exist a verb, whose adnominal form is morphologically distinct from its form combined with *Aff*, it would lend support to my claim. Regardless, the following example with adjective *na(i)* ‘non exist’ might be a piece of evidence:

- (24) a. ya-ru-koto-ga na-i-koto-wa na-i
do-PRS-that-NOM not.exist-COP.PRS-that-*wa* non.exist-COP.PRS
‘It is not the case that I have nothing to do.’ $\neg\neg p$ (double negation)
‘I do have nothing to do.’ $\neg p$ (verum focus)
(i) node, ima ya-ri-masu. ‘so I will do it now.’
(ii) ga, mada ne-nai ‘but I won’t sleep yet.’
- b. ya-ru-koto-ga na-i-koto-wa na-kat-ta
do-PRS-that-NOM not.exist-COP.PRS-that-*wa* non.exist-COP-PST
‘It is not the case that I had nothing to do.’ $\neg\neg p = p$ (double negation)
‘I did have nothing to do.’ $\neg p$ (verum focus)
(i) node, ima ya-tte-i-ru. ‘so I’m doing it now.’
(ii) ga, ne-na-kat-ta. ‘but I didn’t sleep then.’

Although there is apparently a unique sentence, we have two possible readings: double negation and emphasis on a proposition (i.e. verum focus). If *na(i)* in P₁ is an adjective and the one in P₂ a negative operator, it pertains to double negation; thereby, ‘not exist’ is negated (i.e. ‘exist’= p). Thus, (24a) is appropriate for this context as *node* ‘so’ suggests. Meanwhile, the latter is chosen if *na(i)* in both P₁ and P₂ are identical, namely a pair of copy. In this case, since the proposition *I have nothing to do* is emphasized, the concessive reading (ii), triggered by *ga* ‘but’ is appropriate. With this background in mind, let us take the following example into consideration:

- (25) ya-ru-koto-ga na-i-koto-wa na-ku-nai
do-PRS-that-NOM not.exist-COP.PRS-that-*wa* non.exist-COP-NEG.PRS
‘It is not the case that I do not have nothing to do.’ $\neg\neg\neg p = \neg p$
(double negation)
‘I do have something to do.’ $\neg\neg p = p$ (verum focus)
(i) # node, moo ne-ru. ‘so I will sleep now.’
(ii) ? ga, oo-ku-wa-nai. ‘but it is not much.’

In these cases, if double negation reading is attested, roughly we will yield the reading ‘I have nothing to do’ (i.e. $\neg p$; cf. (24a(i))), because there are three negative operators. As for the doubling construction, what is crucial is the compositional meaning of predicate located in P_2 . *Na-ku-nai* in P_2 should be interpreted as negation of “being ‘not exist’”: *I do have something to do*. The subsequent discourses clear-cuts this asymmetry. The concessive reading (25ii) is only attested; it is a welcome result because this can be regarded as evidence that the separation between a predicate and negative morpheme *na(i)* is licit in grammar. Hence we are led to conclude that any size of predicate within TP domain can be moved and doubled.

3.2. Summary

To summarize the discussions in the subsection 3.1, the idiolectal variations, in which some speakers, but not few, do not allow the non-identical form in several domains, are argued to be reduced to how wrongly they analyze the relevant morpheme. Although to what extent they allow the non-identical form varies, I claim that such variations are accounted for by the correlation of the violation of less-specificity first advocated by Barbiers et al. (2008) and how each speaker misanalyzes the peculiar morphemes (e.g. incorrectly *(r)u* as present tense). In addition, I have laid out the possibility that this line of reasoning can be further extended to the absolute unseparability between a negation and a predicate. If this is on the right track, we can consequently maintain that PDC, whether it is identical or not, can be generalized as the syntactic movement of any size of verbal elements within TP domain.

4. (A)symmetries between PDC and SSC

4.1. The Lack of Incompleteness in PDC

Along with the preceding subsection, we will focus on the discourse function of contrastive *wa* in the two constructions. Recall that N&C imply that PDC and the SSC are underlyingly similar in that they both involve contrastive focus. However, Ishihara (2010, 2013) abandons the idea, showing that only the former is felicitous when it is uttered to express a speaker’s belief that a salient (i.e. discourse-given) proposition is true (i.e. verum focus), while the latter is not used for the discourse purpose. Ishihara, thus, identifies *wa* in PDC as a topic marker and as not necessarily the locus of contrastive meaning. However, Ishihara’s (2010) example, which he takes to be a piece of evidence for his idea that the contrastive meaning observed in PDC is merely a by-product, is not amenable to me, as discussed earlier (see footnote 18).

However, I am not eager to insist that *wa* in PDC is a contrastive topic marker. Buring (2003) observes that the typical use of contrastive topic is shown to be incompleteness of the answer to the given question in terms of his D(iscourse)-tree account. Since his examples are taken from English and German, I provide an example in Japanese for ease of explanation. In English and German, it has been reported that the contrastive topic is realized by a special intonation pattern so-called B-accent on the targeted element (Jackendoff (1972)) on the one hand, its counterpart in Japanese is marked by a particle *wa* with an intonation identical to one for focus marking on the other hand (cf. Kuno (1973), Tomioka (2010b), among others). Let us see the relevant example:

- (26) A: dare-ga siken-ni oti-masi-ta-ka?
 who-NOM exam-DAT fail-HNR-PST-Q
 ‘Who failed the exam?’
 B: Zen-in nituite sittei-ru wake-de-wa-ari-mas-en ga,
 everyone about know-PRS reason-COP-*wa*-COP-HNR-NEG but
 { # Ken-ga / Ken-wa } oti-masi-ta
 Ken-NOM Ken-*wa* fail-HNR-PST
 ‘I don’t know all people who took the exam, but [Ken]_{B-accent} failed it.’
 (Tomioka (2010b:302), translation mine)
- (27) A: gakuseitai-wa nani-o tabe-ta?
 students-TOP what-ACC eat-PST
 ‘What did the students eat?’
 B: Erika-wa mame-o tabe-ta (kedo)
 Erika-*wa* beans-ACC eat-PST but
 ‘[Erika]_{B-accent} ate the beans, but...’
 (Tomioka (2010b:305), translation mine)

Normally, the *wh*-interrogative requires its relevant answer to be replaced with the *wh*-word in the answer. The answer in (26) is, regardless, shown to be an incomplete one since A requires B to answer all the people who failed the exam. We can ensure that such incompleteness is required also in (27), although the incomplete part is associated with the given information (i.e. students) rather than the *wh*-word (i.e. what), as opposed to (26).²³ To follow the traditional view that incompleteness is crucial for

²³ Hara (2006) points out that the fact that the constituent marked by contrastive topic *wa* can be a unique focus of a sentence renders it difficult to extend Buring’s (2003) account straightforwardly to Japanese.

contrastive topic, let us consider whether *wa* in PDC is contrastive topic. Note that for convenience, I use *wa_{CT}* even for *wa* in PDC and SSC, which is marked as italicized *wa* in the other examples.

- (28) A: Okayu-o tabe-te, kusuri-o non-da?
 rice gruel-ACC eat-and medicine-ACC drink-PST
 ‘Did you eat rice gruel and then took medicine?’
- B Okayu-wa tabe-ta (kedo kusuri-wa non-de-nai)
 rice gruel-*wa* eat-PST but medicine-wa drink-COP-NEG
 ‘I ate [rice gruel]_{B-accent}, but I didn’t take medicine.’
- B’? Okayu-o tabe-wa-si-ta (kedo kusuri-wa
 rice gruel-ACC eat-*wa*-do-PST but medicine-TOP
 non-de-nai)²⁴
 drink-COP-NEG
 ‘I did [eat rice-gruel]_{B-accent}, but I didn’t take medicine.’
- B’# Okayu-o tabe-ta-koto-wa tabe-ta
 rice gruel-ACC eat-PST-that-*wa* eat-PST
 (kedo kusuri-wa non-de-nai)
 but medicine-TOP drink-COP-NEG
 ‘As for eating rice gruel, I did [eat it]_{B-accent}, but I didn’t take
 medicine.’

Above all, it should be noted that the fact that the use of SSC (28B’) for the question is not completely acceptable can be ascribed to the property of *wa* in this construction; if the *wa* requires an element to which it attaches to be discourse new, the fact is naturally accounted for since the targeted proposition marked by *wa*, *okayu o taberu* ‘to eat rice gruel’ is given in the question. In this respect, it may lend support to the N&C’s view that the predicate attached to *wa* in SSC is a focus. Particularly crucial is the fact that the response by PDC (28B’#) is infelicitous in this context. This is problematic as far as we assume that *wa* in PDC is a contrastive topic marker. As stated above, however, it is difficult for me to see contrastivity in PDC is optional, as opposed to Ishihara (cf. footnote 21); even if an object is focalized, it seems that PDC exhibits contrastivity more or less. With this in mind, I cannot exactly describe what

²⁴ It will be completely acceptable if we use a contrastive topic marker *wa* instead of *o* in the phrase ‘okayu-o.’

wa in PDC is. Thus, I tentatively suggest that the *wa* exhibits contrastivity but it is not a hallmark of contrastive topic.²⁵

4.2. *Narrow vs. Wide Focus*

Toritate particles have generally been studied with respect to how elements they attach to are associated with ones in discourse (i.e. association with focus; see Aoyagi (2006); cf. Numata and Jo (1995), Kinsui et al. (2000)). Let us first review Ishihara's (2013) observation for this matter. According to him, PDC "can be interpreted with V [(29a)] and VP [(29b)] [a]s a contrastive topic" (Ishihara (2013:277)).²⁶

- (29) Taro-wa ringo-o kat-ta-koto-wa kat-ta ga...
 Taro-TOP apple-ACC buy-PST-that-*wa* buy-PST but
 'As for Taro's buying an apple, he did buy one, but...'
- a. tabe-nakat-ta. (V contrast)²⁷
 eat-NEG-PST
 'he didn't eat it.'
- b. sake-o non-de ne-te simat-ta. (VP contrast)
 alcohol-ACC drink-and sleep-and do-PST
 'he drank sake and fell asleep.'
- (Ishihara (2013:277))

This example implies that although *wa* attaches to TP with *koto* intervening, it does not have any restrictions as to what constituent must be contrastive. Let us further examine whether any asymmetries are observed in the non-identical form:

- (30) Taro-wa ringo-o kat-**u**-koto-wa kat-ta ga...
 Taro-TOP apple-ACC buy-**ru**-that-*wa* buy-PST but
 'As for Taro's buying an apple, he did buy one, but...'
- a. tabe-nakat-ta. (V contrast)
 eat-NEG-PST
 'hi didn't eat it.'
- b. sake-o non-de ne-te simat-ta. (VP contrast)
 alcohol-ACC drink-and sleep-and do-PST
 'he drank sake and fell asleep.'

²⁵ Of course, it is possible, along with N&C, to regard *wa* in PDC as identical to that in SSC by virtue of the lack of incompleteness.

²⁶ Ishihara (2013) also gives an example which suggests that PDC can contrast TP level.

²⁷ My informant reports that the V-contrast example gets more acceptable if *kat-ta* 'bought' is stressed as *KAT-TA-KOTO-WA*.

Surprisingly, even if a subpart of TP is attached to *wa*, contrasting a TP with another is licit, as the acceptable (30b) exemplifies. This is problematic, however, if we assume that what is fronted in the non-identical form is exactly a less-specified TP. On the other hand, this fact is captured if we assume that PDC involves merely TP-movement, whether it is identical or not. This line of reasoning further leads us to concede with the new issue of why a full-fledged TP to be fronted is sometimes realized partially. However, since such issues on linearization are beyond the scope of this paper, I leave it for future research.

Let us focus on how a contrasted phrase is related to PDC. More precisely, we now elaborate how the polarity value of PDC affect that of the contrasted phrase. For the sake of simplicity, we first observe PDC with the identical form, whose polarity value is affirmative, repeated here:

- (31) Taro-wa ringo-o kat-ta-koto-wa kat-ta ga...
 Taro-TOP apple-ACC buy-PST-that-*wa* buy-PST but
 ‘As for Taro’s buying an apple, he did buy one, but...’
- a. tabe-nakat-ta. (V contrast: Negative)
 eat-NEG-PST
 ‘he didn’t eat it.’
- a’. sugu sute-ta. (V contrast: Positive)
 soon throw.away-PST
 ‘he threw it out right away.’
- b. sake-o non-de ne-te simat-ta. (VP contrast: Positive)
 alcohol-ACC drink-and sleep-and do-PST
 ‘he drank sake and fell asleep.’
- b’. oisi-ku-nakat-ta. (VP contrast: Negative)
 delicious-COP-NEG-PST
 ‘it wasn’t delicious.’

This data set suggests that PDC with the affirmative value does not have to accompany a particular value of polarity.

In a similar vein, let us consider cases with negation. The following examples suggest that the same holds for PDC with the negative polarity value:

- (32) Taro-wa ringo-o kaw-anakat-ta-koto-wa kaw-anakat-ta ga...
 Taro-TOP apple-ACC buy-NEG-PST-that-*wa* buy-NEG-PST but
 ‘As for Taro’s not buying an apple, he didn’t buy one, but...’

- a. nusun-da. (V contrast: Positive)
steal-PST
'he stole it.'
- a'. nusumi-mo-si-nakat-ta. (V contrast: Negative)
steal-too-do-NEG-PST
'he didn't steal it, either.'
- b. banana-o nusun-da. (VP contrast: Positive)
banana-ACC steal-PST
'he stole a banana.'
- b'. koukai-si-nakat-ta. (VP contrast: Negative)
regret-do-NEG-PST
'he did not regret that.'

Let us consider how SSC behaves in this respect.

- (33) Taro-wa hasi-de keeki-o kiri-wa-si-ta ga...
Taro-TOP chopsticks-with cake-ACC cut-wa-do-PST but
'Taro did cut the cake with chopsticks, but...'
- a.?? tabe-nakat-ta. (V contrast: Negative)
eat-NEG-PST
'he did not eat it with them.'
- a'.* tabe-ta.²⁸ (V contrast: Positive)
eat-PST
'he ate it with them.'
- b. fooku-de tabe-ta. (VP contrast: Positive)
fork-with eat-PST
'he ate it with a fork.'
- b'. oisi-ku-nakat-ta. (VP contrast: Negative)
delicious-COP-NEG-PST
'it wasn't delicious.'

Conversely, SSC with affirmative requires the value of the following phrase to some extent: the V contrasted sentence with the same value is prohibited (33a'). It should be pointed out further that (33a) implies that even the V contrast with the opposite value is less acceptable unless a phonological prominence is imposed on the verb (i.e. *KIRI-WA*). Let us then consider the negative case:

²⁸ Of course, the sentence 'tabe-ta' itself is fully grammatical. But this sentence is unacceptable if it follows the preceding sentence 'taro-wa hasi-de keeki-o kiri-wa-sita ga.'

- (34) Taro-wa hasi-de keeki-o kiri-wa-si-nakat-ta ga...
 Taro-TOP chopsticks-with cake-ACC cut-*wa*-do-NEG-PST but
 ‘Taro did cut the cake with chopsticks, but...’
- a. sasi-ta. (V contrast: Positive)
 prick-PST
 ‘he pricked it with them.’
- a’.* sasa-nakat-ta.²⁹ (V contrast: Negative)
 prick-NEG-PST
 ‘he didn’t prick it with them.’
- b. fooku-de sushi-o tabe-ta. (VP contrast: Positive)
 fork-with sushi-ACC eat-PST
 ‘he ate sushi with a fork.’
- b’. home-rare-nakat-ta. (VP contrast: Negative)
 praise-PASS-NEG-PST
 ‘wasn’t praised.’

These asymmetries imply that SSC is more sensitive to the polarity value than PDC especially in V contrast contexts. Additionally, it should be noted that while the V contrast with the negative value (33a’) is hard to regard as acceptable in the affirmative SSC, such less acceptability is not observed in (34a) even if no phonological prominence on the predicate exists.

To summarize this section, the (a)symmetries between PDC and SSC are illustrated as below:

- (35) (i) PDC is less sensitive to sentence polarity than SSC.
 (ii) Although SSC is sensitive to sentence polarity, there is a gap between the two V contrast contexts. If SSC has affirmative value, the V contrast with the opposite value is quite restricted; if it has the negative value, such restriction is not observed.

In the following section, I will propose that the behavior in (ii) is straightforwardly accounted for by Kobayashi’s (2009) focus licensing mechanism and implies that this account might be implemented for the explanation of (i), shedding light on the traditional issue concerning contrastive *wa*, which can be either in the sentence initial

²⁹ See footnote 27.

or in situ (e.g. Kuno (1973), Hoji (1985), Vermeulen (2013)), and the new one for the double realization in PDC.

5. Proposal

5.1. Theoretical Assumptions

Kobayashi (2009) proposes the new idea for some information structural notions from the observations of certain types of focus particles in Japanese so-called *toritate* particles. It has been reported in the literature (Miyagawa (1997, 2005, 2007), Hasegawa (1991, 1994, 2005), among others) that the particles *mo* and *wa* are sensitive to the polarity of sentences, and thus Kobayashi defines them as mere new information markers associated with it, rather than the traditionally acknowledged notion as focus particles. Her basic observations and the function of *wa* are illustrated as follows:

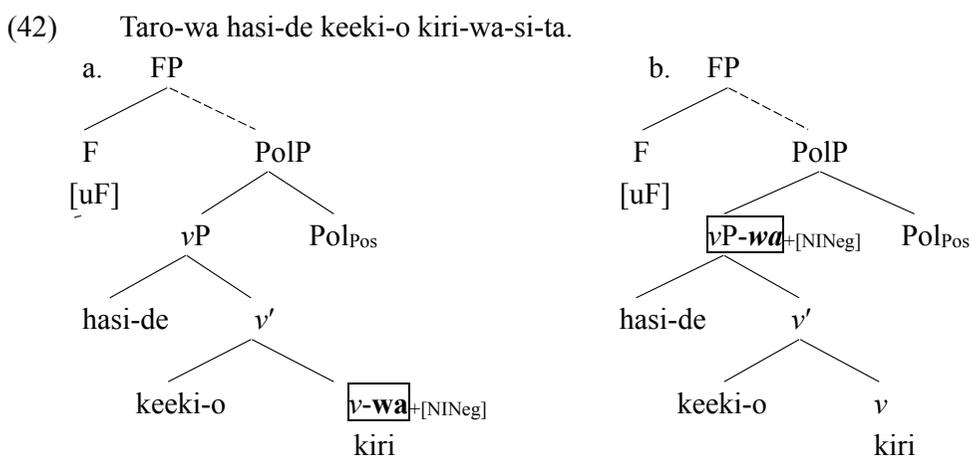
- (36) a. ?? Hanako-wa hasi-de **keeki-wa** tabe-ta.
 Hanako-TOP chopsticks-with cake-*wa* eat-PST
 ‘Hanako ate only a CAKE with chopsticks.’
- b. Hanako-wa keeki-wa_i hasi-de *t_i* tabe-ta
 Hanako-TOP cake-*wa* chopsticks-with eat-PST
- (37) a. Hanako-wa hasi-de **keeki-wa** tabe-nakat-ta.
 Hanako-TOP chopsticks-with cake-*wa* eat-NEG-PST
 ‘Hanako didn’t eat a CAKE with chopsticks.’
- b. Hanako-wa keeki-wa_i hasi-de *t_i* tabe-nakat-ta
 Hanako-TOP cake-*wa* chopsticks-with eat-NEG-PST
 (Kobayashi (2009:124), translation mine)
- (38) The function of *wa*
- (i) Presupposition: $\exists_{x \neq a} x \in \lambda x \neg P(x)$
 $(sushi) \in \lambda x \neg [\text{Hanako ate } x]$
 =Hanako didn’t eat a cake.
- (ii) Assertion: $\alpha \notin \lambda x \neg P(x)$
 $\text{cake} \notin \lambda x \neg [\text{Hanako ate } x]$
 =It is not true that Hanako didn’t eat a cake.
 =Hanako ate a cake.
- (Kobayashi (2009:134-135), with slight modifications; cf. Kato (1985))

5.2. Analysis

Let us employ Kobayashi's (2009) mechanism for the issue developed here. What can be resolved here is (ii) where the asymmetries on acceptability associated with sentence polarity stem from. Along with Kobayashi, I assume that contrastive *wa* which attaches to verbal domain is a [NI_{Neg}] marker and that [uF] must be deleted via Agree. The crucial examples are repeated here:

- (41) Taro-wa hasi-de keeki-o kiri-wa-si-ta ga...
 Taro-TOP chopsticks-with cake-ACC cut-*wa*-do-PST but
 'Taro did cut the cake with chopsticks, but...'
- a. ??tabe-nakat-ta. (V contrast)
 eat-NEG-PST
 'he didn't eat it with them.'
- b. fooku-de tabe-ta. (VP contrast)
 fork-with eat-PST
 'he ate it with a fork.'

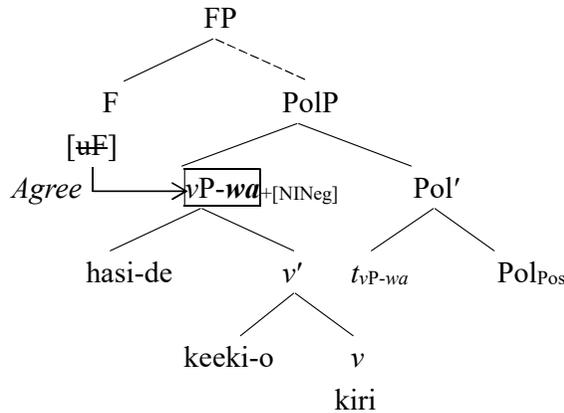
If we further assume that what element is contrasted is contingent on to what element *wa* attaches, the asymmetry can be straightforwardly captured by the distinction, in which *wa* attaches to a head V directly in (41a) on the one hand, whereas it does to a VP in (41b) on the other hand, illustrated as follows:³⁰



³⁰ Aoyagi (2006) proposes that *toritate* particles move to either vP or TP as D⁰ categories at LF and so-called wide focus is attributed to this covert operation. Hence, he assumes that V contrast and VP contrast is not distinct in narrow syntax. In this respect, my assumption is quite different from Aoyagi (2006).

These structures are predicted to be both ruled out since the Pol_{Pos} intervenes between the $[\text{uF}]$ and $[\text{NI}_{\text{Neg}}]$, which is assigned the opposite polarity value. However, a further operation is assumed to rescue only the structure in (42b); as Kobayashi notes, if a (vacuous) scrambling renders the targeted $\nu\text{P-wa}$ located higher than the intervening Pol_{Pos} , the Probe-Goal Agree is successfully established, whose output will be grammatical.³¹

(43)



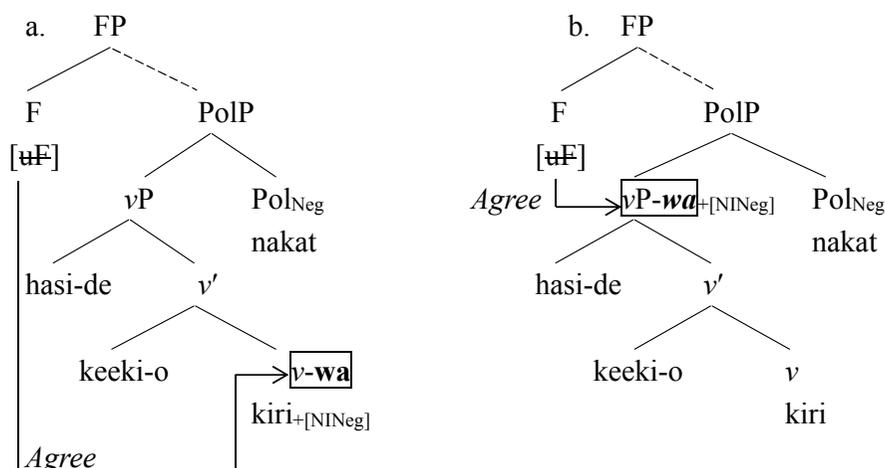
(cf. (42b))

In this connection, if the ν head in (42a) scrambled to the Spec PolP, the structure would be available. Nonetheless, this is ruled out due to the restrictions on scrambling of a head. Therefore, the fact that the *suru*-support sentence with affirmative polarity only allows VP contrast is accounted for straightforwardly.

Kobayashi's mechanism can be successfully implemented for the case with negative polarity, namely that in the negative sentences, V contrast is yielded as well as VP contrast. The fact follows from no intervention effects: it is the case that a Pol head intervenes between $[\text{uF}]$ and a *wa* phrase; despite that, the Probe-Goal Agree is established, whether *wa* attaches to a ν head or a νP , since the intervening Pol_{Neg} shares the same polarity value with the *wa* phrases, illustrated as follows:

³¹ Immaterial though, I tentatively assume that the landing site of scrambled constituents is Spec PolP because the point is that the constituents must be higher than a Pol head.

(44) Taro-wa hasi-de keeki-o kiri-wa-si-nakat-ta



Finally, let us briefly discuss why such polarity sensitivity is not attested in PDC. I offer two tentative possibilities; one is that the contrastive *wa* in PDC must be differentiated from that in SSC; more precisely, contrastivity in contrastive topic *wa* (e.g. Ishihara (2013)) is not associated with *wa* as a new information marker at all. The other is that whereas the contrastive topic *wa* is in fact originated from a NI marker *wa*, deletion of [uF] via Agree, the locus of (less) acceptability, is held in other way. It has been argued that contrastive topic is not an independent information structural notion but reduced to other existing notions such as topic and (contrastive) focus (e.g. Molnár (1998), Sauerland (2005), Tomioka (2010a), Titov (2013), among others), or some researchers (e.g. Molnár (2002), Molnár and Winkler (2010); cf. López (2009)) claim that contrast is an independent grammatical category, on a par with topic and focus. Since a novel notion should be deduced from, if any, such existing notions for theoretical simplicity, it is worthwhile exploring the second possibility. Recall that PDC exhibits the emphasis on a salient proposition, so-called verum focus, even in the cross-linguistic perspective. According to the literature (e.g. Ishihara (2010)), it is the focus that is inherent in PDC. Hence, the fact that PDC rather than SSC is imposed on any contrastivity constraints might be captured if we assume that [uF] under PDC enters into Agree relation with a feature associated with the polarity value of a sentence.³² Because the [uF] would successfully be deleted, it turns out to be the circumstance, under which *wa* phrase can freely be located. In doing so, this research direction might also give some theoretical implication; if PDC is cross-linguistically associated with verum focus, the lower verbal copy, which is

³² The feature can be analogous to PolP or Σ P (Laka (1990)). See Nagata (in this volume), who aims to account for how verum focus is licensed in VP ellipsis and VP fronting in English in terms of Kobayashi (2009).

assumed tentatively, is no more a copy of the verb located higher, rather a phonological realization of polarity particle such as *yes*. Expectedly, Japanese is reported to be a language which is allowed to use a verb as an answer to a polar question as well as a particle *hai* ‘yes’ (cf. Holmberg (2016)). Interestingly however, there is a possibility that a language allows PDC if it employs a verb instead of polarity particle (cf. Episova (2018)).³³ Accordingly, the cross-linguistic presence of verum focus in PDC and the investigation of this can shed light on the issue as to what language exhibits PDC.

6. Concluding Remarks and Remaining Issues

6.1. Concluding Remarks

N&C’s finding of the comparison between PDC and SSC is attractive in that they have attempted to analyze them equally, with the concentration on concessive readings both exhibits, whereas Ishihara (2010, 2013) has investigated PDC with non-identical form and claimed that the identical form involves TP movement, in line with N&C, and the non-identical one partial TP movement. Being in a spirit of N&C, I have argued that Ishihara’s examples need more examined and ambivalence of his examples, that is how speakers who judge them as unacceptable, is ascribed to how they misanalyse them. The fact that the inseparability between purely lexical predicate and polarity might also be argued to be a reminiscent of such ascription. In addition, I have examined Ishihara’s partial TP movement analysis of the non-identical form; it has been observed here that there are not any asymmetries on targets of contrastivity between the (non-)identical forms; it is mysterious given that it is served by *wa*. This leads us to conclude that what apparently involves partial TP movement is in fact not structurally distinct from the identical form assumed to undergo full-fledged TP movement by Ishihara, although this idea gives rise to a new issue of under what circumstance subpart of a TP is doubly realized. I have also observed that the targeted constituent of contrastivity is sensitive to polarity of the sentence in SSC and claimed that the sensitivity can be captured straightforwardly by Kobayashi’s (2009) focus licensing mechanism. In other words, the intervention effect (i.e. Pol_{Pos} vs. NI_{Neg}) proposed here prevents [uF] from being deleted, and the presence of independent movement operation (i.e. scrambling) helps the [uF] Agree and leads to interpretable restrictions depending on polarity value of the sentence and where *wa* attaches to. Although we must take into consideration whether this account also correctly predicts the behavior of PDC, the research direction, in which *wa* in PDC (tentatively contrastive topic *wa*) should be analogous to in SSC (i.e. in situ contrastive

³³ David Pesetsky points out this possibility to Episova (2018).

optionally (e.g. Hara (2006), Oshima (2008) among others; but see Vermeulen (2013) against this view). This paper observes that it is difficult to regard *wa* in PDC as a contrastive topic marker due to the lack of incompleteness. Adopting Kobayashi (2009), I have shown that *wa* in SSC is also sensitive to the sentence polarity due to the successful Probe-Goal Agree and suggested the lack of this in PDC is ascribed to the presence of polarity focus. As slightly reviewed above, there are some studies which attempt to reduce the notion of contrastive topic to other existing notions (e.g. Molnár (1998), Tomioka (2010a)). The finding of this paper seems to shed light on this research direction in that it has accounted for some of the properties of *wa* in PDC, which has been considered to be a contrastive topic marker, in terms of the combination of existing syntactic operations (e.g. Agree and intervention). In this respect, the proposal developed here, based on Kobayashi's (2009) focus licensing mechanism without the cartographic approach (Rizzi (1997)) may be worthwhile scrutinizing in dealing with the general issues of contrastive *wa* (clause-initial vs. in situ) and, furthermore, contrastive topic in the crosslinguistic perspective. These issues must be left for future research.

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