

Remarks on N-Final Relativization in Japanese

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Abstract

Within the hypothesis of antisymmetry of syntax, Kayne (1994) proposes that N-final relatives be derived via leftward movement of the relative head NP/DP to [Spec,CP], followed by leftward movement of the remnant IP from a postnominal position under the D-CP complementation structure, taking up the Japanese relative as a paradigmatic case instantiating this derivation: $[_{DP} [_{IP} \dots t_i \dots]_j [_{DP} D [_{CP} NP_i/DP_i [_{CP} C t_j]]]]$ (see also Bianchi 1999, 2000a,b). On the other hand, working under the same framework of antisymmetric syntax, Murasugi (2000a,b) arrives at a different conclusion that Japanese totally lacks relative clauses to be derived in such a way from the underlying D-CP complementation structure (see also Aoun and Li 2003). With this recent trend in mind, I will argue that the Kaynean relative head-raising analysis together with the D-CP complementation hypothesis should be maintained (at least) for N-final relatives in Japanese, critically re-examining empirical evidence discussed in Murasugi (2000a,b) and providing theoretical and empirical motivations for both the Kaynean relative head-raising and the D-CP structure in Japanese.

1. Introduction

Kayne (1994) proposes to analyze relatives as deriving from the underlying

D-CP configuration universally within the theory of antisymmetric syntax (cf. also Bianchi 1999, 2000a,b).¹ One of the consequences of such a line of analysis is that N-final relatives are to be derived via leftward movement of the relative head to [Spec,CP], followed by leftward movement of the remnant IP from a postnominal position under the D-CP complementation structure, as schematically represented in (1) below:^{2, 3}

(1) [_{DP} [_{IP} ... t_i ...]_j [_{DP} D [_{CP} DP_i [_{CP} C t_j]]]] (N-final relative)

Since Japanese has N-final relatives, it is paradigmatically subject to the Kaynean analysis in (1) under Kayne's (1994) assumptions.⁴ On the other hand, working under the same hypothesis, Murasugi (2000a,b) reaches a different conclusion that Japanese totally lacks relative clauses to be derived in such a way from the underlying D-CP complementation structure (see also Aoun and Li 2003).

The aim of this paper is to argue for the Kaynean analysis of N-final relatives in Japanese, re-examining empirical evidence discussed in Murasugi (2000a,b) and providing theoretical and empirical motivations for both the relative head-raising and the D-CP structure in Japanese. As Kayne (1994:165) himself remarks, the LCA with D-CP structure per se does not determine whether [Spec,CP] must be filled by movement or base-generation. Thus, as Aoun and Li (2003) claims, the base-generation strategy is in principle always available for all types of languages. The question I would like to pose in this paper is whether Japanese, an N-final language, employs the movement strategy and/or the base-generation strategy. This paper will put forth a strong claim that "genuine" relatives in Japanese must always appeal to the movement strategy.

The paper is organized as follows. Section 2 is devoted to critically re-examining some previous arguments against the Kaynean analysis of N-final relativization in Japanese, demonstrating that none of them are yet conclusive enough to immediately nullify the analysis at hand. In so doing, it is claimed that the relative head-raising along with the D-CP underlying structure be maintained for (at least) N-final relatives in Japanese. More specifically, Section 2.1 addresses apparent lack of Island effects in Japanese relatives. Next, Section 2.2 looks at apparent lack of connectivity/reconstruction effects in Japanese relatives. Then, Section 2.3 considers the presence of the so-called “gapless relatives” in Japanese. In Section 2.4, I will discuss a tighter locality restriction on “relativization” of reason/manner adjuncts in Japanese. Further, in Section 2.5, I will cursorily take up issues concerning the status of the particle *no* in the context of N-final modification in Japanese. Finally, Section 2.6 takes account of arguments based on putative Proper Binding Condition (PBC) effects. Section 3 concludes this paper.

2. Re-examination of Arguments against the Kaynean Analysis of N-Final Relatives in Japanese

Recall that Kayne (1994) analyzes N-final relatives as involving the following derivation in general (cf. also Bianchi 1999, 2000a,b):

(1) $[_{DP} [_{IP} \dots t_i \dots]_j [_{DP} D [_{CP} DP_i [_{CP} C t_j]]]]$ (N-final relative)

In (1), the relative head DP is first raised to [Spec, CP], which is followed by remnant movement of IP to [Spec, DP]. Murasugi (2000a,b) points out that the relative head raising to [Spec, CP] cannot be motivated in Japanese

on the following grounds: (i) lack of island effects; (ii) lack of connectivity/reconstruction effects for anaphor binding; (iii) tighter locality restriction on relativization of reason/manner adjuncts; (iv) the status of the particle *no*; (v) Proper Binding Condition (PBC) effects. In the following subsections, I will address and evaluate Murasugi's (2000a,b) arguments in turn.

2.1. Apparent Lack of Island Effects

Murasugi (2000a,b) alludes to Kuno's (1973) well-known observation that Japanese relativization apparently does not exhibit island effects, as illustrated in (2) below:⁵

- (2) [_{DP} [[_{DP} [e_i e_j kiteiru] [yoohuku,]]-ga yogoreteiru] [sinsi,]]
 wearing-is suit-Nom dirty-is gentleman
 'the gentleman who [the suit that he is wearing] is dirty'

In (2), relativization out of a relative clause has occurred in violation of the Complex NP Constraint (CNPC). Acceptability in (2) has been standardly taken to indicate that Japanese relatives need not be derived by movement of the relative head (cf. also Perlmutter 1972). Murasugi (op. cit.) considers this fact as a clear piece of evidence against the relative head-raising analysis assumed in the D-CP structure by Kayne (1994).

However, there is another possible derivation in which the relative head can be taken to have been moved without inducing violation of the CNPC. Kuroda (1986a,b;1992) explores a possibility of movement analysis of topicalization in Japanese, incorporating the notion of the so-called "major subject" in Japanese. Sakai (1994) applies Kuroda's major subject analysis to

the empirical domain of relativization in Japanese, arguing that relativization in Japanese can involve movement of a null operator (Op) from the major subject position into [Spec, CP].⁶ Consider (3) and (4) below:

(3) [(**sono**) **sinsi-ga** [[pro_i e_j kiteiru] [yoohuku_j]-ga yogoreteiru]
 that gentleman-Nom wearing-is suit-Nom dirty-is
 ‘(that) gentleman is such that the suit that he is wearing is dirty’

(4) [Op_i [t_i [[pro_i e_j kiteiru] [yoohuku_j]-ga yogoreteiru] [sinsi_i]]
 wearing-is suit-Nom dirty-is gentleman
 ‘the gentleman who [the suit that he is wearing] is dirty’

Note that (4) involves movement of a null operator (Op) from the major subject position corresponding to the position of the bold-faced (*sono*) *sinsi* ‘(that) gentleman’ in (3), crossing no complex NP (cf. Sakai 1994 and Hoshi 1995 for some discussion of relativization from the major subject position).⁷ By the same token, it is equally plausible to assume a derivation in which the relative head [*sinsi*] ‘gentleman’ rather than a null operator (Op) has been directly moved from the major subject position to [Spec, CP] under the Kaynean D-CP complementation structure, as illustrated in (5) below:

(5) [_{DP} [_{IP} t_i kiteiru yoohuku-ga yogoreteiru]_j [_{DP} D [_{CP} **sinsi_i** [_{CP} C t_j]]]]
 wearing-is suit-Nom dirty-is gentleman
 ‘the gentleman that the suit that he is wearing is dirty’

Thus, apparent lack of island effects does not necessarily indicate lack of movement in Japanese relativization.⁸ In Section 2.2, I will show that the head-raising operation should be favored over the null operator movement

in light of the presence of connectivity/reconstruction effects in Japanese relativization. In fact, if Aoun and Li (2003) are on the right track in claiming that null operator movement does not exhibit connectivity/reconstruction effects in general, this conclusion will be forced.

If the major subject analysis of the relative head movement is correct, it makes a specific prediction that island effects should emerge where the relative head movement from the major subject position is somehow not available. Indeed, this prediction seems to be borne out, as illustrated in (6) below:

- (6) a. sono $sinsi_i$ -ga kinoo [[pro_i itinen-mae-ni t_j okusan-ni okutta]
 that gentleman-Nom yesterday a year ago wife-Dat gave
 $yubiwa_j$]-ga nusumareta.
 ring-Nom was-stolen
 ‘That gentleman is such that yesterday the ring which he gave his wife
 a year ago was stolen’
- b. *[[sono $sinsi_i$ -ga kinoo [[pro_i itinen-mae-ni t_j okutta]
 that gentleman-Nom yesterday a year ago gave
 $yubiwa_j$]-ga nusumareta] okusan_k]
 ring-Nom was-stolen wife
 ‘The wife that that gentleman is such that yesterday the ring which he
 gave her a year ago was stolen’

(6b) has been derived from (6a) by relativizing the dative Case-marked nominal *okusan* ‘wife’ out of the relative clause (= a complex NP), resulting in unacceptability. Note that, as the following paradigm in (7) shows, in a simplex sentence involving no complex NP, a dative Case-marked nominal

can be relativized:

(7) a. sono *sinsi-ga* *okusan-ni yubiwa-o okutta.*

that gentleman-Nom wife-Dat ring-Acc gave

‘That gentleman gave a ring to his wife’

b. [[*sono sinsi-ga t_i yubiwa-o okutta*] *okusan_i*]

that gentleman-Nom ring-Acc gave wife

‘the wife to whom that gentleman gave a ring’

Thus, the status of the dative Case-marked nominal per se does not block its relativization.

One might suspect that (6b) has been derived from the following sentence in (8):

(8) *sono sinsi_i-ga okusan_k-ga kinoo* [[*pro_i itinen-mae-ni t_j pro_k okutta*]

that gentleman-Nom wife-Nom yesterday a year ago gave

yubiwa_j]-ga nusumareta.

ring-Nom was-stolen

‘That gentleman is such that yesterday his wife had the ring which he gave her a year ago stolen’

In fact, for some unknown reason, the inner nominative subject cannot be relativized in the following multiple nominative construction in (9):⁹

(9) a. *sono sinsi-ga okusan-ga yubiwa-ga nusumareta.*

that gentleman-Nom wife-Nom ring-Nom was-stolen

‘That gentleman is such that his wife had a ring stolen’

b. *[[*sono sinsi-ga t_i yubiwa-ga nusumareta*] *okusan_i*]

that gentleman-Nom ring-Nom was-stolen wife

‘Lit. the wife who that gentleman is such that she had a ring stolen’

First of all, whatever the exact reason may be, relativization of the inner nominative Case-marked nominal is disallowed in (9). Thus, it is impossible to derive (6b) from (8) by any means. Given this, the unacceptability of (6b) might be expected on a par with (9). But, notice that the relevant intended interpretation in (6a) is different from the one in (8). Therefore, it is impossible to account for the unacceptability of (6b) by appealing to the same reason as in (9b). Taken together, it seems to be legitimate to conclude that in (6b) the relativized head *okusan* ‘wife’ has been moved out of the complex NP, running afoul of the CNPC.¹⁰

2.2. Apparent Lack of Connectivity/Reconstruction Effects

Murasugi (2000a,b) appeals to Hoji’s (1985) strong claim that relativization in Japanese lacks movement, which is based on the apparent absence of the connectivity/reconstruction effects regarding anaphor binding (see Jackendoff 1972, Barss 1986 *inter alia* for discussion on the connectivity/reconstruction effects in English).

It is well established that the connectivity/reconstruction effects can emerge with A-bar movement, while it is not the case with a base-generated DP-pronoun relation, as illustrated in (10)-(11), respectively:

(10) [That picture of himself]_i, John_i liked t_j. (= topicalization)

(11) *[That picture of himself]_i, John_i liked it_j. (= left dislocation)

As the following example in (12) shows, the restrictive relative in English patterns with (10):

- (12) [[the picture of himself]_i] [that John_i likes t_j best]] (= restrictive relative)

Hoji (1985) reports that the Japanese analogue with an anaphoric expression *zibun* ‘self’ is unacceptable, as displayed in (13):

- (13) *[[John_i-ga e_j taipusita] [zibun_i-no ronbun]_j]
 John-Nom typed self-Gen paper
 ‘Lit. self’s paper that John typed’

First of all, pace Hoji (ibid.), I judge (13) to be quite acceptable, and for that matter, even if the non-local subject oriented-anaphor *zibun* is replaced with the local subject-oriented anaphor *zibun-zisin*, the expression is still fully acceptable, as illustrated below:¹¹

- (14) [[John_i-ga e_j taipusita] [zibun-zisin_i-no ronbun]_j]
 John-Nom typed self-Gen paper
 ‘Lit. self’s paper that John typed’

Hoji (2003:440), however, claims that *zibun* ‘self’ and *zibun-zisin* ‘self’ are not anaphors in Japanese. Thus, it may well be fair to use different items other than the two expressions at hand to check reconstruction effects in relativization.

Ishii (1991:29) demonstrates that Japanese relatives show connectivity/reconstruction effects with reflexive anaphors such as *kare-zisin* ‘himself’ and *kanozyo-zisin* ‘herself’ in Japanese, as illustrated below:

- (15) [[[John_i-ga e_j taipusita] [kare-zisin_i-no ronbun]_j]
 John-Nom typed himself-Gen paper
 ‘the paper of himself that John typed’

In this vein, let us observe the following example:

- (16) Mary-wa [[[John_i-ga e_j taipusita] [kare-zisin_i-no ronbun]_j]-o mottekita.
 Mary-Top John-Nom typed himself-Gen paper-Acc brought
 ‘Mary brought the paper of himself that John typed’

Note that although in (16) the relative clause is embedded within a matrix sentence, it is still possible to interpret the relative subject *John* as coreferential with *kare-zisin* ‘himself’. This clearly shows a reconstruction effect with respect to anaphor binding in Japanese.

Ishii (1991:30) further observes that what he calls long-distance relativization does not exhibit reconstruction effects on anaphor binding, as illustrated below:

- (17) ?*[[Mary-ga [[[John_i-ga e_k e_j miseta] koto-ga aru] hito_k]-o sitteiru]
 Mary-Nom John-Nom showed fact-Nom exist person-Acc know
 [kare-zisin_i-no syasin]_j
 himself-Gen picture
 ‘Lit. the picture of himself which Mary knows the person to whom
 John has once showed’

In (17), the external head [*kare-zisin-no syasin*] ‘picture of himself’ is related to a position inside a complex NP. Recall from Section 2.1 that I claimed that

this kind of relativization in Japanese involves the major subject construction underlyingly. As expected, the corresponding major subject construction is also unacceptable, as illustrated in (18) below:

- (18) *[*kare-zisin_i-no sysin_j*]_i-ga [Mary-ga [[[*John_i-ga e_k pro_j miseta*]
 himself-Gen picture-Nom Mary-Nom John-Nom showed
koto-ga aru] *hito_k*]-o sitteiru
 fact-Nom exist person-Acc know
 ‘Lit. the picture of himself is such that Mary knows the person to which
 John showed it’

In (18), the anaphor *kare-zisin* ‘himself’ is contained in the major subject position and thus is not c-commanded by its antecedent *John* at the subject position in the most deeply embedded clause in violation of Condition A of the Binding Theory. Thus, under the major subject analysis, the unacceptability of (17) can be accounted for as a result of connectivity/reconstruction to the underlying structure in (18).^{12, 13}

2.3. Presence of the So-Called “Gapless Relatives”

As another piece of evidence for lack of movement in Japanese relativization, Murasugi (2000a,b) cites Kuno’s (1973) example of the so-called “gapless relatives”, as illustrated in (19):

- (19) [[*syuusyoku-ga muzukasii*] buturigaku]
 getting job-Nom is-hard physics
 ‘physics, which is hard to get a job in’

However, as Kuroda (1986a,b) points out, it is possible to construct the corresponding major subject construction, as shown in (20):

- (20) [**buturigaku-ga** [syuusyoku-ga muzukasii]
 physics-Nom getting job-Nom is-hard
 ‘physics is such that getting a job is hard’

Thus, it is plausible to assume that the relative head *buturigaku* ‘physics’ in (19) has been moved from the major subject position represented in boldface in (20) to [Spec, CP] à la Kayne (1994).

2.4. Tigher Locality Restriction on “Relativization” of Reason/Manner Adjuncts

Saito (1985) observes that “relativization” of reason/manner adjuncts in Japanese is clause-bound, as illustrated in (21)-(22):

- (21) a. [[Mary-ga e_i kaetta] riyuu_i]
 Mary-Nom left reason
 ‘the reason Mary left’
 b. *[[Mary-ga [John-ga e_i kaetta to] omotteiru] riyuu_i]
 Mary-Nom John-Nom left Comp think reason
 ‘the reason Mary thinks that John left’
- (22) a. [[Mary-ga e_i mondai-o toita] hoo_i]
 Mary-Nom problem-Acc solved method
 ‘the method Mary solved the problem’

- b. *[[Mary-ga [John-ga e_i mondai-o toita to] omotteiru] hoo_ihoo_i
 Mary-Nom John-Nom problem-Acc solved Comp think method
 ‘the method Mary thinks that John solved the problem’

Based on Saito’s (1985) observation above, Murasugi (1991, 2000a,b) argues that relativization of manner/reason adjuncts is simply impossible in Japanese, attributing the reason to the fact that a null pronominal *pro* can only appear in argument positions and that there is no null pronominal counterpart *pro* for adjuncts in Japanese.¹⁴ She claims that (21a) and (22a) have a pure complex NP structure corresponding to the English counterpart in (23) and the Japanese examples such as (24) below:

(23) the reason for John’s leaving

(24) a. [[sakana-ga yakeru] nioi]

fish-Nom burn smell

‘Lit. the smell that a fish burns’

b. [[doa-ga simaru] oto]

door-Nom shut sound

‘Lit. the sound that a door shuts’

I totally agree with Murasugi (1991, 2000a,b) on this point. But, the phenomenon in question *per se* does not refute the movement analysis of “genuine” relativization in Japanese. It just shows that reason/manner adjuncts must employ a different strategy for nominal modification in Japanese. Why is the movement strategy not available in this case, then?

First of all, unlike Case particles, postpositons like *-de* ‘for/by’ in reason/manner adjuncts must be present underlyingly because of the existence

of their semantic contents and cannot be deleted due to the recoverability condition on deletion. Thus, it is impossible to move only its DP portion to [Spec, CP], with the postposition being stranded. Second, note that there is no corresponding major subject construction available for manner/reason adjuncts in Japanese, as exemplified in (25) and (26) below:

- (25) a. Mary-ga [John-ga sono riyuu-de kaetta to] omotteiru
 Mary-Nom John-Nom that reason-for left Comp think
 ‘Mary thinks that John left for that reason.’
 b. *[sono riyuu_i-ga [Mary-ga [John-ga e_i kaetta to] omotteiru]]
 that reason-Nom Mary-Nom John-Nom left Comp think
 ‘That reason is such that Mary thinks that John left (for it).’
- (26) a. Mary-ga [John-ga sono hoo-hoo-de mondai-o toita to] omotteiru
 Mary-Nom John-Nom that method-by problem-Acc solved Comp think
 ‘Mary thinks that John solved the problem by that method.’
 b. *[sono hoo-hoo_i-ga Mary-ga [John-ga e_i mondai-o toita to] omotteiru
 that method-Nom Mary-Nom John-Nom problem-Acc solved Comp think
 ‘That method is such that Mary thinks that John solved the problem
 (by it).’

Therefore, in the case of adjuncts, for independent reasons, a DP form is unavailable, which in turn makes the usual DP relative head-raising to [Spec, CP] impossible. As a result, Japanese will have to adopt the other option of utilizing pure complex NP formation along the lines of (23)-(24) for adjunct “relativization”. Thus, it seems to be too early to lump this phenomenon together with “genuine” relativization in Japanese (see Aoun and Li 2003 for a similar view on Chinese “gapless relatives”).

2.5. The Status of the Particle *No*

It has been observed in the literature that some children acquiring Japanese (around the age 2 to 4) overgenerate the particle *no* in nominal modification contexts (cf. Harada 1980; Clancy 1985, Murasugi 1991, 2000a,b among others), as illustrated in (27)-(28) below:^{15, 16}

- (27) [[[buta san-ga tataiteiru] **no**] taiko]
 piggy-Nom is-hitting no drum [M: 2; 11]
 ‘the drum that the piggy is playing’
- (28) [[[ohana motteiru] **no**] wanwa]
 flower is-holding no doggie [T: 2; 6]
 ‘the doggie that is holding a flower’

Murasugi (1991, 2000a,b) advocates that the relevant particle *no* in (27)-(28) is an instance of overgenerated complementizer *C* in Japanese and that it is not compatible with Kayne’s (1994) analysis. In this connection, recall Kayne’s (1994) original analysis of N-final relatives, which is repeated as (29) below:

- (29) [_{DP} [_{IP} ... t_i ...]_j [_{DP} D [_{CP} DP_i [_{CP} C t_j]]]] (N-final relative)

If the relevant particle *no* is a complementizer *C*, as claimed in Murasugi (1991, 2000a,b), then Kayne’s N-final relative structure predicts that it should follow the relative head at surface, contrary to fact in (27)-(28). Is there any way out of this difficulty while maintaining Kayne’s original idea? One possibility is to assume that the instance of the particle *no* in N-final modification in Japanese is not *C* but *D* in the D-CP structure, as illustrated in (30):

(30) $[_{DP} [_{IP} \dots t_i \dots]_j [_{DP} D (= \mathbf{no}) [_{CP} DP_i [_{CP} C t_j]]]]$ (N-final relative)

In fact, Zushi (1996) entertains this possibility within the framework of Kayne (1994), proposing to analyze the subcase of the element *no* in Japanese as D. However, Murasugi (2000a:255) flatly rejects this idea without any arguments, stating that:

“Within Kayne’s antisymmetry analysis, it seems difficult to maintain that the overgenerated *no* is of the category C. This is so, since if it were a C, it should follow the relative head. It is possible to pursue the hypothesis that it is a D, but it is not clear to me at this point that this approach is promising. It has been proposed in the literature (for example, in Zushi (1996) that the Japanese genitive Case marker *no* is generated under D. But if the *no* in (65) is the genitive Case marker, it is not clear why it appears only in child Japanese, and is not allowed in adult Japanese. That is, it is not clear how children can retreat from the overgeneration of *no*.”

In Hoshi (in preparation a), partly following Zushi’s (1996) insight, I argued that the relevant particle *no* in Japanese is to be considered as an instance of D rather than C and that, for that matter, all instances of the particle *no* possibly except for the genitive Case-marker *no* in Japanese are to be considered as D, strengthening Zushi’s (1996) position with some modification (see Hoshi in preparation a for more details on this matter). Thus, if my analysis is on the right track, there is no such a thing as a complementizer *no*, contra the standard position in Japanese generative literature, including Murasugi (1991, 2000a,b) (cf. also Hoshi 2003 for some discussion on the complementizer system in Japanese).¹⁷ Given this alternative analysis, the particle *no* ceases to be a problem for the Kaynean analysis of N-final relatives in Japanese.

2.6. Proper Binding Condition Effects

Finally, let us turn to Murasugi's (2000b) final argument against Kayne's (1994) analysis of N-final relatives in Japanese, which is based on the Proper Binding Condition effects.¹⁸

Recall from the previous discussion that Kayne's (1994) analysis of N-final relatives involves the following derivation in (31) (= (1)):

(31) [_{DP} [_{IP} ... t_i ...]_j [_{DP} D [_{CP} DP_i [_{CP} C t_j]]]] (← N-final relative)

Murasugi (2000b) points out that the trace t_i in the fronted IP is in violation of the Proper Binding Condition (PBC), as defined in (32):

(32) Traces must be bound.

(cf. Fiengo 1977, May 1977 among others)

Her claim is based on Saito's (1986) observation that there is a clear asymmetry with respect to the application of the PBC, as illustrated in (33) below (cf. also Saito 1989, 1992):

(33) a. [How likely [t_i to win]_j is John_i t_j?

b. *[Which picture of t_i]_j does John wonder who_i Mary likes t_j?

(= Murasugi 2000b:228, (52))

In (33a) the unbound trace is a trace of A-movement, while the one in (33b) is a trace created by A-bar movement. Murasugi notes that the trace left behind in the fronted IP in (31) is produced as a result of A-bar movement of DP

to [Spec, CP] on a par with the case in (33b). Thus, in light of the PBC, she concludes that in principle N-final “relatives” in Japanese cannot involve such a derivation in (31), contra Kayne (1994).

However, whether the PBC effect arises or not depends on the nature of the moved elements rather than the status of unbound traces. It has been argued in the literature that the PBC effects will arise if the following situation holds (cf. Kitahara 1994, 1997; Müller 1993, 1996; and Takano 1994, 2002, among others):

(34) The operation that created a trace and the operation that raised a phrase containing the trace to a position where the trace is unbound are of the same type.

(= adapted from Takano 2002: 8 (20))

The “type” of an operation can be defined in terms of the properties regarding feature checking of the moved element. In (33a), the two movement operations are not of the same type, since they involve different kinds of feature checking at different positions: one is Case/ ϕ -feature at [Spec,IP] and the other *wh*-feature at [Spec,CP]. Hence, no PBC effects will result. On the other hand, (33b) involves two movement operations of the same type, both being triggered by *wh*-feature checking at [Spec,CP], producing the PBC effects. Thus, to the extent that the relevant two operations are motivated by different features and checked in different positions, the created unbound trace does not produce the PBC effects. Given this, what matters is not the distinction of A/A-bar trace in the moved remnant *per se*, contrary to Murasugi (2000b).

Apparently, the derivation in (31) involves two instances of A-bar

movement, viz., DP-movement to [Spec, CP] and the remnant IP-movement to [Spec, DP], if the latter is taken as an A-bar movement. However, it is quite reasonable to assume that the two instances of “A-bar movement” belong to different types of operations in the relevant sense. By definition, in the case of relatives, a nominal element DP functioning as a “predicative” relative head must be raised to [Spec, CP]. Thus, the relevant movement operation cannot affect other elements.¹⁹ On the other hand, the movement to [Spec, DP] in (31) never affects a predicative nominal element, but only effects raising of the remnant IP. This can be confirmed by the fact that the reversed movement operations, viz., DP-movement to [Spec, DP] and IP-movement to [Spec, CP] will produce an ungrammatical expression, as illustrated by the contrast in (35) below:

- (35) a. $[_{DP} [_{IP} \text{Taroo-ga } t_i \text{ yonda}]_j [_{DP} D [_{CP} \text{hon}_i [_{C} t_j]]]]$
 Taro-Nom read book
 ‘the book that John read’
- b. $*[_{DP} \text{hon}_i [_{DP} D [_{CP} [_{IP} \text{Taroo-ga } t_i \text{ yonda}]_j [_{C} t_j]]]]$ (= reversed order)
 book Taro-Nom read

This clearly indicates that the relevant two movements are triggered by different kinds of features and checked in different positions even if they could be classified roughly as “A-bar movements”.

In addition, it has been observed in the literature (Saito 1989) that once the offending unbound trace is removed, examples such as (33b) will be ameliorated, as illustrated in (36) below:

- (36) ??Who_i does John wonder [which picture of t_i] Mary likes t_j

(36) is not perfect due to the *wh*-island effects, but there is no PBC effects involved. Suppose that the two “A-bar movement” operations in (35a) are on a par with the two *wh*-movement operations in (33b) and (36), then the same kind of amelioration should be expected in (35b), contrary to fact. Therefore, it is not unreasonable to conclude that the two movement operations involved in the derivation in (35) and (33b) are of different types as far as the PBC effects are concerned.

3. Conclusion

In this paper, I have critically re-examined Murasugi’s (2000a,b) arguments against Kayne’s (1994) analysis of N-final relativization, viz., the relative head DP-raising analysis under the D-CP complementation structure and have demonstrated that there are still possible ways to maintain Kayne’s original insight, while incorporating Murasugi’s (2000a,b) empirical data. If the foregoing discussion is on the right track, the Kaynean analysis is empirically justified for the N-final relatives in Japanese.

Notes

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1 Although I will not discuss N-initial relativization in English in this paper, I will

follow Carlson (1977), Aoun and Li (2003), and Sauerland (2003) in assuming that relativization in English requires both raising and matching analyses (under the Kaynean D-CP structure), contra Kayne (1994) and Bianchi (1999, 2000a,b) (cf. also Heim 1987 and Grosu and Landman 1998 *inter alia* for a similar idea).

- 2 In the ensuing discussion, I will follow Bianchi (1999, 2000a,b) rather than Kayne (1994) in assuming that what is raised to [Spec,CP] is not an NP but a DP uniformly. See Borsley (1997) for criticisms of the head-raising analysis of relative clauses by Kayne (1994) and see also Bianchi (2000a) for her reply to Borsley (op.cit.). But, see Hoshi (in preparation b) for a different tack on this matter. The choice between the two does not affect the validity of the following discussion in the text, though.

- 3 In what follows, I will use the symbol *e* to indicate a phonologically empty element for the purpose of being neutral with respect to its nature. Otherwise, I will specifically use symbols like *t* and *pro* to clearly show the nature of the relevant phonologically null elements.

- 4 On (head-external) relativization in Japanese, there have been a variety of analyses proposed in the literature. The following table summarizes representative analyses:
 - (i) A. Movement Analysis:
 - (a) Category Movement
 - (i) Null Operator Movement: Imai (1987), Sakai (1994)
 - (ii) NP/DP Movement: Harada (1974), Kayne (1994)
 - (b) Feature (= Null Operator feature: op) Movement: Takahashi (1997)

B. Base-generation Analysis: Perlmutter (1972), Kuno (1973),
 Matsumoto (1988), Hoshi (1995),
 Ochi (1996, 1998), Honda *et al.* (1996),
 Takeda (1999), Murasugi (2000a,b)
 Fukui and Takano (2000)

C. Hybrid (= Null Operator Movement and Base-generation) Analysis:
 Saito (1985), Kameshima (1989),
 Ishii (1991), Murasugi (1991),
 Kaplan and Whitman (1995)

Harada (1974) proposes a different type of analysis of NP (or currently DP) movement, Pro Head Substitution, to derive head-external relative clauses in Japanese, although he accounts for apparent island-insensitivity of Japanese relativization by assuming that only “Shadow Pronoun” Deletion is sensitive to islands. As far as head-internal relative clauses are concerned, such an NP/DP movement is claimed not to be operative in the derivation.

- 5 Kuno (1973) originally pointed out that relativization in Japanese can take place out of various islands, as illustrated (i)-(iii):

<Relativization from an Adverbial Clause>

(i) [[e_i sinda] node] minna-ga kanasinda hito_i
 died because everyone-Nom was-distressed person
 ‘Lit. a person who, because (he) died, everyone was saddened’

<Relativization from a Complex NP>

(ii) [[e_i e_j kiteiru] yoohuku_j]-ga yogoreteiru] sinsi_i
 wearing-is suit-Nom dirty-is gentleman

‘Lit. a gentleman who the suit that (he) is wearing is dirty’

<Relativization from a Sentential Subject>

(iii) [[[kare-ga e_i kaita] koto]-ga yoku sirareteiru] bun_i
 he-Nom wrote that-Nom well known-is article

‘Lit. the article which that he has written (it) is well-known’

Although Kuno (ibid.) does not discuss the case where relativization in Japanese occurs out of a *wh*-island, this is also possible, as illustrated in (iv):

<Relativization from a *Wh*-island>

(iv) Mary-ga [[[dare-ga e_i kaita] ka] siritagatteita] ronbun_i
 Mary-Nom who-Nom wrote Q wanted to know paper

‘Lit. the paper that Mary wanted to know who wrote’

Although I will not discuss the cases illustrated in (i), (iii), and (iv) in this paper, with respect to all the cases of apparent relativization out of islands in (i)-(iv), the major subject analysis of relativization to be proposed in the text seems to apply equally as well. The following paradigm in (i)-(iv)’ illustrates the corresponding (underlying) major subject constructions, respectively:

(i) sono hito-ga [[pro_i sinda] node] minna-ga kanasinda
 that person-Nom died because everyone-Nom was-distressed

‘Lit. that person is such that because (he) died, everyone was saddened’

(ii) sono sinsi-ga [[pro_i e_j kiteiru] yoohuku_j]-ga yogoreteiru
 that gentleman-Nom wearing-is suit-Nom dirty-is

‘Lit. that gentleman is such that the suit that (he) is wearing is dirty’

(iii)'sono bun_i-ga [[kare-ga pro_i kaita] koto]-ga yoku sirareteiru
 that article-Nom he-Nom wrote that-Nom well known-is
 'Lit. that article is such that that he has written (it) is well-known'

(iv)'sono ronbun_i-ga Mary-ga [[dare-ga pro_i kaita] ka] siritagatteita
 that paper-Nom Mary-Nom who-Nom wrote Q wanted to know
 'that paper is such that Mary wanted to know who wrote (it)'

6 See Kuno (1973) *inter alia* for discussion on the correlation between the availability of topicalization and that of relativization in Japanese.

7 In this paper, I will abstract away from the possibility of the process of subjectivization in Japanese, which has been claimed to be responsible for generating a subset of multiple nominative constructions in Japanese (cf. Kuno 1973 *inter alia*).

8 In Japanese, the head-internal relativization from the major subject position is also possible, as illustrated below:

(i)John-wa [[sinsi_i-ga [[pro_i kiteiru] huku]-ga yogoreteiru] no]-o kabatteageeta.
 John-Top gentleman-Nom wearing-is suit-Nom dirty-is -Acc stood up for
 'Lit. John stood up for the gentleman who the suit that he was wearing was dirty'

Thus, if the same overt relative head DP movement to [Spec,CP] is involved in both head-external relativization and head-internal relativization, (i) will support the idea of the major subject analysis of relative head movement in the text. I will not deal with the head-internal relative in Japanese in this paper, though. See Hoshi (in preparation b) for some discussion on this construction along this line.

- 9 This constraint does not seem to apply to all the cases of multiple nominative construction. Consider the following Kuno's (1973:34) well-known example of multiple nominative construction in (i):

(i)[bunmeikoku-ga [dansei-ga [heikinzyumyoo-ga mizikai]]]
 civilized country-Nom male-Nom average-life-span-Nom short-is
 'The civilized countries are such that the average life-span of males are is short'

From (i), it is possible to derive all the three relatives by relativizing each of the three nominative case-marked nominals as illustrated below:

- (ii) a. [[t_i[dansei-ga [heikinzyumyoo-ga mizikai]]] [bunmeikoku]_i]
 male-Nom average-life-span-Nom short-is civilized country
 'The civilized countries such that the average life-span of males of them is short'
- b. [[bunmeikoku-ga [t_i[heikinzyumyoo-ga mizikai]]] [dansei]_i]
 civilized country-Nom average-life-span-Nom short-is male
 'The males such that in the civilized countries the average life-span of them is short'
- c. [[bunmeikoku-ga [dansei-ga [t_i mizikai]]] [heikinzyumyoo]_i]
 civilized country-Nom male-Nom short-is average life-span
 'The average life-span which is short as far as the males in the civilizedcountries are concerned'

Yamada (2001) judges examples such as (iib) to be unacceptable and claims that its unacceptability can be accounted for by his semantics-based theory. Unfortunately, at this moment, I cannot give any account of the cause for our

different judgments. Also, I have no idea as to where the difference between (9b) and (ii), if any, stems from.

10 In this connection, it is interesting to note Kuno's (1970, 1973) observation concerning the difference between the genitive *no* and the appositive *no*, cited by McCawley (1976):

(i) a. *syatyoo-no okusan-ga nakunatta.*

President-Gen wife-Nom died

'The president's wife died'

b. [*okusan-ga nakunatta*] *syatyoo*

wife-Nom died president

'the company president whose wife died'

(ii) a. *syatyoo-no Yamada-san-ga nakunatta.*

President-Gen Mr. Yamada-Nom died

'Mr. Yamada, the president, died'

b. *[*Yamada-san-ga nakunatta*] *syatyoo*

Mr. Yamada-Nom died president

The contrast between (ib) and (iib) seems to be related to the availability of the major subject construction, as illustrated below:

(iii) a. *syatyoo-ga okusan-ga nakunatta.*

President-Nom wife-Nom died

'The president is such that his wife died'

- b. **syatyoo-ga Yamada-san-ga nakunatta.*
 President-Gen Mr. Yamada-Nom died
 ‘Mr. Yamada, the president, died’

If the relative clauses in (ib) and (iib) have been forced to be derived from the underlying major subject structures in (iiia) and (iiib), respectively, the contrast between (ib) and (iib) will follow quite naturally. If the Left Branch Condition is at work in Japanese as well, it is implausible to move the genitive phrase and the appositive phrase out of its containing DP to form a relative clause in the first place. As a matter of fact, as the following examples by Zushi (1996) illustrates, the Left Branch Condition effect is to be observed in Japanese as well:

- (iv) a. *John-ga kinoo [Chomsky-no hon]-o yonda.*
 John-Nom yesterday Chomsky-Gen book-Acc read
 ‘John read Chomsky’s book yesterday’
 b. *[Chomsky-no]_i John-ga kinoo [_i hon]-o yonda.
- (v) a. *John-ga [keikaku-no zikkou]-o meireisita.*
 John-Nom plan-Gen execution-Acc ordered
 ‘John ordered the execution of the plan’
 b. *[keikaku-no]_i John-ga [_i zikkou]-o meireisita.

In (ivb) and (vb), the *no*-marked phrases have been extracted out of their containing DP by scrambling, yielding ungrammaticality.

11 Gunji (2002: 212-217) also judges that relativization in Japanese exhibits reconstruction effects with respect to the “anaphor” *zibun*, as illustrated in (i):

- (i)[Ken_i-ga e_j kaita] zibun_i-no denki_j]-ga besutoseraa-ni natta.
 Ken-Nom wrote self-Gen biography-Nom bestseller-Dat became
 ‘The biography of himself that Ken wrote became a bestseller’

12 Note in passing that topicalization counterpart, which is considered to be derived from the major subject construction (Kuroda 1986a,b,1992), is unacceptable either, as shown in (i):

- (i) *[kare-zisin_i-no sysin_j]-wa [Mary-ga [[[John_i-ga e_k pro_i miseta]
 himself-Gen picture-Top Mary-Nom John-Nom showed
 koto-ga aru] hito_k]-o sitteiru
 fact-Nom exist person-Acc know
 ‘Lit. the picture of himself, Mary knows the person to which John showed (it)’

13 Takeda (1999:112) points out the following example in (i) to illustrate that *kare-zisin* ‘himself’ can apparently take the subject *John* of the highest clause in the relative as its antecedent:

- (i) [John_i-ga [[Mary-ga e_k e_j miseta] hito_k]-o sitteiru][kare-zisin_i-no syasin]_j
 John-Nom Mary-Nom showed person-Acc know himself-Gen picture
 ‘The picture of himself that John knows the person who Mary showed it to’

Although I have no definite explanation of why (i) is acceptable under the interpretation with *John* as the antecedent of *kare-zisin* ‘himself’, one possibility is to assume that (i) is derived from the underlying structure such as (ii):

- (ii) John_i-ga [kare-zisin_i-no syasin]-wa [Mary-ga e_k e_j miseta]
 John-Nom himself-Gen picture-Top Mary-Nom showed
 hito_k-o sitteiru.
 Person-Acc know

‘John (as for the picture of himself) knows the person who Mary showed it to’

In (ii), [*karezin-no syasin*]-*wa* is located IP-internally, functioning as a contrastive focus phrase. Thus, it is plausible to assume that the relative head [*karezin-no syasin*] in (i) has been moved from such a contrastive focus position to [Spec, CP]. Note that in (ii) *John* c-command *karezin* ‘himself’ in the contrastive focus phrase.

14 As Aoun and Li (2003) state, unlike Japanese, Chinese allows for long-distance adjunct relativization due to the presence of a null adjunct operator movement.

15 The particle *no* is overgenerated in the pure complex NPs as well, as illustrated in (i) below:

- (i) [[[syukuriimu tukutteru] **no**] nioi]
 cream puffs making-is no smell [E: 2;11]
 ‘the smell of someone making cream puffs’

See Hoshi (in preparation a) for an alternative analysis to Murasugi’s (1991, 2000a,b) on the particle *no* in the pure complex NP like (i).

16 Murasugi (1991, 2000a,b) attempts to account for the lack of the complementizer *no* in adult Japanese on the basis of ECP along the lines of Kayne (1981) and Stowell (1981), concluding that the categorial status of the prenominal

modifier will change from CP to IP in the course of acquiring Japanese. But, see Ogawa (2001) for a view that such an ECP-based explanation is empirically and theoretically not desirable.

17 Zushi herself takes a modest position that not all the instances of the element *no* in Japanese is D, taking a sentence-final particle *no* in colloquial speech as belonging to the complementizer C in Japanese, following Tonoike (1990).

18 My analysis in what follows is incompatible with Saito's (2003) reformulation of the Proper Binding Condition as a constraint on the application of Merge, which is defined as follows:

- (i) α is subject to Merge only if α is a complete constituent.
- (ii) α is a complete constituent =_{df} (i) α is a term, and
 - (ii) if a position within α is a member of a chain γ , then every position of γ is contained within α .

This means that genuine remnant movement is in principle impossible. If Saito is correct, then my analysis of the lack of the proper binding effects in Japanese relativization would have to be reconsidered. I will leave this problem to future research.

19 This point is related to the question of why it is possible to move the object DP from within the embedded IP to [Spec,CP], crossing over the subject DP, given the MLC on movement (Chomsky 1995). First, note that even though the categorial status of the moved nominal element in English is DP headed

by a null D, it functions as a predicative element to be associated with the external determiner D. In the case of Japanese, in order for the relevant DP to be predicative, it must not be morphologically Case-marked. Thus, as far as relativization is concerned, the attractor C should be specified as attracting a non-argumental predicative DP by its EPP feature. If the EPP feature in C is a kind of selectional feature, this situation seems to make sense. Therefore, the nature of the EPP feature in C at hand will account for the fact that a non-argumental predicative DP in the object position can be moved over a Case-marked argumental DP in the subject position without violating the MLC on movement. See Rizzi (1990), who gives the complementizer C in relatives the feature specification [+/-wh,+pred]. This feature specification might somehow be able to be incorporated into the EPP specification in C of relatives.

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