

Restrictive and Non-restrictive Relative Clauses in Japanese: Antisymmetric approach

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Abstract

Japanese is alleged to make no syntactic nor phonological differences between restrictive and non-restrictive relative clauses (Kuno 1973, Inoue 1976, Fukui, 1986 *inter alia*). Contrary to this widely-adopted view, the paper shows that there is a syntactic distinction between the two types of relative clauses, refining the generalization proposed by Kamio (1977). The distinction can be brought out by the position of the demonstrative: when the relative clause follows the demonstrative, it can be interpreted only as restrictive, but when it precedes the demonstrative, both restrictive and non-restrictive interpretations are available. I will discuss how these facts can be made to follow from Kayne's movement analysis (1994), which preposes the relative IP outside the D.

1. Introduction*

In his antisymmetry program that prohibits right adjunction, Kayne (1994) proposes a raising analysis of head-initial relative clauses, reviving Vergnaud's (1974) promotion analysis. Raising the question how the crosslinguistic positioning of the head with respect to the relative clause should be construed, Kayne (1994, 2005) argues that head-final relatives are derived from head-initial relatives by an extra step of leftward IP movement from a universal order [D CP]. The A' movement of the relativized NP to Spec,CP yields a head-initial relative, as shown in (1). Additional fronting of the remnant IP to Spec,DP yields a head-final relative clause, as shown in (2).

- | | |
|---|-------------------------|
| (1) [_{DP} [_D the [_{CP} [book] _i [_C that [_{IP} John read <i>t_i</i>]]]] | [Head-initial relative] |
| (2) [_{DP} [_{IP} John read <i>t_i</i>] _j [_D the [_{CP} [book] _i [_C <i>t_j</i>]]]] | [Head-final relative] |

Interestingly, Kayne (1994:110-115) suggests that the difference in structure between (1) and (2) correlates with another difference, namely whether or not a language makes overt distinctions between restrictive and non-restrictive relative clauses. English-type languages, which have head-initial relatives, generally do make such distinction, while languages with head-final relatives, such as Japanese, are said not to make (Kuno 1973:235, Inoue 1976, Fukui, 1986, Keenan 1985:169). Kayne (1994) argues that this is so because head-final relatives as in (2) are

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Refining Kamio's generalizations (1977), this squib will show that, contrary to the accepted wisdom, Japanese does indeed make a distinction between restrictive and non-restrictive interpretations in overt syntax: the distinction can be brought out by the position of the demonstratives. In addition, it will offer an argument in support of Kayne's (1994, 2005) IP movement analysis of head-final relative clauses for Japanese and of two functional layers, DP and DemP, in the Japanese DP.

Japanese relative clauses have been studied extensively, and there is considerable controversy with respect to the derivation (Kuno 1973, Murasugi 2000, *inter alia*). The controversy stems from the well-known fact that Japanese appears to allow relativization from a relative clause, in violation of the Complex Noun Phrase Constraint. An example is given below:

- This phenomenon poses a serious challenge for the overall theory of locality and makes a movement analysis questionable, motivating some linguists such as Murasugi (2000) and Fukui and Takano (2000) to propose a base-generation analysis. In this approach, the derivation of relative clauses involves generation of a head in a matrix clause and an interpretation of a null pronoun in the embedded clause. Nevertheless, Han and Kim (2004) and Ishizuka (forthcoming) have analyzed this phenomenon as an instance of local A'-relativization of a sentence-initial multiple (*or* major) subject. The proposed structure is given below:

- If this analysis is correct, there is no threat to the raising analysis (see Ishizuka (forthcoming) for a justification of this analysis). In addition, Japanese relative clauses show reconstruction effects with local anaphors such as *zibun-zisin* ‘oneself’ or *kare-zisin* ‘himself’, as shown in (5) (adopted from Ishii 1991:29 and also cited in Hoshi 2004:122):

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Therefore, this squib assumes a raising analysis of relative clauses in Japanese.¹

Returning to the restrictive vs. non-restrictive interpretations, Japanese is said to exhibit neither morphosyntactic nor phonological distinctions between the two types of relative clauses (Kuno 1973, Inoue 1976, Fukui 1986, Keenan 1985:169). Indeed, without context, both restrictive and non-restrictive readings are generally available:

- (6) Ken-ga [[ani-ga karite-ki-ta] muzukasii syoosetu]-o yon-da
 Ken-NOM older_brother-NOM borrow-come-PAST difficult novel-ACC read-PAST
 ‘Ken read a difficult novel, which his older brother checked out.’
 ‘Ken read the difficult novel that his older brother checked out.’

However, it is possible to make an overt distinction between restrictive and non-restrictive relatives in Japanese, via the linear position of the demonstrative. To my knowledge, this was first pointed out by Kamio (1977:153-159). He argues for two types of relative clauses in Japanese: one a restrictive relative with the structure [_{NP} [_{N'} S N]], and the other a non-restrictive relative with the structure [_{NP} S NP]. His claim is that in restrictive relatives with an overt demonstrative *kono* ‘this’, *sono* ‘that’, or *ano* ‘that’, the demonstrative always precedes the relative clause, i.e., [_{NP} *sono* [_{N'} S N]]. In contrast, the demonstrative always follows a relative clause in a non-restrictive relative, i.e., [_{NP} S [_{NP} *sono* N]].

- (7) a. **sono** [aniki-ga katte-ki-ta] ringo (Kamio 1977:153-4)
 that brother-NOM buy-come-PAST apple
 ‘that apple that brother bought’
 b. [minna-ga sagasi-teiru] **sono** ronbun
 everyone-NOM look_for-ASP that paper
 ‘that paper, which everyone is looking for’ (Kamio’s translation)

It turns out, however, that the picture is slightly more complicated: when the relative clause precedes the demonstrative as in (7b), an ambiguity arises and both restrictive and non-restrictive interpretations are available. In other words, the interpretation is not limited to the non-restrictive reading. On the other hand, as Kamio correctly argues, the restrictive reading is the only one possible in (7a). Thus the new generalization is:

- (8) a. Dem [_{RC}] NP (Restrictive / *Non-restrictive)
 b. [_{RC}] Dem NP (Restrictive / Non-restrictive)

This generalization can be established by comparing (8a) and (8b) in contexts that prime restrictive and non-restrictive readings, as presented in (9). Note that a slight intonational break

¹ Note, however, that the focus of this squib is on the interpretive and structural differences between restrictive and non-restrictive relative clauses: the discussion given in this squib does not hinge on the head-raising derivation of restrictive relatives *per se*, but rather crucially involves IP movement.

ensures the desired bracketing of *sono* with the head of the relative, while a lack of intonational break allows *sono* to bracket with the subject of the relative clause.²

(9) [Dem RC NP] / Restrictive

- a. √ Ito-san-ni-wa san-nin musuko-ga iru. Sakunen hito-ri-wa isya- ni, huta-ri-wa
Ito-Ms.-DAT-TOP 3- CL son-NOM exist. last_year 1- CL -TOP doctor-DAT, 2- CL-TOP

bengoshi-ni nat-ta. [Sono [sakunen isya-ni nat-ta] musuko]-ga
lawyer-DAT become-PAST that [last_year doctor-DAT become-PAST] son-NOM

kekkon-si-ta.

marriage-do-PAST

‘Ms. Ito has three sons. Last year one became a doctor, and two became lawyers. That son who became a doctor last year got married.’

- b. √ Hanako-wa sakuzitu furansu-no tomodati-kara i-tuu, buraziru-no sinseki-kara
Hanako-TOP yesterday France-GEN friend-from 1- CL, Brazil-GEN relative-from

san-tuu-no tegami-o uketot-ta. Sikasi Hanako-wa [sono [furansu-no
3- CL-GEN letter-ACC receive-PAST however Hanako-TOP that France-GEN

yuuzin-ga okutte-ki-ta] tegami]-o yomu-maeni nakusi-ta.

friend-NOM send-come-PAST letter-ACC read-before lose-PAST

‘Hanako received a letter from her friend in France, and three letters from her relatives in Brazil yesterday. However, Hanako lost that letter that her friend in France sent to her before reading it.’

(9a) and (9b) contain contexts that prime restrictive relative clauses: there is more than one possible antecedent of the demonstrative NP, and the contextual information is essential in determining the right antecedent. The grammatical status of (9a) and (9b) shows that the string [Dem RC NP] is compatible with a restrictive relative interpretation.³

The following examples present [RC Dem NP] in the same context as (9):

(10) [RC Dem NP] / Restrictive

²Among the three demonstratives in Japanese, *a-no* ‘that’, *ko-no* ‘this’, and *so-no* ‘that’, I focus on the demonstrative *so-no* ‘that’ here, but the other two demonstratives behave the same in terms of restrictive and non-restrictive interpretations.

³ The grammaticality judgments provided in this squib are based on introspection and on data from six additional naïve native speakers. In addition, the same judgment pattern has been reported in Kameshima (1989). However, there seems to be some variability among speakers, evidenced by the fact that Kamio (1977) has reported different judgments. The question of just how widespread individual variability is still calls for investigation with more speakers.

- a. √ Ito-san-ni-wa san-nin musuko-ga iru. Sakunen hito-ri-wa isya-ni, huta-ri-wa
Ito-Ms.-DAT-TOP 3-CL son-NOM exist last_year 1-CL-TOP doctor-DAT, 2-CL-TOP

bengoshi-ni nat-ta. [[Sakunen isya-ni nat-ta] sono musuko]-ga
lawyer-DAT become-PAST last_year doctor-DAT become-PAST that son-NOM

kekkon-si-ta

marriage-do-PAST

‘Ms. Ito has three sons. Last year one became a doctor, and two became lawyers. That son who became a doctor last year got married.’

- b. √ Hanako-wa sakuzitu furansu-no tomodati-kara i-tuu, buraziru-no sinseki-kara
Hanako-TOP yesterday France-GEN friend-from 1-CL, Brazil- GEN relative-from

san-tuu-no tegami-o uketot-ta. Sikasi **Hanako-wa** [[furansu-no
3-CL- GEN letter- ACC receive- PAST however Hanako-TOP France- GEN

yuuzin-ga okutte-ki-ta] sono tegami]-o yomu-maeni nakusi-ta.
friend- NOM send-come- PAST] that letter- ACC read- before lose-PAST

‘Hanako received a letter from her friends in France, and three letters from her relatives in Brazil yesterday. However, Hanako lost that letter that her friend in France sent to her before reading it.’

The grammaticality of (10a) and (10b) shows that [RC Dem NP] can also serve as a restrictive relative. In short, both strings, [Dem RC NP] and [RC Dem NP], can be interpreted as restrictive relatives, thus showing Kamio’s (1977) generalization was incomplete and in need of further refinement.

Interestingly, the string [Dem RC NP] cannot receive a non-restrictive reading:

(11) [Dem RC NP] / Non-restrictive

- a. *?Ito-san-ni-wa musuko-ga hito-ri iru. [Sono [sakunen isya-ni nat-ta]
Ito-Ms.-DAT-TOP son-NOM 1-CL exist that last_year doctor-DAT become-PAST

musuko]-ga kekkon-si-ta.

son-NOM marriage-do-PAST

‘Ms. Ito has a son. That son who became a doctor last year got married.’

- b. *?Hanako-wa sakuzitu tegami-o uketot-ta. Sikasi, **Hanako-wa**
Hanako-TOP yesterday letter-ACC receive-PAST however Hanako-TOP

[sono [furansu-no yuuzin-ga okutte-ki-ta] tegami]-o
that France-GEN friend-NOM send-come-PAST letter-ACC

yomu-maeni nakusi-ta.
read-before lose-PAST

‘Hanako received a letter yesterday. However, Hanako lost that letter that her friend in France sent to her before reading it.’

Finally, (12) completes the paradigm: [RC Dem NP] is compatible with a non-restrictive interpretation.

(12) [RC Dem NP] / Non-restrictive

- a. ✓ Ito-san-ni-wa musuko-ga hito-ri iru. [[**Sakunen isya-ni nat-ta**]
Ito-Ms.-DAT-TOP son- NOM 1-CL exist last_year doctor- DAT become- PAST

sono musuko]-ga kekkon-si-ta
that son- NOM marriage-do- PAST

‘Ms. Ito has a son. That son, who became a doctor last year, got married.’

- b. ✓ Hanako-wa sakuzitu tegami-o uketot-ta. Sikasi, **Hanako-wa**
Hanako-TOP yesterday letter-ACC receive-PAST however Hanako-TOP

[[**furansu-no yuuzin-ga okutte-ki-ta**] **sono tegami]-o yomu-maeni**
France-GEN friend-NOM send-come-PAST that letter- ACC read-before

nakusi-ta.
lose-PAST

‘Hanako received a letter yesterday. However, Hanako lost that letter, which her friend in France sent to her, before reading it.’

These examples establish that [Dem RC NP] carries only a restrictive reading, whereas [RC Dem NP] is compatible with both restrictive and non-restrictive readings.

This generalization is further confirmed by the compatibility with a ‘*by the way*’ phrase in the RC Dem order; *by the way* is only allowed with non-restrictive relative clauses—it cannot be inserted into a restrictive relative clause.⁴

- (13) ✓ [Tokorode isya-ni natta] sono musuko-ga kekkonsi-ta.
by_the_way doctor-DAT became that son-NOM marry-PAST
‘The son, who became a doctor by the way, got married.’

- (14) *Sono [tokorode isya-ni natta] musuko-ga kekkonsi-ta.
that by_the_way doctor-DAT became son-NOM marry-PAST
‘The son who became the doctor by the way got married.’

⁴ Thanks to Dominique Sportiche, for bringing these tests to my attention.

This guarantees that only [RC Dem NP], and not [Dem RC NP], is a non-restrictive relative clause. In addition, the availability of reconstruction in the following examples illustrates that the relative clause in [RC Dem NP] can also be a restrictive relative, as reconstruction is only possible in restrictive relatives.

- (15) √sono [[dare-mo_i-ga mada sira-nai] zibun_i-no kekkonaite]-no e
 that INDET-Q-NOM yet know-NEG self_i-NO spouse-NO picture
 ‘that picture of self_i’s spouse whom no one_i knows yet’

- (16) √ [[dare-mo_i-ga mada sira-nai] sono zibun_i-no kekkonaite]-no e
 INDET-Q-NOM yet know-NEG that self-NO spouse-NO picture
 ‘that picture of self_i’s spouse, whom no one_i knows yet’

The analytical question is how these properties follow from the derivation. In the subsequent sections, three different frameworks—Kayne’s (1994) movement analysis, the traditional adjunction analysis, and Cinque’s (2008) base-generated non-restrictive IP analysis—are compared in turn to account for the data. I will show that Kayne’s (1994) proposal is the most compelling, giving us a straightforward answer once we assume a more elaborate periphery of the DP in Japanese that provides an additional landing site for the restrictive relative IP in the scope of D.

3. The Antisymmetry Analysis

Recall that Kayne (1994:112) proposes the following structure for head-final relatives:

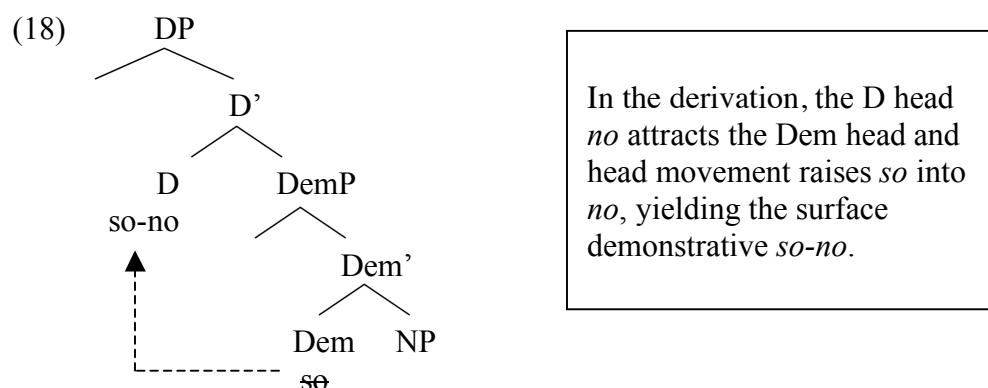
- (17) [_{DP} [_{IP} ... *t_i* ...]_j [D[_{CP} NP_i [C *t_j*]]]]

This structure generates the linear order [RC D NP]. How can we generate the two types of Japanese relatives observed above, adopting Kayne’s movement analysis? Needless to say, the structure and position of the demonstrative play an important role in deriving the two linear strings, [RC Dem NP] and [Dem RC NP]. It is often assumed that Japanese does not have a D projection due to the lack of overt definite and indefinite articles (Fukui 1986:202-206, Fukui & Takano 2000, among others). The demonstrative *so-no* has been assumed to be base-generated in Spec,DemP with a phonetically unrealized Dem Head, so that Japanese can be consistently head-final yet still have spell-out capture the empirical order [Dem NP].⁵ How can we translate this into the antisymmetry framework, while correctly deriving the two types of relatives? Simply assuming that Japanese demonstratives are the equivalent of D in other languages would not give us the order [Dem RC NP]: this suggests the need of further refinements of the D region in Japanese, which will be explored below.

The demonstratives in Japanese, *ko-no* ‘this’ *so-no* ‘that (closer)’, and *a-no* ‘that (further)’, consist of two elements: the deictic prefix *ko-* ‘here’, *so-* ‘there’, or *a-* ‘over there’, and the nominal D head *no* (e.g., Hoji 1995:258). Each of these heads occurs independently: the

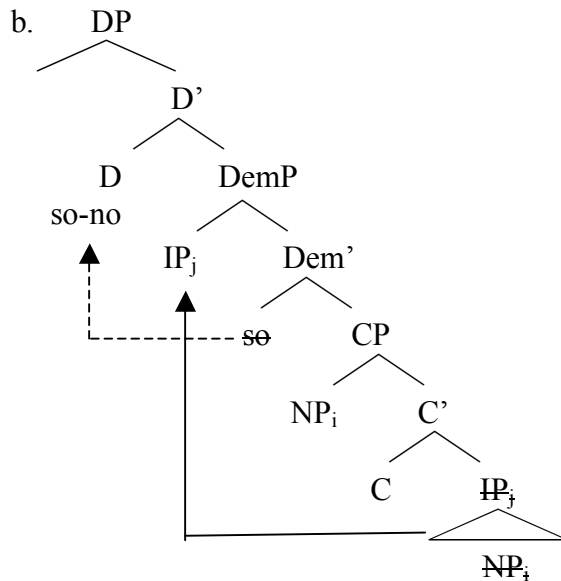
⁵ Hoji (1995:258) has a slightly more elaborated approach along the same lines, wherein he analyzes *so-no* as consisting of two parts: the demonstrative prefix *so*, which is base-generated in Spec,DemP with a silent head, and the genitive case marker *no*.

deictic prefixes *so-*, *ko-*, and *a-* combine with different roots, such as *re* ‘thing’ and *ko* ‘place’, generating *so-re* ‘that thing’, *ko-re* ‘this thing’, *a-re* ‘that thing’, and *so-ko* ‘that place’, *ko-ko* ‘this place’, and *a-soko* ‘that place’, respectively (see Kuno 1973). The D morpheme *no* is also used as a genitive marker in possession (e.g. *Taro-no hon* ‘Taro’s book’). The demonstratives, *a-no*, *so-no* and *ko-no*, each form a single phonological unit, and are each treated as a single lexical item. Note that under the traditional head-final analysis, it is not an option to treat the whole demonstrative—let alone each of the two parts—as a head, since this would derive the wrong word order, i.e., *[NP Dem]. Nevertheless, the antisymmetry analysis allows us to treat these elements as heads while still preserving the correct order, i.e., [Dem NP]. Indeed, the idea I pursue here is that the composition of the deictic and D elements are morphosyntactic, and the Japanese D region consists of the two projections instantiated by the two elements: DemP is headed by the deictic prefix *so-*, *ko-* and *a-*, and DP headed by *no-*. The demonstrative is then combined via head-movement, as given schematically below:



Once we assume that Japanese has two D-like projections and adopt the above structure for the demonstrative, an application of Kayne’s (1994) derivation generates the two types of relatives, [*sono* RC NP] and [RC *sono* NP], and also accounts for the right semantics associated with each type of relative. The following is the proposed syntactic structure of the restrictive relative, [*sono* RC NP]:

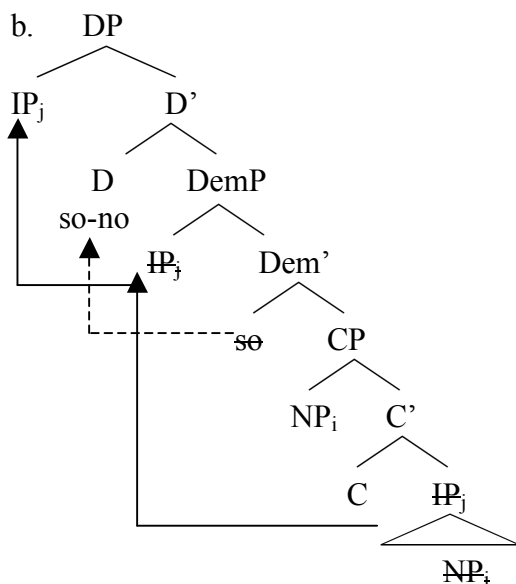
- (19) a. [_{DP} *so-no* [_{DemP} IP_i [_{CP} NP [C *t_i*]]]] (restrictive / *non-restrictive)



Following Kayne's (1994) analysis, NP movement raises the relativized NP into Spec,CP. Then the remnant IP is fronted into Spec, DemP, keeping the relative IP in the domain of D. In this derivation, only the restrictive reading is available since the relative IP never scopes out D.

The derivation of the non-restrictive relative follows the same steps as in (19), then raises IP to Spec,DP, which brings the relative IP out of the domain of D.

(20) a. $[_{DP} IP_i [_D \text{so-no} [_{CP} NP [C t_i]]]]$ (restrictive / non-restrictive)



Under this derivation, a restrictive interpretation is computed by reconstruction, i.e. undoing the movement to the intermediate position Spec, DemP, where IP is still c-commanded by D. The non-restrictive interpretation is computed at Spell-out, where IP is no longer in the scope of D.

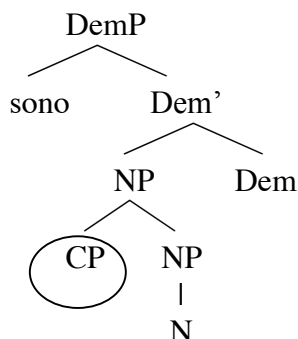
One question that might arise with respect to the derivation in (20) is why the movement has to take the intermediate step to Spec,DemP. It is probably the case that D elements have an EPP feature; thus, the movement to Spec,DemP is obligatory, yielding a restrictive reading. Then what is the motivation for the second movement? It cannot be for interpretive reasons, since in that case, we would not expect reconstruction to be available. Presumably, there are other properties in which the two structures differ besides having restrictive and non-restrictive readings, and which motivate the second movement. Identifying what exactly triggers the movement calls for further investigation.⁶

To recapitulate, this section has shown that the two linear orders of Japanese relative clauses and the availability of restrictive or non-restrictive interpretations directly fall out from Kayne's analysis, once a more elaborate left periphery of the DP is assumed. We will see below whether the adjunction analysis can account for the empirical data.

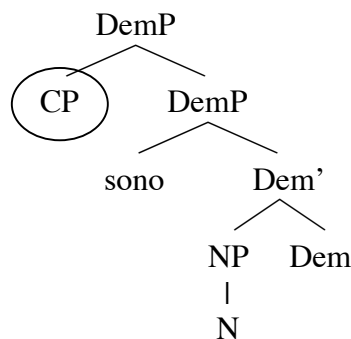
4. Traditional Adjunction Analysis

In the traditional head-final adjunction analysis of Japanese relative clauses, the two linear strings [sono RC NP] and [RC sono NP] are derived by adjoining the relative CP to NP and to DemP respectively, as illustrated below:

(21) a. [sono RC NP]



b. [RC sono NP]



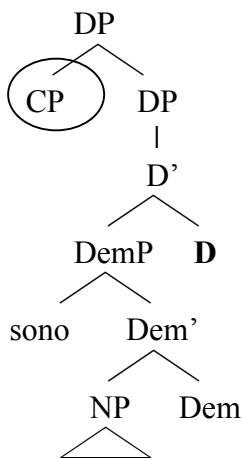
Assuming the demonstratives in Japanese are the equivalent of D in other languages, the unambiguous restrictive reading of (21a)[sono RC NP] is predicted since the relative clause is in the c-commanding domain of an appropriate D. In (21b), on the other hand, the relative CP is merged structurally higher than D, thus this configuration incorrectly predicts [RC sono NP] to be unambiguously non-restrictive.⁷

One way to save the adjunction story is to assume that the DP space is actually slightly larger, with a silent D position. Then three adjunction sites will be available, i.e., DP, DemP, and NP, as shown below:

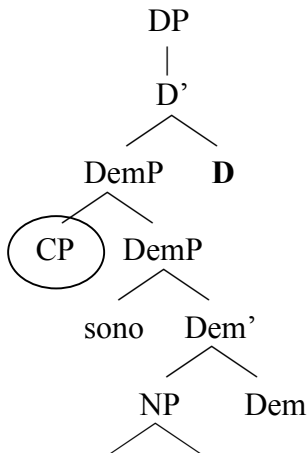
⁶ There is another possible justification for the derivation, such that the EPP feature is optionally borne by either Dem or D, or more aptly, that the EPP feature on Dem can be satisfied either in Spec,DemP as soon as D is merged, or after the incorporation of Dem to D (that is, by direct IP movement to Spec,DP without taking an intermediate step). In the latter case, the restrictive reading is computed by undoing the movement to its originally merged position, i.e., the complement of C. However, we still need to account for the optionality.

⁷ Relative clauses in Japanese cannot be scrambled away from the head, hence scrambling CP from (22c) to (22a) and attributing the ambiguity to a reconstruction effect is not an option here.

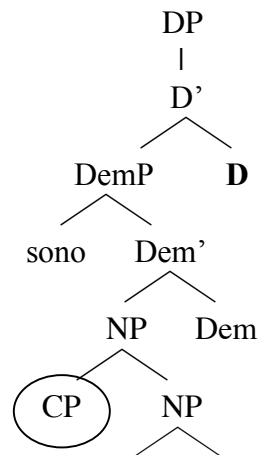
(22) a. [RC sono NP]



b. [RC sono NP]



c. [sono RC NP]



When it adjoins to DP as in (22a), the relative CP is outside the scope of D and is predicted to have only a non-restrictive reading. In (22b) and (22c), adjunction to DemP and NP brings the relative CP inside the scope of D, thus the reading should be unambiguously restrictive. Note that these two different syntactic representations (22a) and (22b), are spelled out as the same linear string [RC sono NP]; thus, the observed ambiguity is attributed to the two different syntactic representations of the same surface linear string.

Nevertheless, this analysis would constitute an argument for the presence of a *silent* D projection in Japanese. Furthermore, this analysis has to assume at least three adjunction sites for a relative CP in Japanese: DP, DemP, and NP. This would then raise the question of why a restrictive relative CP takes two different adjunction sites: DemP and NP. If there were two different syntactic representations for a restrictive relative, we would expect them to have different semantics, which appears not to be the case.⁸ As a result, this analysis seems less likely to be the correct one.⁹

5. Cinque's (2008: fn. 25) base generated non-restrictive IP

Cinque (2008) assumes that there are universally two merge positions for relative clauses inside the DP (i.e., $IP_{nonrest} > Dem > IP_{rest} > Num > A > NP$): one for restrictive and one for non-restrictive IP. In fn. 25, Cinque provides an analysis of restrictive and nonrestrictive relative clauses in Japanese, which captures the facts we have reviewed in section two in a slightly different way. The analyses share the idea that the surface order [IP_{rest} *so-no* NP] is derived through movement of the restrictive IP to the left of the Dem from [*so-no* IP_{rest} NP]. However, they differ as to

⁸ One might argue that Kayne's (1994) analysis has exactly the same problem because the relative IP is already in the scope of D in base position, and the overt movement of the remnant IP to Spec, DemP is unnecessary. However, note that the overt movement of the remnant IP to Spec, DemP is independent from the interpretive reasons, being motivated instead by the properties of head-final relative languages.

⁹ Kameshima (1989) proposes a variant of this analysis, which derives (22b) from (22c) by moving the relative CP out of the scope of D. This analysis, however, involves an adjunction to an argument, which should not be a possibility (Chomsky 1986:6). Furthermore, her analysis also faces the same problem as Cinque's, which will be discussed in section five.

where the non-restrictive IP originates: either merged outside the demonstrative or merged inside then moved outside the scope of D. This can be represented as in (23):

- (23)
- | | | |
|-----|--|--|
| (a) | [IP _{nonrestr} D IP _{rest} [Dem [IP _{rest} NP]]] | <i>Proposed analysis</i> |
| (b) | [IP _{nonrestr} IP _{rest} [Dem [IP _{rest} NP]]] | <i>Cinque's analysis</i> ¹⁰ |

Whether the merge position of the non-restrictive IP is different from the derived restrictive IP is a difficult question, since nothing seems to be able to intervene between them. I have not found any [IP Dem NP] string with IP incompatible with a restrictive reading.

Cinque's proposal rests on Kameshima's (1989) claim that when restrictive and non-restrictive relatives are stacked, the order must be nonrestrictive followed by restrictive, i.e. [IP_{nonrestr} IP_{rest} NP]. Kameshima's argument is based on the following example where she claims that the bell-boy would choose (24a) instead of (24b) to express the meaning equivalent to the English translation:

- (24) **Context:** The bellboy in the hotel in Kyoto must report to the manager which group arrived. There are two groups from America and Sweden, both of whom plan to go sightseeing in Kyoto the next day. The group from America just arrived.

- a. [Ashita Kyooto-kenbutsu-suru-koto-ni natteiru [Amerika-kara kita]
tomorrow Kyoto-sightseeing-do-fact-DAT is-supposed-to America-from came

dantai]]-ga ima basu-de tuita.
group-NOM now bus-by arrived
- b. [Amerika-kara kita [ashita Kyooto kenbutsu-suru koto-ni natteiru]
America-from came tomorrow Kyoto sightseeing-do fact-DAT is-supposed-to

dantai]]-ga ima basu-de tuita.
group-NOM now bus-by arrived

Int: 'The group that came from America, who planned to go sightseeing in Kyoto tomorrow, now arrived.'

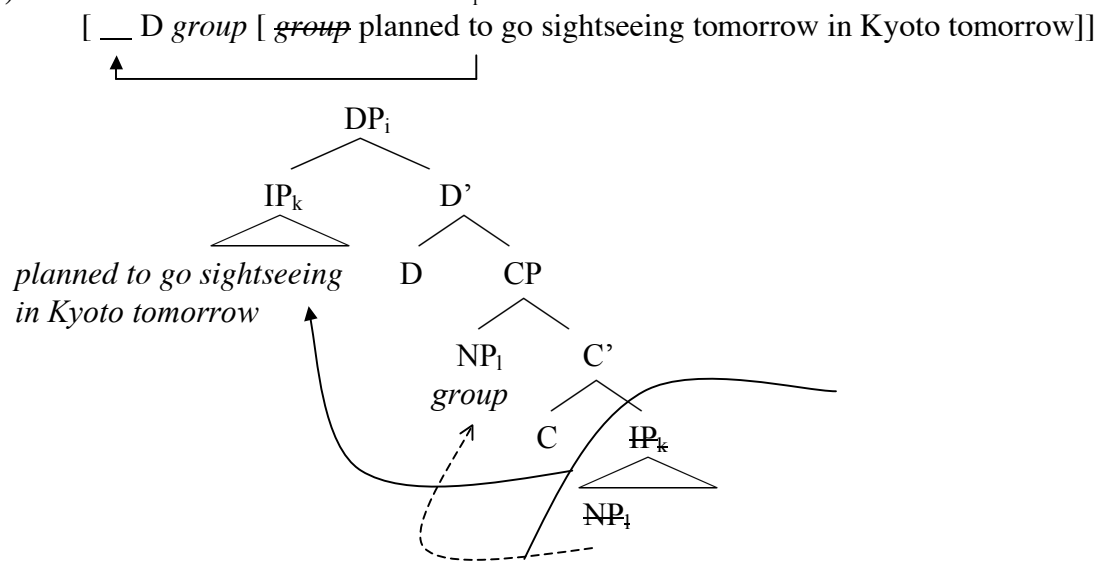
¹⁰ Cinque (2008) has a slightly more elaborated structure than (23b). Based on Kameshima's (1989) observation that similar ambiguity concerning demonstratives arises with quantifiers like *subete-no* 'all-no' and *hotondo-no* 'most-no', Cinque (2008) argues that the restrictive IP in Japanese moves past the Q_{all} as in [IP_{rest} Q_{all} Dem IP_{rest}]. There is a question, however, about whether quantifiers in Japanese should be analyzed as constituents merged at the universal position proposed by Cinque. These elements all consist of a quantifier followed by D -no. An alternative analysis would be that these elements are in fact reduced relatives introduced by D -no. This explains why the relative ordering of these elements with respect to the demonstrative is not fixed: in fact it is more natural to say [*so-no subete-no hon*] 'that all-no book' to mean 'all the books', which is not the expected order under Cinque's proposal. If the reduced relative analysis is correct, the ambiguity observed by Kameshima is expected and does not necessarily mean that the landing position of the raised restrictive IP is higher than the Q_{all} projection.

This reading, she proposes, can be brought out by ordering the nonrestrictive relative clause before the restrictive relative one. Several speakers I consulted, however, judged that the bell-boy would utter (24b) with IP_{rest} ‘*who came from America*’ first. I agree with their judgment: the *only* way I can accept (24a) in this context is stressing the left edge of the second relative clause. Cinque’s analysis (2008) does not account for the judgment pattern of the speakers who accepted (24b) but not (24a).

The question is how (24b) can be derived by the analysis proposed in section three. Under the proposed analysis, the string $[IP_{rest} IP_{nonrest} DP]$ is derived through the following steps (Japanese words are rendered in English below):

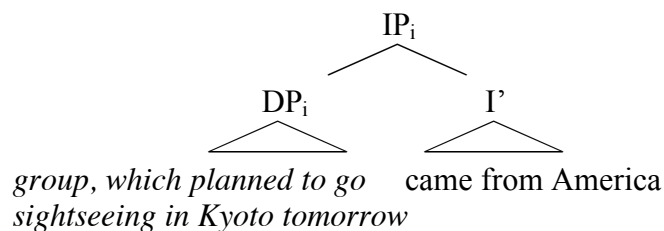
(25) a. $[_{DP} [_{DemP} IP_i [_{CP} [_{DP} IP D NP] [C t_i]]]]$ Surface order: $[IP_{rest}, IP_{nonrest}]$

(i) Form a non-restrictive relative DP_i :

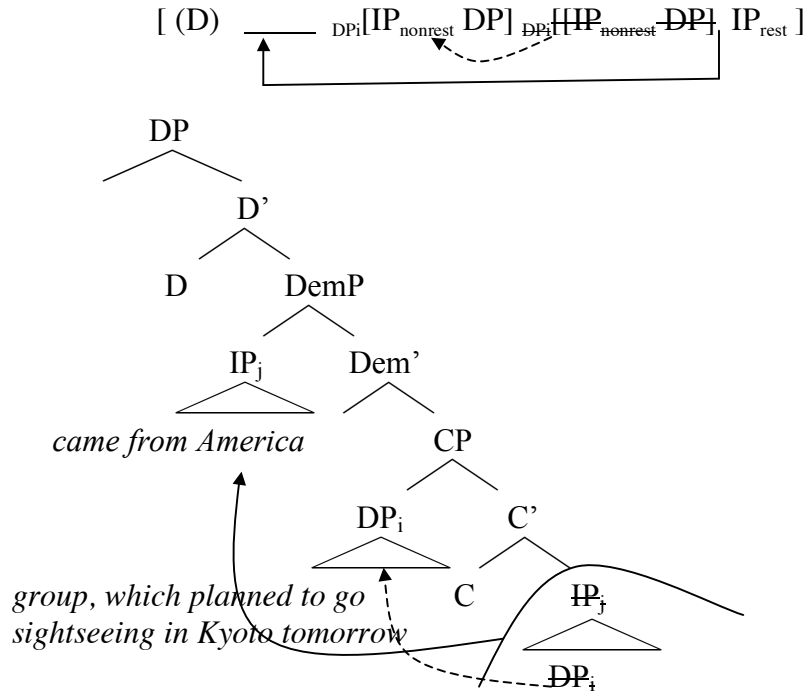


(ii) Merge DP_i with the predicate ‘came from America’, yielding an IP.

[The group, which planned to go sightseeing in Kyoto tomorrow] came from America



(iii) Relativize DP, yielding $[IP_{rest} [IP_{nonrest} DP]]$



The proposed analysis, in fact, generates the stacking of all four combinations of restrictive and non-restrictive IPs, i.e., $[IP_{rest}, IP_{rest}]$, $[IP_{rest}, IP_{nonrest}]$, $[IP_{nonrest}, IP_{nonrest}]$, and $[IP_{nonrest}, IP_{rest}]$: the outcome just depends on what is merged as a subject of the predicate inside the relative IP (cf. step (25-ii)).¹¹ Unlike English stacked relatives, Fukui (19891) reports that Japanese allows not only stacking of restrictive relatives but also of nonrestrictive relatives, and this is exactly the analysis proposed here predicts. Therefore, the proposed analysis is more likely to be the correct one on the empirical basis.

6. Conclusion

In this squib, I have discussed the effect of the position of demonstratives on the restrictive vs. non-restrictive interpretation of relative clauses in Japanese, refining the generalization proposed by Kamio (1977). The new generalization provided here is that when a demonstrative precedes the relative clause, the interpretation is unambiguously restrictive, while both restrictive and non-restrictive readings are available when a demonstrative follows a relative clause. I have argued that this follows from the movement of the relative IP to Spec,DP, which allows for reconstruction and thus yields a restrictive interpretation, and shown that the derivations are compatible with Kayne's (1994) proposal. Furthermore, on this empirical basis, I have provided an argument in support of the presence of two functional layers, DP and DemP, in the Japanese DP.

¹¹ The analysis proposed here would predict (24-a) with the desired interpretation $[IP_{NONREST} IP_{rest}]$ to be grammatical. I speculate that the reason (24-a) was not acceptable to the speakers I consulted is probably due to the way the context is set up: the information encoded in the restrictive relative, which needed to be reported to the manager, is more important than the one encoded in the non-restrictive relative.

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