

## Antisymmetric analysis of non-restrictive relatives in Japanese

This paper introduces a new generalization in terms of Japanese non-restrictive relative clauses; namely, contrary to the accepted wisdom, Japanese does indeed make a distinction between restrictive and non-restrictive interpretations in overt syntax. In addition, it shows that with minor refinements this new fact can be made to follow from Kayne's (1994) antisymmetric analysis, offering an argument in support of Kayne's (1994, 2005) analysis—IP movement of head-final relatives in Japanese. Lastly, it provides evidence for the existence of two functional layers, DP and DemP in Japanese DPs.

### Japanese non-restrictive relatives:

Japanese is said to make no morphosyntactic nor phonological distinctions between restrictive and non-restrictive relative clauses (Kuno 1973, Inoue 1976, Fukui, 1986 *inter alia*). Indeed without context, both restrictive and non-restrictive readings are generally available:

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

Contrary to this widely-adopted view, this paper shows that Japanese indeed makes a syntactic distinction between the two types of relative clauses. This distinction can be brought out by the position of the demonstrative *so-no*, refining the generalization originally proposed by Kamio (1977). Specifically, 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 (cf. also Kameshima 1989).

- (2) a. Dem [<sub>RC</sub>] NP (Restrictive/\*Non-restrictive)  
 [sono [sakunen isya-ni nat-ta] musuko]-ga kekkon-si-ta.  
 that [last.year doctor-DAT become-PST] son-NOM marriage-do-PST  
 'That son who became a doctor last year got married.'
- b. [<sub>RC</sub>] Dem NP (Restrictive/Non-restrictive)  
 [[sakunen isya-ni nat-ta] sono musuko]-ga kekkon-si-ta  
 last.year doctor-DAT become-PST that son-NOM marriage-do-PST  
 'That son(,) who became a doctor last year(,) got married.'

This fact can be confirmed by compatibility with *tokorode* 'by the way' and embedding the relative clauses in contexts that prime restrictive relative clauses, I then discuss how these facts can be made to follow from the IP promotion analysis of Kayne (1994).

### Kayne's antisymmetric approach

In his antisymmetry program that prohibits right adjunction, Kayne (1994) proposes a raising analysis of head-initial relative clauses. Raising the question of how the crosslinguistic positioning of the head with respect to the relative clause should be construed, Kayne (1994) 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 (3a). Additional fronting of the remnant IP to Spec,DP yields a head-final relative clause, as shown in (3b).

- (3) a. [<sub>DP</sub> [D the [<sub>CP</sub> [book]<sub>i</sub> [C that [<sub>IP</sub> John read *t<sub>i</sub>* ]]]]] [<sub>Head-initial relative</sub>]  
 b. [<sub>DP</sub> [<sub>IP</sub> John read *t<sub>i</sub>*]<sub>j</sub> [D the [<sub>CP</sub> [book]<sub>i</sub> [C *t<sub>j</sub>* ]]]]] [<sub>Head-final relative</sub>]

Assuming the widely-adopted view that the difference between the restrictive and non-restrictive relative clauses is realized by whether the relative clause is in or out of the scope of the definite article (Vries 2006:234, Cinque 2008), Kayne (1994) further proposes that in head-initial languages like English, IP covertly moves out of the scope of D in LF (i.e., [ $_{DP}$  IP [ $_D$  [ $_{CP}$  NP [ $_C$  [ $e_i$ ]]]]]), yielding the structure for head-final relatives given in (3b). In contrast, languages with head-final relatives like Japanese does not make overt distinctions between the two types of interpretations because head-final relatives as in (1) are already compatible with both non-restrictive (in overt syntax), and restrictive interpretations (through reconstruction).

However, now that I have shown that Japanese indeed make overt distinctions between restrictive and non-restrictive relatives, as in (2a) and (2b), how can we make sense of this phenomenon from the perspective of Kayane’s promotion analysis of relative clauses? The problem is that Kayne’s structure (3b) generates the linear order [RC D NP], namely, (2b) but not (2a).

**Proposal: Two functional heads in Japanese DPs**

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 demonstratives in Japanese, *ko-no* ‘this’ *so-no* ‘that (closer)’, and *a-no* ‘that (further)’, consist of two elements: the deictic prefix *ko-*, *so-*, or *a-*, and the nominal D head *no* (e.g., Hoji 1995:258). Although each of these heads occurs independently, as deictic prefixes and a genitive marker in possession, the demonstratives are generally treated as a single lexical item. 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 [ $_{DP}$  *so-no* [ $_{DemP}$   $\wp$  NP ]]. The presence of two functional layers in the Japanese DP—DP headed by *no* and DemP headed by *so*, provides an additional landing site for the restrictive relative IP within the scope of D. The derivations of the two types of relatives are illustrated below:

- (4) a. [ $_{DP}$  *so-no* [ $_{DemP}$  IP<sub>*i*</sub> [ $_{CP}$  NP [ $_C$  *t<sub>i</sub>* ]]]] (restrictive / \*non-restrictive)
- b. [ $_{DP}$  IP<sub>*i*</sub> [ $_D$  *so-no* [ $_{DemP}$  [ $_{CP}$  NP [ $_C$  *t<sub>i</sub>* ]]]]] (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.

**Selected References:**

Fukui, N. (1986) A theory of category projection and its applications. Doctoral dissertation, MIT, Cambridge, Mass.

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