

1. The First Issue: Head-Internal Relative Clauses and Long-Distance Selection

This study focuses on Head-Internal Relative Clauses (HIRCs) in Japanese like (1).

(1) Taro-wa [Hanako-ga **ringo**-wo sara-ni oi-ta no]-o tabe-ta.

T.-TOP H.-NOM apple-ACC plate-on put C-ACC eat-PST

‘Taro ate an apple, which Hanako put on a plate.’

In (1), the semantic object of *tabe-ta* ‘ate’ is bold-faced *ringo* ‘an apple.’ A problem is how the θ -role is assigned between *tabe-ta* and *ringo*, which are not adjacent. Kuroda (1999a) assumes that a θ -role which HIRCs receive is discharged into their semantic head *ringo*.

2. The Second Issue: *Tokoro* Clauses and Selecting an Adjunct

Another construction we discuss is similar to HIRCs: *tokoro* clauses.

(2) a. Taro-ga [**sensei**-ga heya-kara detekuru tokoro]-ni/*-o deat-ta.

T.-NOM teacher-NOM room-from come.out Tokoro-DAT/*-ACC bump.into-PST

‘Taro bumped into a teacher when s/he came out from the room.’

b. Taro-ga [**sensei**-ga heya-kara detekuru tokoro]-o tsuiteit-ta.

T.-NOM teacher-NOM room-from come.out Tokoro-ACC follow-PST

‘The students followed a teacher as s/he came out from the library.’

Kuroda (1999b) clarifies that whereas the matrix verb of the *tokoro-ni* clause can select either an individual or an event, the one belonging to the *tokoro-o* clause can only select an individual. Then, he proposes that the *tokoro-ni* clause is a relative clause (RC) of the semantic head, as shown in (3a), and that the *tokoro-o* clause is a VP adjunct, where *pro* serves as the semantic head as in (3b). Although the *tokoro-ni* clause is an RC (an adjunct), he argues that it is selected as an event, receiving the structural Case from the verb. The *tokoro-o* clause, on the contrary, is not selected and receives the default accusative Case. The ill-formedness of the accusative Case in (2a) indicates that the *tokoro* clause must be selected if possible, and structure (3b) is banned.

(3) a. [TP students [T [VP [NP [NP **teacher**] *tokoro-ni* clause] bumped into] T]]

b. [TP students [T [VP *tokoro-o* clause [VP **pro** followed]] T]]

3. Kuroda’s Problem and our Goals

Kuroda’s (1999b) analysis, however, faces a problem. As Hosoi (2003: 67) points out, quantifiers behave differently in *tokoro* clauses and externally headed RCs with regard to their scopes. Since Kuroda’s (1999b) structure on *tokoro-ni* clauses (3b) involves an externally-headed RC, this difference cannot be explained. Now, our goal concerns the following two points: (i) to clarify the theoretical mechanism on the long-distance selection in HIRCs (Kuroda says nothing more than “discharging θ -roles” concerning this issue); and (ii), to explain the difference between *tokoro-ni/-o* clauses without recourse to the externally-headed RC.

4. Proposal

To achieve our goals, we propose (6). It is not an *ad hoc* assumption but can be deduced from Chomsky’s (2013) idea that the label identifies the set Merge forms. (7) is the structure of (1).

(6) θ -roles are assigned to the arguments inside the set labeled by the predicate.

(7) [_{tabe-ta} [_{no} Hanako-ga **ringo**-wo sara-ni oi-ta no]-o tabe-ta]

In (7), *ringo* is contained in the set with the label *tabe-ta*. Thus, it receives its θ -role from *tabe-ta*. We propose that this assignment is implemented at the CI/SM interfaces. Then, the *tokoro-ni/-o* clauses are also uniformly explained. We assume that they are merged as VP adjuncts.

(8) [_{TP} students [_{T'} [_{VP} tokoro clause [_{VP} pro bumped into/followed]] T]]

According to (6), the types of Merge (set-/pair-Merge) are irrelevant to the θ -role assignment. The pair-merged adjunct also has a chance to receive the θ -role, which is theoretically possible after SIMPL in Chomsky (2004). If the verb can select an event, the *tokoro* clause is selected, receiving the dative Case. If not, it remains an adjunct with the default accusative Case. In (2a), since the verb can select an event, the *tokoro* clause automatically becomes the complement with the dative Case. Thus, Kuroda's discharging process is deduced from the label under (6).

5. Three Theoretical Consequences

Finally, we extend the analysis according to (6). First, let us consider the middle construction.

(9) This book sells *(well).

Well is an adverb, a typical adjunct. However, it cannot be omitted in (9), so it seems to be the complement. In our analysis, pair-Merge introduces *well*, and it becomes the complement by the label and the selective property of *sell*. Another case blurring the complement-adjunct distinction is transparent adjuncts, from which extraction is allowed. Consider (10).

(10) a. What_i are you working so hard in order to achieve *t_i*? (Narita (2011: 108))

b. *I know what_i the man criticized Mary after she said *t_i*. (*ibid.*: 107)

(11) [_V [_V VP] adverbial PP]

(12) [_C [_C CP] adverbial CP]

(11) and (12) show the structures of the adjuncts in (10a, b), respectively. If the PP in the set labeled V is regarded as the complement at the interfaces, extraction from there is justified. However, this is impossible in adverbial CP adjoining to the CP level since unlike lexical V, C cannot select its complement semantically. Thus, the clauses remain adjuncts, so the extraction is banned. The last consequence concerns how to assign a θ -role to the external argument EA, which is a problem without the notion of spec in the minimalist program. In our analysis, since (the copy of) EA is contained in the set with the label V, it is assigned the θ -role from V. This is seen in (13), which is the derivation of transitive verbs in Chomsky's (2013) framework. With head movement, the domain labeled V is extended to contain the copy of EA. Thus, without any further assumption, we can explain the θ -role assignment system in terms of the label.

(13) [_C C [_{<phi, phi>} SUBJ [_T T [_{V-V*} SUBJ_{Agent}] [_{V-V*} V-V*] [_V V OBJ]]]]]]

[References] Chomsky, Noam (2004) "Beyond Explanatory Adequacy," *Structures and Beyond*, ed. by Adriana Belletti, 104-131, Oxford University Press, Oxford, New York. / Chomsky, Noam (2013) "Problems of Projection," *Lingua* 130, 33-49. / Hosoi, Hironobu (2003) *Internally Headed Constructions in Japanese: A Unified Approach*, Doctoral Dissertation, McGill University. / Kuroda (1999a/b) "Shubu Naizai Kankei-Setsu / Tokoro Setsu," *Kotoba no Kaku to Shuuen*, ed. by S.-Y. Kuroda and Masaru Nakamura, 27-103 / 105-161, Kuroshio Shuppan, Tokyo. / Narita, Hiroki (2011) *Phasing in Full Interpretation*, Doctoral Dissertation, Harvard University.