A Condition on Juxtaposed Interrogative Clauses

In Japanese Right Dislocation (JRD) construction, interrogative wh-phrases cannot appear at the right side of the matrix verb, as exemplified in (1):

(1) John-wa tabemasita ka, nani-o
   John-TOP ate.polite Q what-ACC
   intended: ‘What did John eat?’

In contrast, Negative Polarity Items (NPIs) such as nani-mo ‘anything’ can appear in the dislocated position as in (2):

(2) John-wa tabenakatta yo, nani-mo.
   John-TOP did not eat PRT anything
   ‘John didn’t eat anything.’

Since both an interrogative wh-phrase and an NPI have to be syntactically licensed by a Q-particle and a NEG head, respectively, the difference of acceptability requires an explanation. Although three different approaches have been proposed previously for JRD: Clause-External, Clause-Internal, and Bi-clausal (Leftward movement + deletion) Analysis, we cannot provide a satisfactory explanation in syntactic terms under any approach, because the same structural position would be assigned to the dislocated interrogative wh-phrase and the NPI. The answer, therefore, must be found in the semantic/pragmatic or phonological aspect of the construction. In this paper, assuming that covertly juxtaposed clauses are interpreted independently in the semantic/pragmatic component, we will account for the contrast between (1) and (2) in a unified way under the Bi-Clausal Analysis of JRD constructions.

According to the Bi-Clausal Analysis of JRD, the example in (1) consists of two clauses and has the structure like (3):

(3) [John-wa tabemasita ka], [nani-o [John-wa tabemasita ka]]

Assume here that these two clauses are independently transmitted to and interpreted in the semantic component. According to Hamblin’s (1973) semantics, the preceding clause in (3) is interpreted as a polar question and creates an alternative set of proposition {John ate, John did not eat}. The negative clause in (2), on the other hand, denotes a set created by the focus of negation; in this case, a set of edible things. We propose that the legitimate interpretation of JRD requires the compatibility of created sets:

(4) the Compatibility Condition on Created Sets
   The set created by the preceding clause must contain one of the members of the set created by the following clause.

According to this condition, the ungrammaticality of (1) can be explained as the incompatibility of created sets: the interrogative wh-phrase contained in the second clause generates a set of propositions such as {John ate sushi, John ate tempura, …}, which is not contained in the set of propositions created by the preceding yes-no question. In the case of NPI in (2), the mo-particle, as a kind of universal quantifier, is taken to contribute meaning that all the alternatives created by the wh-phrase are true, which means that all the members of the set created by the second conjunct are contained by the preceding set created by the first one, thus resulting in an acceptable sentence.

The following pieces of evidence corroborate the relevance of alternative sets to the interpretation of the wh-phrase in the right periphery.

A) If we substitute nani-o (what) with docchi (which), a wh-phrase creating the meaning of alternative questions, the sentence becomes grammatical, because both clauses generate an alternative set of proposition {John ate, John did not eat}:

(5) John-wa bangohan-o tabeta no (tabenakatta no), docchi
   John-TOP supper-ACCate Q ate Q did not eat Q which
   ‘Did John have supper (or not), which?’

B) As Tanaka (2001) notes, even nani-o can occur in the right dislocated position, when the wh-phrase is duplicated, which means that two juxtaposed clauses create the same set of propositions:

(6) John-wa nani-o tabemasita ka, nani-o
   John-TOP what-ACC ate.polite Q what-ACC
C) When the affirmative answer to the preceding question is presupposed from the context; in other words, the first conjunct does not create an alternative set, you can say:

(7) When you open the refrigerator door and find out your cake is missing:

keeki tabeta no, dare-ga
cake ate Q who-NOM
‘Who ate my cake?’

The proposal covers the fact that the construction like so-called “sequence of wh-questions” exists in Japanese. While an embedded indirect question can be right dislocated (8a), the post-verbal positioning of a clause with a wh-phrase intended to have matrix scope is not allowed (8b):

(8) a. John-ga tazuneta yo, [CP Mary-ga nani-o yonda ka]
    John-NOM asked PRT Mary-NOM what-ACC read Q
‘John asked what Mary read.’

b. *John-wa omotteimasu ka, [CP Mary-ga nani-o yonda ka]
    John-NOM think.polite Q Mary-NOM what-ACC read Q
‘What does John think Mary read?’

The contrast can be explained along the same line of reasoning by the incompatibility of created sets; the matrix clause in (8b) is interpreted as a polar question, which is incompatible with the set of propositions created by the dislocated embedded clause. Interestingly, when the matrix clause is changed to a wh-question by adding doo (how), which creates a set of propositions, the sentence becomes grammatical.

(9) John-wa doo omotteimasu ka, [CP Mary-ga nani-o yonda ka]
    John-TOP how think.polite Q Mary-NOM what-ACC read Q
‘What does John think Mary read?’

In addition, our proposal also predicts that not only wh-phrases but also focused elements in general cannot be right dislocated in Japanese when different sets are created, as illustrated in (10):

(10) *John-wa wain-dake nomu yo, borudoo-no
    John-TOP wine-only drinks PRT Bordeaux-of
intended: ‘John drinks only Bordeaux wine.’

In the first conjunct the focus-particle -dake (only) creates an alternative set of drinkables and picks up wine out of that set. The second conjunct, on the other hand, creates an alternative set of possible production areas of wine, resulting in the incompatibility of created alternative sets.

The proposal mentioned above can be extended to the analysis of Split Questions discussed in Arregi (2010), “What tree did John plant, an oak?” This type of question contains two independent interrogative clauses, a wh-question and a non-wh-question, as illustrated in (11a):

(11) a. [what tree did John plant] [Did John plant an oak]

b. {John planted an oak, John planted a cherry, …}

c. {John planted an oak, John did not plant an oak}

The first clause creates a set of possible answers (11b) and the second elliptical clause creates a two-membered set (11c) and functions to narrow down the list of possible answers just to an oak. If this extension is on the right track, the Compatibility Condition on Created Sets proposed in (4) is not a condition just on the JRD construction, but a more general condition on the juxtaposition of elliptical interrogative clauses.

To conclude, the analysis proposed here is more successful than its predecessors in respect of empirical coverage, as it offers a natural explanation to different types of juxtaposition of interrogative clauses.

References