

Reconstruction Obeys Minimality

It is well known that in double object constructions, when Indirect Object (IO) precedes Direct Object (DO) as in (1a), the IO unambiguously takes wide scope (Hoji 1985). The same scope relation obtains if IO and DO are scrambled in this order as in (1b) (Yatsuhiko 1996, 2000). This suggests that IO alone cannot reconstruct so that (1b) will have the same structure as (1c), where the DO can take wide scope as well as narrow scope.

- (1) a. John-ga [IO dareka-ni] [DO daremo-o] syookaisita (some>every, *every>some)
 John-Nom someone-Dat everyone-Acc introduced
 ‘John introduced everyone to someone.’
 b. [IO dareka-ni] [DO daremo-o] John-ga t_{IO} t_{DO} syookaisita (some>every, *every>some)
 someone-Dat everyone-Acc John-Nom introduced
 c. [DO daremo-o] John-ga [IO dareka-ni] t_{DO} syookaisita (some>every, every>some)
 everyone-Acc John-Nom someone-Dat introduced

The lack of the wide scope reading for universal is unexpected in light of the widely held view that scrambled phrases may freely reconstruct in Japanese (Saito 1989, 1992). In order to capture the impossibility of “partial” reconstruction, we need a condition on reconstruction. I propose that reconstruction obeys the Minimality Condition on Reconstruction (MCR) stated in (2).

(2) In the structure “XP YP ... t_{XP} t_{YP}” where XP and YP have been scrambled (linear order represents the hierarchical relation), XP cannot reconstruct across YP.

Given MCR, we can easily explain why the IO cannot reconstruct across the DO in cases like (1b). In what follows, I will lend further support to MCR.

MCR predicts that there will be an asymmetry between the inner scrambled phrase and the outer one in the availability of reconstruction: While the inner phrase alone (YP) can reconstruct, the outer phrase (XP) cannot reconstruct unless the inner phrase does. Examples (3) illustrate this asymmetry.

- (3) a. [Subj Ikutuka-no geinoo purodakusyon_i-ga] [IO dono terebikyoku-ni-mo]
 several-Gen theatrical agency-Nom every TV.station-Dat-Prt
 [DO soko_i-no sinjin kasyu-o] syookaisita
 it-Gen new singer-Acc introduced
 (several>every, *every>several)
 ‘Several theatrical agencies_i introduced its_i new singers to every TV station.’
 b. [IO Dono terebikyoku-ni-mo] [Subj ikutuka-no geinoo purodakusyon_i-ga] t_{IO}
 every TV.station-Dat-Prt several-Gen theatrical agency-Nom
 [DO soko_i-no sinjin kasyu-o] syookaisita
 it-Gen new singer-Acc introduced
 (several>every, *every>several)
 c. [IO Dono terebikyoku-ni-mo] [DO soko_i-no sinjin kasyu-o]
 every TV.station-Dat-Prt it-Gen new singer-Acc
 [Subj ikutuka-no geinoo purodakusyon_i-ga] t_{IO} t_{DO} syookaisita
 several-Gen theatrical agency-Nom introduced
 (several>every, every>several)
 d. [DO Soko_i-no sinjin kasyu-o] [IO dono terebikyoku-ni-mo]
 it-Gen new singer-Acc every TV.station-Dat-Prt
 [Subj ikutuka-no geinoo purodakusyon_i-ga] t_{IO} t_{DO} syookaisita
 several-Gen theatrical agency-Nom introduced
 (several>every, ??/*every>several)

(3a) stands for the base order, where the quantified subject unambiguously scopes over the IO and successfully binds the pronoun *soko* contained in the DO. (3b) shows that when the IO is scrambled to the left of the subject, it can take wide scope as well as narrow scope. With this in mind, let us compare (3c) and (3d), where both IO and DO are scrambled to the left of the subject in a different order. (3c) is scopally ambiguous whereas (3d) is scopally unambiguous. MCR gives an explanation to

this contrast. In both examples, since the DO that contains the bound pronoun is scrambled out of the c-command domain of the binder, it must reconstruct under the assumption that pronominal/variable binding takes place at LF. In (3c), the DO, being an inner scrambled phrase, may reconstruct by itself. Hence the IO can remain in the surface position and take wide scope over the subject. On the other hand, in (3d) where the DO is an outer scrambled phrase, the DO may reconstruct only if the IO does. As a result, (3d) will have basically the same LF representation as (3a), where the IO is c-commanded by the subject, hence the unavailability of wide scope for universal.

MCR has another advantage. It explains why remnant scrambling is impossible as shown in (4b).

- (4) a. John-ga Mary-ni [_{CP} Taro-ga Hanako-o nagutta to] itta
 John-Nom Mary-Dat Taro-Nom Hanako-Acc hit C said
 'John said to Mary that Taro hit Hanako.'
- b. * [_{CP} Taro-ga _{t_i} nagutta to] Hanako-o_i John-ga Mary-ni _{t_{CP}} itta
 Taro-Nom hit C Hanako-Acc John-Nom Mary-Dat said
- c. Hanako-o_i John-ga Mary-ni [_{CP} Taro-ga _{t_i} nagutta to] itta
 Hanako-Acc John-Nom Mary-Dat Taro-Nom hit C said
- d. [_{CP} Taro-ga Hanako-o nagutta to] John-ga Mary-ni _{t_{CP}} itta
 Taro-Nom Hanako-Acc hit C John-Nom Mary-Dat said

(4b) is derived from (4a) first by scrambling of the embedded object *Hanako-o*, which makes the embedded CP a remnant, and then by scrambling of that remnant. (Long-distance scrambling and scrambling of CP are allowed in Japanese as show in (4c) and (4d), respectively; multiple scrambling is too, as we saw in (1b, 3b,c).) A straightforward explanation for the ill-formedness of (4b) is to resort to the Proper Binding Condition (PBC), which requires that traces must be bound; otherwise, remnants and larger structures containing them cannot obtain semantic interpretation properly under the standard framework of semantics. Thus, the PBC forces any remnant to undergo reconstruction. From this viewpoint on remnant movement and the PBC, the ungrammaticality of instances like (4b) has long been a puzzle (Saito 1989, 1992) because Japanese scrambling may reconstruct quite freely. However, this is no longer so. If we assume MCR, it follows that the remnant CP cannot reconstruct unless the inner phrase, *Hanako-o*, does. However, the inner phrase has no place to reconstruct because its launching site is inside the outer phrase. Its reconstruction would involve illicit sideward movement. For the inner phrase to reconstruct, the outer phrase must reconstruct first in violation of MCR. Therefore, there is no way out and remnant scrambling like (4b) is impossible.

MCR can be regarded as the mirror image of Superiority Condition (SC). SC requires that when there are more than one element that can potentially move, the one that is remoter from the landing site may move only if the closer one moves. This point is best illustrated by the following paradigm of the object shift in double object construction in Icelandic (Collins and Thráinsson 1993).

- (5) a. Ég lána ekki [_{IO} Maríu] [_{DO} bækur] b. Ég lána [_{IO} Maríu] ekki _{t_{IO}} [_{DO} bækur]
 I lend not Maria books I lend Maria not books
- c. Ég lána [_{IO} Maríu] [_{DO} bækur] ekki _{t_{IO}} _{t_{DO}} d. *Ég lána [_{IO} bækur] ekki [_{IO} Maríu] _{t_{DO}}
 I lend Maria books not I lend books not Maria

(5a) is the base order, from which the IO alone or both IO and DO can move, as in (5b) and (5c). But the DO alone cannot move across the IO as in (5d).

The striking similarity between SC and MCR suggests that reconstruction is not just a free choice of a lower copy in LF but has essentially the same status as upward movement. This argues for a representational theory of grammar, rather than a derivational one. Suppose we try to incorporate MCR into a derivational model of grammar in which upward movement is considered to take place in the course of derivation and reconstruction is regarded as (a consequence of) an operation on the LF representation. Then, we will end up with a highly redundant theory in which the very similar locality conditions, SC and MCR, have to be stated in both derivational and LF components. By contrast, in a representational theory, in which there is no distinction between upward movement and reconstruction, we can easily unify SC and MCR as a well-formedness condition on chains in the representation. Therefore, MCR supports a representational view of grammar.