

A Case against the Representational Approach to the Coordinate Structure Constraint

Recently, several researchers have argued that (the “no extraction *out of* conjuncts” part of) the CSC should be regarded as a condition on LF representations rather than a condition on movement (cf. Fox 2000, Lin 2001, and Ruys 1993). In particular, Fox (2000: 50) proposes deriving CSC effects from the two assumptions in (1). One of the merits of this representational approach to the CSC is that it can explain the contrast in (2), which is observed by Ruys (1993). The LF representations of the two component structures (CSs) of (2a) should be like the ones in (3). In (3b), *what* induces a violation of a ban on vacuous quantification (BVQ) is violated, hence the unacceptability of (2a). In contrast, in (2b), due to the existence of the bound pronoun in the second conjunct, the BVQ is satisfied in both CSs, hence the acceptability of (2b) (the CS involving the second conjunct is given in (4)). If the CSC is a condition on movement, the acceptability of (2b) is unexpected. Lin (2001) argues that A-movement also obeys the representational CSC.

The main aim of this paper is to provide empirical evidence against the representational CSC from Japanese. I will examine the patterns of extraction from coordinated VPs in Japanese and argue that in this language the CSC should be regarded as a syntactic condition on movement, rather than a condition on LF representations (or a PF condition).

Takano (2004) argues that examples like (5), where the first verb takes a bare form and the second verb is inflected for tense, involve coordination of VPs. This is supported by the fact that sentence (5) allows for a “sentence-internal reading (SIR)” of *different*. That is, it can mean “the dog which chased John is different from the dog which chased Bill” (for *betubetuno*, this is the only reading available). As argued by Carlson (1987), a SIR of *different* can only be licensed when the sentence denotes a plural eventuality, and conjoined V(P)s, as well as conjoined/plural NPs, allow sentences to denote plural eventualities, as seen in (6).

Consider the examples with VP coordination in (7). In (7a), the first object is scrambled to the sentence-initial position, and in (7b), the second object undergoes scrambling. The unacceptability of these examples indicates that scrambling out of coordinated VPs is not allowed. Can this be explained by the representational CSC in (1)? The answer is no: because Japanese (A’)-scrambling can (or must) be “undone” or totally reconstructed at LF (Saito 1989, 1994, Tada 1990, 1993, among many others), the LF representations of the CSs of (7a,b) should be like the ones in (8) (written using English words), and in these CSs, there is no violation of any grammatical constraint (Lin (2001) actually claims that LF total reconstruction nullifies the representational CSC). Thus, the CSC should not be regarded as a condition on LF representations in Japanese. Replacing the subject in (7a), which is a “different”-NP forcing SIRs, with *Yamada kyoozyu-ga* ‘Prof. Yamada-NOM’ makes the example sound better (see (9)). On the assumption that subjects do not have to raise to Spec,IP in Japanese (Fukui 1986, Kuroda 1988 and Takano 1996), I claim that the scrambling of the object in (9) can be to an adjoined position of the first VP conjunct, so that the example can have the structure in (10). Because the object is not extracted out of the conjunct, the CSC is not violated. In (7a), unlike in (9), the subject must move out of the VP to Spec,IP since, as argued by Carlson (1987), a SIR of *different* cannot be licensed by a conjoined VP when *different* is a part of it (see (11)). Thus, the structure corresponding to (10) is unavailable for (7a) and the scrambling in this example results in ungrammaticality.

If the CSC cannot be regarded as a condition on LF representations in Japanese, how should it be formulated? There remain two possibilities: either the CSC is a syntactic condition on movement or it is a PF condition. In order to choose one over the other, I consider the behavior of covert *wh*-movement in Japanese with respect to the CSC. If it obeys the CSC, this constraint is syntactic; and if it does not, it is phonological. The examples in (12), where a *wh*-argument appears in a VP conjunct, are acceptable, although perhaps a little awkward. This appears to indicate that covert *wh*-movement does not obey the CSC. However, the examples in (13), where a *wh*-adjunct appears in a VP conjunct, are unacceptable. I claim that the unacceptability of (13a,b) indicates that covert *wh*-movement in Japanese obeys the CSC and that this constraint should be viewed as a syntactic constraint on movement, rather than a PF constraint. Then, why do *wh*-arguments fail to obey the CSC? It should be noted in this connection that the CSC is not the only locality constraint that *wh*-arguments do not obey in Japanese: they also fail to exhibit Complex NP Constraint (CNPC) effects, as seen in (14). My claim is that whatever analysis explains the insensitivity of *wh*-arguments to the CNPC applies to their insensitivity to the CSC. One might claim that in (12a,b), the whole coordinate structure undergoes “large-scale pied-piping” in the sense of Nishigauchi 1986, 1990.

To sum up, the empirical evidence provided in this paper indicates that the CSC should be regarded as a condition on movement in Japanese, and this poses a problem for the LF representational approach to the CSC.

- (1) a. Extraction out of a coordinate structure is possible only when the structure consists of two [or more] independent substructures, each composed of one of the coordinates together with material above it up the landing site (henceforth, *component structures*).
 b. Grammatical constraints are checked independently in each of the component structures.
- (2) a. *I wonder who took what from Mary and gave a book to Jeremy.
 b. I wonder who took what_i from Mary and gave it_i to Jeremy.
- (3) a. I wonder [who_i what_j [t_i took t_j from Mary]]
 b. I wonder [who_i what_j [t_i gave a book to Jeremy]]
- (4) I wonder [who_i what_j [t_i gave it_j to Jeremy]]
- (5) Tigau/Kotonaru/Betubetuno inu-ga John-o oikake Bill-o kada.
 different dog-NOM John-ACC chase Bill-ACC bit
 ‘Different dogs chased John and bit Bill.’
- (6) a. Bob attends different classes. (*SIR; only meaning “the classes Bob attends are different from those which have already been contextually defined”)
 b. Bob and Alice attend different classes. (^{ok}SIR)
 c. Different dogs chased John and bit Bill. (^{ok}SIR)
- (7) a. *Hanako-o_i betubetuno kyoozyu-ga t_i home Taroo-o sikatta.
 Hanako-ACC different professor-NOM praise Taroo-ACC scolded
 ‘Hanako, different professors praised and scolded Taroo.’
 b. *Taroo-o_i betubetuno kyoozyu-ga Hanako-o home t_i sikatta.
 ‘Taroo, different professors praised Hanako and scolded.’
- (8) [IP different professors [VP Hanako praise]] / [IP different professors [VP Taroo scolded]]
- (9) (?)Hanako-o_i Yamada kyoozyu-ga t_i home Taroo-o sikatta.
- (10) [IP [VP Hanako_i [VP Prof. Yamada_j t_i praise]] & [VP pro_j Taroo scolded]]
- (11) John spilled his milk and poached different eggs. (*SIR) (Carlson 1987: 540)
- (12) a. Yamada kyoozyu-ga dare-o home Taroo-o sikatta-no?
 Yamada prof-NOM who-ACC praise Taroo-ACC scolded-Q
 ‘Who did Prof. Yamada praise and scold Taroo?’
 b. Yamada kyoozyu-ga Hanako-o home dare-o sikatta-no?
 Yamada prof-NOM Hanako-ACC praise who-ACC scolded-Q
 ‘Who did Prof. Yamada praise Hanako and scold?’
- (13) a. *Yamada kyoozyu-ga [naze Hanako-o home] [[pro_j namaikida-kara]
 Yamada prof-NOM why Hanako-ACC praise forward-because
 Taroo_j-o sikatta]-no?
 Taroo-ACC scolded-Q
 ‘Why did Prof. Yamada praise Hanako and scold Taroo because he was forward?’
 b. *Yamada kyoozyu-ga [[pro_i kasikoi-kara] Hanako_i-o home] [naze Taroo-o
 Yamada prof-NOM smart-because Hanako-ACC praise why Taroo-ACC
 sikatta]-no?
 scolded-Q
 ‘Why did Prof. Yamada praise Hanako because she was smart and scold Taroo?’
- (14) a. Taroo-wa [Hanako-ga dare-ni syookai-sita hito]-o sagasiteiru-no?
 Taroo-TOP Hanako-NOM who-DAT introduced man-ACC looking-for-Q
 ‘To whom is Taroo looking for the man who Hanako introduced?’
 b. *Taroo-wa [Hanako-ga naze atta hito]-o sagasiteiru-no?
 Taroo-TOP Hanako-NOM why met man-ACC looking-for-Q
 ‘Why is Taroo looking for the man who Hanako met?’

Selected references

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