Pseudo-gapping: Evidence for Overt Quantifier Raising

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1. Issue This paper explores the derivation of the p(seudo)-gapping construction. In the literature, it has been argued that p-gapping involves syntactic movement of remnants (Move-R), along with VP-deletion (e.g., Jayaseelan 1990). Given this, we address what type of movement Move-R is and where it lands. We extend Johnson's (2008) idea that Move-R is the same type of movement as *Quantifier Raising* (QR), a covert operation in general cases, and argue that Move-R is an overt case of QR to the left edge of *v*P.

2. Refutation Let us begin by falsifying Takahashi's (2004) proposal, which has not been criticized for any good reasons. He integrates Jayaseelan's (1990) and Lasnik's (1999) ideas, claiming that both *Heavy NP Shift* (HNPS) and *Object Shift* (OS) can serve as Move-R. His argument is based on the double object construction (DOC); as in (1), either the indirect object (IO) or the direct object (DO) can be a remnant:

(1) a. Although John wouldn't give Bill the book, he would [$_{IO}$ Susan].
b. Although John wouldn't give Bill the book, he would [$_{DO}$ the paper]. (Takahashi 2004: 572-3)

He notes that (1a) must be derived by OS, since IO cannot undergo HNPS (e.g., Lasnik 1999), while (1b) must be derived by HNPS, since DO cannot undergo OS in Icelandic, for example. However, the eclectic approach is faced with two problems; it undergenerates and overgenerates. First, it cannot capture the fact in (2b), namely that the object of a preposition (ObjP) can be a grammatical remnant in the NP-PP complement construction; though (2b) is somewhat marginal, see Levin (1979: 15-16) for naturally occurring examples similar to (2b), such as *You can't take the lining out of that coat. You can* ~~*take the lining out of*~~ *this one*.

(2) a. You cannot borrow a car from John, but you can ~~borrow a car~~ [from Mary].
b. ? You cannot borrow a car from John, but you can ~~borrow a car from~~ [Mary].

(2b) cannot be derived by HNPS, since it cannot apply to ObjP, as in (3). (2b) cannot be derived by OS either, since OS is A-movement and A-movement cannot apply to the ObjP in the construction, as in (4).

(3) * You can borrow a car [from t_1] tomorrow [the female graduate student of natural language processing]$_1$.
(4) * Mary$_1$ was borrowed the car from t_1. (passive movement = A-movement)

Second, the eclectic approach fails to predict that predicate NPs cannot be remnants, a fact noted by Baltin (2000); the point is made by the contrast between (5a) and (5b), given that the complements of the verbs *date* and *become* must be entity-denoting and predicate-denoting elements, respectively.

(5) a. The students did not date doctors, but they did ~~date~~ nurses. (argument NP)
b. * The students did not become doctors, but they did ~~become~~ nurses. (predicate NP)

Under the eclectic approach, (5b) should be fine, because HNPS can be applied to predicate NPs, as in (6). Moreover, there is reason to believe that OS in English can (and must) be applied to predicate NPs. The point is that predicate NPs must be adjacent to their verbs, like argument NPs, as in (7) (cf. Stowell 1981); some researchers argue that such adjacency effects are reduced to the application of OS to verbs' complement NPs (e.g., Koizumi 1995), suggesting that OS can also be applied to predicate NPs. Thus, it is impossible to identify Move-R with HNPS or OS, requiring a different approach to the issue.

(6) (?) John has become t_1 recently [a more skillful and more considerate nurse than anyone here]$_1$.
(7) John has (recently) dated / become (*recently) a nurse (recently).

3. Alternative Johnson (2008) proposes that Move-R is the same type of movement as QR, which can target generalized quantifiers, possibly including proper names and definite descriptions. In the following, we make new arguments for Johnson's proposal. First, the QR approach also predicts the applicability of Move-R in the DOC illustrated in (1). For instance, as described by Neeleman and van de Koot (2012), both IO and DO can outscope the subject, which we take to show that QR can be applied to IO and DO:

(8) a. [*Some teacher*] gave Mary [*every paper*] on the syllabus. ✓*some* > *every* / ✓*every* > *some*
b. [*Some teacher*] gave [*most students*] every paper on the syllabus. ✓*some* > *most* / ✓*most* > *some*
(Neeleman and van de Koot 2012: 65-66)

Second, the QR approach predicts the availability of the ObjP remnant in (2b), since the NP-PP complement construction allows inverse scope, as in (9), showing that QR can be applied to the ObjP:

(9) John borrowed [*a type of car*] from [*every professor*]. ✓*a* > *every* / ✓*every* > *a*

Third, if Move-R is QR, we correctly predict the unavailability of the predicate-NP remnant in (5b). This is because predicate NPs in general fail to undergo QR. For instance, (10b) does not allow inverse scope, and its only available reading (i.e., *a* > *every*) is not compatible with usual situations, thus suggesting that QR cannot apply to the element in the predicative position in (5b), in the same way as in (10b).

(10) a. [*A student*] dated [*every nurse*]. ✓*a* > *every* / ✓*every* > *a*
b. # [*A student*] became [*every nurse*]. ✓*a* > *every* / **every* > *a*

4. Extension Given that the QR approach is empirically preferred, we now suggest that as QR, Move-R goes "leftwards" to the edge of "*v*P", with the option of pied-piping available, as schematized in (11):

(11) a. [$_{TP}$ you can [$_{vP}$ [from Mary]$_1$ ~~[$_{vP}$ borrow a car [from Mary]$_1$]~~]] (QR of NP + Pied-piping of PP)
b. [$_{TP}$ you can [$_{vP}$ [Mary]$_1$ ~~[$_{vP}$ borrow a car from [Mary]$_1$]~~]] (QR of NP)

There are two pieces of evidence for our proposal. First, Move-R should cross at least the boundary of VP, given that it can escape out of a *to*-infinitive clause, which is also the case with QR, as shown in (12). Since Move-R can apply to ObjP, which is not the case with rightward movement, as shown in (13), Move-R should be a leftward movement.

(12) a. [*Someone*] tried to visit [*everyone*]. ✓*some* > *every* / ✓*every* > *some*
b. Although I didn't try to visit Martha, I did ~~try to visit~~ Sally. (Baltin 2000: 42, 52)
(13) a. John doesn't want to go to every city, but he does ~~want to go to~~ Kyoto.
b. * John has wanted [to go to t_1] since last year [the city famous for its historical buildings and festivals]$_1$.

Second, Move-R cannot go as far as the domain of Neg or T, as shown in (14). Note that the sentence-initial instance of the remnant is grammatical, but it requires setting a special context, suggesting that it is not a result of QR, but a result of (contrastive) topicalization. Thus, the landing site of Move-R should be higher than VP and lower than NegP or TP, specifically the edge of *v*P.

(14) Although John may like onion, (#carrot) he (*carrot) may (*carrot) not (carrot).

5. Implication Lastly, we consider why the output of QR can be overt in p-gapping. This question is given a possible answer within the single output model (e.g., Bobaljik 1995), where there is only one syntactic component with no overt/covert distinction, and "covert" movements, such as QR, result from phonology targeting the tail of a chain. Given that p-gapping remnants are contrastively focused, let us assume that the chain of QR of α must pronounce the lowest accessible copy of α when α is focused. Then, p-gapping is a case that realizes the output of QR, because the lowest copy of the remnant is elided independently by VP-deletion, so that the second lowest copy, which is at the left edge of *v*P, must be pronounced. If these lines of reasoning are correct, then the identification of Move-R as QR lends support to the single output model over the traditional T model, which never accepts any overt instance of QR.

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