

What Prepositional Object Gaps Tell Us about Merge and Linearization

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1. A pronoun coreferential with the subject of *have* that is interpreted as a location can be omitted in British English (BrE) in (1)b, but not in American English (AmE) (*Prepositional Object Gaps* (POGs)). There would be three hypotheses about POGs: the postulation of pro, null operator (Op) movement, and movement of the subject from within the PP. I argue for the last analysis. Evidence lies in the incompatibility of a theme extraction with POGs in (2). It makes the pro analysis implausible because the (c)overtness of a pronoun would not affect the extractability of the theme. (2) will be explained under Fox and Pesetsky (2005), together with movement of the subject. We will see that a null Op analysis cannot treat all of the facts. I also suggest that the availability of POGs hinges on whether the subject can leapfrog a higher argument (i.e., *a book* in (1)b). To set the stage, I first illustrate the structure of (1)a.

- (1) a. [The table]_i has a pencil on it_i.
b. The table has a book on. (Belvin and den Dikken 1997:168)
- (2) What_j does [this film]_i have t_j in *(it_i)? (Stockwell and Schütze (S&S) 2019:9)

2. *Have* is often claimed to be composed of BE and a P (e.g., Freeze 1992), and in their analysis of POGs, Sailor and Griffiths (2017) adopt Levinson (2011), where the P involved is *with*. I assume the gist of their proposals and analyze (1)a as (3). Levinson posits *p* above a PP, which introduces an argument and Case-marks an NP, just as *v* does. In (3), *p*₁ and *p*₂ assign Case to *a pencil* and *it*, respectively, and T gives Case to *the table*. *With* is incorporated into BE, yielding *has*. We are now ready to propose an analysis of POGs.

- (3) [TP T [VP BE [_{p1P} [the table] *p*₁ [PP with [_{p2P} [a pencil] *p*₂ [PP on it]]]]]]]

3. While Griffiths and Sailor (G&S) (2015) advance the subject movement in (4)b, it is challenged by antireconstruction in (5). Taking it as a clue to understand how it moves, I claim that Wholesale Late Merger (WLM), which Takahashi and Hulsey (T&H) (2009) propose to capture the same effect in A-movement, must be used in its movement. In WLM, an NP late merges with a Det. Thus, (6)a is the first stage of (1)b. The reason why only *the* must be generated in (6)a is this. Adopting T&H's idea that both a Det and an N need Case, I argue that *the* gets Case from *p*₂ and moves to the edge of *p*₂P in (6)b. *Table* merges with *the* in (6)c, getting Case from T in (6)d. If *the* and *table* were generated in (6)a, they would be assigned Case by *p*₂, and there would be no item to which T can assign Case. *The* must move to the edge of *p*₂P in (6)b, otherwise a higher head could not attract *the* because *a book* intervenes between the two. Thus, *table* could not late merge with *the*. Since movement of *the* is induced by the EPP of *p*₂, *p*₂P is identified as a phase. (6)d explains (5) because only a Det is within the PP. It also helps to capture (2).

- (4) a. This film has monsters in. b. [TP [this film]_i T has monsters [PP in t₁]]
- (5) a. *[My pictures of [each other]_i's birthday parties] have [John and Mary]_i in.
b. *[Films about his_i youth] have [every director]_j in. (S&S 2019:8)
- (6) a. [_{p2P} a book *p*₂ [on [the]]]
b. [_{p2P} [the]_i [_{p2P} a book *p*₂ [on t₁]]]
c. [_{p2P} [the [table]]_i [_{p2P} a book *p*₂ [on t₁]]]
d. [TP [the [table]]_i T [VP BE [_{p1P} *p*₁ [PP with [_{p2P} t₁ [_{p2P} a book *p*₂ [PP on t₁]]]]]]]]]

4. **The extraction restriction:** Leftward and rightward \bar{A} -movement of the theme cannot cooccur with POGs in (2) and (7). But we will see that it is \bar{A} -mobile if movement does not change its surface position. Foreseeing this fact, I characterize the restriction as follows: when a POG occurs, the theme cannot precede the subject or follow a P, *modulo its modifying adjunct*. If the relative linear order of the lexical

items within p_2P is determined in (6)c and must be preserved throughout the derivation, we explain this rendition of the restriction. This idea can be implemented in Fox and Pesetsky's cyclic linearization. They claim that an entire phase is Spelled-Out, determining the relative order of the items within the phase, which cannot be altered throughout the derivation. As a phase, p_2P in (6)c is Spelled-Out, which places the theme between *the table* and *on*. As a result, any overt movement of the theme at a later stage ends up violating the preservation constraint. Let me turn to the italicized proviso, which accommodates the fact that adjunct extraposition from the theme is possible in (8). Fox and Nissenbaum (1999) analyze it as covert rightward \bar{A} -movement of a DP (e.g., *some papers* in (8)) followed by late merger of an adjunct. Since covert movement has no effect on linear ordering, (8) is allowed. Rightward \bar{A} -movement of the theme participates in both (7) and (8), but their acceptability hinges upon whether it changes its linear position. This supports our analysis. In contrast, a null Op analysis in (9) would exclude (2) by appealing to an illicit crossing \bar{A} -dependency. However, the contrast between (7) and (8) militates against it because they involve the same \bar{A} -dependency. Finally, the theme can move overtly when a pronoun appears in (2) and (7). In (10), nothing moves to the edge of p_2P when *it* appears. Thus, p_2P in (10) does not have to be a phase, unlike (6). Thus, the relative linear order of the theme is not determined in (10).

- (7) [This film]_i has t_j in *(it)_i [some monsters that no one has ever heard of]_j. (S&S 2019:10)
 (8) This box_i has [some papers t_j] in (it)_i [that need to be kept for at least five years]_j. (S&S 2019:10)
 (9) [what₁ does [[this film] Op₂ have t₁ in t₂]]
 (10) [p_2P [some monsters that no one has ever heard of] p_2 [in it]]

5. A dialectal variation: To yield POGs, a Det must leapfrog a higher argument for locality in (6). I argue that the permissibility of a leapfrogging operation is the source of the variation in the availability of POGs. We can confirm that BrE has this operation. In BrE, a theme of the double object construction can leapfrog a higher goal in a passive in (11). But it is impossible in AmE, which signifies that it lacks this operation. This may explain the fact that a POG is illicit even in BrE when it is c-commanded by two higher arguments in (12) (i.e., *a secret compartment* and *a third-class carriage*). Evidence that hints that leapfrogging two arguments is generally impossible comes from a passive in Haya (see Branan 2023 for further arguments for this restriction and its possible analysis). A theme passive is allowed in Haya in (13). In a Haya passive, an agent can appear postverbally. When it appears, a goal passive is possible, but not a theme passive, in (14). It suggests that the theme cannot leapfrog both the agent and the goal.

- (11) The book was given Mary (by John). (OK BrE; *AmE) (Ura 2000:244)
 (12) This train has a secret compartment in a third-class carriage on *(it). (G&S 2015:67)
 (13) ekitabo kí-ka-háá-bw' ómwáana. (Haya)
 book it-P₃-give-PASS child
 'The book was given to the child.' (Duranti and Byarushengo (D&B) 1977:60)
 (14) a. omwáán' a-ka-háá-bw-a kat' ékitabo. b. *ekitabo kí-ha-háá-bw-a kat' ómwáana. (Haya)
 child he-P₃-give-PASS Kato book book it-P₃-give-PASS Kato child
 'The child was given a book by Kato.' 'The book was given to the child by Kato.' (D&B 1977:59)

6. Conclusion: POGs, which might be viewed as a peripheral phenomenon found only in certain regions, actually constitute additional evidence for the independently motivated WLM and cyclic linearization.

Selected References:

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