

To Gap or to Right Node Raise?

Early research on gapping established that in head initial languages like Polish it typically operates in a forward fashion (1a versus 1b) (cf. Ross 1970, Maling 1972) and that apparent *backward gapping* cases like (1c) are a result of a different process (scrambling and/or right node raising (RNR)).

(1) a. Jan **lubi** piwo a Maria — wino.
Jan likes beer a Maria wine
b. *Jan — piwo a Maria **lubi** wino.
Jan beer and Maria likes wine
c. Jan piwo — a Maria wino **lubi**.
Jan beer and Maria wine likes

'Jan likes beer and Maria wine.'

In this paper, I revisit the status of (1a) versus (1c) in light of recent research on *both* gapping and RNR. First, I discuss independently established differences between gapping and RNR and show that with respect to these differences backward gapping patterns with RNR. I then show how these differences follow from a multidominant analysis of RNR (see Abels 2004, Bachrach and Katzir 2009, Citko 2011, McCawley 1982, Wilder 1999, among others, for various variants of such an account).

A. Islands

RNR, unlike gapping, does not exhibit island effects (1a vs 1b) (as noted by Neij 1979 for gapping and Wexler and Culicover 1980 on RNR). In this respect, backwards gapping patterns with RNR (see 2c).

(2) a. *Maria woli studentów którzy czytają Chomskiego a Ewa — Lakoffa.
Maria prefers students who read Chomsky and Ewa Lakoff
'Maria prefers students who read Chomsky and Ewa prefers students that read Lakoff.'
b. Maria lubi studentów którzy czytają — a Ewa woli tych co rozumieją **nowe analizy**.
Maria likes students who read — and Ewa prefers these that understand new analyses'
'Maria likes students who read and Ewa prefers the ones who understand new analyses.'
c. Maria lubi studentów którzy Chomskiego — a Ewa woli tych którzy Lakoffa **czytają**.
Maria likes students who Chomsky — and Ewa prefers these who Lakoff read
'Maria likes students who read Chomsky and Ewa prefers the ones that read Lakoff.'

B. Embeddability

(3) shows that the gapped verb cannot be embedded (first noted by Hankamer 1979, more recently discussed by Johnson 2014). Neither RNR or 'backward' gapping is subject to this constraint; in both (2a) and (2b) above, the gap is embedded, with a grammatical result.

(3) *Maria woli studentów którzy czytają Chomskiego a Ewa woli tych którzy — Lakoffa.
Maria prefers students who read Chomsky — and Ewa prefers these who — Lakoff
'Maria prefers students who read Chomsky and Ewa prefers the ones that read Lakoff.'

C. Agreement

The contrast between (4a) and (4b) shows that backward gaps, unlike forward gaps, allow so-called cumulative agreement (in addition to the expected singular agreement), whereby singular subjects inside the two conjuncts can result in plural agreement on the shared predicate). I follow Grosz 2009 and take plural agreement in (4a) to be indicative of a multidominant analysis (see (6a) below)

(4) a. Jan winem — a Piotr szampanem **wznióst/wznieśli toast na bankiecie**.
Jan wine — and Piotr champagne raised.**SG/PL** toast at banquet
'Jan raised a toast at a banquet with wine and Peter with champagne.'
b. Jan **wznióst/*wznieśli** toast na bankiecie winem a Piotr szampanem.
Jan raised.**SG/*PL** toast at banquet wine and Piotr champagne

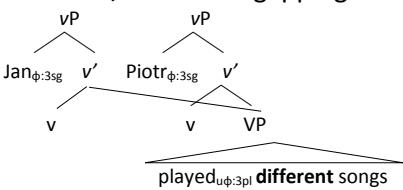
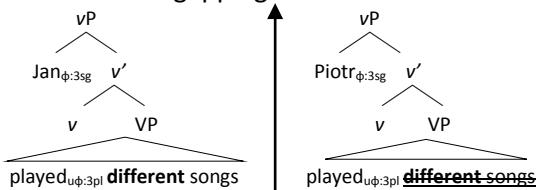
D. Relational Modifiers

Backward and forward gaps also differ with respect to the use of the relational modifiers (i.e. modifiers like *different*, *together* or *same*). (5a) allows the so-called internal reading (cf. Beck 2000, Abels 2004),

where the songs students played are different from the songs teachers played (as opposed to being different from each other, the reciprocal reading, which is the only reading available in (5b)).

(5) a. Nauczyciele na pianinie __ a studenci na akordeonie **zagrali różne piosenki**.
 teachers on piano and students on accordion played different songs
 'The teachers played different songs on the piano and the students on the accordion.'
 b. Nauczyciele **zagrali różne piosenki** na pianinie a studenci __ na akordeonie.
 teachers played different songs on piano and students on accordion
 'The teachers played different songs on the piano and the students on the accordion.'

Cumulative agreement and the use of relational modifiers both follow from a multi-dominant treatment of RNR (see Grosz 2009 on cumulative agreement and Abels 2004 on relational modifiers in RNR), where the bolded portion in (5a) is literally shared between the two conjuncts, as shown by the partial structure in (6a). The phi-features on the shared verb can be simultaneously valued by the two singular subjects inside the two conjuncts (hence plural agreement). Likewise, the relational modifier contained in the shared element is simultaneously c-commanded by the two subjects. The lack of island effects in RNR is also expected since there is no movement involved. If gapping involves a different process (such as ellipsis or ATB movement, as argued by Toosarvandani 2013 and Johnson 2009, respectively), the lack of cumulative agreement and relational modifiers follows from the structure in (6b), in which each conjunct contains a single verb, which will then only agree with its own singular subject. The remnant inside the second conjunct (*different songs*) moves to a higher focus-related projection, not indicated in (6b), followed by VP deletion (or remnant ATB movement); hence island effects in gapping.

(6) a. RNR/'backward gapping'

 b. forward gapping


Another argument in favor of analyzing 'backward gapping' as RNR comes from the well-known restriction on RNR, referred to as the Right Edge Restriction (noted already by Maling 1972). Backwards gapping becomes ungrammatical if the shared element is not final (as shown in (7), also (1b) above). On a multidominant analysis, this restriction follows from the linearization algorithm based on Kayne's (1994) Linear Correspondence Axiom, which makes the LCA sensitive to full dominance (whereby the shared VP in (6a) is not fully dominated by either *v'*) and requires the non-shared material (i.e. fully dominated material) to be linearized *before* the shared (non-fully dominated) material (cf. Wilder 1999, 2008 and Gracanin-Yuksek 2013 for concrete implementations of such an account).

(7) *Jan __ do Londynu a Piotr **poleceli różnymi samolotami** do Paryża
 Jan to London and Piotr flew different planes to Paris

To conclude briefly, this paper establishes the following points. First, backward gapping is best analyzed as right node raising. Second, RNR and gapping are different processes, subject to different restrictions. And third, ellipsis is not a unitary phenomenon; some cases of what we think of as ellipsis (i.e. gapping) involve movement and/or deletion, whereas others (i.e. RNR) involve multidominance.

Selected References

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