### On the interaction between verb movement and ellipsis: new evidence from Hungarian

## The main issue: ellipsis bleeding verb movement

Matrix sluicing in English does not allow for the presence of a finite verb (cf. (1)). This is unexpected given that sluicing involves IP-ellipsis (Ross 1969, Merchant 2001) and that a finite auxiliary obligatorily raises out of the IP in non-elliptical matrix questions (cf. (2)). This means that eliding the IP should leave the auxiliary untouched (cf. (3)). Merchant (2001) proposes that ellipsis bleeds I°-to-C°-movement, and that the structure underlying B's reply in (1) is not (3) but rather (4). Moreover, a similar account was proposed by Lasnik (1999) for the absence of V-to-*v*-raising in pseudogapping, thus extending the empirical coverage of the proposal. The problem with this analysis is that direct empirical evidence in support of it is lacking. Although it accounts for the data reviewed above, and can be neatly incorporated into the Minimalist theory of movement (Lasnik 1999, Merchant 2001, Boeckx & Stjepanović 2001), there is as yet no direct way of testing whether or not the verb has moved in matrix sluicing or pseudogapping. This paper provides precisely such evidence.

## The central data: the interrogative suffix in Hungarian

Embedded yes/no-questions in Hungarian are obligatorily marked by the suffix -e (Kenesei 1994, Nádasdy 2004, Schirm 2006). When the sentence contains a focus, this suffix must attach to the fronted verb (cf. (5)), not to the focused XP (cf. (6)). We argue that -e occupies the Foc<sup>o</sup>-head, and that it triggers verb movement to this head.

## Prerequisite for the analysis: non-wh-sluicing

Van Craenenbroeck & Lipták (2006) show that Hungarian allows both *wh*- and non*wh*-phrases as sluicing remnants (cf. (7)/(8)). They argue that Hungarian sluicing involves not the ellipsis of the complement of C° (as in English), but rather of the complement of the lower Foc°-head (cf. (9)). That explains why non-*wh*-phrases are also possible remnants, and why in Hungarian (unlike in English) the complementizer can surface to the left of the sluicing remnant (cf. *hogy* 'that' in (7)/(8)).

# The analysis: the interrogative suffix in non-wh-sluicing

Our analysis of the interrogative suffix combined with Van Craenenbroeck & Lipták's account of non-*wh*-sluicing allows us to test whether ellipsis can bleed head movement. If the verb fails to raise to Foc° in sluicing contexts, then the interrogative suffix (which occupies Foc°, cf. supra) should be able to surface in non-*wh*-sluicing in yes/no-questions even though the verb is elided. In other words, this should be the only context where the *e*-suffix occurs separated from the verb. As the example in (10) shows, this prediction is borne out. This example contains an instance of non-*wh*-sluicing in a yes/no-question. The *e*-suffix is not only obligatory, it occurs on the sluicing remnant *Annát* 'Anna'. In non-elliptical yes/no-questions, such a constellation is ill-formed (cf. (6)). This shows that the verb has not raised to Foc° and that the interrogative suffix is forced to attach to the XP in specFocP (cf. (11)).

## Extension of the analysis: ellipsis bleeding XP-movement

In predicative constructions without a copula, the *e*-suffix can attach to the (nominal or adjectival) predicate (cf. (12)). We argue that this predicate has undergone XP-movement to specFocP. Given that in yes/no-sluices the suffix once again attaches to the sluicing remnant (cf. (13)), these data show that XP-movement can also be bled by ellipsis (cf. Baltin 2002). Time permitting, we further extend our account to the behavior of the negator *nem* 'not' under ellipsis.

### Summary

In this paper we have shown that ellipsis can bleed head movement. Given that the logic of our argument is not specific to Hungarian, it carries over to the English data discussed in (1)-(4), thus providing much needed empirical support for the Merchant/Lasnik-approach.

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- (1) A: Max has invited someone.
  - B: Who (\*has)?
- (2) a.  $[_{CP}$  Who  $[_{C'}$  has  $[_{IP}$  Max  $[_{I'}$  t<sub>has</sub> invited ]]]]? b. \*  $[_{CP}$  Who  $[_{C'}$  C°  $[_{IP}$  Max  $[_{I'}$  has invited ]]]]?
- (3)  $[_{CP}$  Who  $[_{C'}$  has  $[_{HP}$  Max  $[_{H'}$  t<sub>has</sub> invited ]]]]?
- (4)  $[_{CP}$  Who  $[_{C'}$  C°  $[_{HP}$  Max  $[_{H'}$  has invited ]]-]]?
- (5) Kiváncsi vagyok, hogy JÁNOS ment\*(-e) el. curious I.am COMP János went\*(-Q) PV 'I wonder if it was János who left.'
- (6) \* Kiváncsi vagyok, hogy JÁNOS-e ment el. curious I.am COMP János-Q went PV INTENDED: 'I wonder if it was János who left.'
- (7) János meghívott egy lányt, de nem tudom hogy kit. János invited a girl but not know-1SG COMP who 'János invited a girl, but I don't know who.'
- (8) János meghívott valakit és azt hiszem, hogy BÉLÁT. János invited someone and that think-1SG COMP Béla 'János invited someone and I think it was Béla whom he invited.'
- (9) ... [CP spec [C° hogy ] [FocP kit/BéLAT Foc° [ $_{HP}$ ...]]]
- (10) János meghívott egy lányt, de nem tudom hogy ANNÁT\*(-e).
  John invited a girl but not I.know COMP Anna-Q
  'John invited a girl, but I don't know if it was Anna.'
- (11) ... [CP spec [C° hogy ] [FocP ANNAT[Foc° e ] [ $_{HP}$  ... meghivott ...-]]]
- (12) Kiváncsi vagyok, hogy Mari nagyon okos \*(-e). curious I.am COMP Mari very clever\*(-Q) 'I wonder if Mari is very clever.'
- (13) Valaki az osztályból nagyon okos. Kiváncsi vagyok, hogy MARI\*(-e). someone the class.from very clever curious I.am COMP Mari\*(-Q) 'Someone from the class is very clever. I wonder if it is Mari.'

### References

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