

Getting rid of uninterpretable features: blind movement and Justification

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Examining evidence from wh-fronting in Slavic and ellipsis/movement interactions in Hungarian, I argue that movement is not driven by uninterpretable features (uFs) on either the mover or target; rather, it occurs blindly to be “Justified” at the interfaces. I argue for dispensing with uFs and analyse the syntax as a blind engine that overgenerates structures that are filtered by convergence and (global) economy at the interfaces.

MOTIVATING MOVEMENT: It is often proposed that movement is motivated by uFs. Chomsky (2008) argues that Move is parasitic on Agree, applying when the probe bears an EPP-feature; Agree is subject to the Activation Condition, which dictates that an element is only available for Agree (and thus Move) when it bears a uF. Bošković (2007) proposes that it is a uF on the goal that drives movement; Agree obtains in the opposite configuration, when a uF is on the probe. On the other hand, Zeijlstra (2010) argues for the reverse, where movement involves uFs occurring on the probe. All three accounts have uFs driving movement in the narrow syntax. Since they are only relevant to narrow syntax, uFs are an “imperfection” in the Minimalist view. I argue that a more minimal grammar without uFs is preferable not only theoretically but also empirically, providing evidence that shows that uFs occur on neither the probe (neutrally *target*) nor the goal (*mover*).

RUSSIAN DOLL QUESTIONS: I argue that the properties of “Russian doll questions” (RDQs) in Slavic show that wh-movement is not driven by uFs on the mover. RDQs are questions with whPs that contain other whPs, like [*Which picture of [what]] did you buy?*]. Richards (2004) describes RDQs in Bulgarian, a multiple wh-fronting language: he presents RDQs with a second modifier and shows that the contained whP in RDQs has to move from its base position (cf. 1) to a second specifier either above (2b) or below (2c) the container. Looking at other multiple wh-fronting languages, I show that out-of-container movement (OCM) in RDQs only occurs when there is genuine wh-movement that is mover-driven. (3) shows that Russian RDQs do not allow OCM; I note that Russian multiple wh-fronting is focus-fronting, whereas Bulgarian multiple fronting is genuine wh-movement (Bošković 2002). I then examine Serbo-Croatian (SC). SC has “genuine” wh-movement in embedded-, long- and overt-C-wh-questions but focus-fronting in simple wh-questions (Bošković 2002). That wh-movement in SC is sensitive to embedding indicates that the syntax of the target, and not the mover, that determines whether we get wh-movement; this is confirmed by the fact that SC patterns with Russian with respect to the non-necessity of OCM in RDQs, in both wh-movement contexts (embedding, 4) and focus-fronting ones (5) (4b,5b are attributed to leftward PP-scrambling prior to wh-fronting, as SC allows for PP-scrambling in non-questions). If SC wh-movement involved uFs on whPs, it would pattern with Bulgarian. I propose (i) Bulgarian wh-fronting is driven in part by properties of the whPs; (ii) genuine wh-movement is driven by properties of C; (iii) focus-fronting is due to a PF condition that requires focused material to be in the focus domain CP (as in Bošković 2002). Thus OCM is only necessary for convergence in Bulgarian, so in the other languages it is blocked by economy.

The RDQ paradigm militates against uFs on the mover. uF-based accounts predict that *all* whPs in multiple wh-fronting languages should bear uFs of some kind; in RDQs, uFs on the contained whPs should remain unchecked when there is no OCM, causing unattested crashes (OCM-less 3a,4a,5a are OK). Thus these cases mustn't involve uFs on the whPs. One might still account for Bulgarian by proposing uFs on the whPs, but considering the increasing rarity of uF effects in the typology, I dispense with uFs and explain wh-movement in phonological terms. Movement is not *driven* in the narrow syntax, by uFs or any other unnecessary primitives; rather it occurs “blindly” without a narrow syntax trigger. Derivations with movement are well-formed since those without movement crash at PF. I describe such cases in terms of “Justification.” Regarding the RDQs, I propose that (a) genuine wh-movement is a property of C, Justified by Richards' (2010) condition on wh-prosody in the first instance; (b) a Q-particle takes the whP as its complement in wh-movement languages (Cable 2007), and in languages like Bulgarian Q is affixal, with Q-affixation to C Justifying movement. The affixal nature of Bulgarian Q is attested by the fact that whPs in CP cannot be separated by parentheticals unless the whP is D-linked (6); according to Cable (2007:249-255), D-linked whPs lack Q-particles in these cases. I show that these assumptions derive (i)-(ii) without uFs, and by assuming (iii) we explain the paradigms of multiple wh-fronting.

ELLIPSIS BLEEDS VERB MOVEMENT: next I reconsider cases where ellipsis bleeds verb movement (VM) and argue that they provide more evidence for blind movement; specifically, they show that uFs do not occur on the *target*. Craenenbroeck & Lipták (2008) provide data from Hungarian yes/no sluicing which shows that VM to Foc⁰ is

bled by ellipsis; this is shown by the fact that the affix that realizes Foc^0 , *-e*, appears on the sluicing remnant (7), even though it only shows up on the verb (after VM) in the absence of ellipsis (8). I reject the PF-movement analysis of VM and Schoorlemmer & Temmerman's (2010) related analysis of ellipsis/VM interactions because it cannot account for semantic effects of VM (cf. Vicente 2008:53-59) and is problematized by other counter-examples (from Irish, Brazilian Portuguese). Yet the bleeding effect is impossible to model with syntactic VM driven by uFs: PF-deletion does not stop uFs target from causing LF crashes, and even if we said that unchecked uFs were only relevant to PF, this would still not suffice since the Foc^0 target survives ellipsis in (8). Thus movement cannot be driven by uFs on the target either. I propose the facts can be captured by assuming that VM is syntactic movement that is Justified by affixation at PF, and that movement is costly. Standard derivations with VM are well-formed because the competing (and more economical) VM-less derivations crash at PF due to the Stray Affix Filter (i.e. unaffixed T, C), but VM is bled when ellipsis deletes an affix that normally Justifies VM: the derivations without VM outcompete those with it because both converge (stray affixes are elided) and the VM-less ones are more economical. The Hungarian case is explained by assuming that the affixal properties of T Justify both v-to-T and T-to-Foc: v-to-T only partially satisfies the affixal requirement of T, so T-to-Foc is required. This is attested by the fact that the finite verb standardly occurs to the immediate right of the element in Spec,FocP in Hungarian (the "preverbal position"). It also explains the fact that the *-e* affix must appear on the verb in non-ellipsis clauses even though the sluicing data shows that this is not due to selectional restrictions of the *-e* suffix itself: without T-to-Foc, T's affixal requirements are not satisfied so the derivation crashes at PF. With sluicing, there are two possible derivations: one with VM to Foc (9a), and one without (9b) where suffixation of *-e* to the sluicing remnant occurs before ellipsis. Both converge at PF (no pronounced stray affixes), but (9b) is more economical because (9a) involves an extra instance of Move, so (9b) blocks (9a) and ellipsis bleeds VM.

(1) Vidja (*po matematika) studenti (po matematika) ot Bulgaria (*po matematika). *Bulgarian*
 you-saw students of mathematics from Bulgaria. "You saw students of maths from Bulgaria"

(2)a. * [Kolko studenti po kakvo ot Bulgaria] vidja?
 How-many students of what from B. you-saw? "How many students of what from B did you see?"

b. [Po kakvo]_i [kolko studenti t_i ot Bulgaria] vidja? c. [Kolko studenti t_i ot Bulgaria] [po kakvo]_i vidja?

(3)a. [Skol'ko risunkov chevo iz kolektsii Dzhona] ty zabral? *Russian*

[How-many drawings of-what from collection of-John] you took

b. ?* [Chevo]_i [skol'ko risunkov t_i iz kolektsii Dzhona] ty zabral?

c. ?* [Skol'ko risunkov t_i iz kolektsii Dzhona] [chevo]_i ty zabral?

(4)a. [Koliko priča o čemu iz naše istorije] najviše voliš? *Serbo-Croatian*

how-many stories about what from our history you-like the most?

b. [O čemu]_i [koliko priča t_i iz naše istorije] najviše voliš?

c. ?* [Koliko priča t_i iz naše istorije] [o čemu]_i najviše voliš?

(5)a. [Koliko priča o čemu iz naše istorije] misliš da Ivan najviše voli?

how-many stories about what from our history you-think C John likes the most?

b. [O čemu]_i [koliko priča t_i iz naše istorije] misliš da Ivan najviše voli?

c. ?* [Koliko priča t_i iz naše istorije] [o čemu]_i misliš da Ivan najviše voli?

(6)a. ?*Koj, spored tebe, kavko e kupil? b. ?Koj, spored tebe, koja kniga e kupil? *Bulgarian*

Who according-to you what is bought Who according-to you which book is bought

"Who, according to you, bought what?" "Who, according to you, bought which book?" (Rudin 1988)

(7) János meghívott egy lányt, de nem tudom hogy Annát* (-e) *Hungarian*

John invited a girl but not I-know COMP Anna-Q "John invited a girl, but I don't know if it was Anna."

(8) Kiváncsi vagyok, hogy János elment* (-e) iskolába.

curious I.am COMP John PV-went-Q school-to "I wonder if John left for school."

(9) a. [FocP XP [Foc^0 [T+V]-e [... [t_i+V]]]] b. [FocP XP-e [Foc^0 [... [T+V]]]]

Selected references: BOŠKOVIĆ, Z., 2002. On multiple wh-fronting. *LB3*:351-383. CABLE, S., 2007. The grammar of Q. PhD, MIT. CRAENENBROECK, J.V., A. LIPTÁK, 2008. On the interaction of verb movement and ellipsis: evidence from Hungarian. *WCCFL 26*. RICHARDS, N., 2004. Against bans on lowering. *LB5*: 456-463. SCHOORLEMMER, E., T. TEMMERMAN, 2010. The interaction of verb movement and ellipsis at the syntax-PF interface. Paper at GLOW 33.