Paths in Remnant Movement:

A Single Solution to Three Problems in the Polish OVS Syntax

- **0. Introduction.** While many analyses have advocated the thesis that remnant movement (RM) serves as a replacement for head movement and leads to certain permutations in word order while it disallows some others (e.g. Cinque 2005), little attention has been devoted to the consequences RM has for clausal syntax. In this work, we illustrate one such consequence, namely the rise of crossing and nesting movement dependencies and their reflexes. In particular, we make a case for the existence of massive RM that involves entire clausal subtrees in Polish. The analysis provides a uniform solution to three robust puzzles in the Polish OVS construction in a straightforward way.
- 1. The puzzles. Polish is a canonical SVO language, which also allows for a non-canonical OVS word order, as in (1b).

The OVS construction in Polish is notorious for exhibiting three puzzles:

- **A.** Wh-movement of the Object in OVS does not produce the WCO effect (cf. (2a)), while wh-movement is otherwise sensitive to WCO (cf. (2b)):
- (2) a. $[Kt\'{o}rego sasiada]_i$ otruła $jego_i \dot{z}ona?$ $(O_{wh}VS)$ which $neighbor_{ACC}$ poisoned his $wife_{NOM}$ b. $??[Kt\'{o}rego sasiada]_i$ $jego_i \dot{z}ona$ otruła? $(O_{wh}SV)$ which $neighbor_{ACC}$ his $wife_{NOM}$ poisoned

'Which neighbor did his wife poison?'

- **B.** Similarly, Object-fronting in OVS does not produce the WCO effect (cf. (3)), while Object-fronting to the left periphery of the clause is sensitive to WCO elsewhere, as for instance in (4).
- (3) Piotra_i kocha [jego_{i/j} mama]. (OVS) Peter_{ACC} loves his mom_{NOM} 'His_{i/j} mom loves Peter_i.'
- (4) [Syna Kowalskich] $_i$ policja odesłała [jego $_{??i/j}$ rodzicom]. (O $_{dir}$ SVO $_{indir}$) Kowalski's son $_{ACC}$ police $_{NOM}$ sent-back his parents $_{DAT}$ 'The Kowalski's son, the police sent back to his parents.'
- C. As reported in Tajsner (2008: 349), in constructions with Experiencer verbs (e.g. Pol. *irytować* 'irritate', etc.), the Experiencer Object in OVS fails to bind the anaphor inside the AGENT Subject (cf. (5a)) but binds it inside the THEME Subject (cf. (5b)):
 - (5) a. *Mari e_i irytowali [sąsiedzi ze swojej $_i$ kamienicy] Mary $_{EX-ACC}$ irritated [neighbors from self house] $_{AGENT-NOM}$ 'Mary was irritated by her neighbors from her apartment-house.'
 - b. Marię $_i$ irytowały [historie ze swojego $_i$ dziecinstwa] Mary $_{EX\text{-}ACC}$ irritated [stories from self childhood] $_{TH\text{-}NOM}$ 'Mary was irritated by the stories from her childhood.' (from Tajsner 2008: 349)
- 2. The form of the solution. The solution rests on two fundamental assumptions: the reduction of the Thematic hierarchy to the hierarchy of syntactic projections in syntax and the role of c-command between the dependents. Under the first assumption (in line with neo-Davidsonian approaches to argument structure, such as Ramchand 2008), the Theta-hierarchy of AG(ENT)>EX(PERIENCER)>GO(AL)>TH(EME)(Grimshaw 1990, Dawty 1991) reflexes the order in which arguments are base-generated in the (articulate) vP, i.e. [AG [EX [GO [TH]]]]. Under the second assumption, c-command—but not linear order—is necessary for establishing

a dependency relation between elements in syntax. We argue that OVS does not involve independent movements of the Object and the Verb across the Subject (contra Witkoś 2008 and Tajsner 2008 for OVS in Polish and Bailyn 2003 for OVS in Russian), but that it involves remnant TP-fronting above the surface position of the Subject (in AgrSP), which feeds the subsequent fronting of the Object to Spec-FocP (an A'-position) as outlined in (6):

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(6) a. AG_{SUB\mathcal{F}}to-AgrSP: [F_{ocP} [XP [AgrSP AG [TP [vP-area: t_{AG} [V^{\circ} [EX [GO [TH]]]]]]]]]
b. TP-to-(some)XP: [F_{ocP} [XP [TP [vP-area: t_{AG} [V^{\circ} [EX [GO [TH]]]]]]] [AgrSP AG t_{TP}]]
c. Obj-to-FocP: [F_{ocP} [EX/GO/TH [XP [TP [vP-area: t_{AG} [V^{\circ} t_{EX/GO/TH}]]]] [AgrSP AG t_{TP}]]]
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We, then, show that puzzles A, B and C all reflect dependecy relations resulting from (6c).

3. The position of the Object in OVS. The intermediate step in (6b) of the derivation

- **3.** The position of the Object in OVS. The intermediate step in (6b) of the derivational scenario above is independently attested, as VOS sentences are also well-formed, as in (7b):
 - (7) a. $Marie_i$ okradli jej_i (własni) sąsiedzi. b. Okradli $Marie_i$ jej_i (własni) sąsiedzi. $Mary_{ACC}$ robbed her (own) neighbors_{NOM} robbed $Mary_{ACC}$ her (own) neighbors_{NOM} 'Mary's neighbors robbed her.'

Tajsner (2008) advances that left-peripheral FocP is projected below TopP in Polish and argues that the topic particle to 'it' optionally lexicalizes Top°, to the effect that fronted Foci can be optionally preceded by to and fronted Topics can be optionally followed by to as in $[T_{opP} \ \underline{XP} \ [T_{op'} \ (\underline{to}) \ [F_{ocP} \ \underline{YP} \ [F_{oc'} \ Foc^{\circ} \ [...]]]]]]$. The fronted Object can indeed either optionally follow or precede the particle to in OVS sentences (e.g. $(7a') \ (To) \ Marie_i \ (to) \ okradli \ jej_j \ sqsiedzi$, etc.) but not VOS sentences (e.g. $(7b') \ (*To) \ okradli \ (*to) \ Marie_j \ jej \ sqsiedzi$). We therefore conclude that the Object in OVS occupies an A'-specifier in the left-periphery of a clause. In turn, independent evidence in favor of the RM of the TP to the exclusion of the Subject (raised from its vP-internal θ -position to Spec-AgrSP) and against independent movements of the Object and the Verb comes from the fact that the reflexive clitic as well as certain frequentive and perfective adverbs must precede the surface position of the Subject, as in (8):

- (8) a. Marii (zawsze/często) podobał się brat Jana (*zawsze/*często)(*się). Mary $_{ACC}$ (always/often) liked REFL Jan's brother $_{NOM}$ 'Mary would (always/often) get attracted to Jan's brother.'
- **4. Puzzles A and B.** If (6) holds, A and B are readily resolved at this point: the fronting of the Object_(wh) does not produce the WCO effect in OVS since its movement does not cross the Subject (in AgrSP) despite the fact that the former ultimately c-commands the latter (from Foc-/TopP).
- 5. Puzzle C. Tajsner (2008) takes C to exhibit an asymmetry in binding reconstruction. But since Object-fronting to the left-periphery (Foc-/TopP) is of the A'-type and puzzle C involves co-indexed dependents, we argue that C in fact reduces to the asymmetry in WCO and results from (6) in the following way. In (5a) (step (6a)), the AGENT Subject raises from its vP-internal θ-position to its surface position in Spec-AgrSP. Importantly, AG is basegenerated above the Ex. Then, the remnant TP is fronted to a position above the raised AG-Subject (to some XP in step (6b)). Third, the Ex is A'-fronted to Spec-Foc-/Top-P (step (6c)). Exactly this step produces the WCO effect, as the A'-fronted Ex now crosses the silent copy of the AG-Subject with a co-indexed subconstituent. In turn, no WCO effect is produced in (5b), since it involves a nesting dependency: the A'-fronting of the Ex does not cross (the copy of) the TH-Subject, since the latter is generated below the former according to the Thematic/syntactic hierarchy.

Conclusion. If RM can target entire clausal subtrees, certain phenomena at the sentence level can receive a (fairly) straightforward account.

Selected references: Bailyn, J. 2003. Does Russian scrambling exist? In S. Karimi (ed.) ● Cinque, G. 2005. Deriving Greenberg's Universal 20 and its exceptions. LI 36: 315–332. ● Ramchand, G. 2008. Verb meaning and the lexicon; A first phase syntax. CUP. ● Tajsner, P. 2008. Aspects of the grammar of Focus. Peter Lang.