Teliga, Victoria; Brian Agbayani; Chris Golston
Prosodic constituent movement in Ukrainian

Extant accounts of scrambling in Ukrainian generally don't extend past object- and other NP-related processes (Féry et al. 2007, Mykhaylyk 2010). Slavic scrambling is analyzed as XP-movement (Corver 1992, Bošković 2005) but this runs into problems with split constituency, as does OT syntax (Gouskova 2001). Remnant movement (Sekerina 1997, Bašić 2004) runs afoul of Slavic data and theory too (Pereltsvaig 2008, Kariaeva 2009). Analyses that mix syntax with prosody (Antonyuk-Yudina & Mykhaylyk 2009; Mykhaylyk 2012) are more promising but we show that they also fail because they assume *syntactic movement*. Ukrainian scrambles only *prosodic* objects, it ignores syntactic principles, and it respects phonological ones.

A great deal speaks against syntactic analyses of Slavic scrambling. It is category-blind, affecting N, V, A, P, Det, Adv, etc., and thus hard to motivate in terms of feature-checking, EPP, etc. It is also blind to the head/phrase distinction. Most seriously, though, it moves strings that don't form syntactic constituents:

(1) *cieju$_a$* *radisnoju$_b$* sxvyl^{j}ovanyj [*t$_a$* [*t$_b$* [*novynoju*]]]
　　this-INSTR good-INSTR excited-NOM 　　　　news-INSTR
　　'excited by this good news'

(2) u$_a$ červonyx$_b$ vin žyv [*t$_a$* [bahat^{j}ox [*t$_b$* budynkax]]]
　　in red he lived 　　many 　　houses
　　'He lived in many red houses.' (Fery et al. 2007:24)

(3) *vona$_a$* *zavdannja$_b$* ja vpevnena, ščo [*t$_a$* [vykonaje *t$_b$*]].
　　she-NOM task-ACC I am.sure that 　　perform-FUT
　　'I'm sure that she will perform the task.'

Scrambling ignores robust syntactic islands including the CSC (3), LBC (4), Subject Condition (Ross 1967), Adjunct Condition (Huang 1982), Freezing Islands (Wexler & Culicover 1980), and Anti-Locality (Grohmann 2002).

(4) *mašynu$_a$* maje [*t$_a$* i *kvartyru*]
　　car-ACC has 　　and apartment-ACC
　　'has a car and an apartment'

(5) *taku$_a$* vona spivala [*t$_a$* [*garnu* *pisn^{j}u*]]
　　such-ACC she sang 　　beautiful-ACC song-ACC
　　'She sang such a beautiful song.'

Scrambling is LF-blind, fronting reflexives (6) and reciprocals (7) past their antecedents:

(6) [*sebe$_i$*] ja$_i$ pro ce ves^j čas pytaju *t*
　　self-ACC I about this-ACC all time ask
　　'I ask myself about this all the time.'

(7) duže [*odyn* vid *odnogo*]$_i$ vony$_i$ vidriznjajut^{j}s^{j}a *t*
　　greatly one-ACC from another-ACC they differ
　　'They differ greatly one from another.'

It can move all, part, or none of a focus/topic (Fanselow & Lanertová 2012: Czech, German), and it splits names and compounds (8-9), thought to be syntactic atoms:

(8) *Olenu$_a$* ja s^{j}ogodni zustriv [t$_a$ *Verbyc^{j}ku*]
　　Olena-ACC I today met 　　Verbyc'ka-ACC
　　'Today I met Olena Verbyc'ka.'

(9) *v$_a$ školi$_b$* vin navčavsja [t$_a$ [t$_b$ *internati*]]
　　in school-PREP he studied 　　boarding-PREP
　　'He studied in a boarding-school.'

Three kinds of data implicate phonology directly. First, scrambled strings are ω and φ even when they aren't X or XP. Thus in (1-3), the moved strings are (probably recursive) ωs, consisting of a function word and following content word (Selkirk 1986): in (1) the

scrambled material was a ω before scrambling, but in (2-3) the scrambled string is a ω *only after scrambling*; as in Japanese, scrambling only requires that the moved material form a prosodic consituent at the end of the phonological day (Agbayani et al 2015). Second, polysyllabic prepositions can scramble (10) but monosyllabic ones can't, a purely prosodic restriction.

(10) *Prot^{j}agom$_a$* vony zustričalys^j [t$_a$ [*lita*]]
　　during they met summer-GEN
　　'They were seeing each other during the summer.'

Third, scrambling is blocked if it brings together homophonous function words (11) but allowed in otherwise identical contexts (12), an OCP effect requiring phonological identity.

(11)* *Tomu* [tomu čolovikovi]$_a$ vona ne mogla dovirjaty t$_a$
　　that's.why that-GEN man-GEN she not could trust-INF
　　'That's why she couldn't trust *that man*.'

(12) *Tomu* [*tij* *žinci*]$_a$ vona ne mogla dovirjaty t$_a$
　　that's.why that-GEN woman-GEN she not could trust-INF
　　'That's why she couldn't trust *that woman*.'

These facts show that phonology plays a direct role in how scrambling works in Ukrainian.

Sekerina (1997) distinguishes *split scrambling* (moving less than an XP) from *XP-scrambling* (moving a full XP). We claim for Ukrainian that

- *split-scrambling* is movement of ω,
- *XP-scrambling* is movement of φ, and that
- scrambling is completely phonological and makes no reference to anything syntactic.

Following recent work on phonological movement (Agbayani & Golston 2010; Agbayani et al. 2015; Bennett et al. to appear) we argue that ω and φ in Ukrainian are scrambled within a purely prosodic tree *after* all syntactic structure has been converted into prosodic structure. This eliminates the need for a pragmatic component that can permute word order after syntax (Kallestinova 2007).

References

Agbayani, Golston. 2010. Phonological movement in Classical Greek. *Language* **86.1**. 133-167.

Agbayani, Golston, Ishii.2015.Syntactic and prosodic scrambling in Japanese. *NLLT* **33.1**. 47-77.

Antonyuk-Yudina, Mykhaylyk. 2013. Prosodic effects in word order. Proceedings *NELS*.

Bašić 2004. Nominal subextraction and the structure of NP in Serbian and English. Tromsø diss.

Bennett, Elfner, McCloskey. to appear. Lightest to the right. *Linquistic Inquiry*.

Bošković. 2005. On the locality of LBE and the structure of NP. *Studia Linguistica* **59**. 1-45.

Féry, Paslawska, Fanselow. 2007. Nominal split constructions in Ukrainian. *JSlavLS* **15.1**. 3–48.

Huang. 1982. *Logical relations in Chinese and the theory of grammar*. MIT diss.

Kariaeva. 2009. Radical discontinuity: syntax at the interface. Rutgers diss.

Mykhaylyk. 2010. *Optional object scrambling in child and adult Ukrainian*. Stony Brook diss.

Mykhaylyk. 2012. Change in prosody as an alternative. *Penn Working Papers in Linguistics*.

Pereltsvaig. 2008. Split phrases in colloquial Russian. *Studia Linguistica* **62.** 5–38.

Ross. 1967. *Constraints on variables in syntax*. MIT diss.

Sekerina. 1997. The syntax and processing of scrambling constructions in Russian. CUNY diss.