



# Prosodic Constituent Movement in Ukrainian

Brian Agbayani<sup>1</sup>, Chris Golston<sup>1</sup> & Victoria Teliga<sup>2</sup>

California State University Fresno<sup>1</sup> & London<sup>2</sup>

OCP13 Budapest  
13–16 January 2016

## Abstract

Extant accounts of scrambling in Ukrainian generally don't extend past object- and other NP-related processes (Féry et al. 2007, Mykhaylyk 2010). Analysis of Slavic scrambling as XP movement (Corver 1992, Bošković 2005) 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 also fail. Ukrainian scrambles only prosodic objects, ignores syntactic principles, and respects phonological principles. We propose it is *phonological movement* (Agbayani & Golston 2010, to appear; Agbayani, Golston & Ishii 2015; Bennett, Elfner, & McCloskey to appear).

## Scrambling is not syntax

- Scrambling ignores part of speech (N, V, A, Adv, Det...) hard to model with feature-checking, EPP or the like
- Scrambling ignores X<sup>0</sup>/XP distinction no uniform landing site for movement (SPEC or X<sup>0</sup>)
- Sekerina (1997) distinguishes *split scrambling* (moving less than an XP) from *XP-scrambling* (moving a full XP)
- Scrambling ignores syntactic constituency
- Scrambling ignores islands
- Coordinate Structure Constraint (Ross 1967)

*mašynu<sub>a</sub>* maje [ *ta* i *kvartyrū* ]  
car has and apartment  
'has a car and an apartment'

Left Branch Condition (Ross 1967)

*skil'ky<sub>a</sub>* vona pročytala [ *ta* cikavyx knyžok ]  
how.many she read interesting books  
'How many interesting books has she read?' (Fery e.a. 2007)

Subject Condition (Ross 1967)

*bagato<sub>a</sub>* mynulo [ *ta* rokiv ]  
many have.passed years  
'many years have passed'

Adjunct Condition (Huang 1982)

*va riznyx<sub>b</sub>* meškajut' [ *ta* [ *tb* [ *mistah* ] ] ]  
in different they.live cities  
'They live in different cities'

Freezing Islands (Wexler & Culicover 1980)

*vidsotkiv<sub>b</sub>* [ *na dvadc'at' tb* ] *a* zris *ta* riven'  
percent by twenty increased level  
'The level increased by twenty percent'

Anti-Locality (Grohmann 2002)

[ *duže<sub>a</sub>* [ *v* [ *ta* tisnyh stosunkah ] ] ]  
very in close relationship  
'in very close relationship'

Accounts based on syntax or syntax+prosody have to explain why scrambling ignores so much syntax.

## Scrambling is not syntax (cont.)

- Scrambling splits names and compounds (syntactic atoms)

*Olenu<sub>a</sub>* ja s'ogodni zustriv [ *ta* *Verbyc'ku* ]  
Olena I today met Verbyc'ka  
'Today I met Olena Verbyc'ka'

*va školib<sub>b</sub>* vin navčavsja [ *ta* [ *tb* *internati* ] ]  
in school he studied boarding  
'He studied in a boarding-school'

- Scrambling ignores LF entirely

Reflexives scramble past their antecedents

*sebe<sub>a</sub>* ja<sub>a</sub> pro ce ves' čas pytaju *ta*  
self I about this all time ask  
'I ask myself about this all the time'

Reciprocals scramble past their antecedents

*duže* [ *odym vid odnogo* ] *a* vony<sub>a</sub> vidriznjajut'sja *ta*  
greatly one fromanother they differ  
'They differ greatly one from another'

- Scrambling can be *partial* and is *optional* (Fanselow & Lanertová 2012: Ukrainian data is the same)

*What did you do? What happened?*  
[ *Einen HAsen* ]<sub>i</sub> habe ich *t<sub>i</sub>* gefangen  
a rabbit have I caught  
'I caught a rabbit.' [German]

*What did you see there?*  
Wir haben eine LaWine gesehen  
we have an avalanche seen  
'We saw an avalanche!' [German]

Feature-checking can't be *partially satisfied* or done *in situ*.  
Focus/topic aren't lexical properties, so using them in syntax violates inclusiveness condition (Chomsky 1995)

## Scrambling is phonology

- Sekerina's "split scrambling" = movement of ω

*Olenu<sub>ω</sub>* ja s'ogodni zustriv ω *Verbyc'ku*  
Olena I today met Verbyc'ka  
'Today I met Olena Verbyc'ka'

( *v školib<sub>ω</sub>* )<sub>ω</sub> vin navčavsja ω *internati* ] ]  
in school he studied boarding  
'He studied in a boarding-school'

( *cieju (radisnoju)<sub>ω</sub>* )<sub>ω</sub> sxvylovanj ω novynoju  
this good excited news  
'excited by this good news'

- Sekerina's "XP-scrambling" = movement of φ

*duže* ( *odym vid odnogo* )<sub>φ</sub> vony<sub>a</sub> vidriznjajut'sja φ  
greatly one fromanother they differ  
'They differ greatly one from another'

*vona<sub>ω</sub> zavdannja<sub>φ</sub>* ja vpevnena ščo ω vykonaje φ  
she task I am.sure that will.perform  
'I'm sure that she will perform the task'

- Scrambling is sensitive to syllable count

polysyllabic P can front, monosyllabic P cannot

*prot'agom<sub>ω</sub>* vony zustričalys' ω *lita*  
during they met summer  
'They met during summer.'

\**u<sub>σ</sub>* vony zustrilys' σ *universyteti*  
in they met university  
'They met in the university.'

## Scrambling is phonology (cont.)

- Scrambling is sensitive to the OCP (Leben 1973) and *blocked* if it brings together homophonous ω within ω

\**Tomu tomu čolovikovi* vona ne mogladovirjaty φ  
thus that man she not could trust  
'That's why she couldn't trust *that man*.'

*Tomu tij žinci* vona ne mogla dovırjaty φ  
thus that woman she not could trust  
'That's why she couldn't trust *that woman*.'

## General Claim

Slavic Scrambling

ignores part of speech, X<sup>0</sup>/XP distinction, syntactic constituency, syntactic islands, binding issues at LF; and splits syntactic atoms  
*because scrambling is not syntax*

Slavic scrambling

respects prosodic constituency, OCP, prosodic size; and moves ω and φ  
*because scrambling is phonology*

Slavic scrambling is *phonological movement*

ω and φ scrambled within a purely prosodic tree  
*after* all syntax is done, subject only to phonology

Ancient Greek	Agbayani, Golston (2010)
Irish	Bennett, Elfner, McCloskey (to appear)
Japanese	Agbayani, Golston, Ishii (2015)
Latin	Agbayani, Golston (to appear)
Russian	Agbayani, Golston, Henderer (2011)
Ukrainian	Teliga 2011 and here

Syntax *feeds and precedes* phonology

Syntax	[V, [D, [Adj, N]]] <sub>VP</sub>	(immediate dominance)
Interface	(ω (σ ω) ω)φ	(linear precedence)
Phonology	((σ ω) ω ω)φ	(scrambling)

We claim more generally that

There is no "movement at PF"  
no "syntactic movement late in the derivation"  
*Slavic scrambling has nothing to do with syntax*

Syntax and prosody are never co-present  
no "prosodic movement with a syntactic tree"  
*Slavic scrambling is purely phonological*

## References

- Agbayani, Brian & Chris Golston. 2010. Phonological movement in Classical Greek. *Language*.
- Agbayani, Brian & Chris Golston. to appear. Phonological constituents and their movement in Latin. *Phonology*.
- Agbayani, Brian, Chris Golston & Dasha Henderer. 2011. Phonological movement. *Proceedings WCCFL 28*.
- Agbayani, Brian, Chris Golston & Toru Ishii. 2015. Syntactic and prosodic scrambling in Japanese. *Natural Language and Linguistic Theory*.
- Antonyuk-Yudina, Svitlana and Roksolana Mykhaylyk. 2013. Prosodic effects in word order. *Proceedings of NELS*.
- Bašić, Monika. 2004. *Nominal subextraction and the structure of NP in Serbian and English*. Doctoral dissertation, Tromsø.
- Bennett, Ryan, Emily Elfner and Jim McCloskey. to appear. Lightest to the right. *Linguistic Inquiry*.
- Bokšović, Željko. 2005. On the locality of LBE and the structure of NP. *Studia Linguistica*.
- Chomsky, Noam. 1995. *The minimalist program*.
- Féry, Caroline, Alla Paslawska and Gisbert Fanselow. 2007. Nominal split constructions in Ukrainian. *Journal of the Slavic Linguistics Society*.
- Huang, C.-T. James. 1982. *Logical relations in Chinese and the theory of grammar*. Doctoral dissertation, MIT.
- Kariaeva, Natalia. 2009. *Radical discontinuity: syntax at the interface*. Doctoral dissertation, Rutgers University.
- Leben, William R. 1973. *Suprasegmental phonology*. Doctoral dissertation, MIT.
- Mykhaylyk, Roksolana. 2010. *Optional object scrambling in child and adult Ukrainian*. Doctoral dissertation, SUNY Stony Brook.
- Mykhaylyk, Roksolana. 2012. Change in prosody as an alternative. *Penn Working Papers Linguistics*.
- Pereltsvaig, Asya. 2008. Split phrases in colloquial Russian. *Studia Linguistica*.
- Ross, John R. 1967. *Constraints on variables in syntax*. Doctoral dissertation, MIT.
- Sekerina. 1997. *The syntax and processing of scrambling constructions in Russian*. Doctoral dissertation, CUNY.
- Teliga, Victoria. 2011. Phonological movement in Ukrainian. Master's thesis, CSUFresno.