Prosodic evidence for an ellipsis-based approach to “either…or…” sentences

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Overview

Puzzle about *either…or…* sentences:
- *Either* seems to always be adjacent to disjunction (***either*** *A or B*)
- …except for surprising facts with unexpected disjunction

Competing syntactic analyses: *movement-based approach* and *ellipsis-based approach*

I present **prosodic evidence** for the ellipsis-based approach

Implications for the syntax-prosody interface:
- Prosody can provide evidence for syntactic claims
- Prosodic structure might reflect syntax more closely than some theories claimed

Puzzle and competing analyses

Puzzle: *Either* can be adjacent to disjunction (1a) (e.g. Sag et al. 1985) or appear higher (1b-d) (observed by Larson 1985, Schwarz 1999, den Dikken 2006, among others)

(1) a. Lillian will look for **either** Lauren or Bella.
b. Lillian will **either** look for Lauren or Bella.
c. Lillian **either** will look for Lauren or Bella.
d. **Either** Lillian will look for Lauren or Bella.

Movement-based approach: *Either* originates as the sister of disjunction (DisjP), and then moves to its surface position (Larson 1985 and Johannessen 2005)

(2) a. Lillian will look for **either** [$_{DisjP}$ Lauren or Bella].
b. Lillian will **either**$_i$ look for **t**$_i$ [$_{DisjP}$ Lauren or Bella].
c. Lillian **either**$_i$ will look for **t**$_i$ [$_{DisjP}$ Lauren or Bella].
d. **Either**$_i$ Lillian will look for **t**$_i$ [$_{DisjP}$ Lauren or Bella].

Ellipsis-based approach: *Either* is the sister of DisjP. When it seems high, ellipsis has applied in the noninitial disjuncts (Schwarz 1999 and Han & Romero 2004)

(3) a. Lillian will look for **either** [$_{DisjP}$ Lauren or Bella].
b. Lillian will **either** [$_{DisjP}$ look for Lauren or ~~look for~~ Bella].
c. Lillian **either** [$_{DisjP}$ will look for Lauren or ~~will look for~~ Bella].
d. **Either** [$_{DisjP}$ Lillian will look for Lauren or ~~she will look for~~ Bella].

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References are available by email on request.

Different prosodic predictions

Assumption about syntax-prosody mapping: Prosodic phrases largely reflect syntactic phrases (Selkirk 1986, 2009, 2011; Wagner 2010; Elfner 2012, 2015)

(4) a. Subclause -> Intermediate phrase (iP)
They saw (Mary $_{iP}$) and Bill Sawyer too.
b. Clause -> Intonational phrase (IP)
(They saw Mary $_{IP}$) and Bill saw her too.

	Syntactic analysis of (1d)	Prosodic prediction
Movement-based account	Either$_i$ Lillian will look for t$_i$ [$_{DisjP}$ Lauren or Bella].	Either Lillian will look for (Lauren $_{iP}$) or Bella.
Ellipsis-based account	Either [$_{DisjP}$ Lillian will look for Lauren or ~~she will look for~~ Bella].	(Either Lillian will look for Lauren $_{IP}$) or Bella.

- *Ellipsis-based account:* since the size of disjunction is different for (1a-d), the prosodic boundary after *Lauren* should differ
- *Movement-based account:* since the disjunction is the same for (1a-d), the prosodic boundary after *Lauren* should be the same

Methods

- Production study with 13 participants
- 2 conditions: Critical Condition (1a-d) and Control Condition for sanity check

Either’s position	Critical Condition	Control Condition
A	(1a)	
B	(1b)	Lillian will **either** look for Lauren or she will look for Bella.
C	(1c)	Lillian **either** will look for Lauren or she will look for Bella.
D	(1d)	**Either** Lillian will look for Lauren or she will look for Bella.

- Transcribed the boundary after *Lauren* using break indices (0-4), which was supplemented by durational measures, e.g. duration of the last rime of *Lauren*
- Ordinal logistic and linear mixed effects models, with helmert-coded item as fixed effect

Discussion

- **Prosodic evidence for syntactic claim:** Supports the ellipsis-based account but not the movement-based account
- **Syntax-prosody mapping:** Prosodic structure might correspond to syntactic structure more closely than some theories claimed, distinguishing XPs vs. X-bars ((1a-b) vs. (1c)), and various subclauses (DP vs. vP) ((1a) vs. (1b))

Results