

# 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**<sub>i</sub> look for t<sub>i</sub> [DisjP Lauren or Bella].  
 c. Lillian **either**<sub>i</sub> will look for t<sub>i</sub> [DisjP Lauren or Bella].  
 d. **Either**<sub>i</sub> Lillian will look for t<sub>i</sub> [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)**      b. Clause -> **Intonational phrase (IP)**  
 They saw (Mary **iP**) and Bill Sawyer too.      (They saw Mary **iP**) and Bill saw her too.

	Syntactic analysis of (1d)	Prosodic prediction
Movement-based account	Either <sub>i</sub> Lillian will look for t <sub>i</sub> [DisjP Lauren or Bella].	Either Lillian will look for (Lauren <b>iP</b> ) or Bella.
Ellipsis-based account	Either [DisjP Lillian will look for Lauren or <del>she will look for</del> Bella].	(Either Lillian will look for Lauren <b>iP</b> ) 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

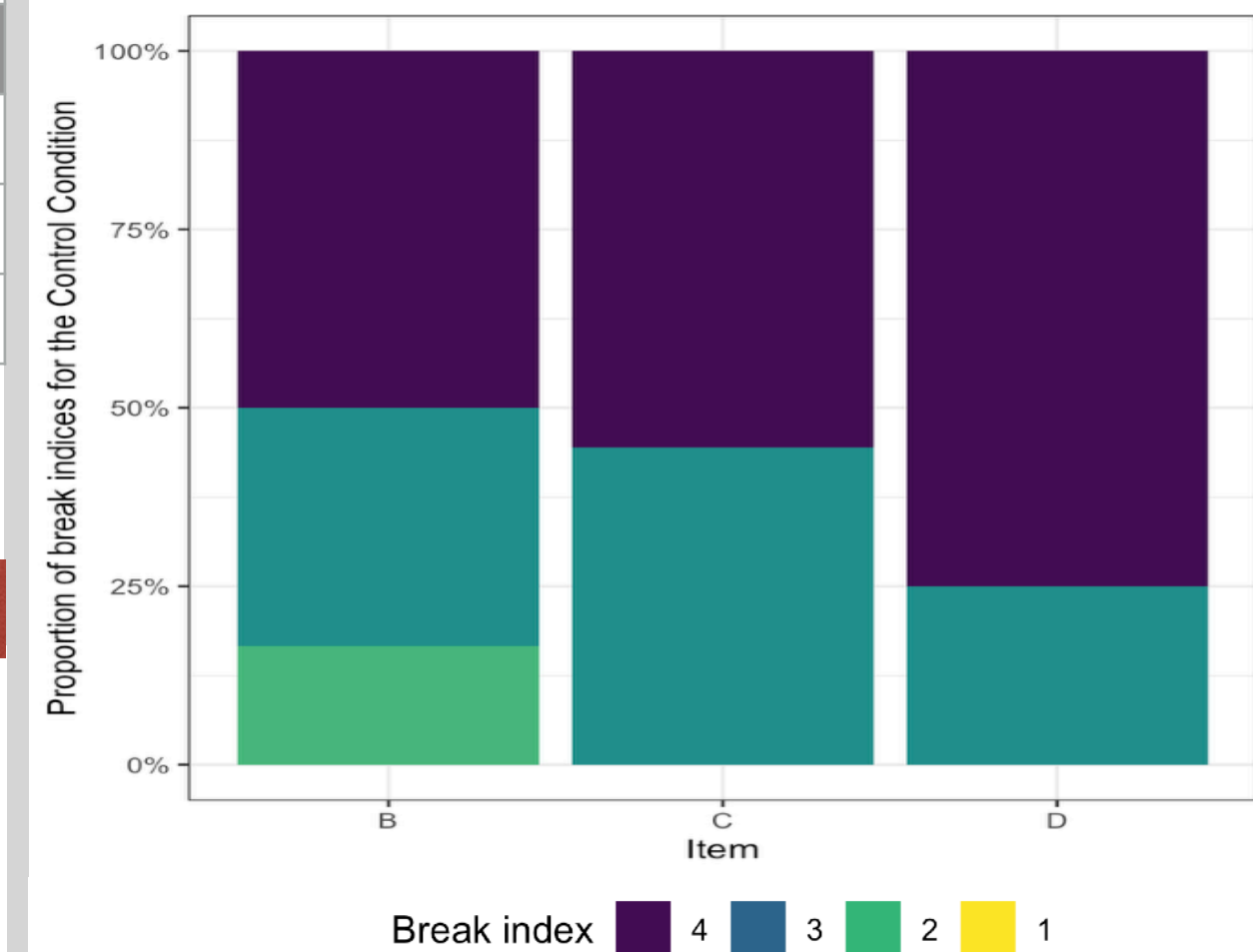
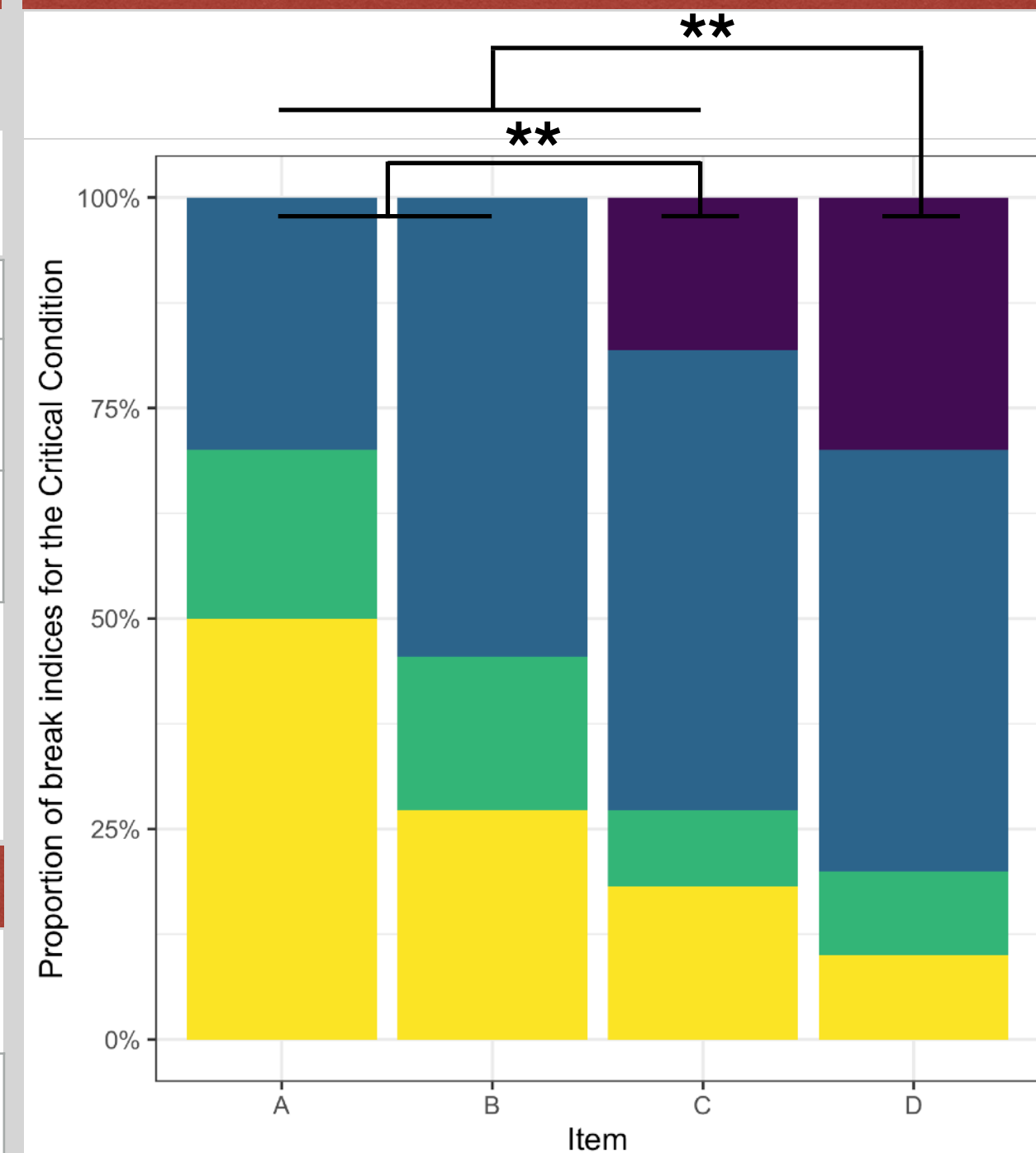
<i>Either</i> 's position	Critical Condition	Control Condition
A	(1a)	
B	(1b)	Lillian will <b>either</b> look for Lauren or she will look for Bella.
C	(1c)	Lillian <b>either</b> will look for Lauren or she will look for Bella.
D	(1d)	<b>Either</b> Lillian will look for Lauren or she will look for Bella.

- 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



Break index 4 (Purple) 3 (Blue) 2 (Green) 1 (Yellow)