# Derivational Constraints on ATB Movement

Eman Al Khalaf

**1. Objective:** This study probes into experimental evidence for the syntactic properties of Across-the-Board (ATB) movement and whether ATB subtypes (wh-questions, relativization, comparatives and topicalization) are derivable with current minimalist approaches. Extraction from a conjunct may occur in ATB constructions in violation of the Coordinate Structure Constraint (1).

(1) What did John buy _ and Mary read _?

Recent proposals in the literature posit these constructions as being licensed by multidominant structures and movements such as External Remerge (Park et al. 2019), sideward movement (Ting 2024), and conditioned by considerations in PF such as cyclic linearization and Conjunct Adjacency Condition. All instances of ATB movement are not treated syntactically in the same fashion, though, and the question remains whether speaker intuitions track these differences.

**2. Methodology:** This hypothesis was tested in the present study in an experiment with an acceptability judgment task from which four subtypes of ATB movement were targeted: wh-ATB, relativization ATB, comparative ATB, and topicalization ATB. Forty non-native Arabic native speaker participants were exposed to 40 ATB sentences (10 samples of each subtype) with non-ATB controls. Example test items are shown in (2) and (3).

(2) This is the book that John liked _ and Mary disliked _.
(3) That student, John praised _ and the teacher punished _.

All materials were built with the syntactic effect of ATB movement eliminated while lexical content and semantic plausibility were kept constant. Syntactic analysis starts from recent computational work with previous path-based constraints on ATB (Laszakovits & Graf 2020) and requiring tree-based constraints to be able to capture shared dependencies among non-hierarchically related conjuncts. Our morphological compatibility in ATB movement also takes a cue from Hein's (2019) account for case matching via syncretism.

**3. Results:** The results indicate a strict ranking of acceptability among ATB types: wh-ATB constructions received high scores, with relativization ATB and comparative ATB receiving somewhat lower but nevertheless fairly high scores while topicalization ATB received low scores by and large.

**4. Discussion:** The results adhere to the prediction of derivational strength of wh-ATB constructions as a result of compatibility with cyclic linearization and symmetric conjunct structure. Topicalization ATB will inevitably violate constraints on movement at the left edge and will fail to satisfy phasehood and PF-align. The findings provide strong empirical support for the hypothesis that ATB movement is syntactically non-uniform. The sole ATB constructions acceptable to native speakers are those obeying derivational symmetry and structural parallelism. Significantly, this contradicts earlier arguments from Principle C reconstruction asymmetries (Szarvas 2024), and rather suggests that structurally configurational considerations rather than binding conditions dictate ATB acceptability. This study contributes to experimental syntax research by experimentally confirming recent derivational coordination and movement theories. The study also illustrates how syntactic theory may be guided by evidence and how minimalist devices like External Remerge and sideward movement and PF constraints may be used to provide an account of ATB dependencies.