Evaluation Order Effects in Dynamic Continuized CCG: From Negative Polarity Items to Balanced Punctuation

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Motivation

- Combinatory Categorial Grammar’s (CCG; Steedman, 2000) flexible treatment of word order and constituency enable it to employ a compact lexicon
- This is an important factor in CCG’s successful application to a range of NLP problems but can be problematic for linguistic phenomena where linear order plays a crucial role

Dynamic Continuized CCG and NPI Licensing

CCG fails to rule out examples where the licensor of an NPI follows the NPI in a verb phrase (Fig. 1b)
- Barker & Shan’s (2014) account in Continuized CCG, using the tower top for licensing, carries over straightforwardly to the present framework
- Word order changes on the tower bottom are unproblematic (Fig. 4, right)

Evaluation Order and Balanced Punctuation

- Crossing composition makes it impossible for CCG to accurately track balanced punctuation on the right periphery (Fig. 6: White & Rajkumar, 2008)
- With Dynamic Continuized CCG, the tower top can be successfully used for this purpose (3), and word order changes on the tower bottom are unproblematic (Fig. 8)

Monadic Semantics for Appositives

- Monadic sequencing straightforwardly allows multiple predications for NPs with appositives (cf. Martin, 2016)

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