Poster proposal:

“On the one hand” as a Cue to Anticipate Upcoming Discourse Structure

Given evidence of anticipation within sentences for upcoming sounds, words, and syntactic structures (Delong, et al. 2005; Kamide, et al., 2003; Levy, 2008), an open question is how comprehenders use cross-sentence cues to anticipate relationships between sentences. Within sentences, words combine via syntactic rules to determine what structures are possible. Between sentences, the possible relationships that can hold between pairs of propositions, such as cause-consequence and claim-argument, create a less constrained discourse structure (Asher & Lascarides, 2003; Hobbs, 1990; Kehler, 2002). Based on evidence of syntactic prediction (e.g., dependencies like either…or, Staub, 2006), our goal is to test what comprehenders predict based on the marker On the one hand.

Three hypotheses were formulated for this study:

H1. Readers expect On the one hand to be followed by any type of contrast marked with On the other hand specifically;

H2. Readers have contrast-specific expectations, where only content that contrasts with the On the one hand-clause will satisfy their expectations (regardless of the connective used);

H3. Readers have a “flat” prediction of contrast, where any contrastive clause can satisfy the prediction set up by On the one hand (regardless of the connective used).

Stories containing one of three types of intervening sentences (non-contrastive (example 1a), globally contrastive (1b), or locally contrastive (1c)) between On the one hand and On the other hand were tested in a story acceptability study, story continuation study, and eye-tracking study.

The results show that On the one hand does not have to be followed by On the other hand; the connective but can also satisfy the anticipation for a contrast, especially if it is used in a globally contrastive sentence. This is not compatible with H1. In particular, reading times on On the other hand were longer in stories with a globally contrastive sentence than in stories with a locally contrastive sentence. The results support H2 and disconfirm H3: readers can build structure-specific expectations based on On the one hand. We conclude that comprehenders use discourse connectors to predict a specific discourse structure and can maintain such predictions across clauses.
Example and illustration

(1) **Sentence A**: Joseph is pondering whether he should take a job offer from the Edinburgh Zoo.

**Sentence B**: On the one hand, he needs the money, because he should start paying off his student loans this year.

**Sentence C**:  
   a. Also, his car needs to be serviced by the end of the month. [no contrast]  
   b. But he could keep looking for a nicer, better-paying job. [global contrast]  
   c. But the loans could be deferred for a few more months. [local contrast]

**Sentence D**: On the other hand, he hates the idea of cleaning out panda cages every day.

![Diagram of local and global contrast conditions]

*Figure 1. Attachment height of the but-clause in the local and global contrast conditions*

**References**


