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
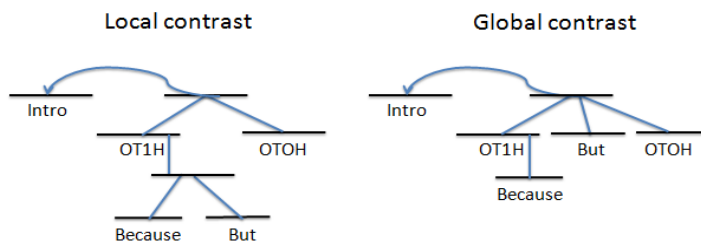   every day.

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

References

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