Prior studies show anticipation of upcoming material within sentences (e.g. Kamide et al., 2003; Levy, 2008; Staub & Clifton, 2006)

Between sentences: discourse creates less constraining structure than syntax

But certain phrases constrain possible structures: *On the one hand* (OT1H), *On the other hand* (OTOH)

**Main question**

How do comprehenders build discourse structure? Specifically, how fine-grained are their predictions of upcoming contrast based on OT1H?

**Hypotheses**

H1 OT1H cues specific surface form “On the other hand”
H2 OT1H cues a general contrast but structure-insensitively
H3 OT1H cues a contrast with sensitivity to structure

**Manipulation:** intervening contrast attaching to OT1H-clause (global, Ex. a) or because-clause (local, Ex. b)

**Example item**

Joseph is pondering whether he should take a job at the zoo. *On the one hand*, he needs the money that this job will pay, *because* he should start paying off his student loans.

**Expt. 1: Coherence Judgement Study**

**Question**

Do coherence ratings reflect presence of contrast (OTOH present/absent) and discourse structure? (local/global/none)

- 144 participants each rated 10 of 24 items on a 7-point scale
- 6 conditions: presence of OTOH-sentence varied

**Results:**

Absence of OTOH lowers ratings, depending on discourse structure: only for items without global contrast (against H2)

**Expt. 2: Story completion study**

**Question**

Are stories in the local condition continued more often with a contrastive sentence than stories in the global condition?

- 90 participants each completed 8 items without OTOH-sent.
- Coding: continuation type (+ or − contrast) and connective

**Results:**

Fewer contrastive continuations in global than in local condition (evidence against H2, for H3)

29% of contrastive markers were connectives other than OTOH, e.g. *but, although, however* (evidence against H1)

**Expt. 3: Eyetracking-while-reading study**

**Question**

Do structure-sensitive expectations of contrast also influence on-line processing of OTOH?

- 32 participants read 24 items
- Reading times of OTOH were compared

If readers immediately build and maintain fine-grained discourse structure, then OTOH should be read slower in global condition

**Results:**

RTs slower in global than local condition (evidence for H3)

**Summary and Conclusions**

**Offline and on-line studies indicate that:**

- a local contrast does not completely satisfy expectation of contrast set up by OT1H, but a global contrast does
- evidence for H3: readers build fine-grained expectation of scope contrast based on OT1H

**More generally, these findings suggest that:**

- readers build and maintain predictions of upcoming discourse relations across multiple sentences
- these predictions are structure-sensitive and can be elicited by discourse markers