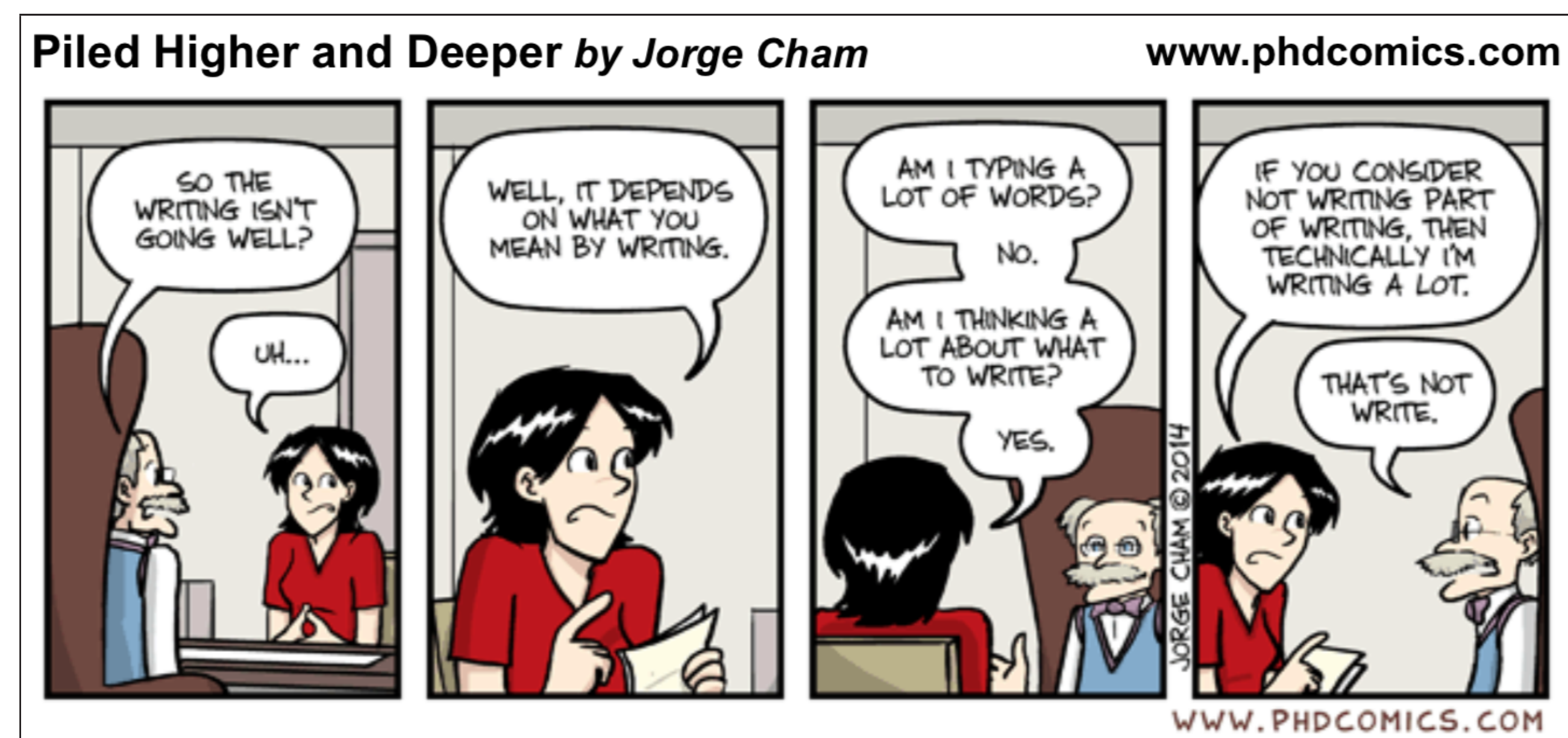# FROM LOCAL HESITATIONS TO GLOBAL IMPRESSIONS OF A SPEAKER'S FEELING OF KNOWING

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INTRODUCTION AND BACKGROUND

- **Listener-Speaker dynamic** – The speaker **encodes**, the listener **decodes**.

- **Previous works** – the link between **fillers** and the **listener's perception** of the speaker's **metacognitive state** (confidence/commitment to their utterance).

- **Drawback i)** – **Limited contexts may not generalise** to more natural forms of spontaneous speech.

- **Drawback ii)** – **Heirarchical analysis**, does **utterance level** use of speaker's fillers lead to an **overall impression** for the listener?

- **Drawback iii)** – **Vast literature on fillers**, sometimes no cross-study linkage.

- **Goal** – Interaction between **what was said** and **how it was said**, and then, **how it affects** the listener.

How do we as listener's perceive the speaker's use of fillers?
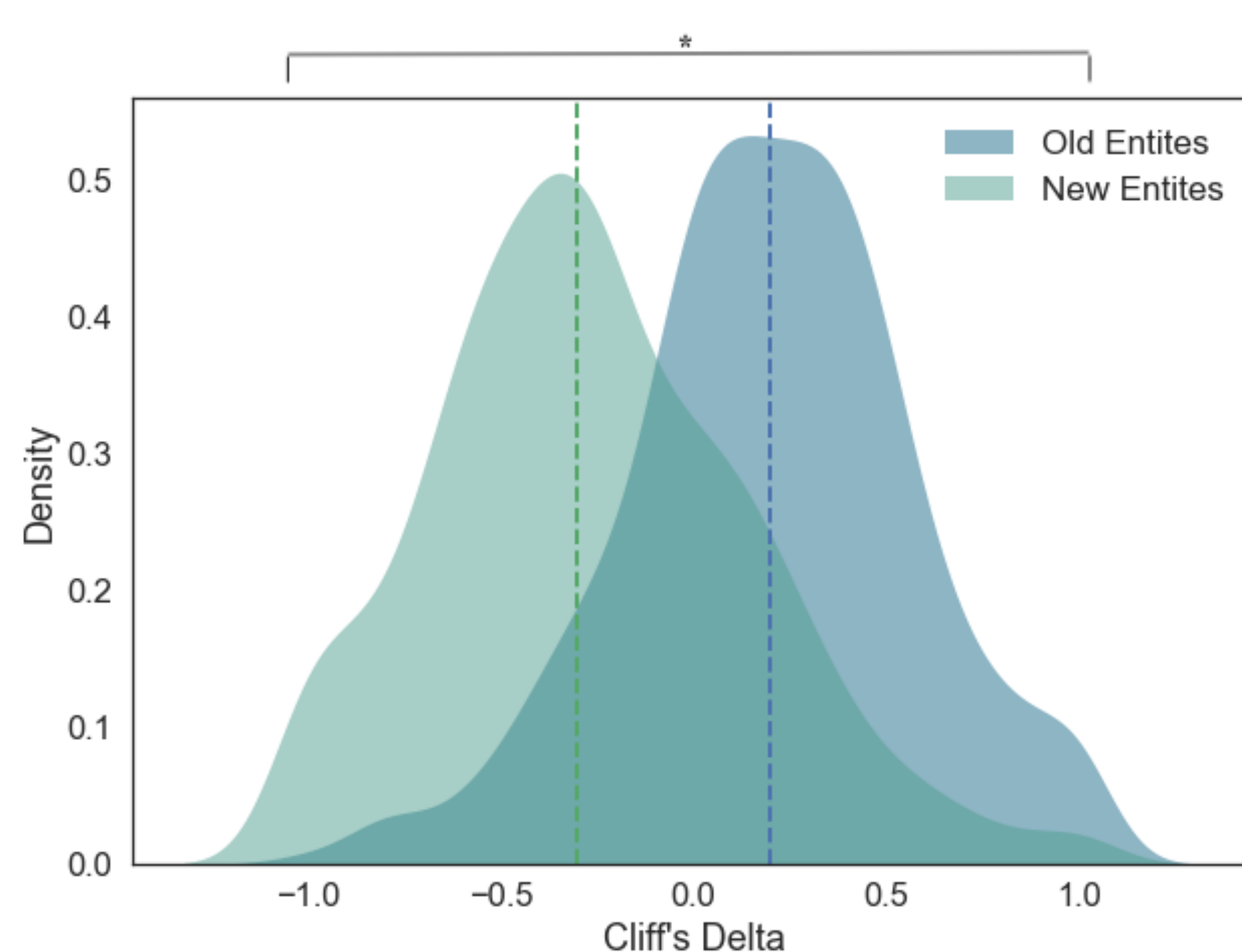
RESEARCH QUESTIONS

- **RQ1**: Fillers **interact** with the rest of the message?

- **RQ2**: **Impression** is formed on the listener?
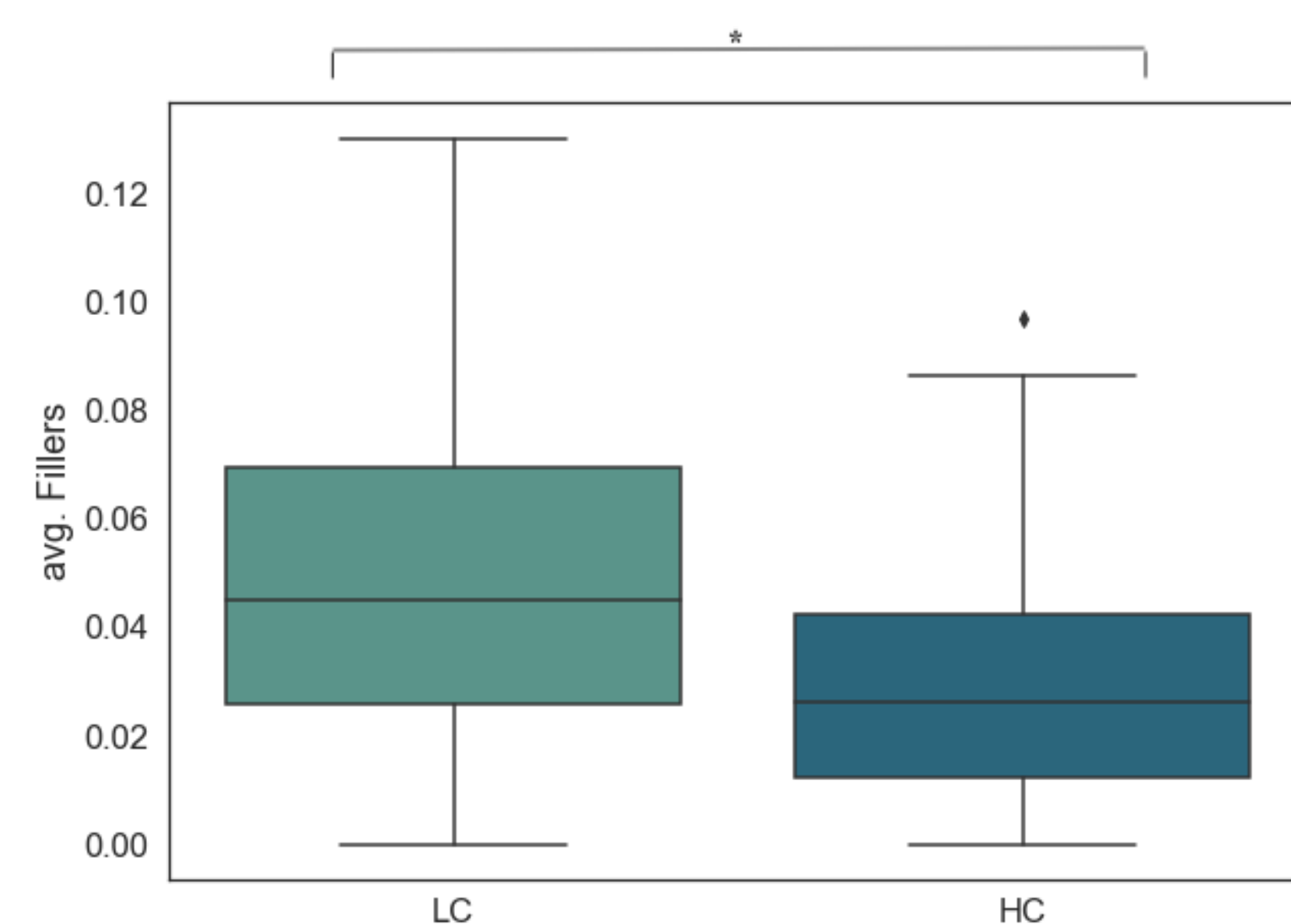
POM DATASET, ENTITY ANNOTATION

RQ1 SPEAKER'S USE OF FILLERS

- Kruskal-Wallis Htest distributions for **fillers+new entities** and **fillers+old entities** cannot capture fine grained information of fillers.
- However, **Cliff's delta** – fillers **visibly** occur before **new entities** throughout the review, and
- Fillers occur predominantly **after entities** already introduced in the discourse (positive δ).

AVERAGE USE OF FILLERS

Speaker's rated **high confidence** and **low confidence** by the listener. $U = 3873.0$ and $p < .05$ Mann-Whitney U test.

RQ2 LISTENER'S IMPRESSION

- Filler considered part of new entity: **maximum 1 token distance away**.
- Results Odds Ratios – Fillers occurring before new entities **do not have a great effect on the odds of high confidence**.
- Listener **may expect** the speaker to use fillers before new entities, therefore it **may not affect** confidence.

DISCUSSION

- Listener might be **drawn to the mind of the speaker and infer** possible reasons for delays in speech.
- Analysis shows **the possibility of different metacognitive functions** in this perspective taking account from use of fillers.
- Spontaneous speech dataset (monologues); speakers **voluntarily** and **naturally** recorded themselves.
- **Local** use of fillers can still lead to **global** impressions of confidence.
- **Future work** – Dialogues

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[1] D. J. Barr and M. Seyfeddinipur. "The role of fillers in listener attributions for speaker disfluency". In: *Language and Cognitive Processes* 25.4 (2010), pp. 441–455.

[2] S. E. Brennan and M. Williams. "The feeling of another's knowing: Prosody and filled pauses as cues to listeners about the metacognitive states of speakers". In: *Journal of memory and language* 34.3 (1995), pp. 383–398.