“Ambiguous” isn’t “underspecified”: Evidence from the Maze task
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The Ambiguity Advantage

Fully ambiguous material is processed more easily than unambiguous material: the ambiguous reflexive in (1a) is read more quickly than its low (1b) and high attachment (1c) counterparts [1, 2].

(1) a. The maid of the queen who scratched herself in public... b. The son of the queen who scratched herself in public... c. The son of the queen who scratched himself in public...

We consider two competing accounts of this phenomenon.

Comprehenders strategically underspecify their interpretations [2, 5].

- At relative pronoun, high vs. low attachment analyses compete.
- Any subsequent input inconsistent with the winner triggers reanalysis.
- Unambiguous high/low attachment will sometimes require reanalysis.
- Ambiguous attachment will never require reanalysis.

Good Enough Processing

Comprehenders strategically underspecify their interpretations [2, 5].

- Comprehenders minimize effort, and resolving ambiguity is costly
- Comprehenders only resolve ambiguity when forced by input or task

Notably, [2] found an ambiguity advantage when participants were asked easy questions like (2a), but not hard questions like (2b).

(2) a. Was someone hurt? (yes/no)
   b. Who was hurt? (the maid/the queen)

The Unrestricted Race Model

The parser allows all possible analyses of ambiguous material to race, and adopts the first one to finish [3, 4].

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Prediction: If the ambiguity advantage reflects strategically underspecified parsing, it should not arise in the Maze task.

Replicating Sweats, Desmet, Clifton, & Ferreira (2008)

Materials: 36 sentences like (3a)-(3c), taken from [2]

(3) a. The mother of the bride who embarrassed herself at the reception...[ambiguous]
   b. The father of the bride who embarrassed herself at the reception...[low]
   c. The father of the bride who embarrassed himself at the reception...[high]

Question Type: Between-Subject manipulation of question difficulty

(4) a. Did someone complain? (yes/no)
   b. Who was embarrassed? (The Mother/The Bride)

Methods: Self-paced reading (n=96), Maze task (n=254), Eye-tracking (current n=24)