

Abg-CoQA: Clarifying Ambiguity in Conversational Question Answering

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Data & Source code 

<https://github.com/MeiqiGuo/AKBC2021-Abg-CoQA>



Ambiguity in Conversational Question Answering

Story: Angie went to the library with her mother. First she had to turn in the books she was returning at the return desk. They said hello to the man there. He took their books. Then they went into the adult reading room. Angie sat in a brown chair at the table. She made a drawing of her mother. **Her mother found a large red book.** Then they went to the Mystery section. Angie sat in a blue chair. She drew a picture of her brother. **Her mother found the book. It was a green book.** Finally it was time to go to the children's room. It was Story Hour. Miss Hudson was there to read to all the children. She read a book about friendship...

Q_{i-2}: What did she draw?

A_{i-2}: Her mother.

Q_{i-1}: What did her mother find?

A_{i-1}: The book.

Q_i: What color was it?

Ambiguous! Her mother found two books in different colors.

Abg-CoQA: Clarifying Ambiguity in Conversation

Story: Angie went to the library with her mother. First she had to turn in the books she was returning at the return desk. They said hello to the man there. He took their books. Then they went into the adult reading room. Angie sat in a brown chair at the table. She made a drawing of her mother. **Her mother found a large red book.** Then they went to the Mystery section. Angie sat in a blue chair. She drew a picture of her brother. **Her mother found the book. It was a green book.** Finally it was time to go to the children's room. It was Story Hour. Miss Hudson was there to read to all the children. She read a book about friendship...

Q_{i-2}: What did she draw?

A_{i-2}: Her mother.

Q_{i-1}: What did her mother find?

A_{i-1}: The book.

Q_i: What color was it?

Ambiguous

CQ: Do you mean the first book?

R₁: Yes.

R₂: No, the second.

A₁: Red.

A₂: Green.

Key Characteristics of Abg-CoQA

- Statistics:
 - 3,968 passages and 8,615 questions (994 of them are ambiguous)
- Diversity:
 - 3 clarification strategies, 4 ambiguity types and 5 source domains
- Challenge:
 - SOTA models, e.g. BART, GPT-2, BERT and XLNET, as benchmark
 - F1 score of 23.6% on ambiguity detection
 - Accuracy of 56.0% on clarification generation in human evaluation
 - F1 score of 40.1% on clarification-based question answering