

What do you mean?

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Eliciting enthymemes in text-based dialogue

Why?

People are good at non-logical common sense (enthymematic) reasoning where premises or conclusions are implicit.

Reasoning in conversational AI is rubbish.

No natural dialogue reasoning data to train them on.

Why ‘why’?

People can be prompted to provide their reasoning using why-questions.

What?

- proof of concept chat tool study to elicit reasons
- balloon task
- spoof questions

A: I think pregnant women are not supposed to fly actually

B: what? [artificial turn]

A: There are safety regulations at least during the 7th month of pregnancy

A: I bet the father would not want their child nor their partner to die.

B: why? [artificial turn]

A: Paternal instincts and all that

Well?

All probes can address enthymematic reasoning, and “Why?” and “How so?” are more likely to.

Spoof question	NR	DR	IR	CR	Tot.
???	4	6	1	0	11
how so?	4	6	3	0	13
what?	4	6	4	0	14
what do you mean?	5	16	14	2	37
why?	4	14	6	3	27
Total:	21	48	28	5	102

So?

Useful method to elicit enthymemes to collect resources for common sense reasoning in dialogue systems.

A: Doctor can have botanical knowledge or whatever

B: why? [artificial turn]

A: why which part?