

Reasoners are influenced by conversational pragmatics in abstract conditional reasoning tasks

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Abstract: People demonstrate systematic logical failures when reasoning about conditional statements. In the Wason selection task, a test typically interpreted as a measure of abstract deductive reasoning, only about 10% of participants choose the cards prescribed by deductive logic. One possibility is that people are simply bad at hypothesis testing – biased toward confirming rather than falsifying abstract conditional rules. A second possibility, however, is that performance on the task is strongly influenced by pragmatic effects of linguistic interpretation. In three experiments, we find that manipulating the instructions to emphasize falsification and that changing the formulation of the rule to increase the pragmatic salience of the correct choices improves performance. These results arise because people do not merely decode the logical content of linguistic expressions. Rather they attempt to understand the communicative intentions of the individual who produced the expression even in abstract reasoning tasks.