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Modeling manipulative language use

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Abstract

We propose an extension to probabilistic pragmatic models to include a dimension that allows for the modeling of argumentative language use. Within our extended Rational Speech Act model, argumentative strength stands for a statistical measure of observational evidence which impacts a speakers utterance choice. More concretely, our model recasts speaker utility in terms of a weight parameter which varies between being purely informative and purely argumentative. We fit the extended RSA model to empirical data from a novel production experiment. Our initial results suggest that there is room for argumentativity on top of informativity in formalizations of pragmatic language reasoning. Crucially, we see that the relationship between the two is not straightforward, as the model fails to capture instances of human behavior which are more manipulative than expected by the suggested informativity-argumentativity trade-off. All in all, our exploration provides us with interesting insights about this relationship.