January 15, 2020

[May R. Berenbaum] 🡨 or whichever editor we should send to

Editor-in-Chief, *Proceedings of the National Academy of Sciences of the United States of America*

Dear Dr. Berenbaum,

We would like to submit a manuscript for potential publication in the *Proceedings of the National Academy of Sciences of the United States of America*, entitled “People calibrate the design and detection of lies by reasoning about other agents.”

In this manuscript, we establish that the extremeness of the lies that people produce are characteristic of what they believe about the detectors’ sensitivities to the statistics of the world. We challenge the traditional notion that people are universally bad at detecting lies by showing that detectors are highly robust to the goals of liars. By developing a formal computational model of lying and detecting in a communicative framework and comparing the model’s predictions to human results in a novel lying game, we validate previous research showing that people are averse to producing lies. We quantify people’s aversion to producing lies for themselves, and furthermore, we provide evidence that people are attuned to, but underestimate, others’ aversion to lying. In other words, people believe others are less honest than they actually are. Our findings are the first (that we know of) to attempt to characterize the types of lies people produce under a simple assumption: people reason about what others might think.

Given the current broad interest in people’s susceptibility to fake news and false information, and this study’s important theoretical contribution to research in deception and human cognition, my co-authors and I believe that this would be an appropriate manuscript for *PNAS*.

The manuscript is 7 pages long (4,834 words) and includes 4 figures. This work has not been previously published, nor is it under consideration for publication elsewhere. Neither my coauthors not I have any conflicting interests with regard to this research.

Thank you for your consideration.

Sincerely,

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