

UPDATING BELIEFS WHEN EVIDENCE IS OPEN TO INTERPRETATION: IMPLICATIONS FOR BIAS AND POLARIZATION

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Abstract

We introduce a model in which agents observe signals about the state of the world, and some signals are open to interpretation. Our decision makers first interpret each signal based on their current belief and then form a posterior on the sequence of interpreted signals. This ‘double updating’ leads to confirmation bias and can lead agents who observe the same information to polarize. We explore the model’s predictions in an on-line experiment in which individuals interpret research summaries about climate change and the death penalty. Consistent with the model, there is a significant relationship between an individual’s prior and their interpretation of the summaries; and over half of the subjects exhibit polarizing behavior. (JEL: D10, D80, J15, J71, I30)

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