BEHAVIOURAL ECONOMICS

Biased information networks

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The decisions we make are partly based on the information we receive. However, not everybody is exposed to the same information when making a decision, such as which party to vote for. Understanding how information flow in social networks affects decision-making has become a

critical question at a time of increasing political polarization and echo chambers.

Alexander Stewart of the University of Houston and colleagues developed a new voter game that explores the role of information flow in decision making. Mathematical modelling and simulations showed that voting decisions are dependent on the structure of the influence network an individual belongs to, which affects the information available to them. This finding, which the authors termed 'information gerrymandering', was confirmed in social network experiments, as well as in real-world influence networks, such as online political discussions leading up to the US federal elections.

This work formalizes the influence of network structure on decision-making and provides compelling empirical evidence for the impact of biased information on decisions. This and future work on information dynamics in social networks are important in an era when most of the information people receive comes from unregulated and easily manipulated online networks.

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