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Opinion Dynamics: A Review of Recent Trends and a Comparative Study of Classical Assumptions

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Opinion dynamics research investigates how individual opinions evolve through social interaction, producing collective patterns such as consensus, polarization, and dynamic disagreement. Classical models —including threshold, bounded confidence, averaging, and game-theoretic approaches —have provided foundational insights that continue to underpin the field. However, recent empirical findings and digital-era phenomena have highlighted the need to extend and refine these classical assumptions. This work presents a narrative review of developments in the field since 2017, identifying five key trends that build on and challenge the classical foundations: media and algorithmic influence, emotions and cognitive biases, dynamic and adaptive networks, multidimensional opinion spaces, and empirically calibrated models. Building on this synthesis, we implement a comparative simulation study of classical assumptions in an agent-based setting, to assess how well they account for observed phenomena. The results show that social influence and bounded confidence assumptions lead to sharp transitions between polarized, mixed, and consensus states, with outcomes fairly independent of initial conditions, network structure, and noise. In contrast, classical complex contagion threshold assumptions appear much more sensitive, producing outcomes that depend strongly on these initial conditions. These findings illustrate how classical assumptions remain valuable as a baseline while revealing their limitations in explaining the diversity of opinion dynamics observed today.

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