How an Ideologically Concentrated Minority Can Trump a Dispersed Majority: Non-Median Voter Results
For Plurality, Run-off and Sequential
Elimination Elections
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Theory: In contrast to Downs' (1957) median voter result for two-candidate competition, we should not expect mulitple candidate elections to produce outcomes around the median, even on average. Rather the median winning candidate will tend to be between the median voter and the mode. This is true whether we consider plurality, run-off or sequential elimination elections, and whether or not the electorate is divided into factions that control the nomination of candidates.

Hypotheses: (1) With both an unfactionalized and factionalized electorate, if the preference distribution is skewed, the median winning candidate in multiple trials will lie between the median and modal voter; (2) In an unfactionalized electorate under plurality elections, the position of the median winning candidate will be very sensitive to the distribution of candidates, but will be far less so under run-off and sequential elimination elections.

Methods: For an unfactionalized electorate, computer simulation with randomly positioned candidates is used to model an unfactionalized electorate under various electoral systems. This is because no equilibrium solution exists for this case. For factionalized electorate, a game theoretic model of faction formation is used.

Results: Whether the electorate is factionalized or not, all electoral systems studied produce results that lie between the median voter and the mode. Thus an ideologically cohesive minority around the mode of the population distribution may have a disproportionate influence on the outcome. These results can be applied to party leadership in the U.S. House, following Grofman et al. (forthcoming).