Endgame Strategies and Simulation Results for the Liar's Dice game

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The Liar's dice is a dice game where deception and the ability to detect the opponents' deception play a crucial role. We analyze this game from different perspectives. First, two-player endgames are analyzed and optimal strategies are calculated. Second, using simulation methods, we examine heuristic playing strategies based on their success against each other.

In the simulations, we first let deterministic strategies compete against each other in several configurations and evaluate their results in the series of games. In another approach, we consider mixed strategies that depend on parameters, populate a parameter space with strategies and perform evolutionary simulation on the strategy population.

References

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[2] Thomas Hoffman and Bart Snapp, *Gaming the Law of Large Numbers* https://people.math.osu.edu/snapp.14/HoffmanSnapp.pdf