

Playing the Game - Sticking to Your Strategy

Felix Munoz-Garcia

February 8, 2015

Sticking to Your Strategy

- When it comes to deciding a game with a penalty shoot-out, the referee flips a coin to determine which team gets to decide whether to kick first or second in each round of the shoot-out
- A recent study shows the team that kicks first wins the shoot-out 60.5% of the time! So what is the source of this advantage?
- It is not strategic!
 - Regardless of the order, the goal and strategy of teams are the same
 - Thus game theory predicts the ordering will have no impacts on the outcome

Sticking to Your Strategy

- To explain this phenomenon, what is needed is not a game theorist but a psychologist
- While the optimal strategy is always the same, a player's ability to implement that optimal strategy depends on whether he is kicking first or second
- Another study shows it is systematically related to environmental factors
 - e.g., a miss was more likely when you play at home
- There is a disconnection between what you want to do and what you actually do! It will be helpful to keep in mind that sometimes the implementation of the optimal strategy can be a challenge