

Why should political scientists or political practitioners care about operations research? Alan Washburn's "Blotto Politics" offers an answer: complicated strategic interactions in politics, including those in presidential elections and legislative bargaining, can be better understood using the tools of OR.

Washburn considers electoral competition that is similar in structure to the U.S. Electoral College system for electing the president. Two political parties compete for state electoral votes. The party that receives the most votes from individuals in a state receives all of that state's electoral votes (the number of which varies by state). The party with the most electoral votes is victorious.

Washburn assumes that the party that expends the most resources in a state wins all of that state's electoral votes, and he then proposes algorithms for determining the parties' optimal strategies under different informational assumptions, including secret spending.

In political science and economics, these sorts of strategic interactions are often solved analytically using the tools of game theory. The advantage of game theory is that it can provide general closed-form solutions. The disadvantage is that it is often not possible to solve for closed-form solutions without making restrictive assumptions.

The tools of operational research are useful because they offer an alternative way to study games that are not amenable to game theoretic analysis. Electoral competition is just one example. Another is coalition building within legislatures. A large "vote buying" literature studies how interest groups build support for or against a piece of legislation. These models often assume complete information and sequential offers to legislators. Washburn's approach for studying elections is easily adaptable to the study of legislative bargaining and could be used to consider more complex environments.

Political scientists already use computational techniques in studying elections and legislatures, but operations researchers may bring a new perspective to important questions in these areas. It is a welcome development that researchers like Washburn are moving in this direction.

The models Washburn lays out are, by necessity, stylized. For instance, the candidate who spends the most money wins the election. The actual relationship between money and votes is far more complicated. The relationship, in fact, is often negative, because as a campaign progresses a candidate who is behind may ratchet up spending, supersede his opponent in outlays, and ultimately still lose the election. The bias term in Washburn's model, which allows some candidates to have a built-in advantage in the election, addresses this concern somewhat. Another approach would be to embed into the model a more complex relationship between campaign spending, expectations about the elections, and outcomes. Limits on computing power may make this approach infeasible, but it is worth exploring whether even a modest increase in complexity would generate a richer set of implications for elections.