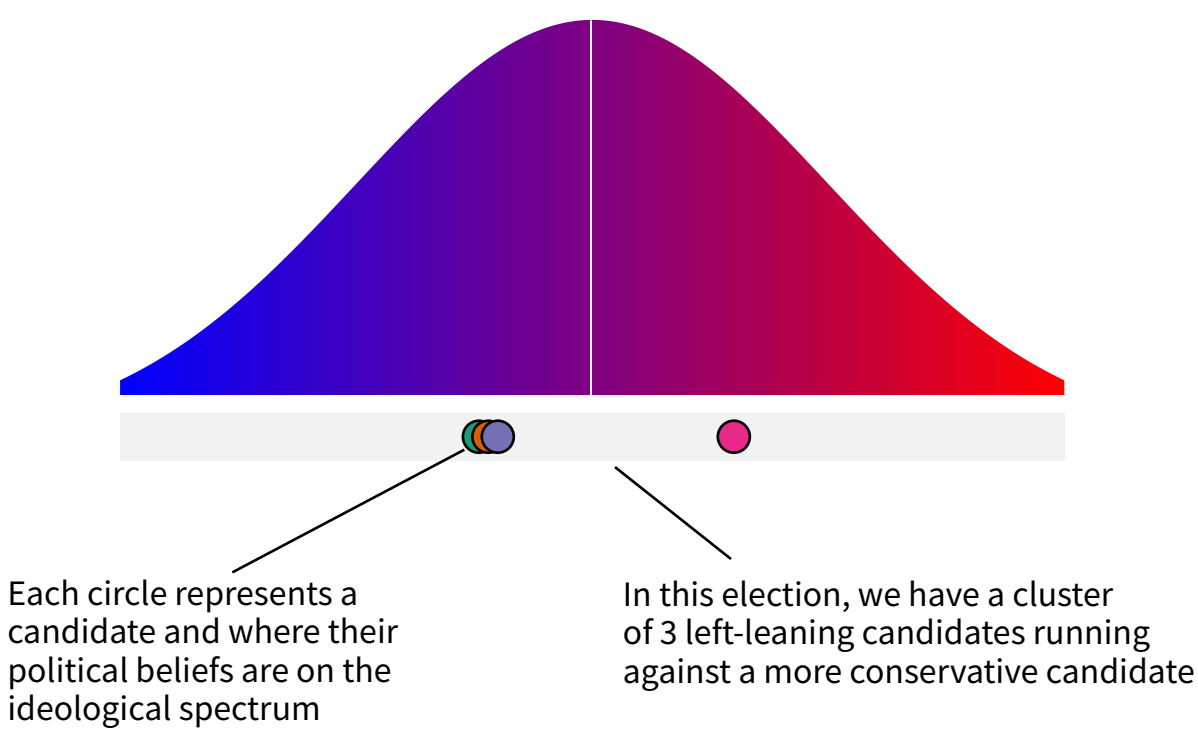


Ranked Choice Voting: A More Representative Democracy?

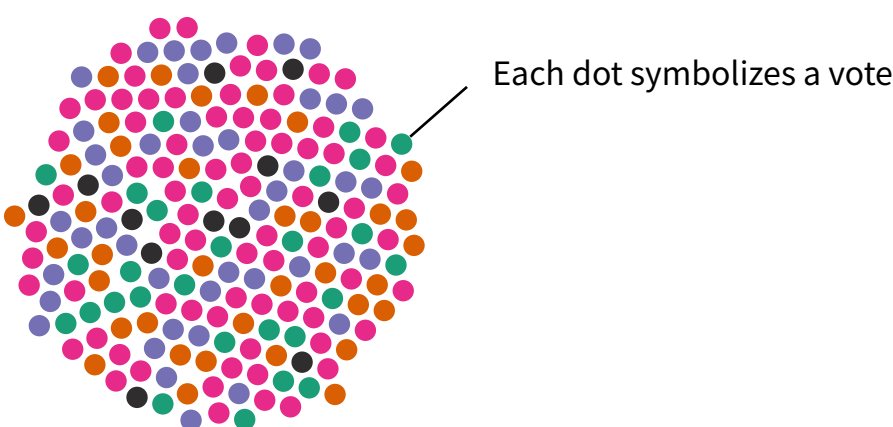
Vinay Bhaip

How can Ranked Choice Voting lead to less extreme candidates?



Key

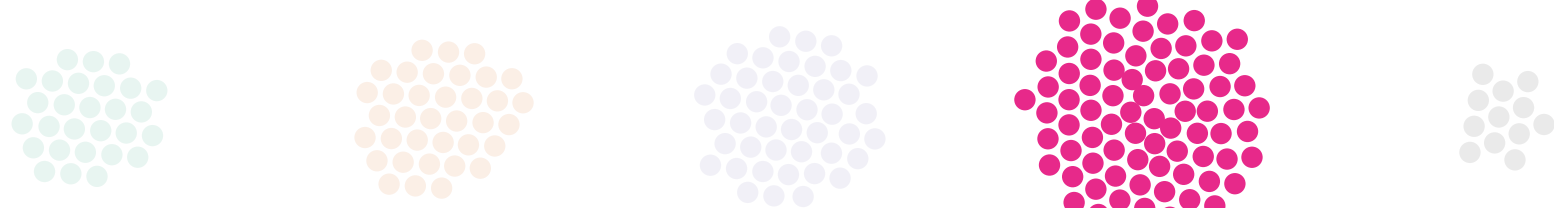
- Falcon
- Hawkeye
- Spider-Man
- Wanda



First Past the Post

Goal: Most Votes

Voters pick one choice and the results are decided.



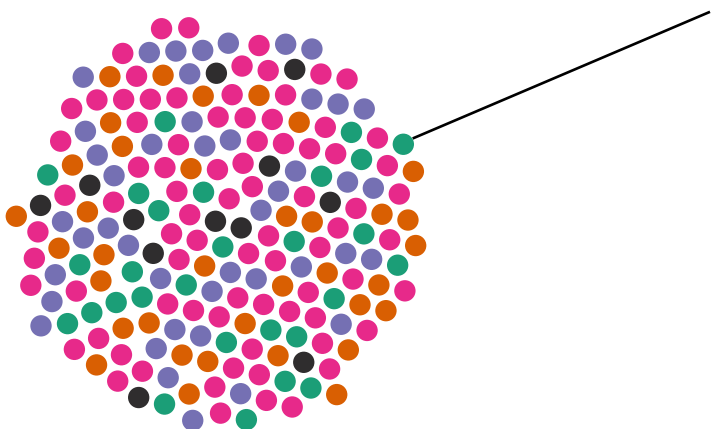
Wanda

Count: 80

No vote

Count: 12

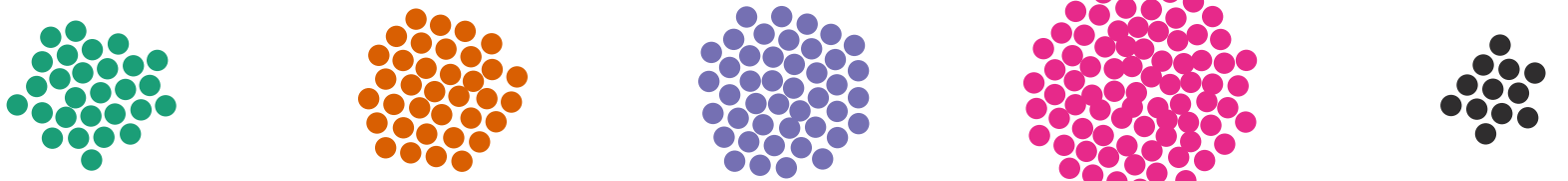
No vote means that a voter did not fill out the ballot correctly or left the ballot empty



Ranked Choice (Round 1)

Goal: 50% votes = 94 votes

Voters pick their top choice candidates. Candidates need >50% of votes to win, so no winner is chosen yet.



Falcon

Count: 28

Hawkeye

Count: 36

Spider-Man

Count: 44

Wanda

Count: 80

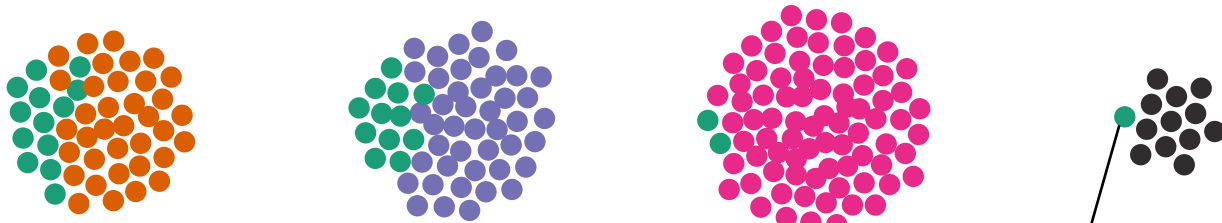
No vote

Count: 12

Ranked Choice (Round 2)

Goal: 50% votes = 93.5 votes

The candidate with the least votes (Falcon) is eliminated, and their votes go to their next choices.



Falcon

Count: 0

Hawkeye

Count: 49

Spider-Man

Count: 56

Wanda

Count: 82

No vote

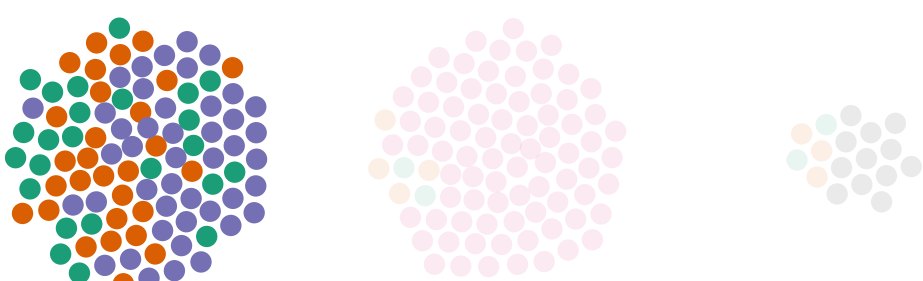
Count: 13

This voter only listed Falcon on their ballot, so as this voter does not have any more preferences, we perform the rest of the calculations excluding this ballot

Ranked Choice (Round 3)

Goal: 50% votes = 91.5 votes

Spider-Man wins the election. First Past the Post and Ranked Choice Voting produced different winners. FPTP winner: Wanda



Falcon

Count: 0

Hawkeye

Count: 0

Spider-Man

Count: 97

Wanda

Count: 86

No vote

Count: 17

A majority of the voters support Spider-Man, rather than only the plurality that supported Wanda with First Past the Post.

Let's simulate an election to answer the question. We can assume that voters are distributed according to a normal bell-curve. Ideally, we'd want the most moderate candidate because that would best reflect the population.

Each dot represents a vote for a candidate in the election. The dots are colored based off who each voter voted for.

All the votes are summed up and Wanda wins. This system, First Past the Post, is what we're used to seeing in elections. But Wanda's political beliefs do not capture those of the voters—she only won because the other votes got split! A majority of the voters do not necessarily want her in office.

Let's look at how this election would play out with Ranked Choice Voting. As the name suggests, each voter ranks who they prefer instead of being confined to just one candidate.

The first round plays out the exact same as First Past the Post, but no winner is chosen. This is because no candidate has reached the 50% threshold for winning the election.

In Ranked Choice Voting, we distribute the candidate who received the least votes to their next choices. Here, we can see most of Falcon voters' votes went to Hawkeye and Spider-Man, which makes sense since that's who is closest on the ideological spectrum. No candidate still has a majority, so we'll have to repeat the process.

We distribute the votes of the next candidate who received the fewest votes, Hawkeye. After doing so, we see that Spider-Man reaches the threshold for a majority votes and is the winner of the election!

This represents the population's true beliefs better, and ultimately results in more candidates better reflective of the population. Voters no longer have to worry about "spoiler votes" and can vote their conscience.