Instant Runoff Normalized Ratings

an Election Method by Brian Olson

Instant Runoff Normalized Ratings

- Expressive — you vote a rating on any candidate you have an opinion on
- Fair — everyone has the same voting power which is never 'thrown away' if your favorite doesn't win

Example: one vote

A	B	C	D	E
10	6	-3	-10	4

- A voter might rate 5 choices on a scale of -10 to 10 like this:

Example: one vote

- To make things fair, each vote is normalized to have the same magnitude

A	B	C	D	E
10	6	-3	-10	4

A	B	C	D	E
0.62	0.37	-0.19	-0.62	0.25

Sum the normalized votes

- Adding up four normalized votes might look like this:

	A	B	C	D	E
	0.62	0.37	-0.19	-0.62	0.25
	0.07	0.66	-0.66	-0.33	0.13
	-0.30	-0.59	0.59	0.42	-0.18
+	-0.59	-0.47	0.12	0.59	0.24
=	-0.21	-0.04	-0.13	0.06	0.44

Instant Runoff Normalized Ratings

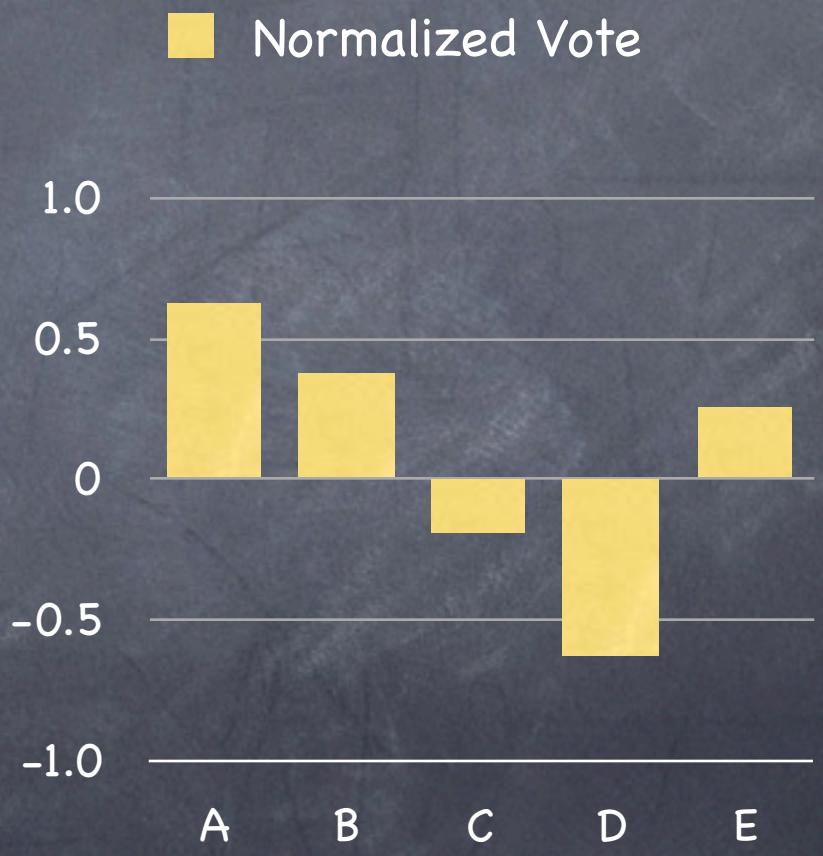
- Sum of all the voters' normalized ratings
- Disqualify the choice with the lowest sum
- Re-normalize, redistributing voters' votes to their remaining choices
- Repeat until there are only two choices left
- Of those two, the highest sum rating wins

One vote over several rounds

- The following slides show how one voter's vote might be redistributed over the course of several rounds
- Not shown are the other votes which add up to decide which choices are disqualified at each round

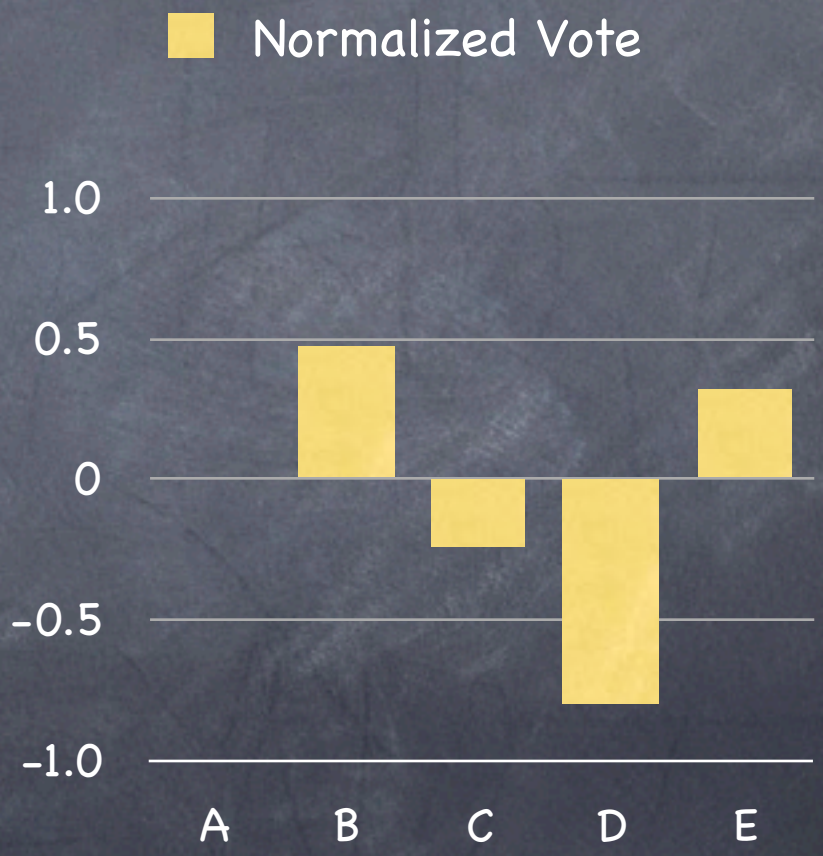
One Vote, graphically

- First round, normalized vote



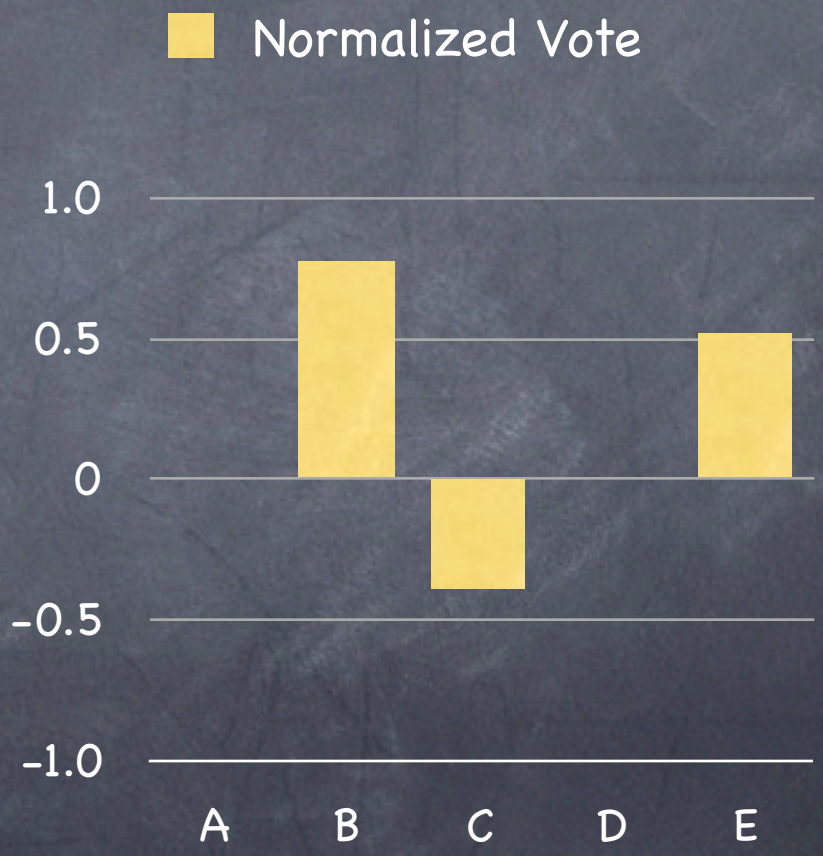
One Vote, graphically

- Second round
- choice A was eliminated



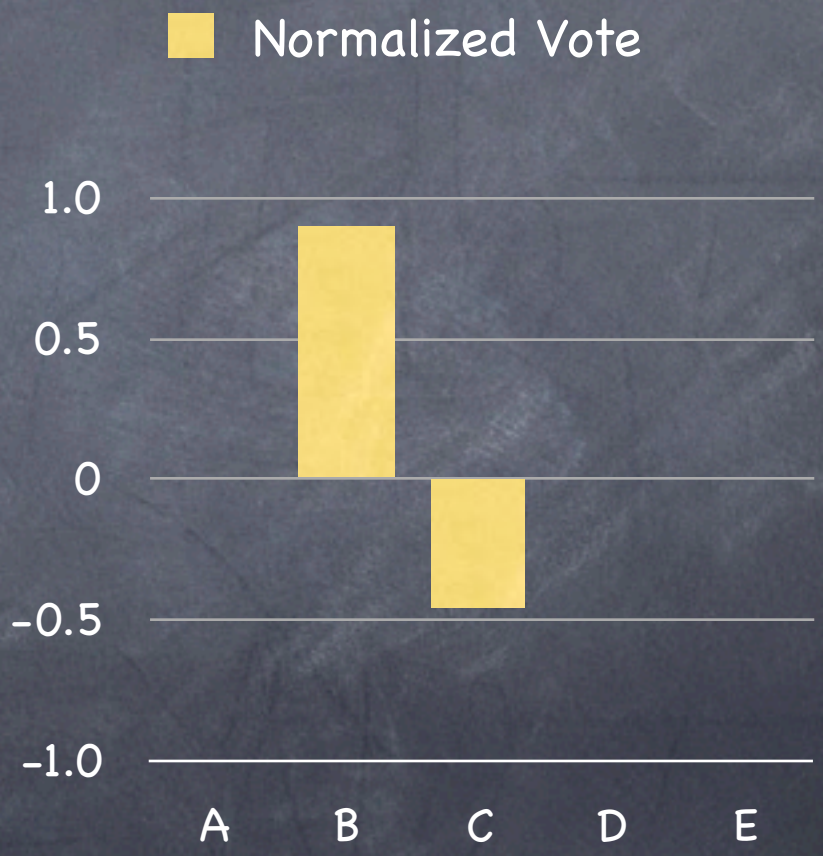
One Vote, graphically

- Third round
- A and D are out



One Vote, graphically

- Fourth and final round
- A, D and E are out.
- This vote is distributed between B and C



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For more on Instant Runoff Normalized Ratings (IRNR), go to

http://bolson.org/voting