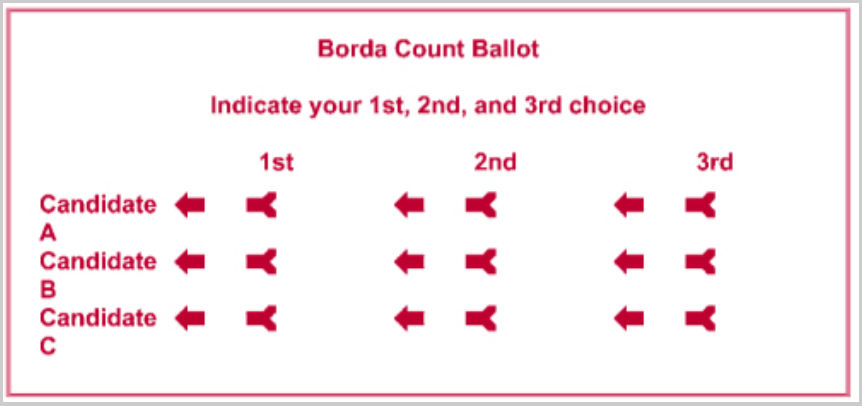
B.2 – Borda Count Elections

The Borda Count election system is a ranked method for selection of winners of single seat offices. A short discussion is provided in Election Methods: Review of Alternatives and Oregon Proposals, with more details provided in the following discussion available online only.

In about 1428, a young German scholar named Nicolaus Cusanus devised an election system that assigned points to each candidate.[1] His invention was largely forgotten by 1770 when French mathematician Jean-Charles de Borda became concerned that the Plurality voting system caused the French Royal Academy of Science to make bad decisions. He proposed (or reinvented) Cusanus' voting procedure, which became the Borda Count system. The Royal Academy adopted this system, which stayed in place for the next forty years.[2]



Borda's idea was to have voters rank order the candidates and assign points to each first place vote (perhaps three), each second place vote (perhaps two), and so on. If 30 Academy members were trying to decide which of three regions produced the best wine, for example, each member would vote on which region he liked best, which he liked second best, and which he liked least. The votes would be converted to points and totaled to determine the winner.[3] Alsace wins with 65 points.

Region	1st place—3pts	2nd place—2 pts	3rd place—1 pt	Total
Alsace	15 votes = 45 pts	5 votes = 10 pts	10 votes = 10 pts	65 pts
Bordeaux	5 votes = 15 pts	20 votes = 40 pts	5 votes = 5 pts	60 pts
Champagne	10 votes = 30 pts	5 votes = 10 pts	15 votes = 15 pts	55 pts

Although Napoleon Bonaparte quashed the Borda Count election system in the nineteenth century, twentieth century sports writers and fans revived a complicated version of it to determine who receives Major League Baseball's Most Valuable Player (MVP) award. Two sportswriters in each league city can nominate up to ten players to be

1 Solomon Garfunkel, ed. For All Practical Purposes: Mathematical Literacy in Today's World. 6th ed. (New York: Freeman), 418-419.
[2] Donald Saari, "The Symmetry and Complexity of Elections," http://www.colorado.edu/education/DMP/voting_b.html
[3] Ibid.

the MVP. Each writer must rank the players from one to ten. The player getting a first-place vote receives fourteen points, a second place vote counts nine points, a third place vote gets eight points, and so on to a tenth place vote, which is worth one point.[4]

The Borda system is also used in "various scientific and technical applications such as handwriting recognition and space navigation, where the votes come from unbiased sensors or systems rather than people."[5] It is included in this study because some mathematicians believe it is the best way to measure the "will of the voters," and in some situations it might provide citizens with a useful alternative to other voting systems. Businesses often use the Borda voting system to rank applicants as well. Donald G. Saari, a professor of mathematics at the University of California at Irvine, is an outspoken advocate of the Borda Count voting system.

- Courtesy of League of Women Voters of Minnesota

[4] HickokSports, http://www.hickoksports.com/history/basebmvp.shtml
[5] "Borda Voting Explained," Election Methods Education and Research Group. ElectionMethods.org. http://www.electionmethods.org/Borda.html