

Voting Paradoxes

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Abstract

The early work of Condorcet in the 18th century, and that of Arrow and others in the 20th century, revealed the complex and interesting mathematical problems that arise in the theory of Social Choice, showing that the simple process of voting leads to strikingly counter-intuitive paradoxes. I will describe some of these, focusing on several recent intriguing examples whose analysis combines combinatorial and probabilistic ideas with techniques from the theory of the VC dimension of range spaces.