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**Criteria for Voting Systems**

- **Veto**...
- **Borda**...
- **Range voting, Approval, Coombs**...
- **Plurality, Two-round, IRV, Bucklin**...
- **Baldwin, Dodgson, Kemeny, Maximin, Nanson, Schulze, Tideman**...

**Set of Voting Systems**

- **Informed Majority Coalition Criterion (InfMC)**
  A majority may choose the outcome when they know the other votes.

- **Ignorant Majority Coalition Criterion (IgnMC)**
  A majority may choose the outcome.

- **Majority Favorite Criterion (MF)**
  Elects a candidate when she is preferred by a majority.

- **Condorcet Criterion (Cond)**
  Elects the Condorcet winner when there is one.

**Goal: Minimize the Manipulability Rate**

\[ \rho(f) = P(\text{voting system } f \text{ is manipulable}) \]

**Transformations**

- **Initial Voting System** \( f \)
- **Condorcification of** \( f \)
  - Elects Condorcet winner when she exists.
  - Otherwise, same outcome as \( f \).
- **Best Slice of** \( f^c \)
  - Depends only on orders of preference.
  - Meets the Condorcet criterion.

**Condorcification Thm.**

If \( f \) meets InfMC:

\[ \rho(f^c) \leq \rho(f). \]

**Slicing Theorem**

If voters are independent:

\[ \rho(f^{cs}) \leq \rho(f^c). \]

**Consequences**

To minimize manipulability while keeping InfMC, one may restrict to voting systems that:

- Depend only on orders of preference,
- And meet the Condorcet criterion.