

Social Choice **Rules** (again)

a social choice rule is **strategy-proof** if it is **never** a good strategy to misrepresent your rankings

misrepresentation is a good idea, for some profile of voters' preferences, and some social choice rule, if

I like **x** better than **y**

for this profile, the social choice rule chooses **y**

but if I reported some other ranking (not true ranking), then the social choice rule will choose **x**

A Social Choice Rule is “Onto” if ..

for **any** alternative x , there exists **some** profile of preferences for which the rule will pick x

The Gibbard–Satterthwaite Theorem

THEOREM : If a social choice rule is strategy–proof and onto, then it must be dictatorial.

(proof in 2 stages)

Proposition i : If a social choice rule is “monotonic”, and if it obeys the Pareto principle, then it must be dictatorial.

Proposition ii : If a social choice rule is strategy–proof and onto, then it must be monotonic, and it must satisfy the Pareto principle.