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## “Representative Democracy and Implementation”

### Abstract

"We study the classical implementation problem by means of a sortive mechanism, i.e., a mechanism that uses only the messages of a sub-population that is selected through a lottery. Depending on whose messages are used, we define three forms of sortive mechanisms: (1) democracy - a mechanism that uses the messages of the whole population, (2) oligarchy --- a mechanism that uses only the messages of a sub-population and (3) oligarchic democracy - a mechanism that uses the messages of a sub-population with a probability arbitrarily close to 1 but the messages of the whole population with the remaining probability. First, we show that the necessary and sufficient condition for implementation by oligarchy is stricter than Maskin Monotonicity. Second, the necessary and sufficient condition for implementation by oligarchic democracy is weak monotonicity which is a slightly weaker than Maskin monotonicity. In addition, this result implies that any Maskin monotonic social choice rule is implementable by oligarchic democracy of any 3 agents. Finally, we show that the necessary and sufficient condition for implementation by sortition is significantly weaker than Maskin Monotonicity."