Communication and Information Aggregation for a Trick Question Problem

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We consider a collective decision problem for a binary question, in which each voter receives an informative signal about the answer to the question, but the precision of the signal is determined by the unknown question type. In this setting, a companion paper, Tajika (2019) shows that the correct information aggregation fails asymptotically, which leads to a wrong outcome with a probability that can be sufficiently close to one. This study considers a group of benevolent players receiving the independent informative signal about the question type. We show that under truthful revelation, the players' information can lead the voters to make a correct decision asymptotically, when the players' information is sufficiently precise. However, under a class of simple and responsive voting behaviors, referred to as *monotone switching*, in any equilibrium, the communication fails so that voters' decision leads to a wrong decision.

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