Moral Impossibility in the Petersburg Paradox: A Literature Survey and Experimental Evidence

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The Petersburg gamble constitutes an important paradox in the history of ideas. It has been thought-provoking and led to important developments in the natural and behavioral sciences. The proposed resolutions of the paradox have involved deep reflections about the human mind by some of the most celebrated scientists of the past three centuries. This paper describes the paradox, focuses on the resolutions that have been advanced in the literature while taking into account the historical context. This study contributes to the discussion on the resolutions of the paradox by providing experimental data. The evidence shows that people's decision-making in the Petersburg gamble is in line with the notion of moral impossibility; at valuing the gamble, people neglect the events that occur only with small probability. The study elicits the size of the probability that experimental subjects seem to neglect when they formulate their willingness to pay for the Petersburg gamble. It is argued that this behavior is boundedly rational as the individual level of moral impossibility can be interpreted as an individual aspiration level in the art of conjecturing.