

Theoretical models of decision-making in the Ultimatum Game:

Fairness vs. Reason

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Abstract. according to Game Theory a human subject playing the Ultimatum Game should choose more for oneself and offer the least amount possible for co-players (assumption of selfish rationality) [1]. However, economy, sociology and neurology communities repeatedly claim non-rationality of the human behaviour [2], following the observation that responders reject offers they find too low and proposers often offer more than the smallest amount, thus suggesting that humans' behaviour is significantly influenced by social norms. We also assume human rationality, but our model describes a human-responder via decision process with a reward function respecting fairness as much as the economic profit. This model is positively tested against a set of original experimental data, thus providing an insight into human's motivation as a social being.

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