Review of: "Subjective Probability Theory for Decision Making"

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Potential competing interests: No potential competing interests to declare.

This is by far a quite interesting paper that covers important aspects of the foundations of both Probability and Utility theories. Reviews of a previous version have led the author to improve that original version in a way that makes the paper more comprehensive to readers. I thank QEIOS for granting me the privilege of reviewing this paper.

In spite of the fundamental importance of unstanding and expanding the abovementioned theories, I would like to observe that since the 50's cognitive psychologists and pioneer researchers as well as cognitive psychologists have pointed out that people do not always behave according to Expected Utility Theory [1]. In the 70s, Kahneman and Tversky [2] established Prospect Theory, a paradigm that has been in continuous evolution and that is of current use in the practice of decision-making support today ([3], [4]). The original Prospect Theory was extended in the 90's leading to Cumulative Prospect Theory [5], also known as CPT. Therefore my recommendation to the author of this paper is the following: although the main issue that is approached in this paper in a strict sense has very little to do with Prospect Theory, the notions of risk proneness and risk aversion should definitely be linked to this theory.

As a final comment, I would like to suggest that the author should introduce at least one paragraph mentioning how the Choquet Expected Utility Theory [6] can represent some decision patterns such as the Ellsberg paradox and the Allais paradox.

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