

RECENT SUGGESTIONS FOR THE RECONCILIATION OF THEORIES OF PROBABILITY

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1. Introduction

For quite some time the different theories of probability appeared to be in hopeless conflict with one another. Now, however, it seems as though an effort to reconcile the opposing ideas might be opportune. A recent paper [1] of M. G. Kendall is precisely entitled "On the Reconciliation of Theories of Probability." The same purpose is expressed by L. J. Savage in his paper [2] presented at the Boulder Meeting of the Econometric Society.

Even if efforts of this kind appear to some as ineffective or premature, there are many indications that such discussions will present themselves in the near future. The fact is that different concepts connected with probability have been developed and clarified. Different points of view have proved their vitality by appearing time and time again, in spite of the torment of having to overcome misconstructions. However, the present state of affairs seems to be more fluid than in the past. In order to stabilize it, the old discussions resulting from misunderstandings between the different theories should be replaced by new ones which recognize the reciprocal positions of these theories, so that each standpoint is correctly understood.

The purpose of this paper is to state my opinion about the points of view expressed in some recent contributions, not only for the purpose of illustrating the position of the subjective theory to which I adhere, but much more because I hope these remarks will clarify some common points and points of disagreement between some of the theories, and will more or less facilitate the resolving of some of the difficulties in the reciprocity of the understanding, and approach a possible "reconciliation."

The subjective theory is generally considered to be an extreme position (and in a sense it is) and consequently may seem an inappropriate ground for seeking agreement. However, it is an extreme position only in the sense that it assumes probability in its widest meaning: it does not require restrictions refused by other theories, but ignores the restrictions demanded by these others. For this reason, contrary to what might appear at first sight, the subjective theory gives the proper ground for comparing the different points of view without prejudicing anyone's opinion.

Even the conclusions at which we will arrive, according to the subjective theory, are of such a nature that they approach an agreement. In fact, the opposite posi-