

Revision of Beliefs with Perceived Experiences in Info-memory Protocols*

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Abstract

We consider a revision process of personal beliefs with perceived experiences. A player revises his old beliefs on his environment into new ones with the currently stored perceived experiences. A salient point of our theory is to take the personal experiences into belief revision. Both the beliefs and perceived experiences are formulated in the same mathematical manner. In this setting, we consider three kinds of belief changes, e-expansion, e-contraction and e-revision. We prove the Levi identity by these changes considering the perceived experiences, i.e., the e-revision is expressed in terms of the e-expansion and e-contraction. Thus, the revision of a player's personal view is characterized under his experiences.

JEL Classification: A12; C70; D83.

Keywords: Belief revision; Levi identity; Perceived experiences; Inductive game theory.

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