

Abstract

First, we consider different kinds of representation of uncertainty and the methods for updating each of them by conditioning. We focus on the generic framework of (conditional) plausibility spaces, since it generalises all the introduced representations. Further, we select three frameworks and list the properties that need to be added to a conditional plausibility space in order to recover each of these frameworks. The main goal of this work, however, is to show how public announcement on single-agent plausibility models, ranking structures, and possibility structures realised by their corresponding update mechanisms, can be embedded into the framework of conditional plausibility spaces. At the very end we briefly illustrate a general update model using plausibility measures.

Keywords: belief revision, dynamic logic, epistemic logic, plausibility space, public announcement, uncertainty, update.