

Title: Dynamic Belief Changes in Subjective Games

Abstract:

This paper gives a logical formulation of this revision process by focusing on the role of player's beliefs. For this objective, we use temporal logic based on Bonanno (14, Game & Econ. Behav.), and analyze Inductive game theory proposed by Kaneko and Matsui (JPET) which captures how a player inductively derives his/her personal views from experiences. In the theory, the players may have various subjective views, which is revised with further experiences. However, the theory does not provide any revision process. Our paper fills in the gap between subjective views and the revised views. We also present an application of our framework to a class of inductive games, called festival games, and show how to derive prejudices and discrimination in society.