Subjunctive Conditionals and Revealed Preference
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Subjunctive conditionals are fundamental to rational decision both in single agent and multiple agent decision problems. They need explicit analysis only when they cause problems, as they do in recent discussions of rationality in extensive form games. This paper develops a unified theory of such conditionals which extends both Stalnaker (1968) and Selten and Leopold (1982). This the fundamental entity of this theory is a family of partitions. It is shown that in the crucial application to decisions and games the full family is not needed, and sometimes a single partition will suffice. The theory is applied to games using a strict revealed preference interpretation of utility. Two very different models of games are investigated, the classical model and the limits of reality model. In the classical model the logic of backwards induction is valid, but it does not use subjunctive conditionals; the relevant subjunctive conditionals do not even make sense. In the limits of reality model the subjunctive conditionals do make sense but backwards induction is valid only under special assumptions.