Research Review

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STRIPS (Fikes and NILSSON, 1971) is the first major planning system. It was used as the planning component of Shakey robot project at SRI, GPS and PSPACE-complete. The representation language used by STRIPS was converted to the Action Description Language by Pednault in 1986 to make it possible to encode more realistic problems. However the planners in early 1970s generally considered totally ordered action sequences. Then there was a solution called goal-regression planning. This was introduced by Wldinger in 1975 and also used by Warren's WarPlan in 1974. Warplan is the first planner to be written in a logic programming language. Partial-order planning dominates the next 20 years of research. And the ideas underlying it include the detection of conflicts and the protection of achieved conditions from interference. This lead to the first clear formal exposition which allow proofs of completeness and intractability of various planning problems. Because of Chapman's work, a complete partial order planner was implemented by McAllester and Rosenblitt in 1991.