AI planning arose from investigations into state-space search, theorem proving, and control theory and from the practical needs of robotics,scheduling, and other domains. STRIPS (Fikes and Nilsson, 1971), the first major planning system, illustrates the interaction of these influences. STRIPS was designed as the planning component of the software for the Shakey robot project at SRI.

The Action Description Language, or ADL, (Pednault, 1986) relaxed some of the restrictions in the STRIPS language and made it possible to encode more realistic problems. Nebel (2000) explores schemes for compiling ADL into STRIPS. The Problem Domain Description Language or PDDL (Ghallab et al., 1998) was introduced as a computer-parsable, standardized syntax for representing STRIPS, ADL, and other languages. PDDL has been used as the standard language for the planning competitions at the AIPS conference, beginning in 1998.