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# Three Historical Developments in AI

## STRIPS:

"AI planning arose from investigations into state-space search, theorem proving, and controltheory and from the practical needs of robotics, scheduling, and other domains."(Russell & Norvig, 2016, p.393). Stanford Research Institute Problem Solver is the first major planning program that represents a problem with an initial state and a goal state and defines actions that are to be used to reach the final goal. STRIPS representation language was the base for many modern representation languages today. It also influenced the AI planning field and later resulted in the creation of the Action Description Language.

## Action Description Language:

It is a system for automated planning and scheduling made particularly for robots. The system was proposed by IBM researched Edwin pednault in 1987 and it was developed in 1996. ADL has "relaxed some of the S TRIPS restrictions and made it possible to encode more realistic problems." (Russell & Norvig, 2016, p.394)

## situation calculus:

Situation calculus represents changing scenarios as a first order logic formula. It is a logic formalism first introduced in 1963 by John McCarthy and its purpose is to represent and reason about dynamical domains. The basic elements of the calculus are the actions that can be performed in this world, the fluents that describe the state of this world, and finally the situations. In order to compose a domain we use precondition axioms,successor state axiom,foundation axioms, and finally axioms to explain any situation in the domain.

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# References

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