Agents acting in an environment

Agent

Actions

prior knowledge
past experiences
goals/values
observations

Environment

© David Poole, Alan Mackworth, Randy Goebel, and Oxford University Press 1998-2000
Central hypotheses of CI

Symbol-system hypothesis:

➢ Reasoning is symbol manipulation.

Church–Turing thesis:

➢ Any symbol manipulation can be carried out on a Turing machine.
Artificial or Computational Intelligence?

- The field is often called **Artificial Intelligence.**

- **Scientific goal:** to understand the principles that make intelligent behavior possible, in natural or artificial systems.

- **Engineering goal:** to specify methods for the design of useful, intelligent artifacts.

- Analogy between studying flying machines and thinking machines.
Rodin's Thinker