

Intelligent Agents

Chapter 2

ICS 171, Fall 2005

Agents

- An **agent** is anything that can be viewed as **perceiving** its **environment** through **sensors** and **acting** upon that environment through **actuators**

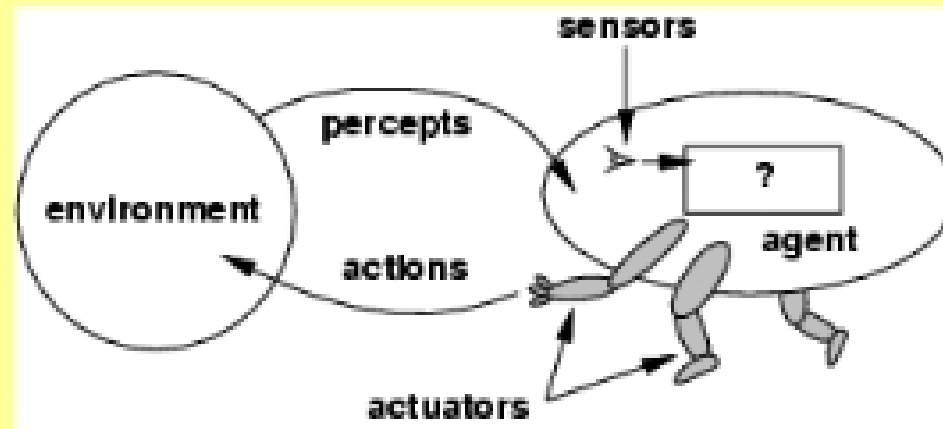
Human agent:

eyes, ears, and other organs for sensors;
hands, legs, mouth, and other body parts for
actuators

- **Robotic agent:**

cameras and infrared range finders for sensors;
various motors for actuators

Agents and environments



- The **agent function** maps from percept histories to actions:

$$[f: P^* \rightarrow A]$$

- The **agent program** runs on the physical **architecture** to produce f
- **agent = architecture + program**