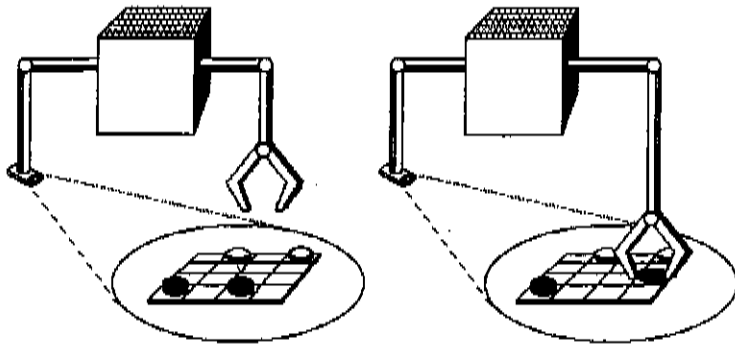


**IF STIMULUS THEN RESPONSE**



SOURCE:

JOHN H. HOLLAND,  
*Adaptive Systems*,  
 ADDISON-WESLEY:  
 READING, MA, 1985.

**PERFORMANCE (A SUCCESSION OF S-R EVENTS)**

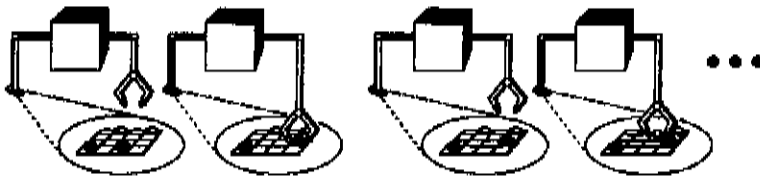


Figure 1.2 A Rule-Based Agent.

**STIMULUS - RESPONSE**



**IF** SMALL FLYING OBJECT TO LEFT  
**THEN** TURN HEAD 15° LEFT

Figure 2.1 A Stimulus-Response Rule.



**IF** SMALL FLYING OBJECT CENTERED  
**THEN** SEND @  
**IF** @  
**THEN** EXTEND TONGUE

A message, represented here by the uninterpreted symbol @, is typically represented by an uninterpreted bit string in implementations.

Figure 2.3 A Small Message-Passing Rule-Based System.

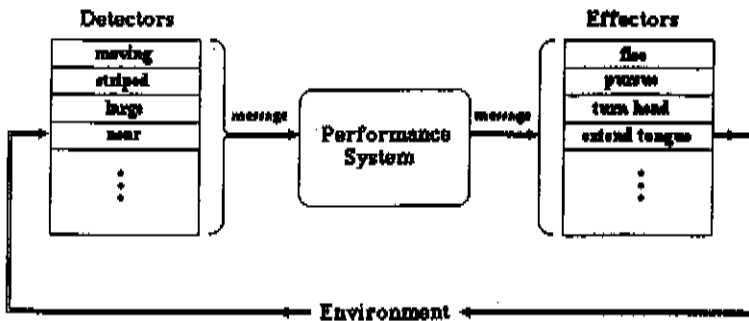


Figure 2.2 Detectors and Effectors for a Performance System.