

1. Hercos

Perceptions:

$O \rightarrow$ Obstacle exists

Actions:

$F \rightarrow$ Go forward

$L \rightarrow$ Turn 90° to the left

$R \rightarrow$ Turn 90° to the right

Memory Start:

States:

- F (The agent is roaming freely without having recently found an obstacle)
- O (The agent is currently going around an obstacle)

$$M = [F]$$

Production System:

$$\begin{aligned} M = [C] \vee M = [F], O \rightarrow L, M = [C] \\ M = [C], \neg O \rightarrow F, R, M = [C] \\ M = [F], \neg O \rightarrow F, M = [F] \end{aligned}$$

5. Covardex

Perceptions:

$O \rightarrow$ Oponent in front

$E_c \rightarrow$ Covardex's energy

$E_o \rightarrow$ Oponent's energy

$\text{comp}(x, y) \rightarrow$ True if $x \geq y$

Actions:

$F \rightarrow$ Go forward

$L \rightarrow$ Turn 90° to the left

$R \rightarrow$ Turn 90° to the right

$K \rightarrow$ Kill oponent in front

Production System:

$$\begin{aligned}
E_c \leq 0 &\rightarrow \text{nil} \\
O \wedge \neg \text{comp}(E_c, E_o) &\rightarrow L \\
O \wedge \text{comp}(E_c, E_o) &\rightarrow K \\
\neg O &\rightarrow F
\end{aligned}$$

11. Novamente Hercos

Perceptions:

$$\begin{aligned}
O &\rightarrow \text{Oponent in front} \\
E_c &\rightarrow \text{Covardex's energy} \\
E_o &\rightarrow \text{Oponent's energy} \\
\text{comp}(x, y) &\rightarrow \text{True if } x \geq y
\end{aligned}$$

Actions:

$$\begin{aligned}
F &\rightarrow \text{Go forward} \\
L &\rightarrow \text{Turn } 90^\circ \text{ to the left} \\
R &\rightarrow \text{Turn } 90^\circ \text{ to the right} \\
K &\rightarrow \text{Kill oponent in front}
\end{aligned}$$

Production System:

$$\begin{aligned}
E_c \leq 0 &\rightarrow \text{nil} \\
O \wedge \neg \text{comp}(E_c, E_o) &\rightarrow L \\
O \wedge \text{comp}(E_c, E_o) &\rightarrow K \\
\neg O &\rightarrow F
\end{aligned}$$