
Pietro Terna - DipEco

3. Artificial neural networks into the agents

$$y = g(x) = f(B f(A x))$$

(m) (n)

or

actions

information

$$y_1 = g_1(x) = f(B_1 f(A_1 x))$$

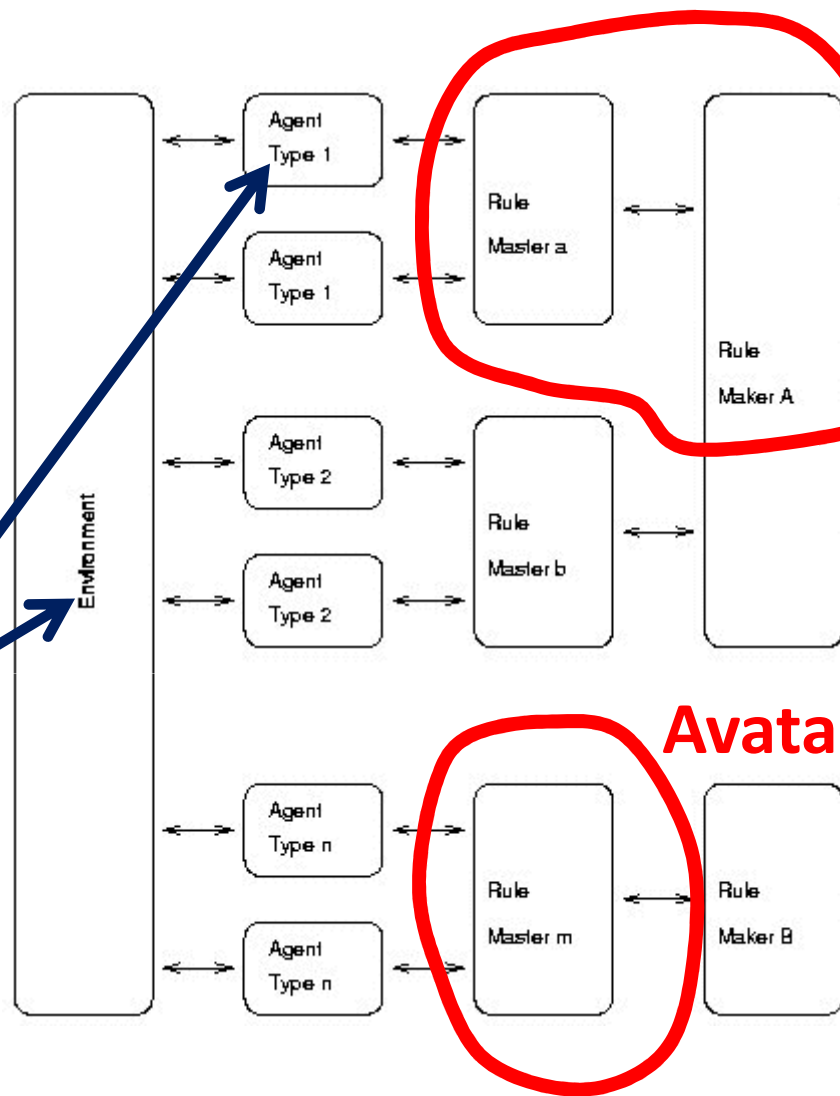
(1) (n)

...

$$y_m = g_m(x) = f(B_m f(A_m x))$$

(1) (n)

**Microstructures,
mainly related to
time and
parallelism**



**Fixed
rules**

ANN

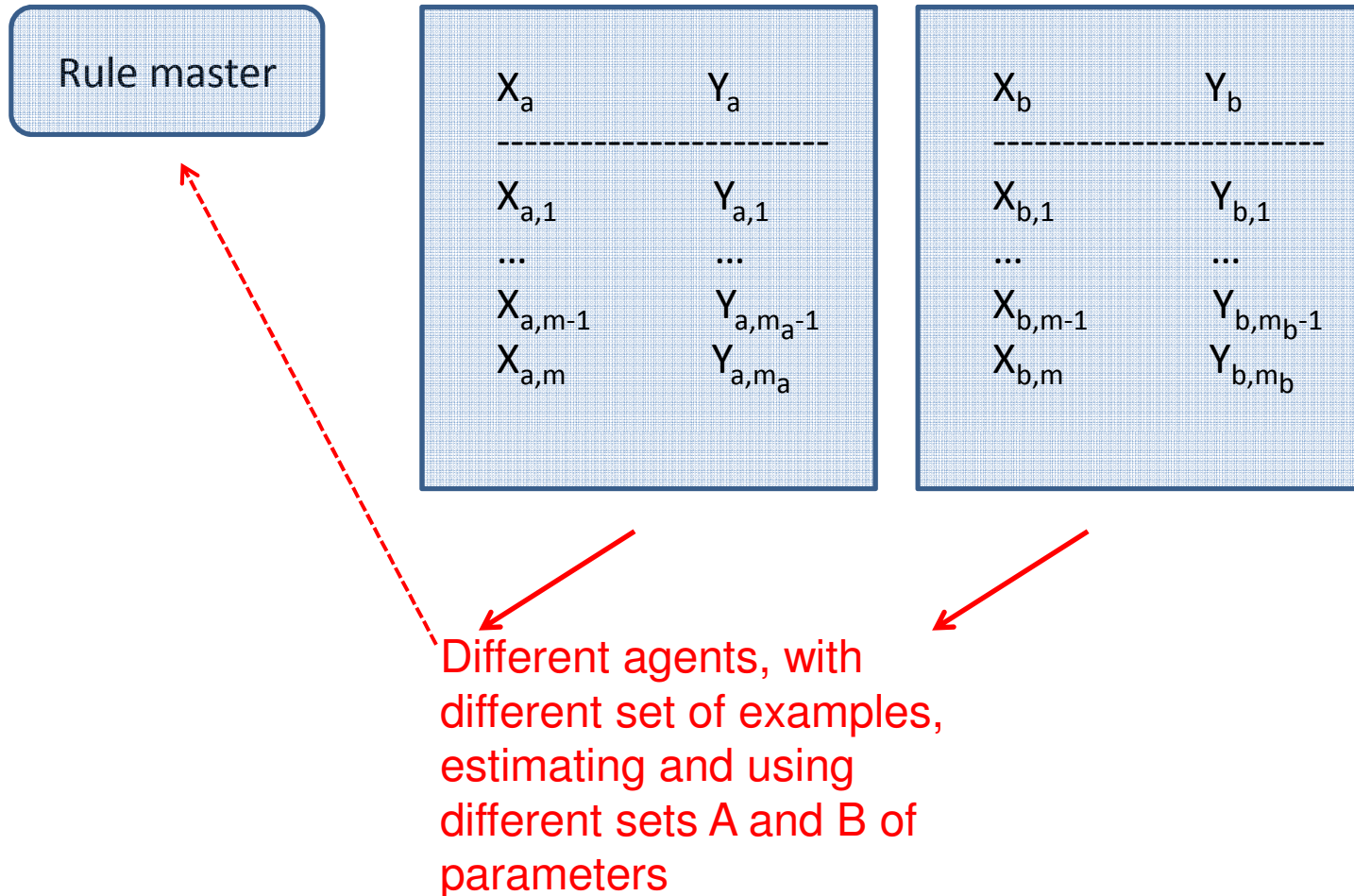
(CS)

(GA)

**Reinforcement
learning**

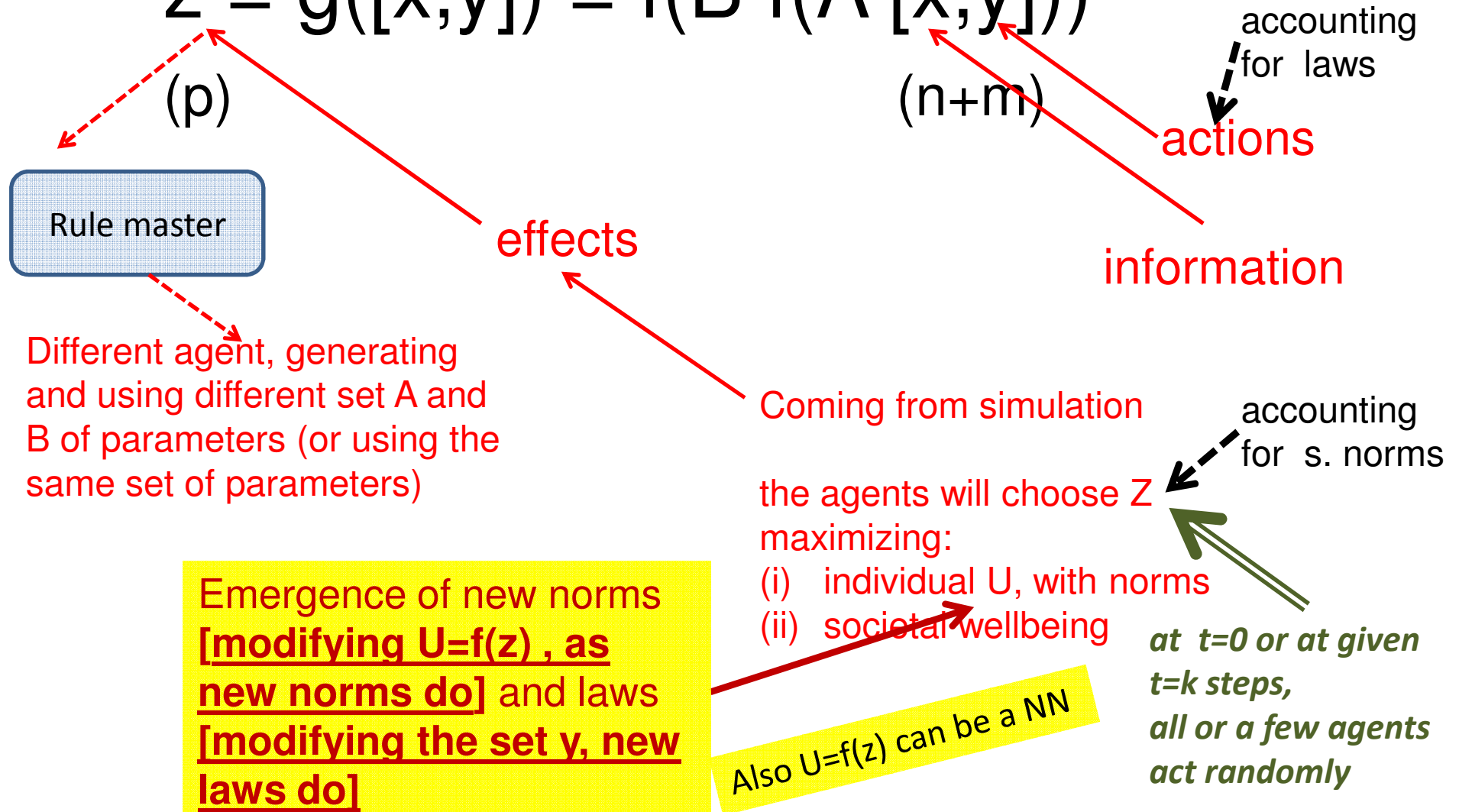
Avatar

a - Static ex-ante learning (on examples)

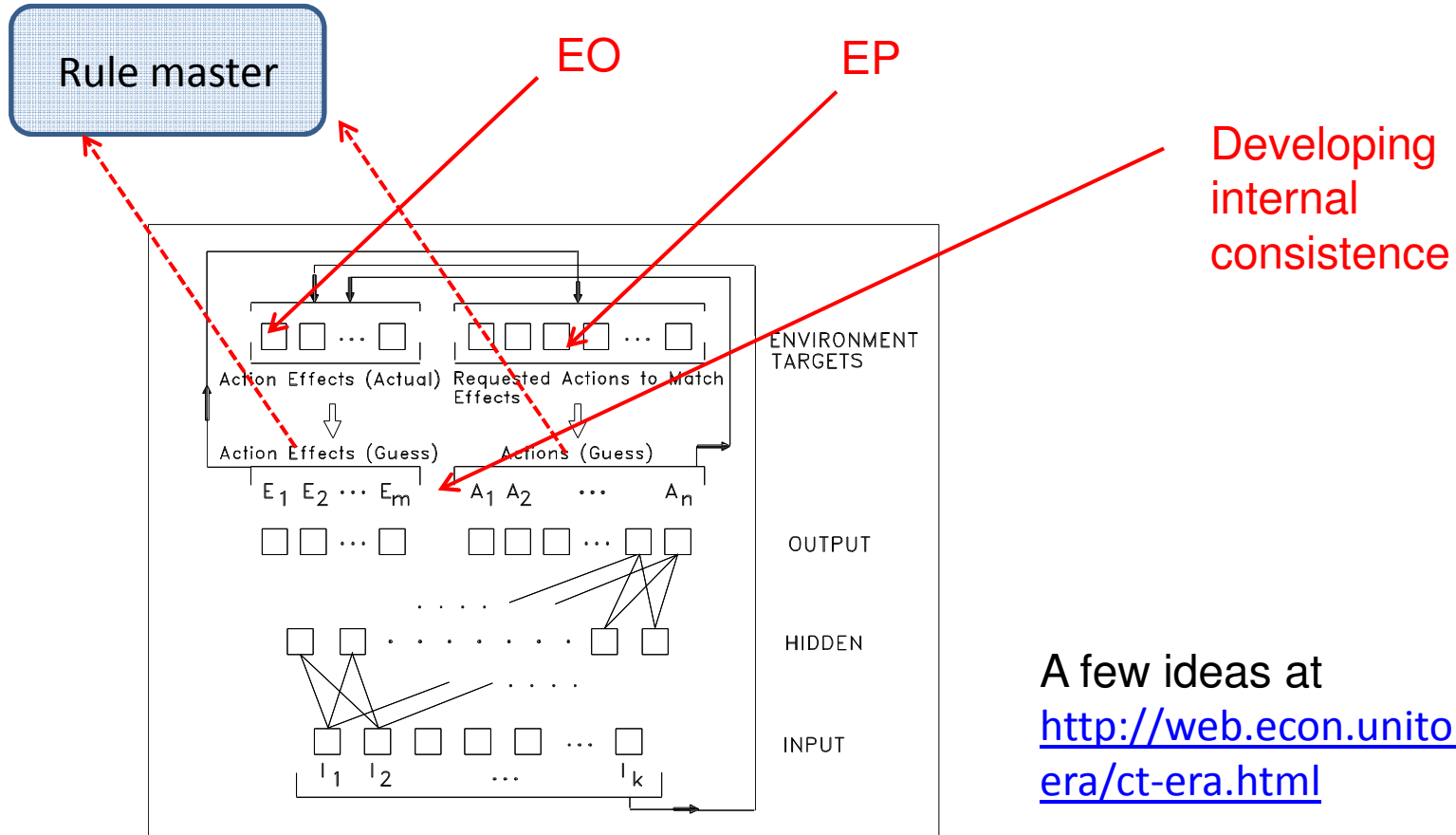


b - Continuous learning (trials and errors)

$$z = g([x,y]) = f(B f(A [x,y]))$$



c - Continuous learning (cross-targets)



A few ideas at
<http://web.econ.unito.it/terna/ct-era/ct-era.html>