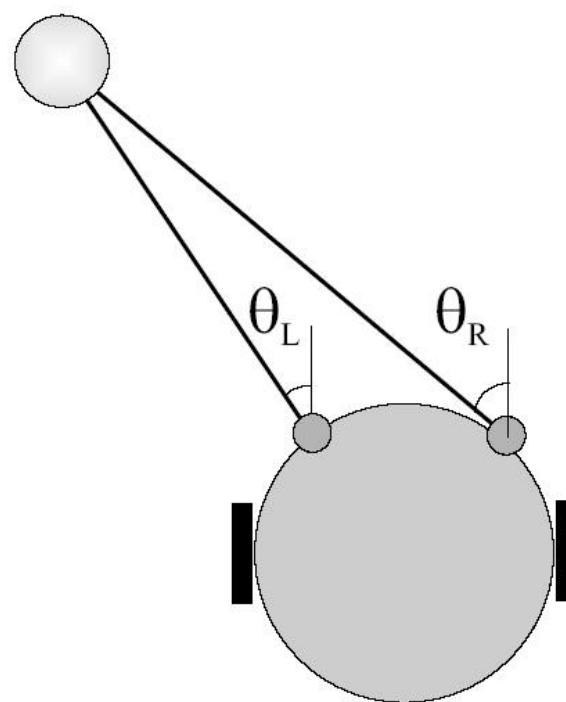


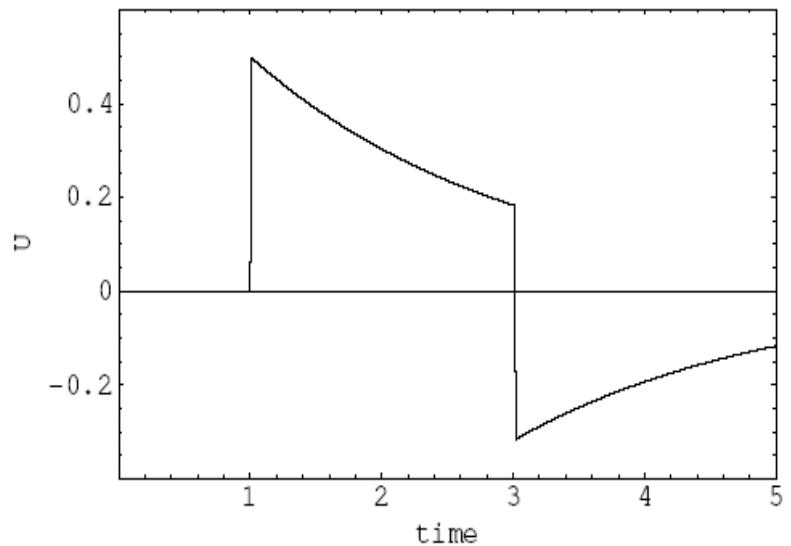
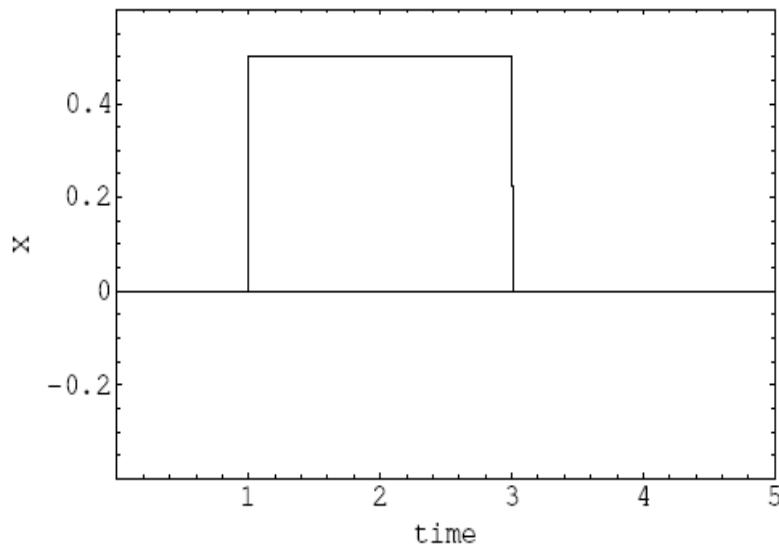
Animal behavior: Lessons for robotics

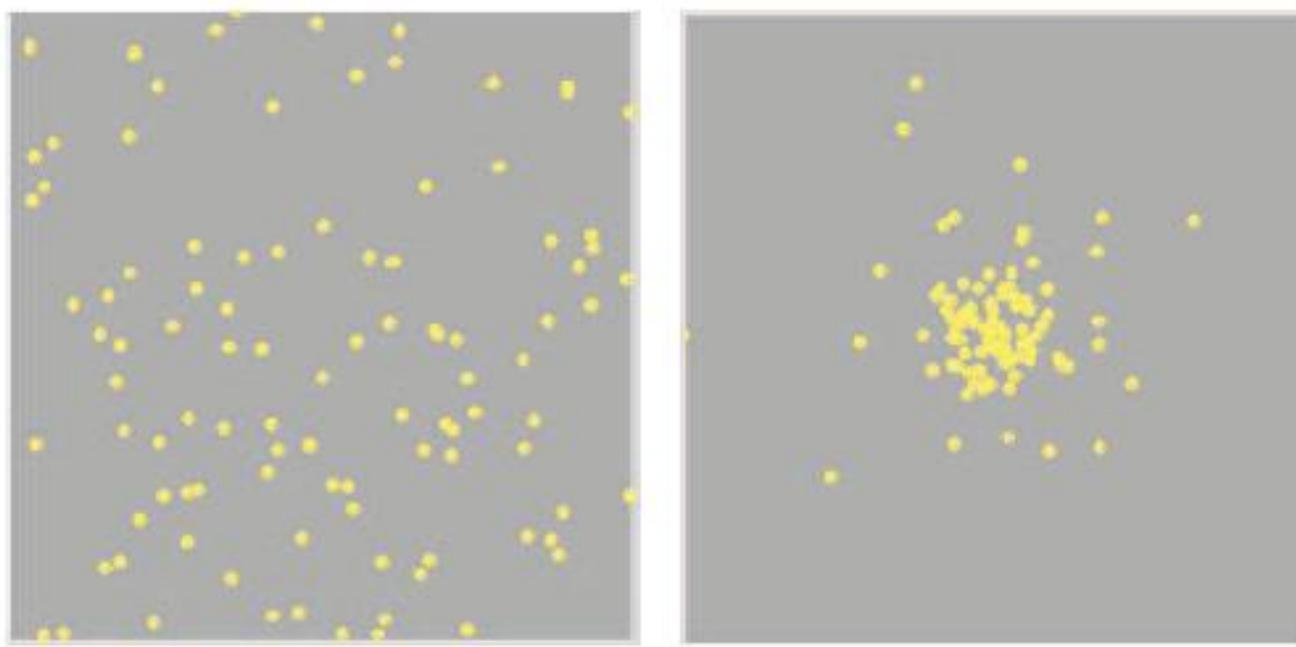
Lecture
2008-02-08

- **Klinotaxis:**
 - follow a light gradient
 - Ex. Fly maggots... **and Robots!**



- Switching behaviors in E. Coli





- The motion of simulated E. Coli

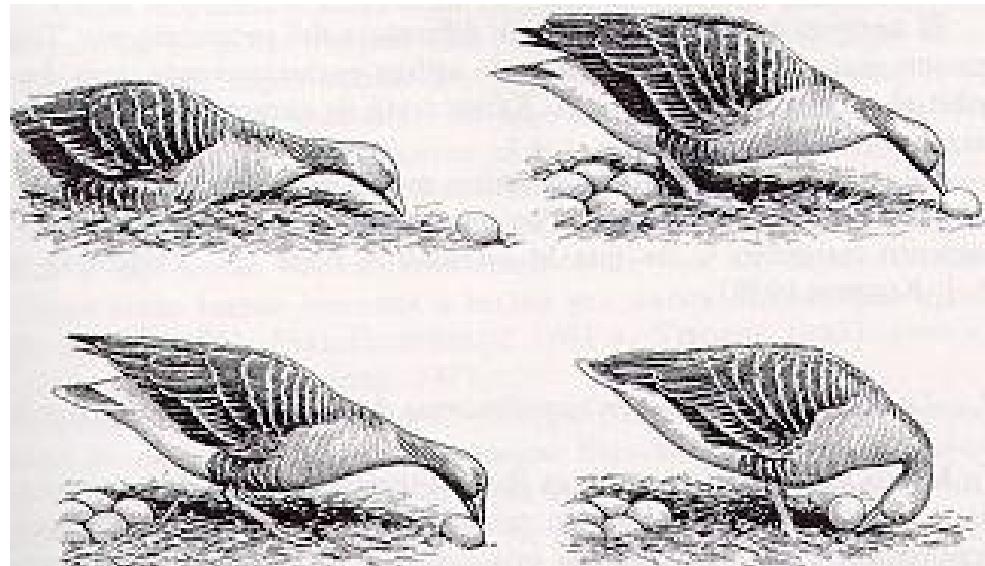
Fixed action patterns (FAPs)

- Example: **attack behavior** of praying mantis



Fixed action patterns (FAPs)

- Example: **egg-retrieving behavior** of geese



Innate releasing mechanism (IRM)

Actual colour & shape

Male stickleback:
red belly,
bluish-white back



Red belly



Model characteristics

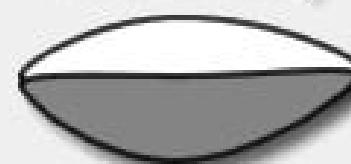
Reaction of males
to model

Attack

Female stickleback:
greyish-green body,
swollen silvery belly

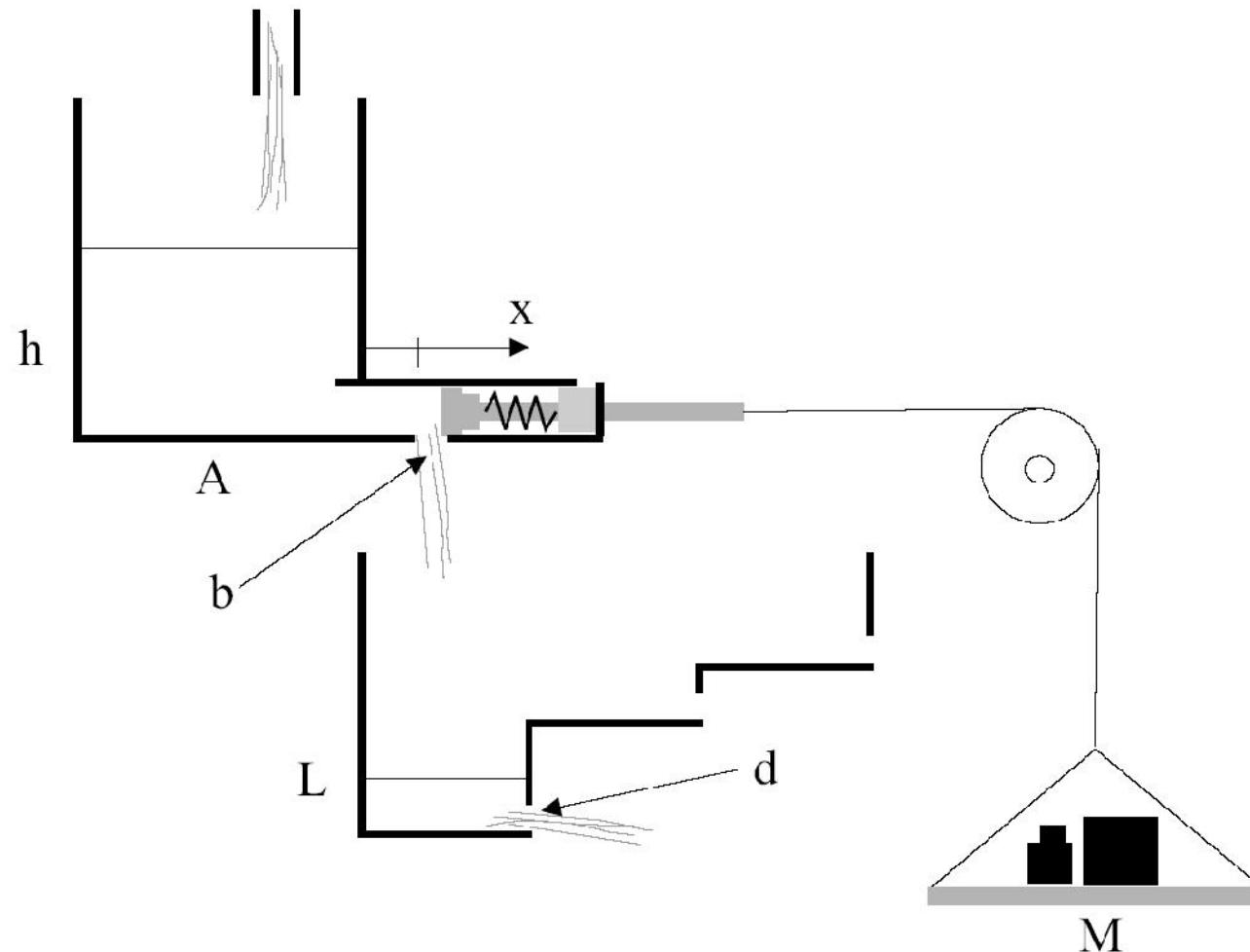


Swollen belly



Court

Lorenz' psychohydraulic model of motivation



Lorenz' psychohydraulic model of motivation

