How do we actually use Operant Conditioning Principles?

In shaping, what is reinforced is some *approximation* of the target behavior.

Do we wait for the subject to deliver the desired behavior?

Sometimes, we use a process called **shaping**.

Shaping is reinforcing small steps on the way to the desired behavior.

To train a dog to get your slippers, you would have to reinforce him in small steps. First, to find the slippers. Then to put them in his mouth. Then to bring them to you and so on...this is shaping behavior.
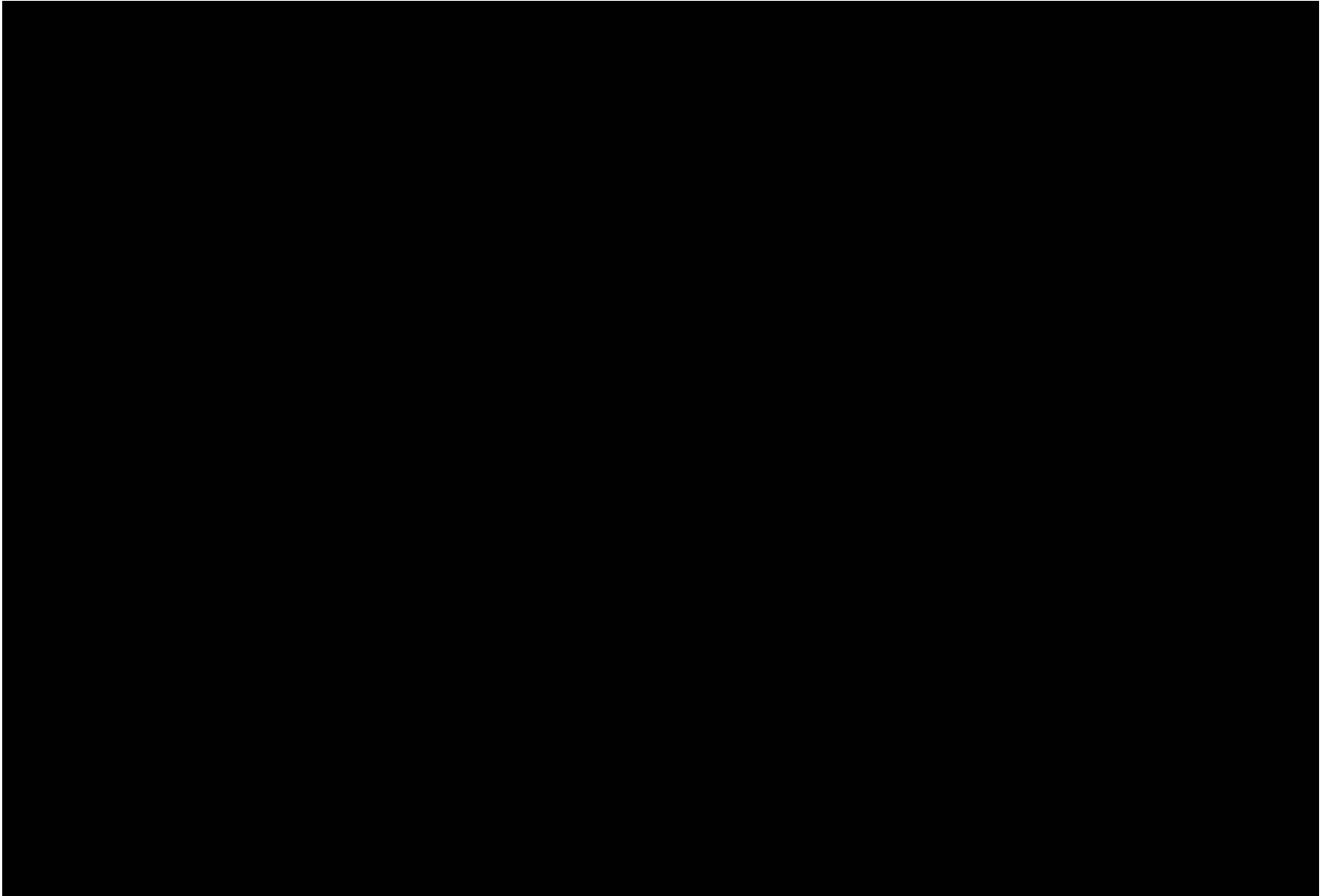
To get Barry to become a better student, you need to do more than give him a massage when he gets good grades. You have to give him massages when he studies for ten minutes, or for when he completes his homework. Small steps to get to the desired behavior.

Shaping

Shaping pigeons

Chaining Behaviors

- Subjects are taught a number of responses successively in order to get a reward.

Is it shaping or chaining?

Shaping:

In shaping, the form of an existing response is gradually changed toward the desired target behavior by rewarding **successive approximations** of behavior. (Playing hot or cold – one target)

Chaining:

Involves reinforcing individual responses occurring in a sequence to **form a complex behavior**. It is frequently used for training behavioral sequences (or "chains") that are beyond the current repertoire of the learner. (brushing your teeth – several, successive targets)

We must realize…

- Skinner came up with his theories about schedules by using rats in a box in a highly controlled environment. Some of the examples are up for interpretation since life does not take place in a controlled environment.

- Humans are not rats, and our world is not a highly controlled environment. Therefore, we cannot always make the theories apply equally well with each example.

- Pavlov, Watson, and Skinner all proposed theories that downplayed the role of cognition in behavior. We now know that cognition plays a significant role in our behavioral choices, and that we are not "mindless mechanisms."

SOCIAL LEARNING

2 types: Cognitive Learning and Modeling

Cognitive Learning

- Focuses on the mental processes involved in learning
  - How information is obtained, processed, and organized
  - Insight
  - Latent Learning

Kohler and Insight

- Early behaviorists described the mind to a "black box" whose workings could not be observed directly

- Wolfgang Kohler wanted to look in the box

  - He believed that there was more to learning-especially learning to solve a complex problem-than responding to stimuli in a trial-and-error fashion

Kohler and Insight

- In a flash of **insight**, the chimp picked up the stick and maneuvered the banana within his grasp

    Insight: A sudden understanding

Insight learning – "A-ha!" moment