Cues

Karen Pryor distinguishes between three types of antecedent events:

- A cue
- A command
- A poisoned cue

Other antecedents include cues based on punishment, removal of reinforcement, and extinction


Cue

A CUE is a discriminative stimulus (SD) established through positive differential reinforcement

In the presence of the CUE

- If the target behavior occurs, it is followed by a click and the delivery of a positive reinforcer
- If other behavior occurs, no click and no delivery of a reinforcer occurs

Cue

The CUE is the occasion in which particular responses are positively reinforced

The CUE itself becomes a conditioned positive reinforcer

Just like the “click”, you can use the CUE to shape new behavior to capture existing behavior
Command

A COMMAND is a discriminative stimulus (SD) established through negative reinforcement.

- In the presence of the COMMAND:
  - If the target behavior occurs, it prevents the occurrence of an aversive stimulus.
  - If other behavior occurs, an aversive stimulus is delivered (usually called a “correction”) which in turn is terminated by the emission of the target behavior.

Command

The COMMAND is the occasion in which particular responses are negatively reinforced.

- The COMMAND itself becomes a conditioned aversive stimulus.
- The removal or postponement can be used to shape and capture behavior.
- The presentation can be used to decrease behavior.

Poisoned Cue

A POISONED CUE is a discriminative stimulus (SD) established through the combination of negative and positive reinforcement.

- In the presence of the POISONED CUE:
  - The target behavior prevents the occurrence of an aversive stimulus and is followed by a positive reinforcer.
  - Other behavior is followed by an aversive stimulus (usually called a "correction") which in turn is terminated by the emission of the target behavior.

Poisoned Cue

The POISONED CUE is the occasion for positive reinforcement as well as negative reinforcement.

- The SD becomes ambiguous in terms of outcome (reinforcers or aversives).
- The SD can be used as positive reinforcer but the resulting performance is significantly different than the one produced by using cues associated with positive reinforcement alone.
Poisoned Cue

Possible effects on behavior
- Learner is reluctant, often with visible manifestations of stress
- Behavior breaks down preceding the cue
- Behavior breaks down following the cue
  Example: Freezing, longer latencies prior to and following the cue

Ways cues may be poisoned
- Add aversive stimulation to a positive reinforcement program
- Teach with aversive stimulation for “errors” or “bad behavior” and positive reinforcement for “corrects” or “good” behavior
- Elicit behavior with aversive stimulation and capture it with positive reinforcement

Purpose

To compare the effects of training with cues established with differential positive reinforcement only to the effects of cues established through the combination of positive and negative reinforcement on the behavior of a miniature poodle
CUE TRAINING

“Ven” & “Punir”

Session 13
Middle of Training

Session 17
100% Accuracy

Capturing Behaviors 1, 2, 3

with

“Ven” & “Punir”
Capturing Behavior 2
Ven Punir
Session 44

Capturing Reversal of Behavior 2
Ven Punir
Session 63

Capturing Behavior 3
Ven Punir
Session 85
Last 3 trials

Stimulus Control Tests
What Got Poisoned?

The cue “Punir”
The leash
The context

No Leash

Ven Punir

Session 102
First 3 trials

Leash

Ven Punir

Session 112
First 3 trials

All Sr+

Ven Punir

Session 118
First 3 trials
Discussion

Combining positive and negative reinforcement during training can have detrimental effects on the topography, accuracy and frequency of the target behavior and evoke emotional behavior.

Emotional behaviors produced by this procedure do not disappear over time in spite of the use of positive reinforcement.

A poisoned cue can select behavior but the performance may be significantly different than with a cue associated with only positive reinforcement.

Discussion

... don’t poison the cue!

... and if you have

Use a different cue and retrain the behavior with positive reinforcement.

Seeing It Their Way: A Stimulus Control Application

Kaylee Patchakos and Dr. Jesús Rosales-Ruiz
University of North Texas
Background

Red tailed hawk: Buento Jamaicensis
Known to be at least 9 years of age but actual age is unknown.
(Average life span in the wild is 21 years.)

Background

Discovered by Texas Parks And Wildlife on the side of the road and deemed imprinted and unreleasable
Refuses to step into the glove

Background

Glove training with weight management was unsuccessful and resulted in the bird prematurely flying at anyone who went in to feed him

Background

Diet varied by day but typically either: 4 oz of BoP, 1 medium rat, or 4 oz of beefheart. Twice a week vitahawk was given in diet
In this demonstration, the hawk received additional beef heart
Identifying Poisoned Cues

Establish a baseline
Trainer says “name” -> dog eye contact ->
Trainer says “Sit” -> dog sits
Repeat for 5 trials
Varied the stimulus conditions
Revert to the original stimulus conditions

Cesar

Baseline  Leash on