

The Poisoned Cue and Its Implications for Teaching and Social Interactions

Jesús Rosales-Ruiz
UNT

TxABA 2018

1

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

Pryor, K. (2002, August/September). The poisoned cue. *Teaching Dogs*. 1(1), 8-9.

2

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

3

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

4

Command

5

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

6

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

7

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

8

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

9

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



LOGAN

10

Poisoned Cue

11

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

12

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

13

CUE TRAINING

“Ven” & “Punir”

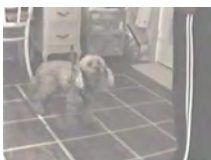
14

Cue Training

Ven



Punir



Session 13
Middle of Training

15

Cue Training

Ven



Punir



Session 17
100% Accuracy

16

Capturing Behaviors 1, 2, 3

with

“Ven” & “Punir”

Capturing Behavior 2

Ven



Punir



Session 44

17

Capturing Reversal of Behavior 2

Ven



Punir



Session 63

18

Capturing Behavior 3

Ven



Punir



Session 85
Last 3 trials

19

Stimulus Control Tests

20

What Got Poisoned?

21

- The cue "Punir"
- The leash
- The context

No Leash

22

Ven

Punir



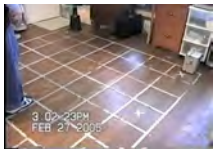
Session 102
First 3 trials

Leash

23

Ven

Punir



Session 112
First 3 trials

All Sr+

24

Ven

Punir



Session 118
First 3 trials

Other Contexts

Leash



Leash + Harness



25

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

26

Discussion

... don't poison the cue!

... and if you have

Use a different cue and retrain the behavior with positive reinforcement

27

Seeing It Their Way: A Stimulus Control Application



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

28

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.)

29

Background



Discovered by Texas Parks And Wildlife on the side of the road and deemed imprinted and unreleasable

Refuses to step into the glove

30

Background



Glove training with weight management was unsuccessful

and resulted in the bird prematurely flying at anyone who went in to feed him

31

Background



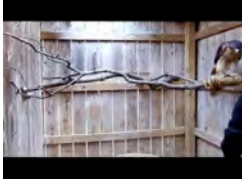
Diet varied by day but typically either: 4 oz of BoP, 1 medium rat, or 4 oz of beefheart. Twice a week vitahawk was given in diet

In this demonstration, the hawk received additional beef heart

32

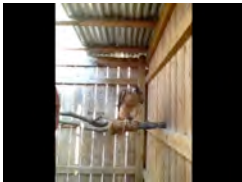
Baseline

33



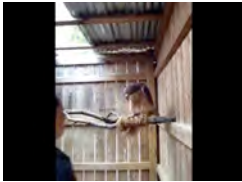
Change of Glove

34



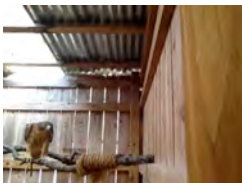
Maintenance

35



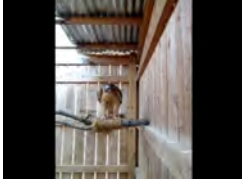
Reversal

36



Flying

37



Identifying Poisoned Cues

38

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

39

Cesar

40

Baseline



Leash on



Cesar

41

Leash/Floor



Leash/Desk



Cesar

42

Leash/House



Leash/Floor & Owner

