

How Animals Learn/ Training and Behavior Mod

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HARMONY DOG TRAINING

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Unlabel Me!

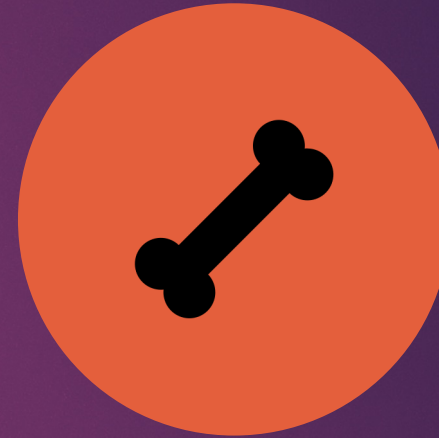
- ▶ Behavior is communication.
- ▶ Behavior is responding to the environment to get one's needs met.
- ▶ Behavior is not “good” or “bad.”
- ▶ Behavior continues because it works.
- ▶ An animal is NOT his or her behavior.



Two Types of Learning



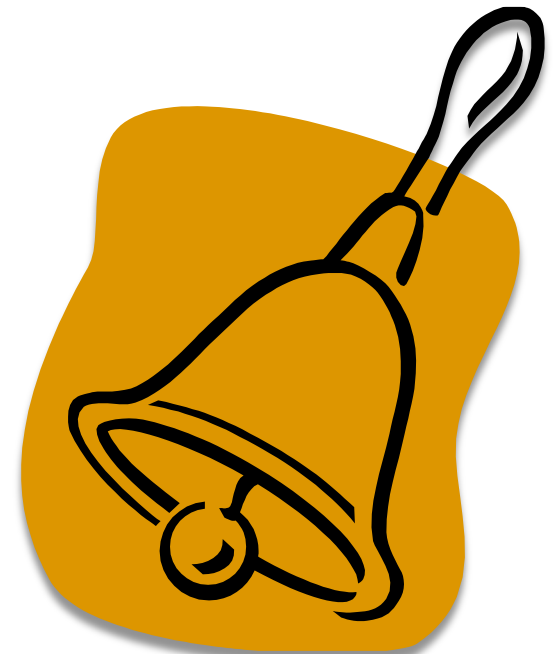
“CLASSICAL” CONDITIONING:
LEARNING BY ASSOCIATION



“OPERANT” CONDITIONING:
LEARNING BY CONSEQUENCES

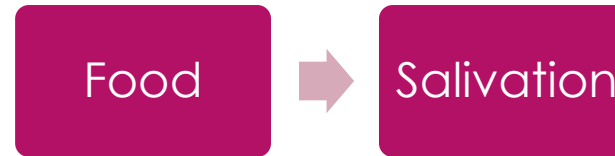
Classical Conditioning

- ▶ Creating an association between two stimuli
 - ▶ Primary/unconditioned – animal doesn't need to learn to like or dislike it (food, pain)
 - ▶ Secondary/conditioned – animal learns to react to it based on its association with the primary stimulus
- ▶ This is occurring ALL the time.



Pavlov's dogs:

- ▶ Food triggers salivation



- ▶ Bell began predicting food



- ▶ Soon, bell alone could trigger salivary response normally only caused by food.



Operant Conditioning

- ▶ Forming an association between a behavior and a consequence.
- ▶ Triggered by an antecedent in the environment.
- ▶ Behavior is changed by changing the antecedent or consequence.



The 4 Quadrants of Operant Conditioning

When training an animal, there is one behavior that we want to **reinforce** (encourage/increase), and another behavior that we want to **punish** (discourage/decrease).

We can add something good or bad (+ **positive**) or remove something good or bad (- **negative**) to get the behavior we want.

IN THIS EXAMPLE: The reinforced behavior is POLITE LOOSE-LEASH WALKING.

The punished behavior is PULLING ON THE LEASH.



+R

Positive Reinforcement

ADD Good Stuff: Give treats, keep walking.
Polite walking behavior is encouraged.



-P

Negative Punishment

END Good Stuff: Stop walking, stand still.
Pulling behavior is discouraged.



+P

Positive Punishment

ADD Bad Stuff: Give leash correction.
Pulling behavior is discouraged.



-R

Negative Reinforcement

END Bad Stuff: Stop leash correction.
Polite walking behavior is encouraged.

“Effectiveness
is not
enough”



All can change behavior,
but methods matter.



“Pavlov is always sitting on
your shoulder”



“Reinforcement works;
everything else is
dangerous.”

Reinforcement vs. Punishment

- ▶ Reinforcement BUILDS behavior.
 - ▶ Behaviors that are reinforced become rewarding on their own.
 - ▶ Example: Dog that is reinforced enough for going to a mat will begin to seek out that mat to relax on, even on his own.
- ▶ Punishment TEMPORARILY stops behavior.
 - ▶ Behavior may even stop for a long time, but in the absence of punishment, it will reappear, and require additional punishment.

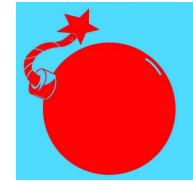
Advantages of Positive Reinforcement

- ▶ Creates eager learners who enjoy the behaviors being taught (classical conditioning at work again)
- ▶ Builds a relationship between teacher and learner
- ▶ Mistakes do no harm (just a couple extra calories for the “oops” cookies!)
- ▶ Creates strong behaviors
- ▶ Easier to focus on what we DO want than all the things we DON'T.
 - ▶ Rather than punishing a behavior, we can replace it with something better (sitting instead of jumping)!
- ▶ Creates positive associations



The Problems With Punishment

- ▶ Requires impeccable observation skills and timing that most of us don't have. (Too easy to correct your dog for the wrong thing)
- ▶ Habituation: learners become used to a level of punishment, so require harsher punishments over time to be effective. *How many of us really want to do this?*
- ▶ Using punishment is like dropping a bomb: imprecise and unpredictable
 - ▶ Remember the lessons of classical conditioning – a punished dog may associate anything in its environment at the time with the punishment, including you.
 - ▶ Common fallout from punishment: increased fear, aggression, and anxiety
 - ▶ Something doesn't have to be painful to be aversive.
- ▶ Avoidance: dogs try to prevent punishment from happening by stopping all behaviors, which ultimately slows learning.
- ▶ We're not solving the underlying problem. It's like pushing down a beach ball in the water. Sooner or later, it's going to pop up somewhere!



“It’s Just A Tap On The Shoulder.”

- ▶ By definition:
 - ▶ If something stops a behavior, it is a punisher.
 - ▶ Punishers work because they are aversive.
 - ▶ Aversives will always result in fallout.
- ▶ We don’t know how severe the fallout will be.
- ▶ Fallout may not be related to the severity of the aversive.
- ▶ Warning beeps/vibrations work because they are conditioned punishers. They predict a potential for a worse aversive; therefore, have the same behavioral – and emotional – response.
- ▶ “Positive reinforcement works and everything else is dangerous.”
–Murray Sidman

Modifying Behavior

- ▶ Reinforce behaviors that we DO want (with treats and toys, not just praise and pets!)
- ▶ Prevent rehearsal of behaviors that we DON'T want (management).

You Can't Reinforce Fear

Behaviors are reinforced, not emotions.

Giving attention, comfort, treats, etc. to a scared or stressed animal is NOT going to make it worse.

Dominance Myth

- ▶ Training is not about dominance
- ▶ Term itself is a misapplication of an ethological concept
- ▶ Theory based on faulty, now-disproven wolf pack studies
- ▶ Dogs aren't wolves, and aren't pack animals – don't form fixed hierarchies
- ▶ We aren't dogs
- ▶ Has nothing to do with learning and teaching anyway
- ▶ AVSAB Position Statement

Fish

- ▶ Adult male lab mix
- ▶ Transferred to Michigan shelter from high-kill animal control in southern state
- ▶ No history
- ▶ Heartworm positive and intact at time of intake
- ▶ Scarring on ears from excessive fly bites, thick scarring around neck (history of embedded collar?)
- ▶ Fearful and avoidant of staff, growling at some male staff

Notes from first attempt to assess:

- ▶ “Unable to test today - too fearful. Ran from me in exterior kennel, tail tucked, body low, wide eyed. M. leashed up and brought into real life room. Paced and stood at door - very stressed. Would take treats I dropped but not from hand. Would avoid if I tried to touch.”

First two weeks:

- ▶ Worked on pure desensitization/counter conditioning – tossing treats from outside kennel.
- ▶ Eventually would approach and allow me to leash and take out.
- ▶ Other than leashing, would avoid any contact. Startled, cowered and fled with any slight movement.

Started Clicker Training

- ▶ Worked on shaping two foundation behaviors: settle on mat and hand target
- ▶ Goal was to build relationship with him where he was empowered to make decisions and earn reinforcement.
- ▶ His behaviors mattered and he could control the interaction.
- ▶ Predictable ways of engaging with a person.

Go to Mat, First Session:

- ▶ Clicking for any movement toward or on to the mat, then remaining there.
- ▶ Treat delivered on mat.
- ▶ Re-set cookies after several seconds.
- ▶ <https://photos.app.goo.gl/UQAFh0Z8lphY8Ltx1>

Go to Mat: Second Session

- ▶ Waiting for body fully standing on mat.
- ▶ <https://photos.app.goo.gl/Pt5Jxlt dvGak989l2>

Go to Mat: Third Session

- ▶ Shaping a default sit, building to a down.
- ▶ <https://photos.app.goo.gl/8GFvbaQH0Mj6NFhn2>

Go to Mat: Fourth Session

- ▶ Settling in down position on mat.
- ▶ Now use this as his “consent” behavior to work on DS/CC to my movement.
 - ▶ Begin standing up and moving gradually.
 - ▶ If he stands up, I will sit back down.
 - ▶ Empowers him to communicate if he is ready.
- ▶ <https://photos.app.goo.gl/KfozOYqbaXQpQhYF2>

Hand Target

- ▶ Goal: shape Fish to touch nose to my hand as a way to voluntarily approach, take in information, and interact with me.
- ▶ The problem: Any movement of my hand would cause a fear/avoidance response.
- ▶ Fish began HW treatment and subsequently came down with kennel cough. Could not go to play yards due to treatment, or to real life room due to his infection. Worked with kennel door between us, which made my hand less intimidating to him.

Hand target: Now and Then

- ▶ <https://photos.app.goo.gl/PIX6u057WxBDI9iv1>
- ▶ <https://photos.app.goo.gl/zQO4S590JMcYrxBi2>

Shortly after . . .

► <https://photos.app.goo.gl/TfNt5UxIVB6UjVbC3>

Fish Progress

- ▶ Would approach all staff and others eagerly for attention.
- ▶ Continued to work on settling on mat during movement and environmental change.
- ▶ Worked on chin rest behavior as consent for touching for husbandry.
- ▶ Shaping games for mental stimulation.
- ▶ Able to be placed for adoption. Last update all was well!



What Did Fish Learn?

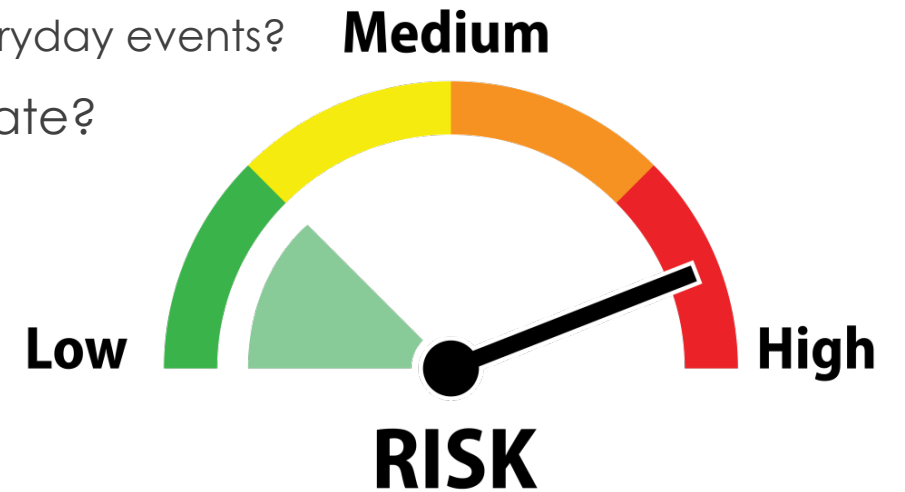
- ▶ A couple basic skills
- ▶ That people equal good things
- ▶ That his behaviors and choices matter
- ▶ That he can control his environment

What Is Possible?

- ▶ Behavior is modifiable – we don't "fix," "correct," or "nip problems in the bud."
- ▶ A behavior that is learned and rehearsed can always come back.
- ▶ Examples:
 - ▶ Stick shifts
 - ▶ Sports
 - ▶ Names
 - ▶ Shelter examples (kennel doors, harnesses)
- ▶ The best predictor of future behavior is past behavior.
- ▶ Abnormal behavior/brain functioning can limit ability to modify a behavior

Assessing Risk

- ▶ How predictable/manageable is it?
 - ▶ Can we identify the triggers?
 - ▶ Can they be avoided/managed?
 - ▶ How likely are they to occur? Extreme situations or everyday events?
- ▶ What does the animal do? How quick do they escalate?
 - ▶ Avoidance
 - ▶ Warning signs
 - ▶ Bite



Acquired Bite Inhibition (ABI)

- ▶ When the dog bites, how hard do they bite?
- ▶ Where on victim's body do they bite?
- ▶ Bite Scales
 - ▶ Ian Dunbar – dog to human
 - ▶ Cara Shannon – dog to dog
- ▶ Predictor of likely severity of future bites
- ▶ Not modifiable after a few weeks of age



Canine Bite Levels

Designed by Dr. Sophia Yin, Illustrated by Lili Chin*

Level 1 (Pre-Bite)

Snapping (air bite, no contact)



Get help before it progresses to an actual bite. Do not punish these warning signs or the dog may progress to biting without warning. Instead, learn the signs of fear and anxiety that the dog may show prior to this situation and the common human actions that might contribute.

Level 2 (Near-Bite)

Tooth contact on skin but no puncture



This near-bite is concerning even though it is inhibited and has not yet broken skin. Ask yourself what earlier signs (i.e. of fear/anxiety) you missed.

Level 3

3A. Skin punctures, single bite (all punctures shallower than the length of the canine tooth)



Even though the bite may not be severe it is still reportable. Reporting is mandatory if the victim is treated in a hospital. Once your dog has actually bitten at this level (or higher) he will always be considered a liability, even if, with behavior modification he is 99.9% improved.

3B. Skin punctures, multiple bites (all punctures shallower than the length of the canine tooth)



Multiple bites generally mean the dog is in a higher arousal state. The dog is reacting without thinking in between bites.

Level 4 (Very Serious)

Single bite with punctures deeper than the length of the canine (the dog bit and clamped down) or with slashes in both directions from the puncture (the dog bit and shook his head)



This is a harder bite than a level 3 bite. It's no longer inhibited. Therefore, it represents a much higher liability. This level bite can kill a child.

Level 5 (Very Serious)

Multiple-bite attack with deep punctures, or multiple attack incident



Dogs that bite at this level have generally had practice biting at levels 3 and 4 already. Some dogs are so fearful that a scary event triggers such a high arousal state that they get stuck in a reactive mode and continue to bite.

Level 6 (Death)

Victim killed or flesh consumed



It's important to realize that even little dogs and puppies can kill infants and small children and that death may be due to overly aroused play, rather than viciousness or fear. It's best to seek qualified help before the dog even reaches a level 2 bite.

*These levels are based on the levels developed by Dr. Ian Dunbar

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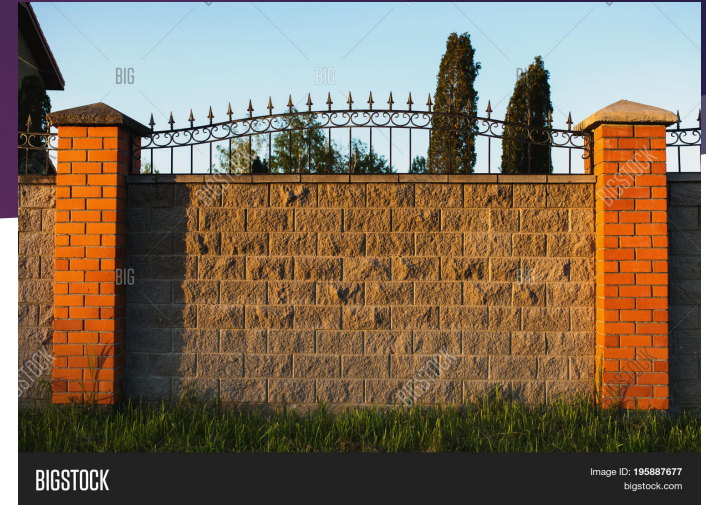
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Balancing Risk

- ▶ Dogs with even low likelihood triggers but poor bite inhibition can still be extremely dangerous.
- ▶ Dogs with high likelihood triggers, but good bite inhibition and warning signs may be able to do OK in the right environment.

Being Realistic

- ▶ What would the perfect home look like?
 - ▶ No men, no kids, no other animals . . . ANYWHERE. EVER.
 - ▶ DIY plumbing, electric, home repair, landscaping.
 - ▶ At least one owner should be a veterinarian with advanced knowledge in behavior and training. Grooming ability may also be necessary.
 - ▶ Home in the middle of nowhere, privacy fencing, probably at least 8 feet high. Ample yard for exercise.
- ▶ This is (somewhat) facetious, but consider . . .



Being Realistic

- ▶ What should the owner be prepared for to be 100% safe?
 - ▶ No visitors.
 - ▶ No delivery people.
 - ▶ No life changes (new partners, kids, ailing parents).
 - ▶ No travel.
 - ▶ No walks. Only leave house when necessary and muzzled.
 - ▶ Home and yard modifications.
 - ▶ Redundant management at all times.
 - ▶ Potentially thousands of dollars and many hours on veterinarians, medications, behavior experts.
 - ▶ Acquire college-level knowledge of behavior and intervention.
 - ▶ Physical ability to control dog.
 - ▶ Good health and home insurance.

Things Happen

- ▶ Off-leash dogs, roaming animals.
- ▶ Unexpected guests.
- ▶ Owner injury/illness/hospitalization.
- ▶ Work-required travel or relocation.
- ▶ Relationship changes.
- ▶ First rule of management is: Management always fails.
 - ▶ Trees fall on fences, gates and doors blow open, leash clips fail, collars slip off, owners trip and fall, miscommunication happens



What Are the Possible Consequences?

- ▶ Human injury, possibly severe.
- ▶ Other animals injured or killed (possibly someone's beloved family pet).
- ▶ Lawsuits and legal involvement.
- ▶ Loss of homeowner's insurance.
- ▶ Loss of place to live.
- ▶ Likely euthanasia.
- ▶ Broken hearts.
- ▶ Owner who will never adopt from a shelter again.
- ▶ Responsibility to community.

Who Is the “Normal” Adopter?

- ▶ Wants a dog to walk, run, camp and cuddle with. Member of the family.
- ▶ Not looking to become a behavior expert.



“Trainer Projects”

- ▶ Professionals and those who have been through this before are not looking for special project dogs.
- ▶ Know the risks, investment, and heartbreak.

Before Blaming

- ▶ It is totally OK to just want a nice family pet (and there are plenty of nice family pets needing homes).
- ▶ The average person is not an expert in dog behavior . . . and shouldn't necessarily have to become one to have a pet.
- ▶ Everyone makes mistakes.

Take-Aways

- ▶ Behavior is modifiable.
- ▶ Positive reinforcement can change even very challenging behaviors.
- ▶ But, all animals are individuals, and behavior can never be 100% controlled.

Questions?

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