

Instructions for HW 1 How to Systematically Approach Behavior Problems

For the learning theory/behavior modification questions you see basically 4 types of questions

- A. Type 1:** Fufu raids the garbage can or plays with other dogs at the park rather than coming when the owner calls or performs some other bad behavior. Why does Fufu do this? And how would you fix it.

EXAMPLE: Type 1 answer: To answer this question you must figure out what's reinforcing the bad behavior or what's punishing the behavior that you'd like. Animals behave in certain ways because they get reinforced for behaving those ways. Once you figure out what might be reinforcing the bad behavior or punishing alternate good behavior, you can fix the behavior by removing the reinforcement or punishment.

- B. Type 2 question:** An animal is behaving a certain way and you want to talk about different training techniques and the categories of operant conditioning into which the techniques fall. Define the behavior(s) you want to fix and then describe a technique for each category of operant conditioning. You have to be able to convince a dog trainer that you're correct about the categories of operant conditioning into which you've put the techniques so wording is very important. In your answer you must be clear about your description of the technique so that the wording clearly distinguishes that one technique from another.

Type 2 answer: First define the behavior—one behavior that you can reinforce and one that you can punish. If it's a behavior you want to increase, then you would reinforce the behavior. If it's a behavior you want to decrease, then you would punish the behavior. You must make it clear somewhere that you know that reinforcement means you increase the behavior and punishment means that you decrease or stop the behavior. Next decide whether you're adding something or removing something. When you describe the specific technique you have to be clear about whether you're adding or removing something and you have to make it clear whether the behavior is increasing or decreasing (example).

- 0. EXAMPLE:** An owner complains that when she takes her dog Fluffy to the park to play with her friend's dog Paco, her dog ignores her and runs away to play with Paco rather than coming when called. Define the behavior(s) you want to fix and then describe a technique for each category of operant conditioning. Make sure you use key words (**increase, decrease, add, remove, and where appropriate indicate that you understand the correct timing**).

Increase: coming when called (reinforcement this behavior)

Decrease: running away to play with Paco (punish this behavior)

Positive reinforcement: Give (Add treats) a treat to **increase** coming when called.” (Make sure you use the key words).

Negative reinforcement: Shock him with an electronic collar until he starts coming (and **remove** the shock **as soon as he starts coming**)
You must specifically state in your answer “**Remove** an aversive shock **as soon as the dog starts coming** to you in order to increase the likelihood that the dog will come when called.”

Positive punishment: Shock him with an electronic collar (**add shock**) until he **stops** running (decreases the behavior)) towards Paco.

Negative punishment: **Remove** Paco as soon as Fluffy starts running towards him order to stop (or decrease the behavior of) Fluffy from running towards Paco. (OR block Fluffy so he clearly can't get to Paco, thus remove his access to Paco as soon as he start running in order to keep him from running to Paco).

- C. **Type 3 question:** The questions presents a problem and asks you to list general behavior modification techniques you could use and then asks you to specifically describe how someone might use each one of these techniques.

Type 3 Answer:

- **Flooding:** you present the stimulus full force until the animal stops reacting to it. The animal **learns to ignore the stimulus because the stimulus has no aversive or pleasurable consequence.**
- **Desensitization:** Present the stimulus at a low level that the animal does not responds to and gradually increase the strength of the stimulus until the animal learns to ignore the full-force stimulus
- **Classical counter-conditioning:** Classically condition an association that's opposite to a previously classically conditioned association.
- **Operant counter-conditioning:** Train an alternate behavior that's incompatible with the problem behavior. (Note that for operant counter-conditioning to work, the animal must associate the alternate behavior with pleasurable consequences).

1. **EXAMPLE:** You own a cat and just adopted a second cat. The cats don't like each other. They growl and hiss when they're in the same room even if they are 10 feet apart. You want to fix the behavior. List general behavior modification techniques you could use and then describe how someone might use each one of these techniques.

- 1) **Flood:** Put the two cats in separate travel carriers (so that they can't hurt each other) and put the carriers next to each other until the cats get used to each other.

- 2) **Desensitize:** Start with the cats far away and when they're calm and relaxed gradually move them closer and closer (days).
- 3) **Classical counter-conditioning:** Teach them to associate each other with pleasurable things. So when they are in the same room, give them treats or attention. It's best then to only give them food and attention when they are together.
- 4) **Operant counter-conditioning:** Train an alternate/ incompatible behavior (that the cats like to perform) such as touching a target. When the cats are together have them repeatedly touch a target to receive treats.

D. **Type 4 Question:** Owner says she's using xxx technique and it's not working. What might be wrong?

Type 4 Answer:

1. **Timing:** Is the **timing** correct? Are you getting the treat to the animal right after he performs the behavior, or is there some other important behavior that consistently occurs before you give the treat? Do you need a bridging stimulus? Are you taking too long to deliver the treat even when the animal knows what he did right so that he gets bored or distracted while he's waiting for you to fumble around?
2. **Criteria:** Have you defined your **criteria** so that you can be consistent and clear? Remember, every interaction is a training session. Are you interacting correctly all the time or just during times you designate as training sessions? Are others in the house reinforcing the same or different criteria (so that the behaviors generalize to others instead of just being good for you)?
3. **Rate of reinforcement:** Are you reinforcing frequently enough to keep your dog from being bored and enough so that your dog can learn the behavior? Are you reinforcing or are you bribing the animals by showing the reward first or luring the animal with the reward? (**A bribe or lure is when you have to show the animal the treat first in order to get the behavior. Read more about bribes in section 3**)
4. **Shaping mistakes:** If the behaviors in question require shaping, are you advancing to the next step before the prior step is down pat? If you're unsure, collect data and don't go on to the next step until your dog performs the current step correctly 8 or 9 out of 10 times in a row. Are you making big leaps between steps? Are you staying on earlier steps too long so that the animal has trouble relearning that this isn't the goal behavior? **Or chaining mistakes:** Have you broken complex behaviors into their component parts and perfected them individually?
5. **Natural history considerations and past experience:** Is the animal biologically prepared and anatomically able to perform the given behavior for the given reinforcement? Will past experience make the goal behavior easier or more difficult to train?
6. **Motivation:** Are you using the appropriate reward for the specific environment or situation? Ask yourself, at this moment what would the dog rather do.
7. **Communication:** Are you giving some type of body cue that's "telling" the animal to do something other than what you want him to do? Is the animal's body language conveying an emotional state that indicates he's fearful in this situation or not motivated for the type of reinforcement you're using?

1. **EXAMPLE:** You're trying to teach your dog to sit when you come home and he greets you. You try to give him treats for sitting and ignoring jumping but for some reason your plan isn't working. He continues to jump on you when you get home sometimes. What might be going wrong? (You must be specific enough to show that you could actually problem-solve in a real-life situation.
 - **Timing:** You take too long to get the treat to him when he sits
 - **Criteria:** Sometimes you give him a treat for almost sitting and sometimes you give it for actually sitting. Also, sometimes you give him attention when he's standing or jumping.
 - **Rate of Reinforcement:** Sometimes when you get home you are too tired to wait for him to sit and then to give him a treat. You should reward him every time he performs the correct behavior until it's a habit.
 - **Shaping/chaining:** No shaping involved in this situation unless you talk about shaping a longer sit because he sits but then after he sits he gets up and starts jumping. If this is the case they you have to shape a longer sit by, for instance, first giving 3 treats in a row for sitting and then gradually increasing the interval between the 3 treats.
 - **Natural history and past experience:** He's had so much experience jumping that it will take longer before he consistently sits instead of jumping on people.
 - **Motivation:** He's not motivated for the types of treats you're using because, for instance, he has food available all day and it tastes better than the treats you're using.
 - **Communication:** You keep giving him a cue to jump up (or encourage him to become more hyper) even though you don't know it, by for instance, squealing or moving your hands around like a chew toy.