

DON'T SAY DON'T: MOVING PAST “HOW DO I STOP MY ANIMAL FROM...”

Chris Jenkins, CPBT-KA
Supervisor
Natural Encounters, Inc.

ABSTRACT

“How do I stop my animal from...?”

It is a common phrase used throughout the zoo and animal training world, and one that unwittingly leads trainers to come up with punishment-based strategies in dealing with their animals' behavior challenges. Wonderful possibilities exist in modifying and replacing unwanted behaviors through positive reinforcement, but the first step for many trainers is to first change their mindset from “How do I stop my animal from...?” and instead replace this question with “What do I want them to do instead?” This paper will take a look into the challenges associated with training strategies that focus on the reduction or elimination of behaviors, and will outline an alternative strategy that instead involves identifying a specific problem behavior in observable terms, analyzing the influences in the environment that are helping to maintain it, and formulating a plan to use positive reinforcement to train the animal to do a different, incompatible behavior instead. Specific behavior problems and their resultant training strategies will be presented in detail to illustrate this process, helping to set the stage for attendees to consider for themselves how they might adjust the way in which they approach behavior challenges in order to empower them to solve these problems in a way that strengthens relationships and deals with their animals in more positive, less intrusive ways.

INTRODUCTION

Any interaction we have with an animal is training. Whether or not the word appears in your title or on your business card, any individual who works with or around animals for a living is a trainer. Whether consciously or not, we are constantly influencing the behavior of the animals in our care by the way we set up their environments and through our own behavior. At Natural Encounters, Inc, we present engaging and entertaining live animal shows with a focus on natural behaviors, most commonly featuring free-flight birds. Additionally, we spend a great deal of time traveling around the world working as consultants at zoo, aviaries, aquariums, and other institutions to teach others about the ins and out of operant conditioning and positive reinforcement training.

Quite commonly, one of our jobs is to help people troubleshoot situations that start with the following words: “How do I get my animal to stop...” The reduction or elimination of unwanted behaviors is a goal of many animal trainers, ranging from minor annoyances like a monkey bouncing off your head when you enter an enclosure to more serious ones such as a tiger aggressively lunging at the bars during feeding time. The trouble with this question, though, is that you can't train an animal to NOT do something. As I will discuss in a moment, whenever we look to reduce the frequency of a behavior, the

science of behavior tells us that we are thinking in terms of utilizing punishment strategies. My goal today is to look at ways in which trainers can utilize alternatives to punishment that not only achieve the result of a reduction in the frequency of an unwanted behavior, but at the same time provide mental stimulation for our animals, strengthen trainers' relationships with their non-human counterparts, and give our animals a stronger voice in the way that they can participate in their own care and management.

THE SCIENCE OF BEHAVIOR

Behavioral science provides us with a clear framework for discussing behavior in a way that can be a shared common language for animal trainers from around the world. It is important, then, to note that when I use the word "behavior" I am defining it as anything an organism does that can be seen and measured. Eye-blinking, pacing across the front of the cage, turning one's head to the right, and swinging from one tree branch to another are all behaviors. When we look at a "problem behavior", or any behavior of interest, we strive to describe it in clear, observable terms. This allows us to talk about a behavior in unambiguous language that everyone can agree upon, which is incredibly important for troubleshooting behavioral challenges as part of a team of caretakers. If we don't describe behaviors in this way, it is all too easy to get stuck simply telling stories that use labels that try to describe what an animal *is*:

"She was lazy today and didn't want to participate."

"He was being obstinate and just seemed frustrated when I asked him to go into his crate."

"He's a biter, so when the new keeper went inside the enclosure he got all fired up."

What these descriptions lack is a clear picture of what the animal actually *did*. If we discipline ourselves to begin our trek towards solving problem behaviors by first defining the behavior itself in terms of what we actually see them do, we now have the ability to look at the influences in the environment that we can help manipulate in order to affect this target behavior in the future.

THE REALITIES OF REINFORCEMENT

Going back once more to behavioral science as our guide, reinforcement can be defined as the increase in the frequency of a response when the response is immediately followed by a particular consequence.¹ The best animal trainers pride themselves in utilizing positive reinforcement strategies whenever possible. From a scientific standpoint, this means a strategy of maintaining or increasing the frequency of a behavior by pairing it with the presentation of a stimulus in the environment that an animal will work to acquire (a scratch on the head, a favorite treat, a new toy, etc). When looking at a "problem

¹ Ramirez, K., 1999

behavior”, more often than not it earns that title because it occurs with some level of frequency; a problem is a problem because it keeps happening! According to behavioral science, then, this means that something is reinforcing this unwanted behavior. This will be important to keep in mind once we dig into the work of finding a new behavior to take its place.

THE PROBLEMS WITH PUNISHMENT

Just as reinforcement is at play whenever the future frequency of a behavior is increase or maintained, the opposite is true for punishment. Going back to scientific definitions, punishment is a consequence delivered after a behavior that serves to reduce the frequency or intensity with which the behavior is exhibited.² Using behavioral science as our lens, a question such as “How do I get my tiger to stop pacing?” can just as accurately be phrased as “How can I punish the behavior of pacing?” This is where things can get a bit uncomfortable for some trainers, as just the idea of willingly using punishment with their animals can ruffle their feathers. Keep in mind, though, that this is just using the scientific terminology the way that it is defined. It in no way implies that trainers who wish to eliminate or reduce the frequency of unwanted behaviors are cruel or vindictive – more likely than not they are looking only to improve the health, safety, and welfare of the animals in their care.

Here’s the reason this is important: punishment, when utilized as the backbone of a training strategy, carries with it a boatload of nasty side effects. Firstly, research has shown (with great verifiability across species lines) that punishment often leads to four very significant detrimental side effects: increased aggression, generalized fear of the environment, apathy, and escape/avoidance behavior.³ Second, it seeks to constrict the animals overall repertoire of behaviors - punishment doesn’t tell an animal what *to* do, and doesn’t teach a trainer how to teach. Third, and maybe worst of all... it works! Punishment wouldn’t exist if it didn’t work – it is alive and well in the world around us, and our lives as humans have been shaped by it by the people around us since birth. When punishment works, it reinforces the behavior of the punisher, making it more likely that they’ll use punishment in the future. So is the answer that there’s no way for us to reduce unwanted behaviors without punishment? Far from it, and all it takes is looking at problem from a new angle.

A DIFFERENT PERSPECTIVE

What if every time we asked a question that begins with “How do I stop my animal from...?” we instead replaced it with “What do I want them to do instead?” It’s a small, simple shift, but opens up a whole world of training possibilities, where you are limited only by your imagination! Going back to science as our guide, the technical term for this process is Differential Reinforcement of an Alternative behavior. It is often referred to by its acronym, “DRA.” I like to refer to it as “This really awesome tool that can take your training to a whole new level!” Basically, this is the process of increasing the frequency of an

² Friedman, S.G. and Brinker, B., 2001

³ Friedman, S.G. and Brinker, B., 2001

alternative behavior with reinforcement while decreasing the frequency of the problem behavior with extinction (that is, withholding the reinforcers that were maintaining the problem behavior in the first place). One of the most effective forms of a DRA strategy is the Differential Reinforcement of an Incompatible behavior (DRI). Just like it sounds, it involves reinforcing an alternative behavior that is incompatible with doing the problem behavior. For example, many parrot handlers believe that getting bit by a parrot when you step them up onto your hand is just a part of working with parrots. At NEI we believe that you should never have to get bit by a parrot, so we've trained our birds to sit upright with their heads held high when they are on our hand. The behavior of sitting with their head up is incompatible with reaching down to bite us – the bird can't do both at the same time.

WHERE TO START

Behaviors, whether acceptable or problematic, never occur in a vacuum. They are always influenced by the environments in which they occur, and by the consequences that follow their performance. Going back to behavioral science, the smallest unit of behavior that can be examined is what is referred to as the A-B-C contingency:

Antecedents: anything in the environment that occurs before the performance of the behavior that “sets the stage” for its performance. Examples might include weather effects, an animal's hunger state, time of day, proximity to other animals, or the presence of novel objects in the environment, just to name a few.

Behavior: again, anything an animal does that can be seen and measured, described in clear, observable terms. “Touches the ball with her rostrum”, “Lifts his left paw 6 inches off the ground”, and “Bites the trainer on the back of his neck” are all clear descriptions for behaviors.

Consequences: anything that follows the behavior and is functionally related to the behavior occurring again. “Gets a food treat”, “Trainer steps out of the room”, and “Pushed away from the edge of the pool” are all consequences that might follow a given behavior.

The most important part of the above breakdown is in looking at how much power we have in influencing two of these three factors. In order to change behavior, we don't control the animal or the behavior itself; we make changes to the antecedent and/or consequence conditions.

When thinking about a new behavior to select to replace an undesirable behavior, there are three important things to keep in mind. First, determine the function that the problem behavior serves for the animal, then select a replacement behavior that serves the same function, but in a more appropriate way. All behavior serves a function of either gaining an animal something it wants or getting away from something it wants to avoid. Second, the replacement behavior must give the animal at least the same amount of reinforcement as the problem behavior. The animal “gets something” out of performing the problem behavior; our job is to make the replacement behavior more rewarding. Third, the replacement behavior should be one that the animal performs (or can be trained to perform) fluently, so that its high

frequency will help speed along the process of extinguishing the problem behavior. An animal only has 24 hours in the day in which to perform behaviors, and the more time it can spend earning desired consequences for behaviors that it can perform easily and fluently the less time it will spend performing undesirable behavior that produce no valuable consequences.

BREAK IT DOWN: ANTECEDENTS

The first thing we can influence in training a new behavior to replace an old one is to look at the ways in which we can rearrange the environment in which the undesirable behavior occurs. Behavior science terminology to the rescue!

Setting Events: can the environment be rearranged to make a better, more acceptable behavior more likely to occur than the wrong behavior?

Motivating Operations: can we up the ante and super-size the reinforcement that an animal receives for doing the new, better behavior? On the flip side, is there a way that we can drain the value of the reinforcer that's maintaining the undesirable behavior? There's actually a scientific term for this relationship known as the Matching Law: simply, given the choice between two behaviors, animals tend to choose to do the one that earns it the more reinforcement.

Cues: what is the signal in the environment that tells the animal that if it performs the problem behavior at that time that reinforcement will follow? If it can be identified, can we stop signaling it?

The bottom line is incredibly simple and incredibly powerful: make the right behavior easier to perform than the wrong behavior.

BREAK IT DOWN: CONSEQUENCES

Now that we've taken a hard look at the influences in the environment that exist before the behavior happens, we next need to look at the consequences that follow it. Behavioral science has a very simple principle known as the Law of Effect that states that all behavior is a function of its consequences. The undesirable behavior has persisted because it has produced valuable consequences for the animal thus far. Is the consequence that the animal gets something it wants, or that it gets away from something it wants to avoid? When the problem behavior occurs, what is our behavioral response? Could we be doing something to inadvertently reinforce it? Is there another, more acceptable behavior that the animal can do instead in the same situation to earn the same consequence?

Take for example the behavior of a bird that bites when a trainer's hand comes in to remove it from its enclosure. The undesirable behavior is biting, and the consequence is that the hand is removed. How

about this new system: the trainer's hand is presented to the parrot. If the parrot leans or moves away from the hand, then the trainer removes the hand from the cage. Both situations allow the animal to use their behavior to produce a desired outcome, but only one of them involves blood and bandages.

FIVE SIMPLE QUESTIONS

With all the above as background, really what it comes down to when looking at an unwanted behavior and how to replace it involves answering five simple questions:

1. What does the problem behavior look like; what do you actually see? (Clear, observable terms)
2. Under what conditions does the animal do the behavior? (Antecedents)
3. What does the animal get, or get away from, by performing this behavior? (Maintaining consequences)
4. Under what conditions does the animal *not* do the problem behavior? (Antecedents and consequences of an alternative)
5. What do you want the animal to do instead? (Pick a new behavior and start training!)

While there is no secret "one size fits all" solution to fixing problem behaviors across the board, this outline may be the closest thing that behavioral science has produced thus far. For an even more elegant, detailed step by step guide to replacing unwanted behaviors, Dr Susan Friedman, Ph.D., has put together the Functional Assessment and Intervention Design (FAID) form on her website behaviorworks.org, which does a beautiful job in unraveling the influences and consequences of problem behaviors and planning out alternative behaviors in a very methodical, simple, and systematic way.

CONCLUSION: KEEP CALM AND TRAIN BEHAVIORS

Much of what's been discussed above is really very simple in nature when you come down to it. It's not so much about developing a new set of skills or a magic secret to deal with problem behaviors, but more about changing our perspective and looking at these challenges as opportunities to teach our animals new and valuable behaviors that earn them reinforcement and strengthen our relationships with them.

The bottom line:

- Look at the antecedent influences in the environment that are setting the stage for the problem behavior – can you eliminate or change them?
- Think about what consequences are maintaining the behavior – what happens after the behavior occurs? Is the animal getting something it wants, or getting away from something it doesn't want?

- Think about what you want the animal to do instead – put together a training plan for an alternative (preferably incompatible) behavior that you'd like the animal to do instead when in the same situation in the future.
- Get to training! Let your anxieties about past experiences, the use of labels for who an animal is, and the noise of dominance-based behavior “experts” fall away and get busy building strong new behaviors to take you and your animal confidently into the future!

NOTE: A very special thank you goes out to Dr. Susan Friedman for both her help with this presentation and for her contributions to the field of applied behavior analysis, which formed the backbone of the information presented here. Anyone interested in learning more about the science of behavior change would be very well served to read more of her work at her website, www.behaviorworks.org.