WHEN PIGS FLY:

UNDERSTANDING REINFORCERS AND PUNISHERS

Consequences, Schmonsequences How Dog Training Works

by JANE KILLION, photos by LOUIS B. RUEDIGER

very training method uses the same fundamental technique – the dog does a behavior, and there is a consequence for it. Depending on how the dog feels about that consequence, the behavior may increase (be reinforced) or decrease (be punished) as a result. There are four possible consequences for any action. How, when, and if, you use these four kinds of consequences will determine your ultimate success in training your dog, so it is worth your while to take a little time to think about them and understand what they mean in practical terms.

1. Something is added that the dog wants. For example, the dog sits and receives a cookie. This is called positive reinforcement. +R.

2. Something that the dog wants is taken away. For example, the dog jumps on you and you turn around and ignore him - attention is taken away. This is called negative punishment. -P

3. Something the dog does not want is added. For example, the dog gets ahead of the handler and receives a jerk on the leash. This is called positive punishment. +P

4. Something the dog does not want is taken away. For example, the dog's ear is pinched until he picks up the dumbbell – picking up the dumbbell makes the pain of the ear pinch go away. This is called negative reinforcement. -R

As used in behavioral science, "positive" and "negative" do not mean "good" and "bad." Positive simply means adding something, and negative means taking away something.

Most trainers, particularly pet trainers, use a little of all four quadrants. Many agility trainers stay mostly in the positive reinforcement quadrant, but dip liberally into the positive punishment quadrant for things like correcting start line stays.

Certainly, almost all agility trainers feel comfortable in the negative punishment quadrant – things like taking the dog off the course for breaking his start line or timeouts for missed contacts. Most agility people would tell you that they steer clear of negative reinforcement because it requires the application of an aversive before the dog can be negatively reinforced by relief from it. How honest are we being with ourselves and how useful are these practices in terms of agility?

IF IT LOOKS LIKE A DUCK...

Let's start with the most basic questions. How would you define a reinforcer in terms of dog training? Something the dog likes? Something motivational? How about a punisher? Something aversive or harsh?

If you are thinking of reinforcers and punisher in emotive or moral terms, you are on the wrong track. You don't know what your dog is thinking, and cannot thus tell what he "likes" and does not "like." As interesting as it is to speculate as to the emotion and motivation behind a dog's actions, guessing about how a dog feels about something or why they do something is unreliable, at best, disastrously inaccurate, at worst. Furthermore, as dog trainers, we don't really care much what our dog likes or does not like. What we care about is that they will learn the desired behaviors. While we certainly care about outward indications of a happy, relaxed, emotional state, that is criteria we shape for, not a definition of whether something is reinforcing or punishing. Your dog can be wagging his tail with a soft, open, countenance as he takes the treat from your hand and runs away, but that does not make that treat a reinforcer for anything related to agility.

So, how do you know what is a reinforcer or punisher for your dog? What you can do with some accuracy is measure your dog's behavior. With that in mind, here is the only working definition of reinforcers and punishers you will ever need.

If the behavior is increasing, it's a reinforcer

If the behavior is decreasing, it's a punisher

If you can apply this definition to your training program, you may shocked at what you see. Simply adding food, toys, or praise to your training program is not reinforcing, unless your dog's target behavior is increasing. Likewise, if you have been "correcting" your dog for blowing contacts and he still blows contacts, your corrections are not punishers. In the apt words of Stacey Braslau-Schneck, MA:

"Pleasures meant as rewards but that do not strengthen a behavior are indulgences, not reinforcement; aversives meant as a behavior weakeners but which do not

PIGGY POINTERS:

Remember, even small verbal corrections, such as "eh, eh," still live in the positive punishment quadrant. If successful, they add something that will suppress (punish) an undesired behavior. The difference between "eh, eh" and a sharp leash correction is a difference in degree, not kind.

weaken a behavior are abuse, not punishment."

You can shape a qualifying performance by using any or all of the four quadrants. However, there will be fundamental differences in the nature of the ultimate behavior, depending on which quadrants you use. Reinforcers create behavior, and punishers suppress behavior. This is not just my opinion, it is an accepted scientific premise. It is a subtle difference, but the effects on your dog's performance are huge. Yes, theoretically you can carve out behaviors by punishing unwanted behaviors around the terminal behavior until you are left with only the desired behavior. In practice, however, this usually does not work so well for agility. As Jean Donaldson points out, punishment has a "carpet bombing" effect - the undesired behavior gets hit, but so does a margin all around it. A classic example is the dog that has been trained with corrections to hold its stay on the start line. Many times the trainer is successful in suppressing the behavior of breaking the start line, but the dog will start failing in seemingly unrelated area. The eventual effect is a dog that is generally suppressed, and this is likely to manifest itself by the dog moving slowly, shutting down, running out of the ring, refusal to do certain obstacles, etc.

Also remember, when you use punishment you only suppress behavior – the undesired behavior is still there, but it is being held back by a potential aversive consequence. When you layer the stress of a trial on top of a suppressed behavior the behavior is likely to spontaneously reappear (it was never gone, just lurking under a blanket of An example of Negative Punishment - This little dog climbs up on me in an apparent attempt to get my attention. I turn away from her and with hold attention. Her behavior of jumping up on me decreases, so the withholding of attention is negative punishment. Note, however, that this "benign" form of punishment does elicit stress signals from the dog. She licks her chops and her ears are crunched back in a somewhat tense way. I do think negative punishment is an appropriate way for pet owners to stop unwanted behaviors and the potential for serious fall-out is slight. However, for those of us who are looking to get all we can out of our performance dogs need to be aware that these small uses of negative punishment do have a suppressive effect. I am not saying that I would never use this technique on one of my dogs, but I would always prefer to train an alternate automatic behavior (in this case, for instance, offering a sit in exchange for attention) and build a behavior rather than suppress it.





punishment) or, worse yet, create so much conflict and stress in the dog that he is literally unable to perform agility with any competency. It may look to you like your dog is performing a nice start line stay, but really he is just "not breaking." In contrast, behaviors that are taught with reinforcers are WYSIWYG (what you see is what you get) behaviors. Whatever the dog in doing in response to the cue is what the dog is actually "thinking" about. If a dog is positively reinforced for start line stays (and quick starts off the line when released), the dog is actually performing the act of sitting still until released. Again, subtle difference, and it is difficult for people to comprehend how important this is, especially when the are already managing to squeeze a qualifying performance out of their dogs by using corrections.

WHAT'S IN YOUR CONTRACT?

Because of the way I train, I require a dog that is operant and will freely offer behaviors. For me, it is crucial to avoid all punishment, because I need a dog that behaves a lot, so I can cherry pick the behaviors I want. I avoid both types of punishment, and am especially alert to inadvertent negative punishment, like changes in my demeanor or abrupt interruptions of running sequences which communicate disappointment to my dog. In my observation, negative punishment, if used in an accurate manner, acts the same as positive punish-

Would you say having something pressed against your windpipe until you could not breathe is punishment? You might think it would be, but it frequently is not. Here is a dog that will happily pull until he just about passes out from lack of oxygen. The behavior of pulling is not only not decreased by the choking action of the collar, it is increased. As you can see in the second photo, when I walk this dog off leash, he does not pull, at all. The choke collar is, bizarrely enough, a reinforcer for pulling instead of a punisher.

Attempting to figure out why having one's breath choked off is a reinforcer instead a punisher is like contemplating infinity. Don't even try, it will blow your mind. Fortunately, all you have to do is decide if the target behavior is increasing or decreasing, which is easy to grasp.

ment, and suppresses the dog the same way. This is not something I need in my training program.

What I do use is negative reinforcement. No, I don't use the ear pinch to train the dumbbell, but there are plenty of other aversives inherent in agility from we can give relief. For instance, giving a fearful dog the opportunity to bail off a see saw can be greatly reinforcing. I just throw the food back and away from the see saw every time the dog approaches it. It is shocking how quickly the behavior of getting on the see saw will increase with this technique. The reason it works so well is that it is reinforcement, albeit negative reinforcement. People have gotten into the habit of thinking of negative reinforcement as "mean" but it is a very valuable tool and has the charm of

actually teaching a behavior, not just suppressing it.

What I want you to let go of is the thought that how you train is a moral issue. How you train is about how to get the behaviors you want. I submit to you is that it is darn hard to get what I would call acceptable agility behaviors on a Pigs Fly dog by using punishment, even negative punishment. I cannot think of an agility behavior that cannot be trained with reinforcement, so why would you use punishment and its potentially suppressing effect on your dog's performance.

WHAT'S IN A NAME?

I have to admit that I don't care for the term "Positive" dog training. The term "positive" training is often misunderstood to mean somehow "upbeat," "kind," or otherwise An example of negative reinforcement - Molly is obviously fearful of the see saw and displays classic avoidance/ stress body language when confronted with that obstacle. Instead of luring her over the dreaded piece of equipment, Erica clicks for approaching/ climing onto the see-saw, and then throws the food away so Molly can jump off. The relief from the aversive of the scary see-saw is negative reinforcement. After just a few reps of this, you can see how (in the third photo) Molly not only does the see-saw, but does it with a relaxed demeanor.





When is a reinforcer not a reinforcer? The first

photo shows Augie's first step out of the crate at an agility trial. He had one thing on his mind, and it was not agility. I gave him food in an attempt to reinforce the behavior of paying attention to me, and he was happy enough to take the food. Nonetheless, as you can see in the third photo, the food was a dismal failure as a reinforcer for attention. The target behavior of attention was not increased by the food, so food was not a reinforcer. This is a perfect example of something that is generally considered a reinforcer becoming nothing more than an indulgence in a certain context.

People often ask me what to do in this situation. My advice is to put an animal that is in this state of distraction back into your vehicle forget agility for the present. Run your other dogs, if you have any. That's what I did on this day. A dog that displays dramatic behavior such as this needs more training, not a different reinforcer.

virtuous. Positive trainers train dogs primarily or exclusively by using positive reinforcement to reinforce the behaviors they want. Positive reinforcement means simply that you add something (such as a cookie, a toy, or praise) that will make a behavior (such as sit, down, or stack) more likely to reoccur. "Positive" as it is used in behavioral science, means adding something, not being "nice." Positive trainers very well may be nice people with upbeat attitudes, but that has nothing to do with the science of dog training.

Calling one's self a "positive" trainer can also, in my opinion, be divisive. Positive, as it is commonly used, is a fuzzy, emotionally laden term that implies that anyone who does not train that way is somehow not a positive person in general, and no one likes to be thought of that way. Furthermore, the vague way we have defined positive training can be very misleading – many, if not most, people believe it means that anyone who smiles and doles out food while they use corrections and punishment is a positive trainer because they maintain an upbeat attitude, and that is not so.

Finally, why are we so proud of hanging out in the positive reinforcement quadrant? Why do we think that negative punishment is somehow different than positive punishment? Used correctly, both suppress behavior in exactly the same way. I don't find that helpful. On the other hand, the much neglected negative reinforcement quadrant is a great place to train. Maybe it would be smart to thinking in terms of "reinforcement" training, instead of "positive" training. I am pretty sure that most of us would see a huge increase in desired behavior from our dogs. In the end, that's the only thing that matters.

Understanding and mastering the use of reinforcers and punishers is not easy, but that should not discourage you. I hope I have given you some food for thought, and that you will re-examine your training program in light of it. Your Saluki can be reinforced into running agility really reliably and well, When Pigs Fly!