Breaking Tradition

Tim Sullivan

The New Training

Animal training is changed, or, should I say evolved. You need only look at the recent trends in the conditioning of dogs, horses and zoo animals to see the direction animal training is heading. Trainers are making a healthy break away from traditional training techniques. This change is revolutionizing our craft, and more importantly, benefiting the animals in our care. From the outside looking in though, a naive observer may not realize that there has been any change in training at all. This layman’s view can be easily explained because behavior, as the product of training, seems mostly unchanged. But as more and more trainers are starting to realize, the end does not necessarily justify the means.

Any animal's motivation to behave can be divided into two broad categories: 1) to acquire desirable outcomes (reinforcing) or 2) to avoid undesirable outcomes (punishing). Strangely enough, the emission of any particular behavior could be motivated by either category. To test this theory, we need only venture into a local primary school. Pick 10 students at random and ask each of them “why do you do your homework?” or “why do you study for tests?” Some students will state that they want to get good grades (desirable outcome) and some will state that they want to avoid failing (undesirable outcome). So, it is clear in this example that both punishers and reinforcers exist in this environment and that individuals are motivated to respond correctly by either one. This fact has created two different animal training philosophies: 1) “traditional” training that relies on punishment, and, 2) “modern” training that relies on positive reinforcement. An animal's attitude (good or bad) towards the learning process is typically a direct result of the philosophy that their trainer has chosen to utilize.

Traditional Training and Punishment

Traditional animal trainers have used punishment as a means of motivation for centuries and have produced remarkable behavior. The greatest problem with the use of punishment to modify behavior is, oddly enough, that it works. The trainer observes an immediate, desirable change in behavior, which then reinforces the use of this technique. Unfortunately, this is a very myopic view of the effects of punishment. What is less apparent to the trainer is the collateral damage caused by this strategy. These “side effects” include anxiety, frustration, aggression and the absence of trust. The traditional trainer rarely attributes these artifacts to the use of punishment. The trainer understandably misses this causal relationship because the results are often latent, masking their association. Moreover, punishment can itself create aberrant behavior, which is in turn punished. This begins a scenario that can be called the “punishment loop.” To make matters even worse, aversive stimuli tend to lose their effectiveness over time due to desensitization. So, traditional trainers may find themselves increasing the frequency and intensity of the aversive stimuli they use, to no effect. The use of these traditional training techniques continues to this day. Fortunately, alternative methods to train animals were developed decades ago, sometimes out of necessity more than any desire to change.

Early Dolphin Training Methods

An important event in the use of positive reinforcement training for performing animals happened back in the late 1940's. Traditional animal trainers from circuses were employed to condition a new and very
charismatic creature—the dolphin. These traditional trainers soon found that utilizing their traditional methods with these animals was very impractical. Collars, halters, bits and other training “tools” were impossible to use with this aquatic mammal. These trainers also learned that dolphins could easily thwart other physical discipline by simply swimming away. These “logistical” challenges forced these traditional trainers to create a new strategy for training these creatures. As a result, “shaping” and positive reinforcement based training systems began to come in to use.

Initial attempts at utilizing positive reinforcement with dolphins was very simplistic—correct responses earned a fish, incorrect responses did not. If an animal failed to “learn” or participate it was thought that the animal just wasn’t “hungry enough.” As a result, animal diets were continually adjusted (i.e. decreased) until the animal became “motivated.” This scenario often produced some of the problems seen in traditional training by creating frustration and poor attitudes in many animals. It would be many years before trainers realized that when animals were not learning, the trainer, not the animal, was to blame.

**Improvements in Marine Mammal Training**

In the 1950s,'60s and 70's, positive reinforcement training techniques continued to improve. Variable reinforcement schedules along with secondary reinforcers became common place in marine mammal training, reducing the need to rely on an animal’s appetite for motivation. These methods unfortunately were only utilized by a small sector of the training community. Although small in number, these “believers” strongly advocated the many advantages of using positive reinforcement. Keller Breland, Bob and Marion (Breland) Bailey, Karen Pryor and numerous others in the marine mammal community knew that these techniques were far more ethical and effective, across taxa, than traditional methods. If the methods were applied correctly, animals could learn remarkable behavior at incredible rates and were happy to do so. But training philosophies, like religious beliefs, are not easily changed. The acceptance of positive reinforcement methods by traditional trainers of terrestrial species was slow, and true converts were rare.

**Current Spread of Positive Reinforcement Methods**

In the last two decades, positive reinforcement methods received further refinement and have spread to many other species. The use of positive reinforcement training in zoos has grown tremendously. Camels, primates, kangaroos and elephants, to name a few, are all trained for cooperative medical behaviors greatly enhancing their care. Positive reinforcement techniques have also become quite popular in the training of service dogs and even animal actors in Hollywood. This growth spurt in the use of 'non-traditional' training methods is very encouraging and a long time in coming.

As a direct result of this growth, modern trainers have now become abundant. As this new market continues to grow, there is a definite need to find ways to develop the skills of prospective animal trainers. Numerous consulting firms have sprung up to fill this void, many operated by former marine mammal trainers. Seminars and college classes teaching positive reinforcement training are also increasing in numbers and are in great demand. Education has become the cornerstone from which the continued growth and acceptance of modern training methods now stands. Nothing will derail this train of desirable change more quickly then poorly qualified trainers. Each modern trainer is responsible for maintaining the quality and integrity of our profession. We must continue to develop and hone not only our own skills, but also the skills of those around us. Like it or not, we will always be represented by the worst trainer in our industry.
Are You a Modern Trainer?

By now, you may be asking yourself, “Am I a modern trainer?” The answer lies in your methods as well as in your animals' behavior. Do you pre-plan your training sessions before actually beginning? Do you always set your animal up to succeed? Do you carefully desensitize your animals to novel items and events? If your animal is failing to learn, do you look at yourself and your techniques first? If your animal is responding incorrectly, do you look for ways to reinforce desirable behavior rather than focusing on decreasing the incorrect response? Do your animals eagerly await opportunities to learn even after failed approximations? Will your animals work for rewards other than food due to the excitement and variety you provide? If you answered “Yes” to all of the above questions, then pat yourself on the back because you are indeed a modern trainer!

Breaking tradition is always a challenging task. Albert Einstein once said, “Great spirits have always encountered violent opposition from mediocre minds.” We have not chosen to utilize positive reinforcement training because it is easy; it takes tremendous skill, patience and dedication. We should not concern ourselves with trying to convince traditional trainers of the merit of our own philosophy. Instead, we should act as missionaries, bring our training philosophy to wherever animals are in need, and let the results speak for themselves. Positive reinforcement techniques are the most ethical and effective way to train animals. Ultimately, we are no different than the animals we teach. We have the same basic preference for “wanting to learn” versus “having to learn.” A simple principle, but one that we should never forget.

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