10

Suggestions to Rescue Reward-Training from Aversive Techniques

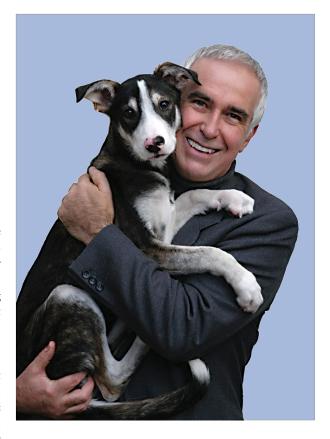
By Dr. Ian Dunbar, APDT Founder

I founded the APDT as an open educational forum to create a large membership, so that dog trainers had a concerted and powerful voice to control their own destiny and be able to thwart challenges from other professions, e.g., the veterinary profession, or government agencies. Now, I think the APDT and CCPDT desperately need to rescue reward-training from its memberships' creedal worship of a laboratory learning theory that has tainted the training/teaching techniques and motivation of all animals, humans included, for more than a century.

Many reward-training techniques have gone down a theoretical rabbit hole, taking practical application and effectiveness along for the downhill ride. Thus, allowing leash-corrections and shock to creep back into public view (social media). Aversive techniques had been virtually eliminated in the 80s and 90s because they simply could not compete with the reliability of off-leash lure/reward-training for teaching reliable, verbally cued responses, that also provided non-aversive solutions for misbehavior and non-compliance. When I studied learning theory at Berkeley, I thought, "Well, this won't work too well for training dogs off-leash." Focusing on a single behavior at a time and with only four ways to change behavior is not that sophisticated and hardly realistic. Behavior comes in lengthy, rapid-fire sequences, changing qualitatively several times a second and so feedback (differing consequences) must reflect this. Using the same-old-same-old quantum food reward over and over won't suffice; reinforcement must be analogue, which is best accomplished verbally.

Ian's Definition of Training

Teaching dogs to the eventual criterion of responding promptly, reliably, and happily to verbal instruction, in any scenario, including when offleash, at a distance, and distracted, and without the continued need for any training aid whatsoever, especially including, food lures, food rewards, hand-contact, leashes, collars (including metal and shock), halters, and harnesses. You'll notice that all three of my woolly adverbs may be objectively quantified. When Response-Reliability percentages are tested before and after a single training session (Test-Train-Test), the difference in results offers an index of improvement, and speed of improvement. Moreover, I routinely train dogs off-leash in safe surroundings, so that I can continually evaluate the dog's consent to join me in the training game. The profession has changed so much over the past four decades. First the abrupt, 1910 transition from off-leash training with verbal instruction and guidance to formalized on-leash obedience, primarily using leash 'corrections.' Second, the 1982 revolution back to off-leash, non-aversive, lure/reward, puppy socialization and training group classes to prevent



predictable, adolescent-onset fear of unfamiliar people and dog-dog reactivity, and to teach dogs to respond reliably to verbal cues when off-leash.

When I first introduced 'learning theory' to dog training in 1987, I cautioned trainers should not blindly follow the reinforcement schedules or punishment techniques, but to understand the principles and relative pros and cons. I suggested trainers be Border Collies and not sheep. The 100-year-old reinforcement schedules are fraught with problems and are relatively ineffective (CC, FI, and VI). Some schedules are motivating and maintain responding (VI and VR), but trainers can neither create nor apply them. The principle we should have learned is that rewards must always be administered unpredictably.

Aside from sabotaging reinforcement, the considerable harm these old studies inflicted on animal training was to give 'aversive stimuli' the same star billing as 'rewards'. They made a 'poster child' of aversive stimuli, creating a false Reward vs. Punishment binary. My view: Aversive Stimuli should never have deserved to be on the same stage as Rewards. Not even backstage, not even the understudy's dressing room, or the dressing room toilet! It must be obvious to everyone that aversive stimuli seldom work to inhibit unwanted behavior outside of captive populations (caged, leashed, or restrained animals, children, spouses, students, employees, and prisoners),

all the trainee needs do is walk, or run away, (from hand's-reach and earshot). Even with shock collars that extend the reach of pain, and even with a well-trained thumb, aversive stimuli always fail the fourth and sixth criteria for aversive stimuli to effective act as punishment. Consistently well-timed shock might inhibit targeted behavior but do nothing to get professiona/

the dog back on track, i.e., teach dogs what we would like them to do. This of course is where verbal instruction excels.

Association of I developed the dreaded 'quadrant' simply as a memory aid for trainers to understand and remember the ridiculously complicated (and scientifically incorrect) Skinnerian positive/negative terminology. (Of course, it should have been reinforcement/inhibition; one punishes a dog to inhibit their behavior.) 'Learning theory' has been accepted as gospel, questioned by no one. We must re-evaluate every aspect. Learning theory is exactly that, theory, well, more accurately, learning hypotheses. The big question is how applicable, how relevant, and how effective is 'the study of food/ shock-trained caged rats' to the training/education of dogs, cats, horses, and people who are not held captive. A: Not very.

Researching caged animals also severely constrained the creative powers of researchers from researching easier, quicker, more effective, human-friendly, animal reward-training techniques, such as lure/reward training.

As dire as things are in the dog training world, we can change things very quickly. I think reward-training is at a critical (do or die) juncture. I so desperately want to ensure that the APDT, the CCPDT, and the Foundation, (all my 'children') remain at the head of the pack to decide the future of the dog training profession worldwide. As such, have listed 10 suggestions and provided a rationale for each.

- 1. Create an Advisory Board of past Board members and stellar dog trainers — a considerable knowledge base of: What's been tried already; What worked; What didn't; and What to do now? For personnel, off the top of my head I would propose starting with: Sue Pearson, Alan Baumann, Mel Bussey, Michelle Douglas, and Megan Stanley. Some of these people lived and psychologically died for the APDT. For amazing practical dog trainers, no one can compete with Julie Case, and then I would suggest Amanda Gagnon and Gina Esoldi.
- 2. For the CCPDT to establish a CCPDT-SA a certified Skills Assessment by reviewing an unedited video of what can be taught in just one hour. A simple TEST-TRAIN-TEST format to quantify the increase in Response-Reliability Percentages and Response: Reward Ratios. The test may comprise of anything, but

I would suggest: 3 repetitions of the basic position-change test sequence (C-S-D-S-St-D-St) using verbal cues only; longest Sit-, Down-, and Stand-Stay (to 'break', or to successful criterion and 'release'); and speed of 10 repetitive, off-leash, one-step Come-

Sits and Heel Sits — just very basic stuff. The choice of

dog(s) is irrelevant, since each dog is used as its own control — puppy/adult, little/large, attentive/

inattentive, trained/untrained, or calm/moonlaunched. (No need for matched-pairs of subjects). Obviously, the less attentive and trained the subject, the greater room for potential improvement. What is important is objectively quantifying the degree of behavior-change effected by training in a set time-period.

3. Trainers Researching Dog Training:

1. To set benchmarks using their own training techniques for the above Test, (for example), so we all know who to read, or listen to and then

- 2. To compare the effectiveness and speed (time and trials to criterion) of different reward-training techniques. Why Trainers? Because in other studies, for example comparing behavioral pharmacology to training, who knows what the 'trainers' did. In fact, I have never identified a single trainer in one study that comes to mind. Some 15-20 years ago, I created a one-day Science Track at the APDT Annual Conference to illustrate some simple experimental designs. Half a dozen or so speakers presented original research on dog training. I presented the SIRIUS® Study — a simple test that we still use today (very similar to the one described above) to objectively evaluate progress in puppy classes. Drs. Suzanne Hetts and Dan Estep presented an objective study on a single dog. Strangely, the Science track met with some passive resistance from the paid conference organizers. We got a room that only seated 100 people, (the room overflowed and they had to put loudspeakers at both ends of the hallway). The following year, it was discontinued. Dog training cannot become science-based until it is based on the science of dog-training, (and not caged rats 'trained' by computers). I have already formed an informal group of trainers to conduct studies.
- 4. The APDT Foundation Awarding Monetary Prizes to Trainers for Completed Research, rather than grants to researchers for proposals to conduct future research. We want to teach trainers how to train like researchers, and objectively quantify everything. In addition to raising money, the whole point of the Foundation was to teach trainers to develop the mindset of quantifying the effectiveness and speed of behavior-change, i.e., training.
- 5. Winning Research Studies Published in an online APDT Journal of Dog Training to teach trainers how to interpret the significance of research studies.

"As dire as things are in the dog training world, we can change things very quickly. I think reward-training is at a critical (do or die) juncture. I so desperately want to ensure that the APDT, the CCPDT, and the Foundation, (all my 'children') remain at the head of the pack to decide the future of the dog training profession worldwide."

6. We must Replace/Rewrite the Century-Old Learning Theory (devised from laboratory computers training caged rats using food pellets and shock) with an understandable, applied methodology that works for people teaching/training all animals off-leash, humans included. The theory we are teaching (and certifying) doesn't work that well, primarily because it lacks effectiveness, is barely relevant for people training dogs off-leash, and next to impossible for people to administer feedback with the same consistency and timing of a computer, which although being beneficial for praise, life rewards, and the occasional food reward, is an absolute disaster when using any aversive stimulus. People need speedy and effective training techniques that are easily mastered, champion inconsistency, and don't fail with ill-timing, i.e., lure/reward training with verbal feedback. Can you imagine the gift this would be for dogs, dog owners, parents, teachers, bosses, etc.?

7. Reevaluate LIMA, Yet Again — with an emphasis on quantifying the *effectiveness* of different reward training techniques, as well as ensuring techniques are off-leash (handsoff). Praise, life rewards, and occasional food rewards for desirable behavior, offering verbal guidance for misbehavior, and persistent, verbal insistence for non-compliance. No aversive technique could possibly approximate the high response-reliability percentages of lure/reward training, because they max. out at 97-98% following a single instruction.

Why Minimally Aversive? Why not NON-Aversive like it was back in the 80s and 90s. I talked about Non-Aversive 'Punishment' for years in my seminars (all archived in DunbarAcademy.com, especially in the 'Science-Based Training with Feeling' seminar) but then realized the various concepts were not written down — hence, my latest book.

When shaping (with clickers) was first introduced to the dog world — Kathleen Chin hosting Karen Pryor (speaking) and Gary Wilkes (training), initially, luring was discouraged* by 'pureshapers. By failing to focus on initially teaching verbally-cued behaviors, shapers were at a total loss for what to do to quickly and effectively deal with non-compliance and misbehavior and so thought, a 'little aversive' might be necessary on occasions.

However, when dogs are lure/reward trained and so, learn ESL, trainers have an arsenal of words at their disposal for verbal (instructive) guidance.

*I think the notion was that if an animal leaned 'by itself' and was not lured, it learned 'better', which of course is nonsense. Once a dog has learned something, it knows it, period. There is no evidence that response-reliability percentages differ whether an animal has been lured or shaped to proficiency. Proficiency is proficiency. The big difference, lure/reward training is a much quicker route to verbally cuing proficiency.

Least *Intrusive?* I don't think that being 'intrusive' is necessarily bad. There are times when we must intervene for our dog's safety and quickly and utterly change their behavior. But even during day-to-day training (living with a dog), I want to totally intrude into the dog's brain to better understand its feelings, emotions, and motives, just as much as I hope the dog will intrude in mine — kinda like a doggy Vulcan mind-meld. Moreover, I almost entirely train off-leash as an ongoing check that the dog is perfectly happy to train together. I have always thought that **TINA** should be the new LIMA. **Totally Intrusive, Non-Aversive.**

8. Bring Our Voice Back to Dog **Training!** — Resuscitate Lure/ Reward Training to teach ESL and at the same time, routinely test comprehension of the words we use for: 1. Verbal instructions prior to task, 2. Ongoing verbal guidance and persistent insistence when dogs err, and PRAISE (as a mega-secondary reinforcer) for a good job well done. The FIRST stage of lure/reward training comprises phasing out food lures during the very first session!!! Many trainers have forgotten this. Moreover, the progressive, decreased emphasis on teaching and testing comprehension (by monitoring response-reliability of the words we

use as instructions and guidance) has led to a massive decline in the effectiveness of reward-training. But the last nail in the coffin for increasing the frequency or duration of desirable-responses — PRAISE was all but replaced by a 'click' and a food treat, I just wanted to sit down and cry. Praise IS both a 'marker' and an intrinsic primary reinforcer, and one that may be amped-up as the most powerful mega-secondary reinforcer in dogdom. Training has become clinical and impersonal and lost the sense of awe and wondrous joy of inter-species communication, connection, engagement, and mind-meld between person and dog.

9. For Dog Training *Demonstrations* to Comprise 75% of Each Conference, instead of talking-head, power-point, and peripheral topics. All conference presenters demonstrate their techniques with dogs on stage, or videos thereof, and supplying digital notes to registrants. I think the main thrust of the APDT conference should always be teaching trainers how to teach dogs to respond on cue, when off-leash, and distracted; how to effectively resolve misbehavior and non-compliance; how to fast-track confidence-building (anxiety reduction); and how to prevent dogs from ever becoming fearful, anxious, and aggressive in the first place.

10. A National Campaign to Prevent the Predictable, i.e., normal, canine, adolescent, behavioral development to become increasingly wary and fearful of the unfamiliar, especially, people, dogs, and the environment and so, develop adolescent-onset fear of people, dog-dog reactivity, and separation anxiety. Fear and anxiety block basic training. Just check Julie Case's video on You Tube https://www.youtube.com/watch?v=eMij-uc7ozo as the best illustration of what needs to be done to prevent adolescent fears and anxiety, and lack of manners. See if you can see just one itty-bitty sign of stress or anxiety in any puppy and listen to Julie's voice as she reassures (reinforces) pups doing 'scary' stuff. When the pups grow up, they remain friendly, confident, and mannerly, because the potential 'unfamiliar of adolescence' was made the 'snoring-boring familiar of puppyhood.'

For this to happen, as the leading profession to offer advice about puppy/dog raising and training, we must take the initiative and do our best to ensure that other dog professions, especially those that routinely see new puppy owners during the first few days after their new puppy comes home, (veterinarians and pet stores), or at the point of sale or adoption, (breeders and shelters), disseminate puppy-raising information that highlights the extreme urgency and critical importance of:

- 1. Neonatal handling and early puppy socialization with unfamiliar people in the safety of the breeding kennel or new home, and during off-leash puppy classes to prevent adolescent-onset fear of unfamiliar people;
- 2. Off-leash puppy classes to develop dog-dog savvy, build confidence, and tone down OTT play to prevent dog-dog reactivity during adolescence; and

3. An hourly crate-training routine during the first few weeks at home, to facilitate teaching elimination on cue and chew toy-training, preventing habitual barking, and to teach puppies (or adopted adult dogs) to thoroughly enjoy short quiet moments in their private den and so, prepare them for being left alone at home. The easiest way to bump-start a prospective and new puppy owner educational campaign is to to share the link for downloading three of my free puppy and dog raising books to the membership and encouraging them to share the books with their clients, or post the books on their own websites for free download — dunbar.info/freepupbooks

Some History of APDTs

The APDT was originally intended as an open educational organization that welcomed everyone. Surely, we can do more for dogs by educating the uneducated than preaching to the choir. Other APDTs followed suit, e.g., Canada, France, Australia, New Zealand, Japan, Chile etc. In the US, we established the CPDT to assess individuals' standards, (although as yet, only knowledgebased) and restricted membership only to those who met the required standard. This is the way of most other professions; you learn at a school/university but must pass State and National boards to practice. To this day, the reach of the CCPDT is worldwide. When objectively evaluating the pros and cons of the speed, ease, and effectiveness of training, most reward training techniques win hands-down over using aversive stimuli intended as punishment. Moreover, for putting behaviors on cue and routinely testing reliability as part and parcel of training, lure/reward training reigns supreme. I truly think that misapplied reward-training is the major reason for the decline of effectiveness, fulfillment, and joy. The key is quantification. Facts rule! The proof is observable and irrefutable.

The Future: We Need an APPLIED Science of Dog Training

For dog training to evolve as a science, dog trainers must create a science-based, applied learning theory derived from studies of trainers training dogs. Since training is all about creating behavior-change, and behavior is observable and quantifiable, dog training studies quickly (within the hour) generate masses of highly significant data. We don't need to use fancy statistics to prove we have an effect — it's blatantly obvious to everyone in real time, or when the data is displayed in a histogram — the bell-shaped curves from before and after data seldom overlap — meaning that the results pass the Intra-Occular Trauma Test — the effect is so great that it hits you between the eyes and so, statistics are largely unnecessary. We should flood the doggy world with studies of such statistical significance, with all p-values <.01, i.e., to give oxygen to reward training and ongoing quantification of response-reliability percentages and response-reward ratios.

To accelerate the process, I would start by rediscovering Lure/ Reward Training so that we have quantification of responsereliability and monitoring our reliance on food rewards already built in, (during the first two stages). Research on dog training by dog trainers can achieve the easiest, quickest, most effective, and mind-boggingly, wondrous way to teach/train all animals, humans included. Our gift to the world.

Dr. Ian Dunbar is a veterinarian, animal behaviorist, and writer. He received his veterinary degree and a Special Honors degree in physiology and biochemistry from the Royal Veterinary College (London University) and a doctorate in animal behavior from the Psychology Department at the University of California in Berkeley, where he spent 10 years researching olfactory communication, the development of hierarchical social behavior, and aggression in domestic dogs.

Dr. Dunbar is a member of the Royal College of Veterinary Surgeons, the International Society for Applied Ethology, the American Veterinary Society of Animal Behavior, the California Veterinary Medical Association, and the Sierra Veterinary Medical Association. He was also involved in the establishment of the American SVE (now the American Veterinary Society of Animal Behavior).

In 1981, Dr. Dunbar created the SIRIUS® Puppy Training Classes, completely changing the way dogs are trained in several countries around the world. Dr. Dunbar's unique lure/reward, off-leash training techniques provided a delightful alternative to inane and inhumane leash jerking. In 1993, Dr. Dunbar founded the Association of Pet (now Professional) Dog Trainers (APDT) in the United States and organized the first two annual conferences. Dr. Dunbar's current project is the creation of the K9 GAMES®-an exciting spectator event featuring fast-moving, motivating, competitive games for dogs and owners.

Since 1986, Dr. Dunbar has conducted more than 800 days of seminars and workshops for trainers and veterinarians around the world. He has written numerous books, including his most recent release in 2023, "Barking Up the Right Tree: The Science and Practice of Positive Dog Training," "How To Teach A New Dog Old Tricks," the "Good Little Dog Book" and a series of Behavior Booklets—separate educational booklets on each of the most common pet behavior problems. Additionally, he has hosted nearly a dozen videotapes on puppy/dog behavior and training. He may be contacted through his website at Dog Star Daily (dogstardaily.com).

