



SG Friedman, Ph. D.
www.behaviorworks.org
www.bwzs.org



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Background

- As a community, we have had a significant impact on how people interact with their animals.
- A *partnership* approach is rapidly replacing traditional command-style training.
- Even for those of us who have trained with some version of a partnership approach for a long time, the limits of what that means keep expanding.

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The Partnership

- In the world of human relationships, collaborative partnerships are *agreements and actions taken by consenting individuals to share resources to accomplish a mutual goal.*
- This definition fits contemporary aspirations working with animals fairly well.
- It's a perspective and set of practices we've grown into from an inglorious past.

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How Did We Get Here?

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- One idea that makes this shift to partnerships with animals possible is the growing acceptance that human and non-human animals have a common behavioral evolution.
- We are all biologically endowed with the ability to rapidly change what we do based on experience.
- In other words, *we all learn* according to the universal principles of a natural behavior science.
- The ability to learn is not something that separates humans from non-humans.
- In this regard, we are not more, they are not less or other.
- We are them.

Agency

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- This understanding — that we are biologically endowed with the ability to learn — impacts our values and practices working with and caring for animals.
- It provides the impetus to consider an animal's agency.
- Agency is *“the ability to make choices and decisions, and to feel in control of one's life. It can also refer to the power to influence a situation”* (Google, AI Overview, 2025).
- IOW, empowerment, freedom to choose, counter-control and co-influence, all protected by the *least intrusive principle*.

What's the Worry?

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- The idea of empowering animals can be worrisome for some people.
- If we give animals choices, control, and influence, will it lead to “animal anarchy” or “birdy bedlam?”
- This was the big concern when I first described empowering companion parrots with the choice to step onto a caregiver's hand (circa 1997).
- *Given the way this world evolved, a lifestyle of control is one of the building blocks of behavioral health.*

The Continuum

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- Empowerment is not a simple dichotomy (all or none).
 - No child should be free to subsist solely on chocolate; no dog should be free to kill the neighbor's rabbits.
- It's best understood as a continuum (more or less).
- The construct "freedom" or "free will" can also be worrisome if people feel their freedom will be curbed.

Freedom

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- A more tangible, therefore more useful, definition of freedom is found in the field of applied behavior analysis.
 - Freedom (empowerment, control) is about big skill repertoires.
 - The more skills an individual has, the freer they are to control their outcomes (basically to get x or to get away from y).
- We should have as much freedom as possible, within the limits of safety for us and others.
- There are, no doubt, many other limits that reasonably curtail freedom but *who gets to decide* on what safety or other limits look like is a difficult and complicated question.
 - For example, there is a discussion around what is called "the dignity of risk," i.e., how much bubble wrap is good stewardship before it interferes with an interesting and meaningful life.
 - At least we can agree on training big skill repertoires even if we may not agree about whether or not, for example, a pet parrot should fly free.

Willingness to Participate

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- Values and practices are not static, thankfully. We can see how they change as one idea or improvement leads to another.
- Another big idea that grows from the discussion of empowering animals is *assent*.
- Assent refers to the expression of agreement or approval (Oxford Dictionary).
 - Consent refers to meeting a legal standard – hair splitting jargon.
- As explained by Linnehan, et al (2023), "*Assent requires the learner to continuously exhibit an assent behavior that indicates a willingness to participate in a procedure. If the behavior ceases, assent is considered withdrawn, and the procedure should also cease.*"
- The edge keeps moving toward improved practices ... exciting!



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Stop. Start. Continue.

- This is the most basic vocabulary for a *dialogue* between trainers and learners, one that fosters reciprocal influence within the partnership.
- What took us so long?
- A lot of social and technological pieces had to fall into place to get here, including developing the training skills to demonstrate it was possible to have a dialogue with animals and a minimum of aversive training without compromising training goals.
 - Karen Pryor opened doors.
 - The move to protected contact in zoos opened doors.
 - The recent interest in learning-science opened doors.
 - The internet opened doors.

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The Dialogue



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First You Have to See It

- How do we increase our learners' Start and Continue behaviors? And what do we do when they indicate Stop?
- The answer is simple: Reinforcement.
- However, first you have to see the behaviors (they can be very subtle) so observation skills are paramount.
- Species typical behaviors are important to consider (ethology, natural history) but *behavior in context is a study of one*. That's our jam.
- Observing behavior in context builds the behavior vocabulary needed for a partnership.
 - *Behavior without context simply has no meaning.*
 - Biting to consume food is obviously different than biting to stop the trainer's hand from coming too close. Although both involve teeth, the context is what makes the difference.

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First you have to see it. We are them with different information.



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- Second you have to be influenced by what you see, what the animal does.
- What does it mean to what trainers do... "That's just the way zebras are."
- Genes too are changed by conditions.



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Georgia Bleza

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Free Choice

- When we can pair assent behaviors with free (Catania, 1980) or genuine (Goldiamond) choice, we further reduce intrusiveness.
- Free/genuine choice refers to an arrangement where the learner has more than one way to get reinforcers.
- When animals choose to train with us even though other reinforcers are accessible, it is important data that working with us offers more reinforcement than just the food in our pouches.
- We compete with their willingness to train with us and win, with the least intrusive arrangement possible.

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- This is likely more than food, rather a bundle of reinforcers, rarely is there just one functional reinforcer.
 - For example, time with a favorite trainer, novel things to do, and problems to solve may all be bundled with the food treat.
- When animals leave the training area (now that we've given the freedom to do so by training without restraint), it's data that something in our training setup needs to change.
- This free choice arrangement is not always possible or necessary but it's a cool aspiration and provides important data.

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The Competing Behavior Model



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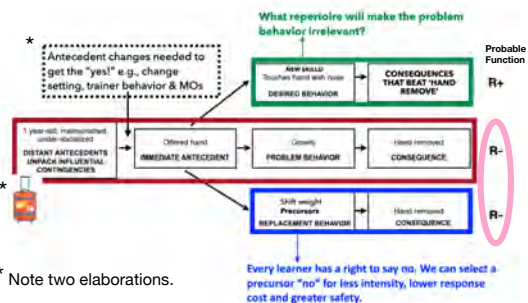
- O'Neill's et al (1997). *Functional Assessment and Program Development for Problem Behavior*.



- Competing Behavior Model (CBM, p. 69).
- There are three behavior paths (contingencies) to identify, two of which are designed to compete with the problem behavior by making it **irrelevant, inefficient and ineffective** – three really stellar criteria for us to consider.
- The steps for implementing the model are as follows with a diagram on next slide.
 - Step 1. Map the functional assessment path (contingency) for the problem behavior (**red box**).
 - Step 2. Map the path for an easier but functionally equivalent replacement behavior so the problem behavior is inefficient and irrelevant (**blue box**).
 - Step 3. Map the path for the new behavior that will produce super reinforcers so the problem behavior is inefficient and irrelevant (**green box**).

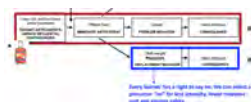
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Competing Behavior Model: Honor the No and Shape the Yes



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Honoring the No: The Blue Path



- By negatively reinforcing precursor behaviors instead of the problem behavior, we can lower the intensity, response cost, and danger.
- Precursors include such behavior as flattening ears, swinging tails, leaning forward or back, widening eyes, licking lips, and panting, just to name a few.

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Blue Path cont.

- Stop (R-) can mean remove, delay, or reduce the intensity of the aversive stimulus.
- Ignoring Stop behaviors often leads to escalation.
- "When selecting an equivalent replacement behavior, *"anything that isn't a yes is a no"* (Rick Hester).
 - When eyes get wide, we remove our hands (rather than wait to be kicked).
 - When neck feathers rise, we step back (rather than wait to get bitten).
 - When a tail is held rigidly, we put down our hoof-trim tool, (rather than wait for the animal to walk away).

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To tell the truth, I can't remember whether I'm supposed to pin my eyes before or after I bite.

Blue Path cont.

- We caution trainers not reinforce the No with both positive and negative reinforcement as it can work against getting the Yes.
 - Simply put, the Yes should be more positively reinforcing than the No is negatively reinforcing, in order to facilitate the desired choice.
- Escape (e.g., hands off), for escape-maintained behavior (e.g. tail flick), is the functional reinforcer to honor the No.
- By **thoughtfully arranging the antecedent environment** and positively reinforcing the desired behavior, e.g., calm tail, animals stay with us.
- Sometimes people report that “there were no warning signals” before a severe NO e.g., a head swing or charge.
 - When this happens, it is most likely that people have not responded to, or not trained, the less intense precursor behaviors indicating discomfort.
 - First you have to see it.

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Getting to Yes: The Green Path



- But then what? What do we do to get past the No/Stop to the Yes/Start/Continue?
- Some procedures involve negative reinforcement. The R- procedures vary in implementation in two ways:
 - 1) How the aversive stimulus is introduced – incrementally, never exceeding the animal's toleration (sub-threshold) or all at once, triggering the full-on Stop response (over threshold – not recommended or necessary).
 - 2) The criterion for withdrawing the aversive stimulus – time-based criterion or behavior-based criterion.

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The Green Path cont.

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- In the article *Pavlov's Parrots: Understanding and Extinguishing Fear Triggers* (2007), I described a behavior-based criterion i.e., increase in calm behavior (which itself can be shaped) controls stepping back.
- With *Constructional Exposure Therapy* (Layng, et al, 2022), the criterion for removal of the aversive stimulus is time based, i.e., a few seconds and step back.
- With both of these procedures (behavior-based or time-based), presentation of the aversive stimulus should be gradual, so the problem behavior remains sub-threshold.

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- If the behavior is triggered, you've made a mistake. Remove the aversive stimulus immediately and *change what you do* on the next repetition.
 - Do not stand there waiting for calm behavior, as it shouldn't be triggered in the first place.
- Continue gradually advancing until the animal calmly tolerates you getting close enough to deliver the positive reinforcers. From there it's R+ all the way.
- This "switchover" (Layng, 2024), calm behavior in the presence of the stimulus, is possibly due to an abolishing operation where the aversive stimulus loses its aversive property.

The Green Path cont.

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- Stimulus-stimulus pairing procedures can also effectively change Stop behaviors into Start and Continue behaviors.
- In one variation, the aversive stimulus is repeatedly paired with a strong appetitive stimulus, until the aversive stimulus no longer triggers the Stop response (Schilz), i.e., classical conditioning/respondent extinction.
- In another stimulus-stimulus pairing procedure, the operant behavior that quickly emerges between the two stimuli is reinforced (Yablon) and the program continues building the operant behavior with discrete trial training (ABC) approach.
 - Note: Regarding all the procedures discussed above, we can't meaningfully separate the respondent and operant systems into two discrete categories.
- Focusing on procedures and technological descriptions is more useful. The technological dimension of Applied Behavior Analysis (ABA) is the practice of clearly describing all interventions and procedures. This ensures that anyone with the relevant background can replicate the intervention.



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S-S, S ^ S, ABC



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The Green Path cont.

- Differential reinforcement of alternative or incompatible behaviors (DRA/ DRAI) has also been shown to effectively reduce escape-maintained behaviors and positively reinforce alternative behaviors.
 - See Click to Calm (Parsons) and Look at That (McDevitt).
- Vollmer et al, (2020) has discussed ways to effectively reduce the use of extinction in DRA programs, which more closely meets our commitment to the least intrusive, effective procedure.
- Many studies have shown that positive reinforcement can effectively compete with negative reinforcement reduce or replace escape-maintained behaviors (see list after Recommended Readings).

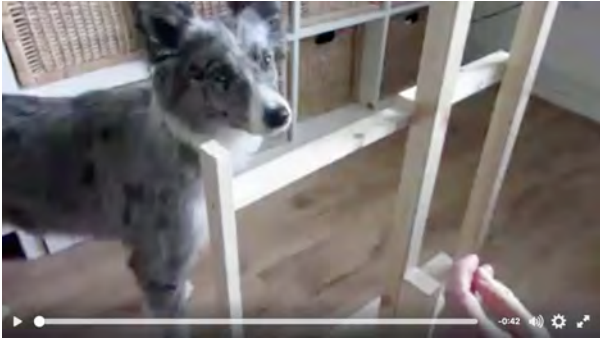
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- Layng (2024) suggests that the effects of DRA/DRI are transient due to superimposition, when the reinforcer is removed
- However, in our application, reinforcers usually continue to be offered throughout the lifetime of the animal.
- For example, a dog that controls reinforcers from the trainer by walking calmly past another dog (rather than lunging), will likely get reinforcement for doing so forever.

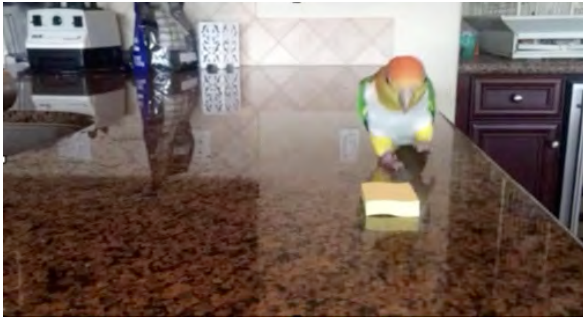
The Green Path cont.

- Additional changes we can make during a training session to go from Stop to Start and Continue follow:
 - Change the antecedent environment, including the setting (e.g. change the tool, or move the hoof block closer).
 - Change motivating operations (e.g., separate conspecifics, provide an escape route).
 - Lower the criterion for reinforcement in your shaping plan.
 - Lower the value of reinforcers for "easy" behaviors and raise reinforcement value for "hard" behaviors.
 - Improve the reinforcement system (Hunter, Behavior Explorer) with well-timed, predictably delivered, valued or novel reinforcers.
- Identify and train prerequisite and component skills.





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The Benefits

- With a partnership approach, Start and Continue behaviors, once learned, are often offered to get the ball rolling even before the trainer's cue.
- Animals may lean into the mesh, open their mouths, or station at a target.
- When we reinforce those behaviors we acknowledge and strengthen their invitation to train, and the dialogue has begun.
- This dialogue style of training is in stark contrast with past generations where the goal was to achieve 100% stimulus (cue) control over a behavior, greatly reducing the dialogue.
- We can also reinforce some other behavior that cues the trainer that the learner is ready to receive our cues like looking at the leash clip before attaching it or approaching the trainer to start the session.

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Conclusion

- Inherent in this partnership approach to training is the commitment to honor the No by changing what we do, moment by moment within each training session.
- This takes both observation, training skills and data. First you have to see it, then you have to respond.
 - Stop when the animal says Stop, *change what you do* to get back to Start and Continue.
- Honoring the No means responding to the earliest indication of Stop so that animals don't have to escalate their behavior to be heard.
- A technically sound plan is one that adheres to the scientific principles of learning and behavior, and our ethical commitment to using the least intrusive, most effective procedures.
- Animals should assent to training with us because doing so is positively reinforcing, not because they are forced or coerced.

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Honor the No and Shape the Yes!



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Related Readings

Abdel-Jalli, A., Linnehan, A. L., Yeich, R., Hetzel, K., Amey, J., & Klick, S. (2023). Can there be compassion without assent? A nonlinear constructional approach. *Behavior Analysis in Practice*, 1-12. <https://doi.org/10.1007/s40617-023-00850-9>

Bertilsson E. & Johnson Vegh, E. (2020). Animals in control – Start button case studies. <https://video.clickertraining.com/programs/animals-in-control-start-button-case-studies>.

Catania AC, Sagvolden T. (1980). Preference for free choice over forced choice in pigeons. *J Exp Anal Behav*. Jul;34(1):77-86. doi: 10.1901/jaba.1980.34.77. PMID: 16812181. PMCID: PMC1332948.

de Fernandes, R.C., Dittich, A. (2018). Expanding the Behavior-Analytic Meanings of “Freedom”: the Contributions of Israel Goldiamond. *Behav. Soc. Iss*. 27, 4–19. <https://doi.org/10.5210/bsi.v27i0.8248>

Friedman, S.G. (2007). Pavlov's parrots: Understanding and extinguishing learned fear triggers. *Good Bird Magazine*, 3(2), 27-30.

Hunter, M. E., & Rosales-Ruiz, J. (2023). The PORTL Laboratory. *Perspectives on Behavior Science*, 46(2), 355-376.

Layng, J., Andronis, P., Linnehan, A., Klick, , Abdel-Jalli, A. (2024). Nonlinear Contingency Analysis (NCA) and the Constructional Approach to Behavior Problems. A course from ASACNJ. <https://abaonj.com/>

Layng, J., Abdel-Jalli (2022). Toward a Constructional Exposure Therapy. *Advances in Cognitive Therapy*. Fall Issue, p.8-11.

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McDevitt, L. (2019). Control Unleashed Reactive to Relaxed. https://www.youtube.com/watch?v=cW_WlETmNM

Parsons, E. (2021). The New Click to Calm : Solutions for All Dogs in a Challenging World. <https://www.youtube.com/watch?v=gelyuR7wbGY>

Schneider, S.(2012). The Science of Consequences: How They Affect Genes, Change the Brain, and Impact Our World. Prometheus Books. Amherst, NY.

Sidman, M. (1993). Reflections on behavior analysis and coercion. *Behavior and Social Issues*, 3(1-2), 75–85. <https://doi.org/10.5210/bsi.v3i1.199>

Vollmer, T.R., Peters, K.P., Krontfl, F.R., Lloveras, L.A., Ibañez, V.F. (2020). On the definition of differential reinforcement of alternative behavior. *J Appl Behav Anal*. Jul;53(3):1299-1303. doi: 10.1002/jaba.701. Epub 2020 Mar 20. PMID: 32196670.

Yablon, Kiki. Your Dog Already Knows How: Teaching When, Where and Why. https://video.clickertraining.com/programs/sending_traveler_profile_in_zoho-57e4fe

Yablon, Kiki. Taking Shortcuts with Stimulus-Stimulus Pairing. <https://hannahbrangan.dogpodcast/176/>

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Sample of Articles Where Positive Reinforcement Effectively Reduced Escape-Maintained Behavior

Briggs, A. M.,Dozier, C. L., Lessor, A. N., Kamana, B. U., Jess, R. L. (2019). Further investigation of differential reinforcement of alternative behavior without extinction for escape-maintained destructive behavior. *Journal of Applied Behavior Analysis*, 52(4):956-973.

Carter, S.L. (2010). A comparison of various forms of reinforcement with and without extinction as treatment for escape maintained problem behavior. *Journal of Applied Behavior Analysis*, 43, 543-546.

DeLeon, I. G., Neidert, P. L., Anders, B. M., & Rodriguez-Catter, V. (2001). Choice between positive and negative reinforcement during treatment for escape-maintained behavior. *Journal of Applied Behavior Analysis*, 34, 521– 525.

Kodak, T., Lerman, D. C., Volkert, V. M., & Troscclair, N. (2007). Further examination of factors influence preference for positive versus negative reinforcement. *Journal of Applied Behavior Analysis*, 40, 25–44.

Lalli, J. S., Vollmer, T. R., Progar, P. R., Wright, C., Borrero, J., Daniel, D., et al. (1999). Competition between positive and negative reinforcement in the treatment of escape behavior. *Journal of Applied Behavior Analysis*, 32, 285–295.

Schieltz, K.M., Wacker, D.P., Romani, P.W. (2017). Effects of Signaled Positive Reinforcement on Problem Behavior Maintained by Negative Reinforcement. *J Beha Educ*, 26:137-150.

Slocum, S.K., Vollmer, T. R. (2015). A comparison of positive and negative reinforcement for compliance to treat problem behavior maintained by escape. *Journal of Applied Behavior Analysis*, 48(3):563-74.

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