

Crossing Bridges – Communicating Clearly With Your Pet Parrot.

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Over the past decade positive reinforcement training has come a long way. Once, only used in labs to study learning or at marine mammal parks to get dolphins, whales and seals to perform nowadays positive reinforcement training is used widely by professional animal trainers and new pet owners alike.

Positive Reinforcement Training.

Positive reinforcement training provides desired consequences for desired behaviour. The dog sits - the dog gets its ball thrown. The parrot plays quietly in his cage, his human gives him a favoured food treat. First studied by a guy called Edward Thorndike and later made really famous by another guy called B.F. Skinner, it has been shown both in laboratory settings and various animal training situations in the real world to be the most powerful way to effect long term changes in behaviour.

A fundamental rule of learning is **reinforcement strengthens behaviour**. Simply put, if your parrot does something you like – say goes calmly in his cage when you ask him to, greets a stranger nicely, plays on his play area while you do the dishes – providing something your parrot likes when the desired behaviour is occurring will make that behaviour more likely to occur again in the future. If you want to be a good parrot trainer, dog trainer, mother, father, boss, co-worker or friend – in fact if you just plain want to have good relationships with anyone (or anything!) you meet, you should tattoo that rule into your mind.

The Importance of Timing.

Obviously, positive reinforcement training depends on the animal making an association between their behaviour and the reinforcement. The studies that have been done in the laboratory show us the importance of timing when it comes to delivering a reward. A good motto when you are using reinforcement training is “two seconds too late!” If you are teaching your dog to sit with food, the treat has to come as soon as the dog sits. If you take your time getting your food out of your pocket and as you hand it to the dog the dog stands up, you have rewarded standing up - not sitting. Don't be surprised then, when you have trouble teaching him to hold the sit for any length of time. If you are teaching your parrot to fly to his cage and he flies there but immediately turns around and flies back to you and you give him the reward for flying to his cage, it is actually flying to you that will be linked with the treat. For your parrot, flying to his cage is over and done with, because the last thing he did before getting a treat was flying to you. Your delivery of reinforcement must occur as, or at the very least half a second after the behaviour you wish to strengthen. What we call good timing scientists call *contingency*, and their research shows us that learning does not take place without it.

Luckily, getting around this issue of timing is a relative simple task. Thanks largely to a gang of Marine Mammal trainers back in the 1940's we have a simple tool that can really help us be clear to our birds about what behaviour has earned them the reward when we need to be really precise. Animal trainers call this a "bridge" and scientists call it a "conditioned reinforcer".

Whatever you call it, a bridge is usually simply a short sharp sound that the trainer has conditioned their animal to associate with a naturally desired reinforcer – like food treats. The bridge provides information as to what behaviour 'worked' to bring on the reward. The term "bridge" comes from the thought that the sound "bridges the gap in time" between the behaviour and the trainer getting the reinforcer to them. "Conditioned reinforcer" comes from the fact that the sound that once meant nothing now can act to reinforce behaviour because of it's association with the food treats – in other words it's ability to reinforce was learnt by the animal, or as a scientist would call it "conditioned".

While any stimuli can become a bridge, most trainers use a specific sound. Commonly used bridges include a specific word, such as "Good!" or "Yes!" said quickly and sharply, a dog whistle or a small metal device known as a clicker. The process of association is simple – make the sound, give the food, make the sound, give the food make the sound, give the food – do this enough and soon the animal hears the sound and spins around looking at you, saying "Where's my food?"

Once the association is created, we can use the bridge in our training to 'mark' the behaviour we are working on. In this way we can be crystal clear to our animals what earned them the reinforcer. If we go back to the training we were doing earlier – teaching our dog to sit and our parrot to fly to his cage, we can use our bridge now to mark the behaviour for them. Our dog's back end hits the ground and he hears "click!" and we get the food in to him nice and quick. Our parrot lands on his cage and hears a bright happy "Good!" and we reach over and give him a sunflower seed. Suddenly our animals have a much clearer understanding of what we are actually reinforcing, and they are in for the game.

The Bridge In Action.

Once the animal 'knows the bridge' the trainer can use it to train behaviours by making the sound of the bridge exactly when the animal is doing a behaviour they want to train. It is important to remember that the bridge doesn't replace the food treat. Whatever the bridge was paired with still needs to be presented – without this the sound will lose meaning as quickly as it gained it, so don't think of the bridge as taking the place of the food, just pinpointing the behaviour that 'worked' and for which the animal earned the treat. This means that if you bridge at the wrong time you still have to follow through on your bargain! – Bridge means treat every time.

Think of the bridge not only as a marker to ‘show’ your parrot the behaviour that earned the reinforcer, but as a predictor or a promise that the treat is coming. If you begin bridging and not following through with a treat your parrot will begin to search for other stimuli that gives him the information that a treat is coming, and pay more attention to that than the bridge. Why? Because learning is always taking place. If the sound of your bridge no longer can be relied on to provide information, your parrot, being the smart cookie he is, will look for what does. If your hand going into your pocket predicts sun flower seed more readily than the bridge, he will pay attention to hand in pocket over bridge every time.

When you begin to train with a bridge, pick an easy behaviour to train – easy for you and your parrot. While you may end up teaching loop the loops, both you and your birds are learning the process, so picking a simple behaviour like touch a target or go to a station (a specific place) are good places to start – they give you a very definite behaviour to bridge and your parrot a very clear behaviour to perform. Lets look at the process of training your parrot to go to a station.

I usually use a cassette tape container for this, with a bit of coloured tape wrapped around it. You could use a bit of carpet off cut or a small book, anything that your parrot can comfortably stand on – because this is our goal behaviour.

For our first step you are going to bridge every time your parrot steps on the station, but in order to reinforce it we first have to get the behaviour happening! I work this on my dining room table. There are a number of ways you might prompt this behaviour, you might lure him on it with a bit of food, you might put the station between you and the bird if he is likely to move towards you, you might wait until he goes and investigates it, you may even click him for moving towards it. The point is we have to get him to understand that the station is important and worthy of his attention.

Because we are new to this kind of training the first thing we are going to do is put the station in place and put your parrot down on the table with a few seeds to eat. Then, we are going to show him we have some seeds in our hand and try and guide him so he walks over the station – bridge him as soon as his feet hit the station. Repeat this 3 or 4 times. Then bring him back over to the other side of the station, feed him one or two seeds to hold him there and when he finishes wait to see what happens – if he steps on the station bridge and reward! If he doesn’t, try and guide him over it by moving your body and calling him.

It is important to watch your parrot for any signs he might be stressed or nervous of the station. If he is, do one or two sessions of treating him around the station – we don’t need to use our bridge here because we aren’t pinpointing a behaviour, we are just changing his feelings about the station and showing him there is nothing to be

scared of. Gradually feed him closer and closer to the station until you feel he is comfortable around it.

Once your parrot is reliably walking over the station to get to you, start moving so he is not just coming directly to you, but he is starting to actually go out of his way to go to the station. You could have him in front of you and bring the station really close to see if he will turn and go there himself. By bringing it closer we are lessening the distance he has to travel to be successful. The aim is to get your parrot going to the station when ever he sees it from any direction.

Once he is doing this it's just a matter of increasing the amount of time he will stand there. You do this by withholding your bridge one second at a time. So now the behaviour we are bridging is not go to your station, but stay on your station until you hear your bridge. In this way our bridge will not only mark the behaviour, but end the behaviour as well.

Once the behaviour is learnt you can put away your bridge and use your voice and rewards to maintain the behaviour. I use my clicker during the process of teaching – clearly communicating what I want and what will be reinforced, but once they understand the behaviour and I have put a cue on it, I use words like “that’s it!” and “excellent!” to tell my animals that they have done well. Unlike the bridge, these stimuli are only sometimes followed with treats and special games, but they are always followed with love and affection, so they work well to maintain the behaviour. If for some reason my animals forget or get a bit sloppy performing a behaviour that needs to be precise, I whip out the clicker, have a refresher session and get the precision back. I may also use my clicker if I need my animals to perform in a strange situation. If, for instance, Gilmore, my Short Billed Corella is doing a commercial we will train the behaviour up he needs to know at home to the point where I don’t need the clicker anymore (because he knows what he’s doing). When we start to work on set however, the clicker is there to help him remember the behaviours and focus on the job at hand.

Teaching your parrot a bridge is an important part of training with positive reinforcement. It allows you to communicate clearly when you are working on precise behaviours, behaviours at a distance and when you are teaching your parrot to be creative. It is a tool that enhances both the effectiveness of your reinforcement based training and your relationship with your bird. Your bird will love you for it!