

Relationships With Animals: A Scientific Love Story

China was my sister. She was always there for me, ready with a strong shoulder to cry on, a laughing face to cheer me up. She knew when I needed her nearby and she understood when I needed my space. She helped me raise my children. She didn't have a problem with long silences. When she said something, it was usually important. She wasn't the smartest friend I ever had, but she was definitely one of the most treasured.

China was a dog. She was a 65 pound Chow & Retriever mix. When she died at the age of 11 it broke my heart. Autumn is still bittersweet four years later because that's when she died. China wasn't the only animal I ever loved. Throughout my life I've had a flowing river of beautiful animals in my life.

Lately there are several well-known and admired dog trainers who are stressing relationship over "learning theory" (which includes scientific behavioral principles) in their dealings with companion animals. I can understand (deeply) the goal of having a good relationship with animals. But an understanding of behavioral principles demonstrates that behavioral principles are what make relationships possible.

When learning to train animals using positive methods, most of us learn some basic principles. Positive and negative reinforcement, positive and negative punishment, and extinction. Then we learn how these are applied in training animals, and we learn which produce more desirable results. (See other articles in the archives on this site for more on the principles. www.behaviorlogic.com/id100.html).

These principles are happening all the time whether we plan for them or not. If there is something you do and find yourself doing more and more often, it is being reinforced. If you do the behavior because something pleasant happens when you do it, you know positive reinforcement is taking place. For example, if you pat your leg when you see the dog you love and she comes over to lean against you when you do, you're likely to pat your leg more often when you see her in the future. If you do the behavior because something unpleasant stops happening or is avoided when you do it, negative reinforcement is going on. So, if your dog stops jumping on you when you close the gate between you, you're more likely to close the gate when the dog jumps on you in the future, or to prevent her from jumping on you.

These little events in everyday life are among the component parts of what we call relationship. Like human beings, companion animals are able to pick up tiny cues in our behaviors that give them information about what to do to be effective in different situations. The more consistent we are in our behaviors around our animals the more of these cues they can learn and the better our relationships will be, but even when we are casual about our interactions, animal can generalize certain cues we aren't aware we are giving. This is why some people think that having a relationship has nothing to do with learning theory or behavioral principles. The cues an animal can pick up are often so tiny as to be invisible to us. The beautiful result is the relationship that comes from this subconscious communication.

There is a story that is sometimes used to debunk the idea that an animal can be psychic or that a horse can have mental abilities. What the true story really demonstrates is how our animals can often seem to know what we are thinking through completely natural processes, an ability that is at the heart of intimate relationships.

There was a horse in Germany at the beginning of the 20th century called Hans. He could perform math problems and tell the time. If his owner, William von Osten, wrote the math problem, 2+3 on a blackboard, Hans would paw his hoof on the ground five times. Von Osten took Hans around to perform for audiences and scientists. His ability to do math was uncanny. He could even perform square roots! Many scientists were stumped about how he did this and some decided he really could do math. Even when people besides his owner produced the questions, Hans got the answer right. Von Osten had tried to teach a cat and a bear to do math with no luck. Clearly Hans was something special. Clearly they had a special relationship for him to learn math from his owner this way. It was determined that Hans had the mathematical ability of a 14-year-old boy.

A scientist named Oskar Pfungst in collaboration with a psychologist named Carl Stumpf finally figured out that if the horse could not see the questioner or if the questioner did not know the answer to the question, the horse could not produce the correct answer. While this meant that Hans couldn't do math problems, the discovery was amazing nonetheless. It was determined that no one was intentionally fooling the public with Clever Hans. Instead, Clever Hans was demonstrating uncanny natural abilities that are at the heart of the human-animal bond... and of the human-human bond as well.

Hans had an uncanny ability to detect minute changes in the muscular position or tension of the questioner. As each questioner awaited the horse's response, no matter how hard he tried not to move, he was producing tiny muscle movements that Hans could see. The horse pawed the ground as long as the questioner's muscles moved. When the correct answer was reached, the questioner always stopped the twitching that even he didn't know he was doing it at all, and the horse stopped pawing the ground.

When you are walking across a field with your dog and you think about petting him and he suddenly runs over to be petted, this is a sign of a good relationship. It seems as if he was reading your mind. You didn't teach him to do this... not intentionally anyway. What happened was that he began to pick up on cues from your physical behavior that let him know that if he went to you right now you would probably produce a very pleasant ear scratching experience or something else desirable. If you had just had a fight with your spouse and really just wanted to stomp around and be left alone, chances are he would keep his distance.

This kind of decision making is based on stimulus control. It could be called sensory perception, it's just not extra-sensory perception (ESP). What has happened is that this dog knows by the tiny changes in what your body does when you are in an "I'd like to pet my dog" kind of mood and when you're in a "leave me alone!" kind of mood. If your body cues him that petting is likely, he'll perform one set of behaviors. If your body cues him that you're likely to ignore him or be gruff with him, he'll perform a different set of behaviors. That's what stimulus control is. It's making decisions on how to act based on conditions in the environment.

All of our relationships are collections of stimuli that let us know how to behave to keep the relationship healthy. Many dogs don't pick up on their owners' cues as readily as others. These dogs are sometimes accused of not showing respect.

I suggest that if a dog can't figure it out on his own, a true sign of respect is for the owner to specifically teach him how she would like him to behave. I had to learn this

over my 18 years of marriage. It turns out that my husband really can't read my mind! Sometimes I have to explain to him how I'd like him to behave. There is really no benefit in saying, "You NEVER do this the right way!" if I've never told him how I want it done. Then I have to make it worth his while to continue to behave that way. When he does what I've asked I have to make sure I never say, "Now, see? Was that so hard?" Instead, I have to reinforce his cooperation by saying something like, "Thank you so much. This really helps." It doesn't diminish me or our relationship for me to be clear about my desires and then to make it worth his while to do what I'd like him to do.

Same with your dog, yes? If your dog doesn't instinctively pick up on the relationship behaviors you'd like him to have, teach them to him. When he does them give him something he loves like an ear scratching or a piece of cheese. The more of these foundational relationship behaviors you specifically teach him, the more he'll be able to figure out on his own. And that is the heart of a good relationship!

In memory of China, the Best Dog Ever

<http://www.behaviorlogic.com/id26.html>

Kellie Snider

Copyright, 2005

Kellie@behaviorlogic.com

www.behaviorlogic.com