

## *Past Pavlov & Skinner*

By—Judy Graham

©2004

It sounds like scientists may finally be discovering what we search and rescue dog handlers, and most dog lovers, have known all along. Dogs may actually think.

Ever since Pavlov, men of science have been trying to establish what makes dogs tick. Tick, not think. The human animal has a mind, we've been told, and arguably a soul. We can plan, solve problems, operate on a level above basic instinct. That, they say, is what separates us from the lower animals.

More and more over the years, and especially recently\*, some scientists have begun offering evidence that animal consciousness may not be as simple as stimulus-response; or rather, that there is such a thing as animal consciousness after all.

Let me tell you about our dogs.

Hatch and I have been living with dogs for a long time. We know they understand more human words than just "heel," "come," "sit," "stay" and "dinnertime." More, even, than the specialized commands we've taught them for search, like "find 'em," "track," "climb" (up a ladder), "walk it" (a plank balanced on top of rubble), "through" (a shaft cut into a collapsed building). Much more than just "shake hands" or "give me five."

But I didn't realize how much of our private conversation was overheard by our dogs until one evening on the desert outside Mojave, when we were waiting by our van for the dogs to finish their dinner.

"Pepper left three pieces," I said, surprised to see any kibble left in the old lady's bowl. Our younger bitch, Roxy, had cleaned up her own dish on the far side of the van and was gazing off into the distance; no sooner were the words

out of my mouth than she bee-lined for Pepper's bowl and gobbled up the leftovers -- count 'em, one-two-three.

It's not just that the dogs understand our language better than we suspected. They can also display an ability to manipulate situations to their own advantage. Take Taco, for instance. He was aptly named; he loved to wrap himself around food. So, when we fed all the dogs in the kitchen, Taco would gulp down his dinner, then hang around watching "the girls" eat theirs in a ladylike fashion.

One day he got a better idea. After finishing his own meal, he ran to the front door and barked -- his signal for someone to open the door. I did. The girls left their dinners and dashed out the front door and away. Taco calmly turned, went back to the kitchen, and cleaned up the food in their bowls.

He repeated this "trick" on a few other occasions; the girls always fell for it.

Taco could be clever about the tricks we taught him, too, and creative about obeying our orders. When he was a youngster, still learning good manners, I took him to obedience class every week.

For the first few months we drilled the basics like "heel" and "stay." And then we started "proofing" the dogs: distracting them so they'd make a mistake and we could correct the slip. The goal was rock-solid obedience.

One evening in class, Taco was on a sit-stay when one of the instructors walked up. "Your name is Taco, isn't it?" she asked. Taco smiled. "What a fine dog you are, Taco!" He grinned. "How are you this evening, Taco? would you like a cookie?" Such temptation! But Taco knew better than to break his stay.

As she kept on sweet-talking, Taco did

the only thing a responsible dog could do under the circumstances. With his butt and left foreleg firmly planted, he offered his right paw—to shake hands. I call it creative obedience.

And then there's creative disobedience. Like the time I laid an overnight trail in the desert outside Las Vegas for my old dog Sardy. Early next morning I scented her at the starting point and told her "track." She set off obediently, following the way I'd walked the evening before. But all of a sudden she put up her head and turned off the trail, into the brush. "Track!" I repeated, sternly this time. Sardy surely knew the difference between nose-to-the-ground tracking and head-in-the-air "find 'em." But she just kept working further into the brush, ignoring me. Was she after a rabbit? I went to investigate, and found her nudging what looked like a body lying face-first in the sand.

"Are you all right?" I asked, on the chance it was still alive.

"I'm fine," the young man muffled into the sand.

"Are you sure?"

"I'm fine," he repeated to the desert floor.

I decided he must have had a rough night-before, and somehow ended up among the sagebrush and creosote to sleep it off.

"Get that dog out of here," he added, as Sardy tried to nuzzle his chin.

Sardy and I resumed our track. I didn't "correct" her for leaving her assignment; I just chalked it up to my dog knowing more than I did, again.

Part of our training as search dog handlers is learning to "believe our dogs." It's one of the toughest lessons for many

of us, Hatch included. It took his old dog Pepper years to teach him that she knew more about the search business than he ever would.

Early in the morning on New Year's Eve, several years ago, we responded to a rural home to search for a woman who'd disappeared, leaving a suicide note. Hatch put Pepper "on trail" at the residence, and Pepper began milling around, sorting out the woman's scent that was everywhere around the house and stable.

It didn't take Pepper long to isolate the freshest trail. Soon she was leading Hatch up a dirt road that climbed steeply south toward the ridgetop. And then she put up her head, testing the air from the west. Off in that direction, Hatch could see a neighbor's house with smoke from the chimney drifting in our direction. *She's smelling those folks*, he decided, *instead of the lady we're supposed to find*.

"Pepper, track!" he repeated, firmly. But Pepper wasn't going to take any nonsense. Dad was giving the wrong command! She turned around and barked at him, then grabbed his arm in her teeth.

"OK then, show me!" When Hatch gave the proper response for an airscent "find," Pepper wheeled around and dashed off toward the west. Hatch followed, and Pepper led him to the missing lady, lying concealed in grass and weeds. She had slit both wrists and was unconscious, but still alive.

So, the dogs know more about how to find people than we do. How about once they've led us to that lost person?

From the time they're puppies, we spend a lot of time socializing our partners so they learn that all humans are their friends. Old Sardy, for instance, never met anyone she didn't like.

And yet, one cold October evening, she showed a whole different side of her personality.

It was another attempted suicide. Police had scoured the woods most of the afternoon without finding the woman

who left a note, then disappeared with a shotgun with one shell. We were called after dark. I attached a Cyalume light-stick to Sardy's collar and told her "go find!"

Through the woods I could see flashes of the light-stick as she ranged out ahead. Then suddenly she turned and came running back. "Did you find?" There was no question in my mind until Sardy started back the way she'd come, but as if on tiptoes. This was the dog who liked to pounce on her practice "victims" with a happy squeal. Why was she acting so spooky?

Then, a little way ahead, I heard a low moan. The missing woman had shot herself in the abdomen.

A police lieutenant helped with first aid while the ambulance was on its way. Hatch used a pen-gun flare to guide the paramedics in through the woods. But as they approached, my always-friendly search dog rose from the side of the injured woman and barked a warning at these intruders who -- she apparently thought -- might do further harm.

I reassured Sardy, but she continued to supervise while the paramedics stabilized the woman and carried her out in a litter. Sardy was just one step behind as they loaded her patient into the ambulance.

Generations of scientists have written about cause and effect, stimulus and response, reward and punishment as bases for dog behavior. And it's true, reward is an important part of getting our search dogs to perform well. The dogs know that when they lead us to the missing person, we'll throw a stick for them; they'll get their game of tug of war, and lots of praise for a job well done.

So how about the first time my original search dog, Prissy, found a real live victim -- not just somebody we'd planted for a training exercise? After two and a half days of searching through the humid Virginia woods, Prissy led me to a

comatose elderly woman who'd wandered off from a mental hospital. Seeing that hardly-breathing form heaped against a tree, I had more on my mind than throwing a stick for my dog. "Good girl, Prissy," I whispered and handed her the nearest dead branch.

The other dog teams converged from different parts of the mountain and helped with first aid while the rescue squad puffed up the hill with oxygen and a litter. Prissy lay quietly at the fringe of activity, holding her stick.

Then came the litter-haul down the mountain. After the woman was loaded into an ambulance, I glanced around to see where my dog was. Prissy was right beside me -- with her stick in her mouth. I tried to play her favorite game of fetch then, but she seemed to prefer just holding her reward. In fact, she carried that stick around the rest of the day. I think she took it as a badge of honor for more than a job well done. I believe she realized she'd done an *important* job this time.

Sometimes there aren't any sticks lying around, and the dogs have to improvise.

In Mexico City after the '85 earthquake, one of the sites we searched was the remains of a collapsed hospital. Pepper worked into a tunnel that rescuers had excavated, then came back to us with "that look" in her eye. She tried to pull a chair leg out of the concrete jumble that used to be building, but couldn't yank it free. So she grabbed a bag full of hospital gauze and began parading around with the packet in her mouth. It was the best way she knew to tell us she smelled somebody alive down there.

So pardon me if I cheer the renegade scientists who are beginning to suggest dogs may be able to think.

---

\* Begley, Sharon and Joshua Cooper Ramo, "Not Just a Pretty Face," *Newsweek*, Nov. 1, 1993, pg. 63-67.