

When laboratory biologists aren't forced to close ranks against the animal-rights crowd, most will admit what they can't say outside the family: It is strange to thing to express your love of life by killing animals.

Biologists love to examine living organisms; but they also want to find out how they work. They can tell you how appealing and interesting a caterpillar is, and then dissect it. That just means their relationship to animals is much like the rest of humanity's. Farmers put food production above their empathetic feelings, and zookeepers have to get crowds, and the pet industry caters to a market. Biologists put their purpose -- creating new knowledge -- above their feelings.

Most of the time they do, anyway, but as with farmers, zookeepers and pet breeders, biologists find that our shared animalness tugs at the heart. Watch a mother mouse struggling to pull a baby back into its cage and you will feel one worldview bury another in your mind, like sudden lava covering a town. Experienced lab people learn to manage themselves, to defend against such feelings; some have stories of mistakes they'll never make again (for example: never name animals you'll have to euthanize).

Other, creepier scientists have denied this psychic intimacy. Rene Descartes, for instance, held that animals were unfeeling machines. But most biologists would be more likely to agree with the great neuroscientist, Charles Sherrington, who wrote, ``one feels sometimes that Descartes must never had a dog." In one way or another, when the cost isn't too high, scientists have been known to give in to fellow-feeling. A lab keeps feeding an elderly rodent or two, long after they have run their last maze; a campus pond is mysteriously abundant in amphibians that the local lab works on. Sometimes people even take an animal out of the system entirely. I should know. I did it myself.

I can't say where or when, because it would get people in trouble.

But it involved a set of experiments with some lookalike young rats, who had to run a maze and make a lady-or-tiger choice at the end. The "right" pick got them their reward sooner, and we were interested in how well they could remember their choices over time.

I had expected that all six of "my" rats would learn the game in a lookalike way, at a lookalike pace. After all, on paper they were identical -- same colony, same sex, same age. The only way I could tell them apart was by the letters we had inked on their tails. But they turned out not to be alike at all. In fact, two of them never did figure out the point of the game. Two others couldn't get beyond the basics. Only two were able to do the work we expected. And one of them was a little unpredictable.

Ah, but Subject B wasn't like that. He was something else. He needed far fewer demonstrations to "see" the point of the game. By the fourth test of nine, he was noticeably calmer; while his colleagues were still leaving clear signs of panic -- not clear, actually, more like brown and yellow signs of panic -- his sector was dry. He seemed to get it, and to know that he was getting it. In fact, he was in the magic zone of "one-trial" learning, the rodent equivalent of being able to drive in a country you've never visited before, because you understand how all the elements of the problem work. I started to wonder if he was getting bored with his job.

Thanks to him, our experiment was able to move ahead. And that had some interesting effects on us experimenters. Human beings are very good at making distinctions among lookalike individuals. We are also very keen to notice when someone else has done us a good turn (an ability that some psychologists argue is "built in"). And we tend to feel close to creatures that have shared a stressful situation with us -- teammates, fellow soldiers, rescue workers. Unless you're like Descartes and have never noticed a family dog, you will know that we don't limit these feelings to other human beings. I was always happy to see Subject B, that hard-working, living proof that our team wasn't wasting its time.

I was less happy as I thought about the reward he would get for his effort. Our protocol required that the animals be euthanized at the end of the task -- not because we needed to dissect them to learn anything, just because, once we were done, they became surplus. As I put Subject B in his clear plexiglass home for the last time, I watched the rats scurry around their enclosure calmly, sniffing corners, checking in with one another, clearly deciding that nothing much had changed after another day at the office. Only I knew tomorrow they were scheduled for a needle in the heart.

Experimental rats are a dime a dozen. They're bred to be used in research. The protocol was humane, designed to save them from suffering. In a few days I would be travelling. And, by the way, I own a cat.

Science, as I said, is no stranger to contradictory feelings about animals. Living with those feelings, a man may, as the playwright Frank Harris once put it, have mercy -- mercy on himself.

Subject B lived out his days in a split-level cage a few feet away from where I write. His tail got longer and broader now, and, eventually, those inky letters faded.