A continuing series of articles by Dr. M. W. Fox covering selected topics of interest and practical value for people who work with, and whose lives are dedicated to the welfare of our animal kin.

I Touch & Love

Several years ago a noted pediatrician, Dr. Rene Spitz, became involved in the care of orphan infants. He found that in those orphanages where babies received little TLC (Tender Loving Care), but had all their survival needs attended to, (clean diapers, baths, regular feeds, etc.) outbreaks of disease were common. Also the babies didn't seem to thrive and some even developed a wasting disease known as marasmus.

Today we have an analogous condition with 'factory' farm and laboratory animals. Young monkeys, puppies and calves, separated from their mothers, even if given plenty of food and warm quarters, just don't thrive. In some establishments where the animals receive more human contact they seem to thrive better and are certainly less likely to succumb to diseases. Now we are beginning to understand this phenomenon. Part of the answer is related to the creature's heart.

When an animal is petted—or groomed or licked by a companion, there is a dramatic decrease in heart rate. When you stroke a dog and provided it's not too excited, its heart rate slows down. This means that the parasympathetic side of the autonomic (vegetative or autonomic 'visceral' nervous system) has been activated. Your touch can evoke such profound changes in the animal's physiology. These changes too, must be pleasurable for a dog since it will work hard for its master just for the occasional reward of a few gentle strokes. (And we all need to get our strokes too!)

When the parasympathetic system is stimulated, an infant animal relaxes, begins to secrete more digestive juices, and its alimentary system is activated to absorb food. Maternal deprivation, or lack of TLC can therefore be detrimental to survival. Food isn't properly assimilated so susceptibility to disease is increased in young animals. It would seem that they are born with two physiological dependencies which the mother normally rectifies by giving TLC. Food and a warm bed just won't do.

This physiological dependence also has another important consequence: attachment. The inborn physiological dependence upon the mother leads to attachment (since TLC is pleasant and rewarding) which in turn leads to an emotional or psychological dependence (upon the mother, foster parent, or caretaker).

Through this attachment process, imprinting or socialization takes place and an enduring bond is formed. This bond persists even in adult animals and this is why socialized cats and dogs enjoy being groomed and petted. And it is through touch that man and animal can appreciate and share a depth of non-verbal communication which transcends the species barrier or they can reaffirm their kinship . . .

II Taming & Domestication

When I used to take my wolf 'Tiny' for a walk, I was often asked whether or not she was domesticated. Being a wolf, of course, she wasn't, but there is a general misconception about domestication, as distinct from taming. A wild animal, even one born in captivity, that is socialized (ie: becomes attached to man from an early age) can never become domesticated: it is, however, tame.

Domestication is a process involving generations of selective breeding, selecting against wild traits such as timidity, neophobia (fear of the unfamiliar), wariness of strangers: selecting for early sexual maturity, dependence, trainability, and stability of temperament.

Without early socialization with man however, an animal from a domesticated lineage will not respond socially to man. It will behave somewhat like a wild animal towards man, showing fear and flight or defensive aggression when approached. Such animals that revert to the wild or have in other words never developed an emotional bond with man, are termed feral animals. If left to natural selection to face the rigors and trials of life in the wild, feral domestic animals may become un-domesticated, their genetic lineage being selectively modified to adapt to nature's demands for survival.

There are some fascinating similarities between domestication and civilization (or culturation) which I won't elaborate upon here * Suffice it to say that we can learn a great deal about what we may be doing unwittingly to our selves by studying some of our domesticated animals. If, however, you would like to seek a more natural life close to nature, remember that you could never be truly wild—only feral; but perhaps your children's children might be closer to the ideal!


Note how the heart rate (beats shown as vertical lines) slow down when this dog is contacted and petted.