Looking for the roots of human morality in the animal kingdom? Focus on canines, who know how to play fair.

Every dog owner knows a pooch can learn the house rules—and when she breaks one, her subsequent groveling is usually ingratiating enough to ensure quick forgiveness. But few people have stopped to ask why dogs have such a keen sense of right and wrong. (2) Chimpanzees and other nonhuman primates regularly make the news when researchers, logically looking to our closest relatives for traits similar to our own, uncover evidence of their instinct for fairness. But our work has suggested that wild canine societies may be even better analogues for early hominid groups—and when we study dogs, wolves and coyotes, we discover behaviors that hint at the roots of human morality.

(3) Morality, as we define it in our book Wild Justice, is a suite of interrelated other-regarding behaviors that cultivate and regulate social interactions. These behaviors, including altruism, tolerance, forgiveness, reciprocity and fairness, are readily evident in the egalitarian way wolves and coyotes play with one another. Canids (animals in the dog family) follow a strict code of conduct when they play, which teaches societies the rules of social engagement that allow their societies to succeed. (4) Play also builds trusting relationships among pack members, which enables divisions of labor, dominance hierarchies and cooperation in hunting, raising young, and defending food and territory. Because this social organization closely resembles that of early humans (as anthropologists and other experts believe it existed), studying canid play may offer a glimpse of the moral code that allowed our ancestral societies to grow and flourish.

(5) Playing by the Rules
When canids and other animals play, they use actions such as vigorous biting, mounting and body slamming that could be easily misinterpreted by the participants. Years of painstaking video analyses by one of us (Bekoff) and his students show, however, that individuals carefully negotiate play, following four general rules to prevent play from escalating into fighting.

(6) Communicate clearly. Animals announce that they want to play and not fight or mate. Canids use a bow to solicit play, crouching on their forelimbs while standing on their hind legs (above). Bows are used almost exclusively during play and are highly stereotyped—that is, they always look the same—so the message “Come play with me” or “I still want to play” is clear. (7) Even when an individual follows a play bow with seemingly aggressive actions such as baring teeth, growling or biting, his companions demonstrate submission or avoidance only around 15 percent of the time, which suggests they trust the bow’s message that whatever follows is meant in fun. Trust in one another’s honest communication is vital for a smoothly functioning social group.
(8) **Mind your manners.** Animals consider their play partners’ abilities and engage in self-handicapping and role reversing to create and maintain equal footing. For instance, a coyote might not bite her play partner as hard as she can, handicapping herself to keep things fair. And a dominant pack member might perform a role reversal, rolling over on her back (a sign of submission that she would never offer during real aggression) to let her lower-status play partner take a turn at “winning”.

(9) Human children also behave this way when they play, for instance, taking turns overpowering each other in a mock wrestling match. [For more on childhood play, see “The Serious Need for Play,” by Melinda Wenner; Scientific American Mind, February/March 2009.] By keeping things fair in this manner, every member of the group can play with every other member, building bonds that keep the group cohesive and strong.

(10) **Admit when you are wrong.** Even when everyone wants to keep things fair, play can sometimes get out of hand. When an animal misbehaves or accidentally hurts his play partner, he apologizes—just like a human would. After an intense bite, a bow sends the message, “Sorry I bit you so hard—this is still play regardless of what I just did. Don’t leave; I’ll play fair.” For play to continue, the other individual must forgive the wrongdoing. And forgiveness is almost always offered; understanding and tolerance are abundant during play as well as in daily pack life.

(11) **Be honest.** An apology, like an invitation to play, must be sincere—individuals who continue to play unfairly or send dishonest signals will quickly find themselves ostracized. This has far greater consequences than simply reduced playtime; for instance, Bekoff’s long-term field research shows that juvenile coyotes who do not play fair often end up leaving their pack and are up to four times more likely to die than those individuals who remain with others. Violating social norms, established during play, is not good for perpetuating one’s genes.

(12) Fair play, then, can be understood as an evolved adaptation that allows individuals to form and maintain social bonds. Canids, like humans, form intricate networks of social relationships and live by rules of conduct that maintain a stable society, which is necessary to ensure the survival of each individual. Basic rules of fairness guide social play, and similar rules are the foundation for fairness among adults. (13) This moral intelligence, so evident in both wild canines and in domesticated dogs, probably closely resembles that of our early human ancestors. And it may have been just this sense of right and wrong that allowed human societies to flourish and spread across the world.