

---

# Playing with Wolves

## An Interview with C. J. Rogers

Since 1992 C. J. Rogers has lived with wolves and studied their societies at Raised by Wolves, a licensed, nonprofit research sanctuary situated in a high valley of New Mexico's Zuni Mountains, not far from the Four Corners. Rogers, who has taught at Northeastern Illinois University and Western New Mexico University, holds doctorates in both psychology and behavioral ecology, and she applies her knowledge of both disciplines to interpreting the emotional dynamics of wolf packs in the habitats—the *playgrounds*—that she has constructed. Rogers describes herself both as a playmate and a sentry for the misunderstood animals she loves and protects. She observes wolves in literal harmony as they sing, and she carefully chronicles their inventiveness and mischief as they play. She also studies closely how conflict arises in and is managed by the packs and how grieving ends play in the complex social systems. In this wide-ranging interview, she offers a fresh interpretation of the role of play in the evolution of humans and wolves, including new views about how early humans learned from wolves.

**A***ERICAN JOURNAL OF PLAY*: You give the wolves at your sanctuary distinguishing names like Guido, Mystic, BudMan, Mantra, Gandalf, and Daydream. Do they have distinct personalities?

**C.J. Rogers**: Oh yes. Definitely. Beau-Beau, for example—a very large wolf-hybrid about 25 percent german shepherd and now deceased—was a member of the House or Shack pack. He was stunningly handsome and sweet, and he often acted as baby-sitter for his pack. That behavior is consistent with an interesting pattern, by the way; the largest males tend to have baby-sitter temperaments—very gentle and sweet but also capable of great strength, as though protecting the young requires their formidable presence. Anyway, he had this little play thing he loved to do: how can I describe to you what it looked like when this huge, gorgeous carnivore tried to stand on his head?

**AJP**: This sounds much like the play we know from watching our pets. If humans know dogs, do we also know wolves?

**Rogers**: Yes, in part. Think about your dog or a dog you've known. You're probably at least half-smiling. When we're with our dogs, we feel loved, safe, and not alone. People often describe their dogs as friends, but with

those bright eyes and big smiles, dogs really are true pals. Whatever dog you have in mind right now, you are thinking of a subspecies of wolf. Wolf equals *canis lupus*; dog equals *canis lupus familiaris*. And if what you love about your dog—your soft, merry, protective prankster—is that guileless loyalty, that easy unconditional love it has for you, that innocent intelligence, devoted happy companionship, and playful charm, then you are loving the wolf in your dog. It's that long-lasting love affair that I'm eager to tell you about.

**AJP:** Before we get to that, would you please say more about how it is that you have both pure-blood wolves and wolf-hybrids at Raised by Wolves?

**Rogers:** Let me say at the start that I'm pleased you picked up on the term *wolf-hybrid* that I used. It pains me to hear wolf-hybrids referred to as wolf dogs. I think it is misleading and even dangerous to encourage people to think wolves are another type of dog—like a *collie* dog or a *poodle* dog. When people think wolves can be pets, disaster almost always follows. Actually, I'm not crazy about the term wolf-hybrid either—it makes them sound like hothouse tomatoes—but I use it to make the distinction. Mostly, though, I refer to both wolves and wolf-hybrids as “monsters,” which is a term of endearment—like the lovable monsters from *Where the Wild Things Are*.

**AJP:** So do your monsters of mixed heritage behave any differently from wolves?

**Rogers:** In seventeen years, I have never seen anything that indicates they recognize any difference between them. They are mixed in together, and their relationships are determined by pack position, temperament, and play preferences. It's not a matter of percentage. If you don't interfere with the wolf-hybrids, they behave just like wolves. For example, Merlyn, a female timber wolf who has been the nucleus of the Posse pack for many years now, has been absolutely devoted to caring for an elderly wolf-hybrid called Chaco-Belle. She is eighteen-years-old—very old for this species—nearly blind, deaf, unsteady in her gait, and practically toothless; she can no longer perform any function or role in pack life other than just being herself. Merlyn accompanies her wherever she goes, prevents her from stumbling, cleans her up, and just generally watches over her, making sure that she feels safe and that she still belongs.

**AJP:** Does a wolf-hybrid need to look like a wolf to be in the pack?

**Rogers:** No. I'll give you an example. In the Posse pack, BudMan and Em were the leaders, and Em was a magnificent, majestic timber wolf. Well, BudMan

had a daughter he was especially fond of who was anything but that. Her name was Karma, but we called her The Karma Thing because she was the most ridiculous looking creature you've ever laid eyes on. No one could resist saying, "She's a wolf in sheep's clothing." But, in traditional pack hierarchy lingo, Karma was a beta female. She was always with Em and BudMan, and she was a superb hunter; she could catch a bird in midair. Karma didn't look much like a wolf, but she surely was one!

**AJP:** But aren't there noticeable physical and emotional differences between dogs and wolves?

**Rogers:** Of course. Physically, wolves usually have longer legs, longer muzzles, much more powerful jaws, keener senses, and—it is true—bigger brains. In fact, wild animals generally have brains 20 to 30 percent larger than their domesticated counterparts. But the main difference is that dogs, because they are domesticated, never actually mature. They grow older, but they don't grow up. Wolves, because they are wild animals, even if they live in captive settings, become mature adults.

**AJP:** What is the essential difference between a wild and a domesticated animal?

**Rogers:** I like ecologist Joseph W. Meeker's definition of wild. He said *wild* is the name for things and processes not under human control. To be a domesticated animal means having been bred to be dependent on, and under the control of, humans.

**AJP:** If independence is a mark of intelligence in this way, should we expect wolves to fetch and roll over?

**Rogers:** Wolves have the brain power to learn to do practically anything you'd care to teach them. However, if wolves don't see the point of it, or if they simply don't want to, they won't bother. The playfulness of wolves is not unlike the playfulness of dogs, but wolves play differently. I've never known a wolf that was interested in playing ball or catch, fetching a stick, or doing tricks. And I've never known a wolf that cared to play Frisbee. Wolves will play with us and even protect us. In fact, my first wolf, Mantra, saved my life by rousing me from unconsciousness when carbon monoxide leaked from a faulty furnace! But wolves are not human oriented. They are independent; their minds are their own. Because our experience is almost always limited to contact with domesticated animals, we're not well prepared to appreciate how nonhuman-oriented wild animals are.

**AJP:** Given their independent nature, should we expect surprises when we are around wolves at play?

**Rogers:** Yes; you should. Here's a good example—something that happened to a woman who came on a tour. It was summer, and she was wearing culottes, not part of the usual dress code here—I am always in jeans or snow pants. Before she went in with a wolf called Elwood, I gave her the standard warnings: “He likes to jump on your head. He likes to put your head in his mouth if he can. He likes to ambush you when you least expect it,” and so on. Elwood, I should emphasize, was a juvenile delinquent with an excess of personality and a real flair for the dramatically inopportune. So, in we go. And Elwood, always inventive, launches a panty-raid. Before we knew what had happened, there was Elwood running around with this lady's panties in his mouth.

**AJP:** That is surprising. Does that incident represent an unusual type of play for wolves?

**Rogers:** Not really. Strip and Peel—a variety of practice play—is good fun. In the wild, wolf pups must learn about removing the tough hide of an animal, and they often practice on tree bark and other things. In captivity, wolves will strip and peel too, and that often involves ripping clothes off people. This always brings to mind the Little Red Riding Hood tale because anyone who knows wolves knows that the wolf would have immediately gone for that cape!

Unfamiliar things often make wolves playful, too. Here's a similar story with a different outcome. We've had quite a number of Franciscan nuns befriend Raised by Wolves over the years, and in the early days, the wolves were unfamiliar with nuns' habits. The first time Sister Miriam came to visit, she felt immediately connected to DayDream. Big ol' sweet, adorable DayDream. He's so lovable that there's no need to warn visitors before they go in with him. (His companion, Miracle, his sister, is just as amiable.) Anyway, Sister Miriam and I go into the enclosure and here comes DayDream. Before I realize what he's going to do, DayDream darts under Sister Miriam's skirt, hides there, and won't come out.

**AJP:** You have been studying these fascinating animals for much of your adult life. How did you become interested in them, and what propelled you to make them your life's work?

**Rogers:** My research and life with wolves was completely unplanned. Even the abbreviated version is a long story that begins like this: I had a dog, Sage, a Samoyed, whom I loved so much. She was fourteen-years-old, and when she died in my arms, in 1991, I took it very hard. My well-meaning mother

said, “You get too attached to your animals. I can’t go through this with you again. Promise me you won’t get another dog.” So I promised. Oops. After a few months I realized that the only thing that would ease my grieving was another dog. But I don’t break promises—especially to my mother. In trying to come up with a creative solution to my problem, it dawned on me that I hadn’t promised not to get a *wolf*. And so, in the beginning, there was Mantra. She was the most fascinating creature I had ever encountered. I was mesmerized. All I wanted to do was watch her and learn from her.

**AJP:** What did you learn early on with Mantra?

**Rogers:** One of the first things she taught me, although it took me almost six months to figure it out, was this: one wolf is no wolf. This lone wolf business is nonsense. In order for Mantra to actualize her full wolf potential, she needed another wolf, or even better, a little pack. So, then, enter Omen, then BudMan, then Embryo, and on and on. There was no turning back.

**AJP:** You’re from Chicago, and you didn’t come directly to Raised by Wolves from there. What challenges did you face in finding a place to live with wolves?

**Rogers:** Well, first I had to come out West. Initially we lived on a wild mesa, but it didn’t stay wild for long. Developers grabbed it for a tract-housing subdivision. “They paved paradise and put up a parking lot.” So we had to move. We relocated to southern New Mexico, but that didn’t work out either. I was so naïve. I just didn’t realize, didn’t understand, that there were hard-core wolf haters out here, and these people became merciless enemies. They tried to poison the wolves and shot at my house and into the enclosure where the wolves lived. Eventually they shot Mantra, twice. She miraculously survived the first time, but the next time, they killed her. Words can’t come close to communicating what that did to us. We were all traumatized. I was trying to write my doctoral dissertation during all of this, and it was horrible. We were not able to play. By this time we had two little newcomers—Miracle and DayDream—and I was desperately trying to find somewhere to relocate.

**AJP:** Did the killings end then?

**Rogers:** No. The next Christmas Eve morning they shot and killed Omen. That’s when we arranged to come here. It was our only option at that point, but it seemed like it might be okay because it is so isolated.

**AJP:** You have been in your current location since 1996. Did things start well there for you?

**Rogers:** As a matter of fact, yes. A week after the move, Miracle gave birth to a litter of eight! The wolves went from a pack of four to a twelve pack overnight. To date there have been twenty-five wolves and hybrid-wolves in the ongoing Raised by Wolves research study.

**AJP:** And that study includes the ways wolves play. Humans often engage in pretend play. Do wolves play this way too?

**Rogers:** Yes, all the time. Play romps can involve all sorts of pretend, including mock hunting games with lots of stalking and chasing and ambushing. Here is a good example of a wolves' play rule: If something is running away from you, chase it!

**AJP:** Do wolves at play revel in their strength?

**Rogers:** They do. I'm reminded of a particular wolf-hybrid called Spud who can look just like he is doing a form of martial arts. He displays those same swift, smooth, graceful, powerful, rounded movements, whirling around and around. Controlled falling somersaults—wolves love to do that. They are common in play romps.

**AJP:** People who have never seen a wolf know they howl and sing to each other. You call this their "music." Singing seems like communication, but is it also play?

**Rogers:** Wolves use songs to communicate serious, important messages. There is a certain way they sing when a storm is coming, for example, and when it arrives they howl with the wind. There is also a particular way they wail when they are mourning; it's like crying. DayDream, our old sentry, would sing up the sun every morning. When he died, for a long time it felt like the sun wasn't really there because he didn't sing it up. Now, however, our new sentry, Taboo, is singing it up. Yes. People often talk about "playing" music or "playing" the piano. Clearly wolves love to sing, and singing is definitely a form of wolf play.

**AJP:** Is it true that a full moon calls them to sing?

**Rogers:** Lots of events call wolves to sing—a train whistle, a siren, someone coming down the road. If they hear a dog crying they start to sing to it. And sure, the moon, why not! The sentry wolf may begin a song as a solo vocalist. Some songs include a soloist interlude. Some songs are like a lullaby and very intimate. But there seems to be a general rule about singing: If one sings, we all sing. Sometimes wolves sing in rounds. Sometimes their singing sounds like jazz. Wolves can make creepy guttural, Hounds of Hell sounds. But they can also sing the purest most perfect notes in all the mu-

sic of the spheres. All these wolf voices singing together as one sometimes sound like a choir. If you are close to them when they're all howling, you can actually feel the air vibrating!

**AJP:** Are you tempted to sing with them?

**Rogers:** I hesitate to admit it, but yes. They like when I sing them show tunes. They love to sing along with "If Ever I Would Leave You" from *Camelot*. Chakra liked to sing duets with me; "Tonight" from *West Side Story* was her favorite.

**AJP:** Does their singing help you understand their minds?

**Rogers:** I must tell you this story. During the rainy El Nino a decade ago, I noticed that Bluewater Lake was growing a lot closer. We woke up one morning and Raised By Wolves had become lakefront property. We were nearly surrounded by water. Finally, during a letup, I was outside just hanging out with the wolves. And with graceful abruptness this very large boat came sailing by. At first this apparition sent the wolves into a state of utter panic and confusion. But they calmed a bit as they noticed that the presence of this unknown entity bothered me not at all. Then, they all just stared it—and stared some more. They simply had no idea how to respond to this thing; they were completely stumped. And then, clueless about what sort of sound the situation called for, they began to conduct experiments in vocalizations! At first they produced sort of timid and strange combinations of avant-garde, baffled-but-trying-to-figure-it-out noises. It sounded like they were experimenting with some kind of musical instrument new to them. Then they became a bit more tuneful, like an opera singer warming up. Then, apparently because the sailboat didn't appear threatening, the wolves grew more confident, more curious, more amused, and more creative, and all of them, all at once, burst into a chorus of howling like I'd never heard before. They played around with all the possibilities, they searched for the right sound, they improvised, and then they had it: "The Sailboat Song," new music composed especially to fit the occasion. And they all knew it and sang it together for every sailboat they saw after that! "The Sailboat Song" was top of the charts all summer. After the lake receded and the sailboats disappeared, I never heard that particular song again.

**AJP:** If wolves can sing, can they also dance? You mentioned earlier that Beau-Beau tried to stand on his head.

**Rogers:** Some wolves really do dance. Galapagos did breakdancing on the roof of a den. Also, freeze frame, or Vogue, dancing is popular. Mantra was

great at it. Sometimes wolves just like whirling around like furry tornados. One of the little female Posse pack pups, Echo, was so sweet on her Uncle DayDream that she'd do flips in front of him.

*AJP:* You installed play structures at Raised by Wolves. What makes a good wolf playground?

**Rogers:** Wolves really like perches. So our play space features places up high where the wolves can look out over their territory. They like leaping off these decks, and sometimes they like leaping onto each other. They consider each other the best playground equipment. They also enjoy lounging up there, using each other as pillows. Somehow wolves manage to turn napping into play. Those in our Gubbio pack have this thing they do. They lie down on the deck, all together in a pile, and turn their heads upside down to look at me. It's a hoot! Some wolves like to perch in tree branches. Trees don't actually grow here because of the wind, but we hauled into each enclosure at least one dead tree with low branches, and we positioned them next to wooden den structures. Galapagos, Pandora, Mystic, and Déjà Vu like to climb in the branches. Mystic loves to hang her head in a branch fork when she naps. It's pretty funny to see. For me, play and playfulness is often more a mood than an activity.

*AJP:* What else, besides perches, do wolves like for a playground?

**Rogers:** Some wolves enjoy water play. So we have large tubs of water for them to splash in. In winter when the water freezes, Pooka loves to sit in the tub on the ice. Digging is play for wolves, too, and great fun for them. They are amazing diggers, and they dig lots of craters and tunnels. Sometimes the tunnels extend so far you can't see the end of them.

*AJP:* Anything else?

**Rogers:** I built the potential for play into the wooden dens we constructed for shade and shelter. Did you ever see a picture of those Paleolithic mammoth tusk huts? Well, I built something like that for the six wolves in the Gubbio pack. Only this one was made of large branches and included tunnels extending out from the main hut area. It looked like the offspring of a mammoth tusk hut and the lunar lander. During a play chase, the wolves go through here or there, this way or that way. The one who is "it" makes choices, and the ones chasing are challenged and surprised.

*AJP:* Did this structure surprise them the way the sailboat did?

**Rogers:** While I was putting the thing together, like a big 3-D puzzle, the wolves watched me with industrial-strength curiosity. Probably they were secretly

making field notes on what seemed to be the inexhaustibly ludicrous behavior of humans. When I finished the thing, I stepped back, admired it, and said something like, “Whaddaya think?” Their facial expressions looked deeply reflective, full of serious considerations. Then came the grins, big ones that said, “Okay, we could eat that.” Which they did. Forget about the three little pigs; forget about huffing and puffing; just eat the house.

**AJP:** So then, wolves also play with things?

**Rogers:** Wolves enjoy playing with natural objects. They love catching snowflakes on their tongues! Food, too, becomes recreational for wolves. They play with watermelon and pumpkins, though you must serve these whole; if they’re cut or sliced up they aren’t nearly as much fun. Watching a wolf trot around with an entire watermelon in its mouth is something to see! Elwood liked to dig a crater, roll the watermelon into it, and sit on the watermelon. This was really funny. It reminded me of *Horton Hatches the Egg!* They also snatch hats, scarves, gloves, earrings, shoelaces, as well as tool belts and work tools like hammers and drills. One time, I had wheeled some lumber into the Gubbio pack’s enclosure on a large dolly to build them something, and I forget some tool or other and went to get it. I was out of the enclosure for about three minutes. When I returned, the wheels of the dolly were confetti. And for reasons beyond me, wolves consider stealing and tearing up used Kleenex more fun than anything else.

**AJP:** Do you ever give them more traditional dog toys?

**Rogers:** I suppose a lot of dogs play with stuffed animals. After the Gubbio pups were born, it was obvious that Nightingale, who was not their mother, wanted them for herself. In fact, she would have made a terrific mom. But for lots of reasons that just couldn’t happen. One day, I gave her a stuffed animal, and she became its mother. Then I gave her another one. Before long, she had a large litter of bears and bunnies and dogs. She likes to bury them head-first with their legs sticking out of the ground. To me, it’s a scream to watch her with her babies, but I’m not sure if it is pretend play for her or if she is seriously trying to be a mom. DayDream loved to play with a large teddy bear. He had one with him when he died. Usually before they die, the wolves gather their favorite bones around them. For DayDream, it was his bear.

**AJP:** Why do you live with your subjects? Is that necessary to study them?

**Rogers:** I can’t imagine not living with them. Scientific research obliges you to study patterns. If you don’t know what the patterns are, how can you know

where there are deviations? Or so that when they are doing something out of the norm, you can ask, “What are they doing, and why are they doing it now?” Also, wolves are nocturnal, so lots of activity goes on at night. I “observe” them at night by listening. Learning how to listen to them has been as important as learning how to see them. And then there are certain pack rituals that occur only in the early morning—like the sentry singing up the sun. There are other behavior patterns that are associated with other times of the day or particular seasons. By living with them, I know them well as representatives of their species, as members of packs, and as unique individuals. I would miss most of this if I were to visit only from time to time. This intimacy also provides the wolves with a feeling of security that arises from my being here to run interference between them and other people. This living arrangement lets them know me really well so they can learn to trust me. I’ve had to earn that trust.

**AJP:** Is playing with them one of the ways you earn their trust?

**Rogers:** Yes. Earning their trust begins early, and play helps it along. Wolves, especially pups and youngsters, enjoy pulling each other’s tails. One of the ways the individuals in the Gubbio pack grew to trust me was that I let them pull on my ponytail. This seemed to amuse them, although I always got the feeling they were a bit concerned that my tail was totally in the wrong place. Being predictable and reliable and, at the same time, sensitive and playful with them requires a certain discipline. It has required years and years of consistency, of respecting and following the proper protocols and rituals each and every day and always letting them initiate interaction. This allows me to study the subtle nuances of pack life and their relationships with each other.

**AJP:** How does that intense level of observation affect you, the observer?

**Rogers:** My research has become a priceless exercise in Zen. The way I carry the water buckets to fill up their tubs, the way I serve them their dinner, the way I scoop the poop (what I call the Turd World Tour), the way I repair their dens—these are not chores when they are Zen. There is truly a quiet, peaceful playfulness to whatever you do when you engage in life like this. To me, all these wolves are Zen masters in disguise because of how they’ve changed me. I’m the apprentice. They can smell emotions. So if you don’t want to bring bad vibes into the enclosures, you have to be aware of the state of yourself without the ego. This is all part of earning their trust and respect. And once you have that, then comes the rare honor of an intimacy

that gives you a sensitivity to them that is almost like a special sensory perception.

**AJP:** You began with only a few wolves, and now you have five separate packs. How do the packs differ from each other? And does a pack become more complicated or less complicated the larger it gets?

**Rogers:** Every wolf has a distinct personality, so of course each combination, each pack, is unique. There are many similarities between my old Posse pack and the next main pack, the Gubbios, for example, but there are some significant differences too. The Gubbio pack originated in 1999 with four youngsters about four-months-old, all rescued from traumatizing circumstances. It included two sisters, Pandora and Mystic, from British Columbia and the opposite-sex Timber Twins, Merlyn and Darwin, who arrived as the most severely traumatized of the four. (The Timber Twins eventually recovered and even appeared in the PBS documentary *The Promise of Play*.) Despite their early experiences, this pack never fought at all. Within three years, Pandora and Darwin became excellent parents of a small litter. And to this day, there still has never been a wreck (my word for a significant aggression event) in this pack. BudMan, the old male leader of the Posse pack, and Darwin, the male leader of the Gubbio pack, have completely different temperaments. BudMan's fear turned into aggression, but Darwin's fear made him timid and skittish. BudMan was really born to be the leader. But Darwin became a leader because there was no one else to do it, and his pack reflected his behavior. So the character of the male leaders (and female leaders too, of course) influences the personality of the pack.

**AJP:** What's your standing among the wolves?

**Rogers:** Where am I in the hierarchy? Well, I'm definitely not the alpha! I've gone through a number of answers to that question: I'm a playmate. I'm their server—as in: “Hello, my name is C. J. and I'll be your server this evening.” (I suppose you could also call me a servant.) I am also frequently the target of hazing—a monkey chump, so to speak.

**AJP:** Other scientists studying animals through observation have inserted themselves near the top of what they saw as a social ladder. You have taken an approach that might be described as more democratic. Why?

**Rogers:** Most people are probably familiar with the standard dominance-order-based hierarchy for wolf-pack dynamics. It originated with Rudolf Schenkel's classic study of the behavior of captive zoo wolves published in the mid-1940s, when biologists popularized the pecking order of birds

and other scientists found primates had a hierarchy system consisting of separate ladders for males and females with alphas at the top of each. It seems to me that Rudolf Schenkel projected a primate system onto wolves. But no one ever questioned it. So, in the generally familiar wolf-pack lingo, there is an alpha male and an alpha female, and they are at the top of two different ladders. Now, this works when one is describing primates. But if you look with unbiased eyes, you can see that that isn't how wolves are organized; it's not what wolves are doing. When I said earlier I'm "not the alpha," I was merely using that generally familiar lingo in response to your question. I don't accept that view for even a moment.

**AJP:** And this belief affected how you determined your place among wolves?

**Rogers:** Because I was so interested in learning about wolves' consciousness and because I really wanted to understand what they were doing, I long ago started paying attention to what *they* were paying attention to. They led me to notice what they notice and to see the world more in the way that they see it. This shift in perspective changed everything for me. I discovered how the complex-systems model illuminated so much of pack dynamics and, as a result, I began to identify previously undescribed pack positions. Only then, I began to understand new things about my participation in pack life (my own what comes naturally or what I'm good at behavior). It slowly dawned on me: *I'm a sentry*. The wolves knew it before I did; they perceived me as a sentry. It was such a kick to realize that the wolves relied on me and trusted me to fill that role in pack life. Watching them, watching out for them, observing, and being a lookout is what I have been doing all these many years. So it was living with the wolves that helped me to discover my role.

**AJP:** Did understanding your role help you understand the wolves better?

**Rogers:** People are intensely conditioned to think that if one isn't the alpha, one is a loser. We assume that everyone wants to be an alpha and that everyone is competing for that position. That is such a primate thing! People are projecting when they think all wolves are alpha wannabes. Wolves know that alpha isn't the only place to be.

**AJP:** How can you tell?

**Rogers:** By close observation of the packs' dynamics. After Em, who was the central figure in the Posse pack died, it was impossible to predict what would happen. Her death had left a huge emptiness in the grief-stricken pack. When we installed a new gate, we gave Merlyn, our female timber

wolf, the chance to bring some new life into the heartbroken Posse enclosure. In her former pack, the Gubbios, she had been by far the most submissive female. In the Posse pack, though, Echo, the only female left there, had owned this role. So the stage was set: enter Merlyn.

**AJP:** What happened?

**Rogers:** After first encountering the Posse pack's male members—Pooka, Gandalf, Galapagos, and Spud—Merlyn discovered Echo. Being the newcomer, Merlyn behaved in an extremely polite, respectful way toward Echo, using all the traditional submissive gestures to communicate that, clearly, she had no interest or intention of assuming a dominate position. Echo, however, tried to make it perfectly clear that *she* was the most submissive female. Merlyn responded by trying to make herself as small as possible. In an exaggerated and utterly comical but serious effort, she turned herself upside-down and inside-out to show she knew that Echo was the elder female. But no, Echo was eager to demonstrate that *she* could *out-submissive* Merlyn. What unfolded was an unbelievably funny duel for nondominance! A competition in who was least competitive! And all of it, of course, unfolded as play.

So, now it is quite awkward for me to use the language of the traditional ladder hierarchy. Words like *alpha* and *higher* and *lower* seem foreign and wrong to me now. Describing wolves' relationships requires more nuanced terminology. If you think about different types of dogs—guard dogs, hunting dogs, rescue dogs, shepherd dogs, work dogs, and so on, you can match them up to different positions in a wolf pack and the different temperaments and talents that go with each position. The pack is organized for cooperation.

**AJP:** Can you give us an example?

**Rogers:** Here's a marvelous example. Pandora, one of the British Colombian wolves, had for years been the female nucleus of the Gubbio pack. Then she had her litter of pups. When one of them died within a week, she became crazy with grief. She buried the dead pup and continued to be an excellent mother to the three who survived, but she was completely unable to continue to function as female leader. There was no conflict over a leadership vacuum—no fighting—and there followed a completely peaceful transition of power to Mystic. She knew, Pandora knew, and, in fact, every member of the Gubbio pack knew that Pandora was in no condition to hold the responsibility of being a leader, of being the center of the pack. So Mystic

took over. Ever since, Pandora has been a little mentally off, but her pack mates still love her.

*AJP:* You have sometimes used two related branches of mathematics to describe wolf society: complexity theory and chaos theory. How do these help explain pack behavior?

*Rogers:* Keep in mind that complexity is the science of natural systems, which are adaptive and nonlinear. In the complexity model, the male and female leaders of the wolf pack are like a double nucleus. There is no top-ranking alpha. The leaders are not at the top, they are at the center—not at the pinnacle, but at the core. The vocabulary that goes with a nonlinear hierarchy is different from the language you would use to describe a pecking order. When the leaders are at the center, you need to reconceptualize. Instead of a ladder, think of a wolf pack using the model of a solar system. It is as if a solar system had two central suns. A nonlinear system is a linking system, and in a linking system, there is no higher and no lower. Once you look at it this way, even dividing the dominant from the submissive feels uncomfortable and incorrect. To put this as nonmathematically as possible, the relationships strike a collective balance, more like yin and yang than win and lose. Some wolves are more yin—shier and more deferential—some more yang, active and predominant. And the pack itself thrives in a collective, dynamic balance among all the personalities.

*AJP:* Did you bring complexity theory and the notion of collective balance to your study initially, or did you discover it later?

*Rogers:* When I began my research, I wasn't setting out to prove anything or to disrupt the status quo. I just wanted to learn whatever the wolves could teach me. I did not have a new theory about them. What I had was several years' worth of field notes and a profound confusion about what the wolves were doing. What was going on in the packs seemed much more complicated and more puzzling than the oversimplified pecking-order, textbook description. The wolves simply were not complying with or conforming to the traditional ladder hierarchy in their relationships with each other. The same was true in the dynamics of aggression events. Basically everyone was mixing it up with everyone else. I could discover nothing that even remotely looked like a ladder or a pecking order. The only constant seemed that I often found BudMan or Elwood at the center of chaos.

*AJP:* Did chaos theory lead you to this insight?

*Rogers:* No, actually I had no idea that a whole scientific theory awaited me in the faraway lands of physics and mathematics and could elegantly explain

the bewildering behavior of the wolves. In fact, this connection literally came to me in a dream. I had a dream about fractal numbers. Now, math is generally something I do not dream about—paging Dr. Freud, paging Dr. Jung! I had absolutely no idea what a fractal was, but I figured my unconscious was suggesting I find out.

**AJP:** How did you follow up?

**Rogers:** I started with James Gleick's *Chaos: Making a New Science* (1987), and there it was on page 308: "Everything tends toward disorder." What mattered most at that serendipitous moment was discovering new scientific ideas with which to think. Sometimes you just don't see something until you have the right metaphor to let you perceive it.

**AJP:** Did chaos theory answer your questions about aggression events?

**Rogers:** It helped. What aided me most specifically was a feature of complexity theory called *turbulence*. For a long time, I didn't understand why there was so much fighting going on. Most of the time, the pack mates got along well. I did begin to understand, though, that there was an abnormal amount of fighting in the Posse pack. After a few years of gathering aggression-event data, I noticed there was a definite spike during the summer. Why would aggression go up then? Summers are hot, and the wolves tend to be less active in the heat. Nor is this the season when females go into heat. Then at last I put it together. Summer is the season of guests. And I realized what caused the most wrecks was the presence of strangers. There were just too many people around. Don't you hate it when it's right in front of your face and you don't see it? Once I realized that too many strangers or too many people disrupted the smooth flow of pack life, there was a drastic change in protocol around here. I cut back the number of tours and arranged for volunteers to come separately instead of together. When volunteers faded away, I didn't replace them. I also stopped socializing with other people here. The wolves were much happier when no one was here but me. I'm quite sure that this dramatic change is partly why there hasn't been a wreck in years.

**AJP:** Is it fair to say, then, that for wolf packs chaos and order go together?

**Rogers:** It is. A wolf pack is a natural system, and as is common with natural systems, it has a hierarchy (nonlinear in this case)—a system that is both parts and a whole. The word *hierarchy* means sacred rule—from the Greek *hieros*, meaning sacred, and *arkhia*, meaning rule. Every complex system, every wolf pack, shares the same basic structure and operates following a set of fundamental guidelines, principles, and rules that bring order to

the system. Wolves are distinct individuals yet *self* is seamlessly woven into the fabric of the pack. There is indeed a pack consciousness, and all packs are alike in this respect. However, unique traits emerge from each group. The nature, evolution, and ordered operation of the pack organism is emergent.

**AJP:** So this was truly a new way of seeing for you?

**Rogers:** Yes. For me, this little revolution in the pack dynamics model helped me understand that a complex system was at work. It is perpetually self-organizing, adaptive, and nonlinear, and it has emergent properties. To sum up, the pack is an organism that is more than the sum of its parts. Each pack member is an individual, but the combination, the gestalt of their coming together, creates a whole other entity, a system unique and unpredictable.

**AJP:** How does play fit into this model?

**Rogers:** A respectable argument can be made that play is a complex system, too, with emergent properties, universality, fixed rules, and flexible strategies. Like aggression, it is characterized by turbulence and flow. It is nonlinear and unpredictable and so on. In the context of a system like a pack, aggression and play both may actually be essential dynamics of organization for pack operations, positions, and personalities. Packs sustain remarkable stability, order, and organization while constantly adapting and adjusting. There is an assortment of options allowed by the rules. For example, it was up to Em whether or not it was okay or safe for everyone to play. But when she gave the go-ahead, which game everyone played was up to the individual wolves. This can be translated to describe the changes in the state of the pack system—the transitions from rest periods and peaceful interactions (*flow*) to play or aggression (*turbulence*) within a pack. Wolf play can be turbulent, and it can also be flow. (By the way, notice that *flow* is *wolf* spelled backwards!)

**AJP:** Do you, as the sentry, ever need to maintain order?

**Rogers:** The prime directive here is do not interfere. But sometimes, when an aggression event is getting quite serious, if it is going on too long or someone is getting hurt, yes, I will intervene. I've gone out with a shovel and put the metal part of the shovel in their mouths to pry them apart. Attempt to pull them apart and they'll leave with chunks of each other in their mouths. I can break up a wreck in this way only because they let me. Here, too, we see order beneath chaos. Also, more in line with the noninterference directive,

I've built a lot of little safety nooks for the Posse enclosure, and a wolf can duck into one of these to avoid a wreck.

*AJP:* Have you kept detailed records of aggression events?

**Rogers:** I kept a record of wrecks for more than five years. The documentation included the date of the event, its time and duration, and the location—which enclosure and where in the enclosure the event took place. I recorded the participants. I noted the degree of intensity. And I noted all sorts of framing conditions, the weather for instance, and yes, even the phase of the moon. Plus, I logged what seemed to be the cause. Fighting over a bone seemed obvious, but over time I learned about other triggers that were not so plainly evident. Too much wind for too long eventually makes everyone irritable, for example. The same goes for too much mud.

*AJP:* In addition to referring to yourself as a sentry, you have also called yourself a playmate. Why is it necessary for you to get so personal with the wolves?

**Rogers:** To not have a relationship with the wolves is just unnatural. Wolves are so good at relationships, it strikes me as insane not to engage with them. It would be like living with Beethoven and thinking you could know him without listening to him play the piano.

*AJP:* How did you come to this approach? Is it from your background in clinical psychology, or have you developed some particular view about empathy in research?

**Rogers:** That question makes me think of something the Dalai Lama once said: “Learn the rules so you can break them properly.” But in the larger context of our discussion, it really calls attention to some important issues. It's implicit that a biologist and a psychologist (or, in my case, a psychologist-ecologist-wolf ethologist) would have different academic orientations and different research interests. It seems to me, however, that the more specialized science becomes, the more it needs to be interdisciplinary. In any case, clearly the many years I worked as a psychotherapist has influenced my work with wolves.

*AJP:* In what ways?

**Rogers:** One of my mentors, Stuart Brown, the psychiatrist and play researcher, has helped me understand the need to examine the mental health and emotional disturbances of wolves. I've been looking at what causes abnormal behavior and ways healthy psychological balance can be restored and then maintained, and this involves healing. From my experience as a psycho-

therapist, I can assure you that healing a wounded, injured psyche requires empathy. The therapist definitely needs the skills and knowledge acquired from rigorous formal education, but just as essential are the intangibles that come from the heart and spirit—compassion, patience, authenticity, attention to detail, and kindness. The wolves that came under my care suffering from serious injuries to their souls, psyche, and spirit desperately needed help. They responded to the same sort of healing process I would extend to a human being. This should tell us and teach us a great deal.

*AJP:* Can you give some examples?

**Rogers:** Both BudMan and Em, the male and female nuclei of the Posse pack, had been through some really bad experiences with humans. If more than two people were here at a time, or even one stranger, they would consider it a potentially dangerous situation. They would feel apprehensive, tense, and fearful. So in these instances, of course, they would not play. Then without play, all the wolves would soon become edgy. And then boom! There would be a wreck. BudMan would set the tone for the pack: the longer he felt stressed out, the more actively he expressed his fear as aggression. He was born to be a leader, but his life had been misery before I adopted him from a rescue ranch when he was ten months old. He had been chained and badly teased and abused by children. Thereafter, of course, whenever a child came anywhere near our territory, he panicked. He taught his offspring to be afraid of children, and they taught that fear to the next generation, too. When he became part of our little pack, Mantra took over the task of rehabilitating him, and he bonded with her so completely that he fell passionately in love with her. Later, when he saw her murdered, he went absolutely insane with grief. Sometimes he became aggressive, but Em always made sure his aggression didn't get out of control, and becoming a father became healing for him. He was never abusive with his offspring, and when he was relaxed, he was a big ol' hambone, very playful and loving with his eight kids. Wolves are crazy for babies and youngsters! Between the time Mantra was killed in August 1995 and BudMan's pups were born in September 1996, he was inconsolable. And needless to say, in that period Budman had no appetite for play at all. Em's unhappy and unforgettable experiences with humans had a similar effect. She saw Mantra, her surrogate mother, shot and killed, too. Em herself was shot and survived, but no one ever really gets over that sort of thing.

*AJP:* Marc Bekoff, who studies coyotes, sees in their play a means of attaining what he calls "wild justice." Have you seen instances of fair play among wolves?

**Rogers:** As I have noted, there used to be a lot of wrecks in the Posse pack, mostly when too many people, especially strangers, were present. But one thing was clear: nobody ever got pounded while getting a drink of water. That was against the rules. One time, the Gubbio pack was having a mock hunting game. Mystic was the moose, as is often the case. I wish you could see her doing her death scene. What a ham! She loves when they kill her! Anyway, this one time she accidentally stumbled. The hunters were all sort of startled, and they did not take this advantage to attack her. They paused to see if she was all right! When she got up and had her balance again, the play resumed.

**AJP:** Wolves are renowned for their cleverness, as your stories illustrate. Does this extend to their play, too?

**Rogers:** Let me tell you about our sentry, Taboo, a very large black wolf. His inventive playfulness was funny, surprising, and rather brilliant. The wolves generally perform a greeting ritual with me whenever I enter an enclosure. For wolves this is a time-limited activity, unlike for dogs, who could greet you all day. After the greeting ritual, if I'm in the enclosure doing something, it's become my habit to take note of where everybody is. I keep track. One fine, day I was doing the Turd World Tour in the Gubbio enclosure, and I saw they were all snoozing away. Then I had the strange feeling that I was being followed or watched. I looked all around. Nothing. I carried on, but I couldn't shake this feeling. I looked around, and again, nothing. Then this feeling changed a bit, as though I was silently being laughed at. This time when I turned around I realized what was happening: I *was* being followed. Taboo had discovered that he could become "invisible" by hiding in my shadow! And this is how he stalked me. I was startled, of course, and gave a little yelp. Taboo thought this was so much fun and so funny that he did his sideways leap that wolves sometimes perform when they are having a good time. Taboo still plays this hiding-in-her-shadow game to amuse himself, but it startles me every time.

**AJP:** You have called wolves "elegant and goofy." Do you think that they intend to make you laugh?

**Rogers:** Yes, unless they are grieving or being traumatized, wolves seem to have an irrepressible levity. One time Barbara, a long-time volunteer, inadvertently left an empty food bucket in the Gubbio enclosure. Their food buckets are large blue plastic buckets with handles, and it had been left only a very short time before Barbara and I went back to see if we could find it and retrieve it. Too late. The food bucket was now on Mystic's head! She was

wearing it like a helmet. We were laughing almost too hard to think, but I suggested that maybe if we ran towards her it would fall off and we could get it. We started to do this, and instantly all the Gubbios were charging at us as one. It was like a football game where the teams were poorly matched. We did what we usually do when the Gubbios get excessively playful with us: try not to laugh so hard we fall down, stand back to back, and inch our way to the gate as we are being circled by a pack of wolves.

**AJP:** Do you find most people are surprised to learn about the gentle behaviors you have observed?

**Rogers:** Yes. Wolf gentleness seems to surprise most people as it has surprised me. All the wolves are, and have been, aware that I am sort of fragile. I have this rare genetic disease of the connective tissue that causes my joints to dislocate very, very easily. So I can't ever play rough with them, and they know they must be really gentle with me. I like to tell this story about Gossamer and Nightingale, a pair I call the Angels. They are real sweethearts. They are very friendly but, at the same time, extremely excitable. Gossamer gets what we call happy feet. You can see how hard he is working to be gentle. Nightingale engages in a ritual with me that is real *zazen*, a form of Zen characterized by sitting. She sits motionlessly yet seems to be forcefully communicating, "Look how gentle I am!" Then Gossamer comes dancing over and Nightingale performs this sort of martial-arts move with her front leg. It's sort of big smooth rounded wave that pushes him away and says, "I'm the most gentle!" Then they go at it to see who is the gentlest of all. (Yes, these are wolves I am describing.) The topper is that they *know* they are funny and that this comedy act will make me laugh every time. I mean, somehow it is always just hilarious. The other wolves know it's funny, too, and usually they gather round to watch. Wolves seem to have a play credo: "If something is fun or funny once, then do it again."

**AJP:** Some scholars think that though play seems to have no purpose other than fun, it is really a rehearsal for adult life or that it provides training in specific skills. Do you see this in wolves?

**Rogers:** Yes. Wolves have long puppyhoods because they have a lot to learn, and they learn both from watching and mimicking the grown-ups and in playing. Interestingly, sometimes, when youngsters are doing something potentially dangerously disobedient, the elders discipline them. It's especially important to learn what to hunt and how, as I described earlier. Wolves can hunt and eat just about any ungulate—moose, elk, deer—but packs

generally concentrate on a particular prey species. Incidentally, wolves do not consider domesticated livestock a prey animal.

*AJP:* What about all the stories we hear of wolves, once they are restored to an area, attacking cattle?

**Rogers:** That's very sad because that's not normal wolf behavior. It comes as a real surprise to people when I point out how tragically flawed those re-introduction programs are; the drawbacks are complicated and multilayered. First, reintroduced wild wolves are all badly traumatized. They've been shot at with tranquilizer darts that often inflict fatal injuries. Then they are kidnapped, separated from pack mates, bundled into an airplane, and removed from their lifelong territory, their home. Furthermore, they are burdened with radio collars that often cause health problems. And finally, they are deposited into foreign territory where they are frequently shot at and often killed by people who hate them. Some fall victim to collisions with cars. Truly, it escapes me just how this is doing them a favor. If you try to imagine what this has been like from the wolves' point of view, it is as if they have become terrorist victims. And in spite of this trauma, they are expected to behave like normal healthy wolves? No way.

*AJP:* Does trauma like this prevent wolves from playing?

**Rogers:** Certainly it does. As a psychologist, part of my long-term research on wolves has focused on the damage caused by prolonged trauma and what is needed to heal it. Put this answer in the "no kidding" category: wolves need to feel safe to play. No one can recover from trauma unless they stop being traumatized. I cannot put this strongly enough: wolves really love each other. They grieve the loss of a loved one intensely. If their beloved pack mates continue to be killed, if they are relentlessly persecuted, it is utterly absurd to imagine they can behave normally. To put this clearly, reintroduced wolves don't live long enough to teach the new generations of wolves what and how to hunt. If there are no elder pack mates to teach them proper wolf lifeways, these young wolves will behave abnormally. You see, we have created the problem by our shortsighted interference. Continuing to shoot, kill, and traumatize them will not solve the problem. As the science-fiction writer Issac Asimov said: "Violence is the last refuge of the incompetent."

*AJP:* He was also a biochemist.

**Rogers:** Right. He wrote about systems failure. Isn't it ironic that the solution is the same whether you want the wolves or you don't want them? We just

have to leave them alone! Be a little bit patient, and give them a chance to recover from the damage we've caused with our so-called recovery programs. They need humans to show enough compassion and courage to protect them so they can be safe enough to become sane again. If we aren't careful, whatever wilderness is left is going to be populated with neurotic animals. It's the same formula for other animals as it is for people: if you aren't safe, you can't play. If you can't play, your physical and mental health will be damaged.

**AJP:** Has your *Raised by Wolves* experience given you any special insight into the historical and evolutionary relationships of humans, wolves, and dogs?

**Rogers:** It has. The *Raised by Wolves* site is a high, tundralike mountain valley about seventy-five hundred feet in elevation. It is always windy here, and winters are arcticlike. Even wearing all the modern-day gear—arctic boots, three pairs of socks, long johns, parka, and mittens—I can tell you that I am seriously freezing. Meanwhile, the wolves, who are adapted to cold climates, are romping around in wha-hoo heaven. Their natural habitat, just about everywhere, is above 20 degrees north latitude. For about seven years, the only source of heat I had here in my alleged shelter was a little wood-burning stove that didn't work properly. So, thanks to my glorious poverty, I had the unusual opportunity to realize that the warmest place to be was outside wrapped up in the wolves. It was like a revelation: imagine that you are in an Ice Age world. There is deafening, gale-force wind, relentless cold, and wolves. When you are in close with the wolves you are much warmer. And they don't mind your using them as heaters. As long as, in return, you scratch their necks and rub their tummies. I am describing a typical winter day for me, but I think I am also describing the experience of a distant ancestor back in the Upper Pleistocene.

**AJP:** So you don't buy the old story that humans' relationship with wolves began with us throwing them table scraps?

**Rogers:** Wolves were state-of-the-art hunters for at least a million years before we showed up. And they came around to our campfires begging for food? It makes me laugh every time I think of it.

**AJP:** If early humans didn't help wolves, did the wolves help humans?

**Rogers:** When we started hanging out with wolves, the benefits for us were beyond measure. Wolves protected humans just as dogs protect us now. For starters, they are the one large predator that does not consider us prey.

The importance of this cannot be over emphasized. They helped us avoid becoming bears' breakfasts. Once we were safer, our brains could do more interesting things than evade being eaten. We could begin to lead a more playful, a less fearful, and a less vulnerable existence. We were people who played with wolves. We probably became a lot more cheerful. We became more creative. We created art. All available evidence points to our being saved and raised by wolves. But the story most people know has us suddenly flinging leftover fillet of mastodon to wolves. How did that go, exactly? "Here, take this rock and kill a woolly mammoth. Watch out for the saber-tooth tigers. It's ten below zero, and you have no shoes."

**AJP:** How does your story go?

**Rogers:** Around 40,000 years ago, we experienced a period of explosive creativity and of unparalleled innovation. Our social organization changed. We began creating art. We acquired sophisticated hunting techniques. What could explain the simultaneous stimulation of our sensibilities and mind-blowing expansion of our brains. This has baffled paleoanthropologists far and wide for a long time. I think I know why. The paleoanthropologists never lived with wolves.

**AJP:** But *you* have.

**Rogers:** During my first few years living with wolves, I remembered a scene from the film *Jaws*. The heroes are out on the ocean in pursuit, and the one who sees that gigantic shark first says to the other guy, "You're going to need a bigger boat." What I kept thinking at first was that if I were going to be living with wolves, I would need a bigger *brain*. I was going to have to get a lot smarter. My research obliged me to let sophisticated language fall away and let ego fall away. It was just me and the wolves. And the wolves were keeping me from freezing to death and somehow turning it all into rip-roaring fun. This freed me from this species-superiority propaganda that we've been bombarded with our whole lives. That's what got me started on this scholastic bender; doing some serious in-depth research into the origins of and evolution of the human-wolf relationship.

**AJP:** What have you learned about humans' earliest relationships with wolves?

**Rogers:** Let me answer that with a little story about the play history of our species. I call it "A Tale of Two Species: Or, Once upon the Pleistocene." Let's step into the Way-Back Machine. (Anyone remember Mr. Peabody from *Rocky and Bullwinkle*?) We'll set it for the Lower Paleolithic, say between 500,000 and 200,000 years ago, and we'll go through to the Up-

per Paleolithic to cover the time span when the human species went from archaic *homo sapien* (wise guy) to *homo sapien sapien* (double wise guy), the anatomically modern humans who appeared around 40,000 years ago. Geographically, we are in the neighborhood of the Eurasian steppes, and climatologically, we are, of course, in the midst of an Ice Age. Contrary to the popular picture people usually have of this scene—and according to the scholars, academics, paleoanthropologists, and paleoarchaeologists—understanding this phase of our evolution is not all that simple. One can read all sorts of educated guesses about the causes of this Great Leap, most having to do with the positive effects of climate, the development of speech, and the pressure of embarrassing relatives who drove us onward and upward. But even the textbooks admit that the explanations are fairly lame. Interpretations of the scant evidence are weak and mystifying. Put as simply as possible, the puzzlement is: How do we account for the specific origins of the various cultural and behavioral innovations that the archaeological record of the Upper Paleolithic clearly reveals? Why did we change so much during this time period in this particular geographical place?

During this Ice Age, we were well into pebble-tool technology. But these tools were only pebbles and scrapers. Nothing that looks remotely like a spear shows up until around 40,000 years ago, at the earliest. That's also about the time of the earliest evidence of clothing we have found. No wonder the experts openly wonder how we survived. It isn't clear what we were doing, going north during an Ice Age, but there we were. It's unlikely it was a planned invasion; we were disoriented scavengers, not conquerors. When you are a prey animal—and that is what we were, not much more than a light lunch for leopards—you have to spend a whole lot of time and energy trying not to get eaten. And also, because of this, most of the time you are afraid. *Really afraid*. And, as most people know, fear is unpleasant and tremendously draining. Yet, there's this familiar heroic image of the early Ice Age hunter. Everyone can picture it. How did he get outfitted? Was there a little customs guardhouse in North Africa with a sign that said, "Points North," where everyone was given a spear and a *yetti* costume?

**AJP:** You make it sound like our traditional picture of the Ice Age hunter belongs more in a comic book than a history book.

**Rogers:** I mean to. We've been conditioned to accept the familiar scenario of the invincible, prehuman Ice Age hunter, but it just doesn't hold up if you

really think about it. Let's take a look at the facts and question the basic assumptions. You are a bipedal primate from a tropical climate. You are built for enjoying the warm weather, eating fruit salad, and swinging through branches. We hear about humans having the eyes of a predator, which would have served us well up north, but actually our human eyes evolved for judging distances. And that's a rather useful skill when your survival depends on competent tree-canopy navigation. Sharp, color-sensitive eyes are also ideal for finding edible fruit. Yes, they happen to work very well for predatorlike activities, but we weren't natural predators or carnivores like big cats or wolves. Our main hunting experience up to that point consisted of stalking tubers. We were foragers and scavengers.

**AJP:** Where did the wolves come in?

**Rogers:** Keep in mind that there were no wolves in Africa. Wolves and humans did not encounter each other until *homo erectus* started leaving Africa. The first encounters took place in wolf country, north of Africa.

**AJP:** What sort of encounters were they?

**Rogers:** Well, think of something we primates are really good at. What are chimps and gorillas continually doing? Grooming each other. It's necessary, but it's a friendly gesture. So, I put it to you that humans' earliest profession was dog groomer, or, to be precise, *wolf* groomer. Wolves love having their necks scratched, their tummies rubbed—just like your dog does. This is how the great human-canine relationship began.

**AJP:** Are you saying wolves liked humans, and they do still, if we let them?

**Rogers:** That's it. They like us. Wolves are so very playful. These are creatures that are half mad with the love of life. So here were these lively, successful, skylarking predators. They had plenty to eat. They were perfectly suited to their environment. Nobody was terribly interested in killing them. And they had plenty of time for play and socializing. And one fine day, an exciting, new, and very stinky scent comes blowing in the wind. And then (oh, the exquisite thrill of it all!) the sources of the stench appears—these highly improbable-looking bipedal creatures. Lucky for these not-so-great apes, they seem to have promising potential for some pretty respectable mischief. If they could stay out of the mouths of lions long enough, they could be lots of fun. The wolves wanted to play with them. So they kept them around as *playmates*. Early humans' talent for play may have helped save the species!

**AJP:** That's quite a story.

**Rogers:** Look. There are lots of similarities between humans and wolves: territory, range, group size, and the formation of strong emotional bonds within the group. Both species are extremely social creatures of high intelligence. They are good communicators and have the capacity for great affection, sensitivity, and adaptability. And of course wolves and humans, even the adults of both species, excel at play. Again, this fondness for play especially predisposes us for compatibility.

**AJP:** Do you believe we don't just share traits, but we also learned from wolves?

**Rogers:** Yes, I do. Some factors such as food caching and sharing, strategies for dividing labor, gender bending and paternal parenting, and ritual-related metacommunication were well-established features of wolf culture *before* they appeared in human culture. Humans went from a primate life-style to living like social predators. And these great transformations emerged in human prehistory—both chronologically and geographically—just as our species took up residence in wolf country. To me this remarkable before-and-after correlation points out a causal relationship. Human hunting behavior took on an unmistakable and striking resemblance to the way wolves hunt. Wolf and human hunts were characterized by a high degree of organization, sophisticated communication, and cooperative strategizing. The two species specialize in particular prey. So yes, after we humans went north, we began to live like wolves.

**AJP:** What role did play have in this transformation?

**Rogers:** A central role. If the culture of our species was profoundly influenced by another species, wolves, isn't it intriguing that what brought these two species together for the prehistoric renaissance was play?

**AJP:** If this is true, why haven't we found evidence for it before now?

**Rogers:** Because no one (well, except me) has been looking for it! Yet, there is quite a bit of supporting evidence.

**AJP:** Of what kind?

**Rogers:** A lot of it isn't about play, but there is something super important that is. There are two parts to this, and part 2 packs a surprise that will be a real scoop for the *American Journal of Play*.

Influenced by wolves, the behavioral changes of the hominid species impacted reproductive success as well. Wolves give birth in birthing dens or caves. This has obvious survival advantages for both mother and newborns. If I were a new-to-the-neighborhood hominid female going into

labor on the frozen, windswept steppes of Eurasia with huge predators all over the place and not even a tree to squat under (and no blankets), what chance would I have? But if my species were learning and imitating survival strategies from wolves, adopting a wolflike lifestyle, I would quickly understand that a birthing den—giving birth in a cave—was an excellent idea. Especially if wolves were with me! This was a realization worthy of a big booming brain. Isn't it interesting that hominids are the only primate species that use caves? That's part 1: caves are birthing dens. The birthing process probably rather quickly and easily took on the flair of a ritual, with other females, midwives, and elders attending. And, of course, the children would have to come along too. Naturally, the youngsters want to play. So, what the hell, let the kiddies in the caves color the walls. Why not? Then, of course, everybody wants to color the walls. That's part 2 of the scoop—that the secret of the magnificent painted caves is that they are birthing dens.

(Joseph Campbell has actually described going into the painted caves as feeling like going into the womb! He was almost there—he felt those vibes. Maybe my being female—and a sort of hybrid wolf—helped me recognize those caves were wombs.)

And these caves gave birth to something besides babies—they gave birth to art! Indeed, it has recently been discovered that most of those handprints are female handprints. Yes, there are handprints of children. And yes, there are paw prints of wolves.

**AJP:** Now you're back to what you were saying earlier about art and creativity.

**Rogers:** You bet. This returns us to our subject—play. Listen. Those painted caves are considered the origins of art, and if art isn't play, I don't know what is. Those painted caves are the first storybook illustrations, the first naturalist's notebook, pictures of our consciousness at play. And consider this: As we all know, play can't fully emerge without a good degree of safety. It was wolves who protected us and shared survival secrets with us. Wolves provided the safety we needed to explore our potential for play, for art, and for creativity. Wherever there were wolves, we find ancient creation myths of how wolves brought humans into the world and how wolves nourished and nurtured the human species. Think of all the suckling stories. Everyone knows about Romulus and Remus; the founder of Western Civilization was a wolf-raised boy. The same is true for the Persian Empire, according to folktale. Turkish legend has Tu Kueh who was raised by a wolf, too, as was

Zoroaster and Siegfried. The oldest known mythology says wolves taught us how to hunt and live. Also, we should not forget the many Native American tales of the wolf-raised hero or heroine who became a powerful shaman. Folk tales from way, way back associate wolves with transformation. As I see it, our species was transformed by wolves.

*AJP:* Is there anything else that has been overlooked?

**Rogers:** The oldest of those painted caves in Europe date to about 32,000 years ago. Figurines found in the caves may date back another 8,000 years. Wolf-teeth pendants date back 35,000 or 40,000 years. Researchers have found evidence of cave-bear rituals dating about 60,000 years ago. And this is usually regarded as the earliest evidence of some sort of religion or at least a sense of spirituality. However, what is somehow strangely overlooked or omitted is this: in caves inhabited by very early humans—as early as 125,000 years ago—there are wolf skulls with obvious intention, like shrines.

*AJP:* From your study, you conclude that wolves are affectionate, playful, and like us in many ways, so why are most humans so deeply afraid of them?

**Rogers:** The fear of wolves has historical and psychological components. For example, domestication removed us from nature, and the wild animals we once knew well became strangers. Lack of interaction with wolves created psychological distance. We no longer played with them, and with the bond between our two species lost, wolves became “bad.” Then there were psychologically complicated consequences, a tragically bizarre twist to this tale of two species. In the language of Jungian psychology, what happened was this: humans projected their shadow onto wolves. That’s what really fueled the fear, what turned the story of humans and wolves—star-crossed soul mates—into a tragic epic of mistaken identity and betrayal.

Yet, even though I understand this, it continues to mystify me how wolves, these lovable, noble comedians could be mistaken for villains. Ironically, the domesticated counterparts of wolves became our best friends.

*AJP:* How did humans turn wolves into dogs?

**Rogers:** The process of wolves turning into dogs was very likely accidental, because in order to domesticate an animal, you have to control it. Have you ever tried controlling a wolf? First of all, you’d have to be nuts to want to. They’re perfect just the way they are. But if you have ever tried to control a wolf, you’d know how absurd it is to imagine that early humans could do such a thing. There were no collars, no leashes (not that a leash would actually help much). There were no chain-link fences, certainly no electric

cattle prods, guns, or tranquilizer darts. Just how would the logistics of this controlling thing have worked? I'd like to know myself.

**AJP:** Are you ever afraid of wolves?

**Rogers:** Sometimes I'm aware of nameless feelings associated with the strangeness of taking care of creatures that can kill you. But I'm never afraid of them.

**AJP:** You have been compared to Jane Goodall, Diane Fosse, and Biruté Galdikas, all of whom have studied primates in the wild. Do you share any special quality with these other female ethologists?

**Rogers:** Well, I can only say this: I have no idea how to answer the question but please keep it in the interview anyway. What a kick it is for me to be put in that kind of company!

**AJP:** Do wolves still surprise you?

**Rogers:** Every day! Plus, it's just indescribably uplifting to live with these beautiful, whimsical, musical, pedagogical life forms—these life-loving creatures who are always so animatedly elated to see me. I walk out the door and the wolves burst into song—all of them gleefully singing just because I have appeared—with these big grins on their faces. And they're all dancing around. Human beings generally don't celebrate me so enthusiastically.

**AJP:** Does their survival depend upon our improved understanding?

**Rogers:** After learning so much about wolves, and *from* wolves and wolf-hybrids, because of the undying love, loyalty, and respect I have for them, I feel profoundly devoted to wanting to do something to help them. What is the key to their survival? Well, actually, after countless sleepless nights of worrying and wondering about what it would really take to save them, I've come to the conclusion that what it would take is a miracle. Or, perhaps, a really good film. Movies and characters from movies have the power to penetrate our collective psyche and thus can become a force for social change.

**AJP:** What movie do you have in mind?

**Rogers:** One day it struck me like a friendly bolt of lightning that A. A. Milne's character Tigger from *The House at Pooh Corner* should have been a wolf. Tigger is nothing at all like a tiger. If you really pay attention, Tigger has the bouncy, funny, and sociable personality of a wolf! Tigger didn't want to be alone, so he moved in with the only pack in town, Kanga and Roo! Tigger is the least domesticated of all the inhabitants of the 100 Aker Woods. How different the perception of wolves would have been if only Tigger had been a wolf.

*AJP*: A scientific treatise won't save the wolves?

**Rogers:** No. Especially in the society we live in now, where commercials pass for culture, the most flawless scientific paper would have insignificant impact. What it will take is a truly great movie—one with state-of-the-art animation, catchy tunes, and prankish wolves cast as merry protagonists, our protectors. We need a smash hit movie about how wolves saved us! We need wolves cast as memorable characters you care about. Characters you will want on your *lunchbox*. The story I just told you would do, with wolves portrayed as the playful, nurturing, noble, brave, funny, intelligent, sensitive, social, musical, misunderstood, and lovable heroes that they really are. If only Elwood were still alive to star in it!