Essay / Why So Many Books About Dogs? / By Vanessa Woods and Brian Hare And what do they tell us about our relationship with canines — and about ourselves?

"WHAT WOULD THE world be like without music or rivers or the green and tender grass?" the poet Mary Oliver asks in her book "Dog Songs." "What would this world be like without dogs?"

A world without dogs is impossible to imagine. Our relationship with them predates the written word, agriculture and civilization. They were our hunting buddies, bed warmers and, sometimes, if not much else was around, our dinner. As dogs crept into our homes, surfing kitchen counters and sleeping on the sofa, our focus was practical: managing the animal with which 60 million American households share space. (That's about 13 million more households than the number cohabitating with the next most popular pet — cats.) Until surprisingly recently, most dog books were assiduously pragmatic: how to choose them, train them and care for them.

But the new millennium is different. "Marley & Me," the 2005 mega-best seller by John Grogan, marked a subtle but important shift in how we think about dogs. It begins as a hilarious account of dog ownership in the 1990s. How do you get a large, muscled carnivore to sit nicely at a restaurant, remain tranquil during thunderstorms and not poop on the beach? But by the end of the book, Grogan is almost entirely concerned with his Labrador Marley's interior life — the way he thinks, feels and apprehends the world. "I dropped my forehead against his and sat there for a long time, as if I could telegraph a message through our two skulls, from my brain to his."

This somersault into Marley's mental landscape involves what researchers call "theory of mind": your thoughts, feelings and beliefs about the thoughts, feelings and beliefs of others. Theory of mind is at the root of some of our most profound experiences. Take love, for instance. It's just an abstraction unless you are able to wonder, Does she love me too? What did he mean when he looked at me that way? Will she miss me when I'm gone?

Since 2000, books exploring dog minds have proliferated at an astonishing rate. Currently more than 70,000 dog books are listed on Amazon, including dozens of novels, many of them best-selling tear-jerkers, such as "The Art of Racing in the Rain" (2008), by Garth Stein, narrated by Enzo, an unfailingly wise and loyal Lab mix, and "A Dog's Purpose" (2010), by W. Bruce Cameron, a tale also told by a dog — one that undergoes repeated incarnations as it arrives in a human's life and dispenses important lessons.

The dog mind is also an increasingly prominent feature of literary fiction, from "The Door," by the Hungarian writer Magda Szabo (published in English to acclaim in 2015), featuring, among other characters, a dog that is, as Claire Messud put it in her review for the Book Review, "as vivid and fully realized a character as any human, a truly great literary dog"; to "The Friend" (2018), by Sigrid Nunez, in which a woman develops a quasi-romantic relationship with a dead friend's Great Dane. (Nunez's book won last year's National Book Award for fiction.) Now there's even a thoughtful political book in the form of a human-canine mind-meld: "Don't Label Me," by Irshad Manji, a writer and activist, which unfolds as a conversation between the author and her dog, Lily, about divisive social issues like identity, diversity and religious politics. ("To do diversity hon-

VANESSA WOODS and BRIAN HARE, a professor of evolutionary anthropology at Duke, are the authors of "The Genius of Dogs." estly, we can't be labeling all of diversity's critics as bigots," Manji tells her dog. "You disagree, Lil? You're entitled to your opinion but you haven't let me explain mine.")

The spate of dog mind-focused books raises the question: After at least 14,000 years of living with dogs, why are we only now getting around to considering what goes on inside their heads? There are many possible explanations, but one is that in the last two decades science has discovered more about dog cognition than in the previous two centuries combined. From 1900 to 1999, most cognitive researchers dismissed dogs as uninteresting because they believed domestication had led to a hopeless dependence on humans. In 1931, the naturalist Frances Pitt scoffed that dogs lacked intelligence because "the rigorous tests imposed by nature, including that of ability to get a living, have been eliminated by human protection." In 1971, the veterinarian Michael Fox



JOHNNY SAMPSON

went so far as to call dogs "*Canis over-familiaris*," arguing that domestication had resulted in "psychosomatic symptoms such as depression and anorexia nervosa, asthma, diarrhea, convulsions or paralysis of the hind limbs."

In the 1950s, cognitive experiments began to show the sophistication of animal intelligence. By the 1980s, a study found that dolphins could mimic computer sounds, then use these new sounds to label real-world objects. Pigeons could categorize objects from two-dimensional photographs.

And, of course, our relatives the great apes were found to be so mentally dexterous that their skills bordered on humans'. But when it came to dogs, the loudest message was overwhelmingly static. There is almost nothing about dogs in the cognitive literature from the 1950s all the way to 2000.

Then, suddenly, there was an explosion in the field of dog cognition, spanning the fields of psychology, anthropology and neuroscience. The psychologist Alexandra Horowitz's "Inside of a Dog" (2009) was a landmark, providing crucial insights into how a dog experiences the world. Imagine being four feet closer to the ground, relying on smell at least as much as sight and picking up on every conscious or unconscious gesture of the person you love most. Horowitz manages to answer burning questions without being fanciful; from the point of view of a dog, she writes, "a rose is undistinguished from the rest of the plant matter surrounding it — unless it has been urinated upon by another dog."

Horowitz's book was followed by Gregory Berns's "How Dogs Love Us" (2013), about his remarkable experiments involving his terrier mix, in which he trained her and other dogs to lie perfectly still in an MRI machine. Several months, and many sausages, later, Berns had the world's first brain scans of conscious dogs. He discovered that the reward centers in their brains responded to praise just as much as to food — and, more surprisingly, some dogs preferred praise. Berns also found that dogs have a dedicated area in their brains for recognizing human faces, a skill cats, for example, are generally less good at.

John Pilley, a retired psychologist, turned the field of developmental psychology upside down with his book "Chaser" (2013), about his Border collie, who not only knew 1,000 words but learned them using a technique called fast mapping, something thought possible only by children. And the ethologist Frans de Waal, in his brandnew "Mama's Last Hug: Animal Emotions and What They Tell Us About Ourselves," argues that dogs have a well-developed sense of fairness and other moral values. When pairs of dogs at the Clever Dog Lab in Vienna were asked to lift a paw to a human experimenter without receiving a reward, they readily complied. But if one of the pair was rewarded with a piece of bread, the other dog lost interest in the game and refused to play. De Waal likens such behavior to that of young children, "when one of them gets a smaller pizza slice than his sibling (yelling 'That's not fair!')."

De Waal elaborated on the idea in a recent opinion piece for The Times, recounting how Bully, a dog belonging to the legendary animal behaviorist Konrad Lorenz, once bit Lorenz's hand as Lorenz tried to break up a dogfight. "Even though Dr. Lorenz petted him right away," de Waal wrote, "Bully suffered a complete nervous breakdown. For days, he was virtually paralyzed and ignored his food.... He had violated a natural taboo, which among ancestral canines could have had the worst imaginable consequences, such as expulsion from the pack."

The shift in how we see our dogs is not unprecedented. When it comes to the beings with whom we cohabitate, we have a history of changing our attitudes. The way we once regarded dogs — not the cleanest creatures but useful to have around — is the way we once regarded children. In early-18th-century Europe, children were born to work. Parents had large numbers of them not just because birth control was generally unavailable but because parents needed help, and understood that not all of their offspring were likely to survive infancy. Those that did were sent off to coal mines, factories and up chimneys — or to live with relatives in need of a servant.

By the 19th century, more children survived to adulthood, and more were spared the work force. Parents began to regard their children not as potential labor but as emblems of purity and innocence to be protected and loved. As the 19th century was for human children, the 21st century is for the dog. Most dogs are no longer required to work long hours. Most are not required to do anything at all, except love us. And this they do very well. \Box