

FOR the LOVE of DOOG



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THE ULTIMATE RELATIONSHIP GUIDE

Observations, lessons,
and wisdom to better
understand our canine
companions

Pilley Bianchi and Calum Heath

PRAISE FOR
FOR THE LOVE OF DOG

“An illustrative, whimsical journey to better understand the dogs we love, or even just the dogs who wag past us on the sidewalk. *For the Love of Dog* is a joyful romp into the world of dogs, with a bright and original perspective—much of it based in science—that will forever change the way you look at your four-legged friends.”

Maria Goodavage, *New York Times* best-selling author of *Top Dog*, *Secret Service Dogs*, *Soldier Dogs*, and *Doctor Dogs*

“A wonderfully illustrated and written ode to the canine-human bond and how that unique bond both expands our horizons and keeps us living fully in the moment. Calum Heath’s illustrations capture the essence of dogs and their people with every ink stroke. I absolutely adored *For the Love of Dog*.”

Cat Warren, *New York Times* best-selling author of *What the Dog Knows*

“A charming account of the journey dog and man have made together.”

Clive Wynne, PhD, *New York Times* best-selling author of *Dog Is Love: Why and How Your Dog Loves You*

“A delightfully refreshing, forward-thinking take on dogs and our shared lives.”

Karen Wild, CCAB certificated clinical animal behaviorist and author of *Being a Dog*, *What Your Dog Wants*, and *21 Days to the Perfect Dog*

“Deep insights and timeless connections.”

John Lane, professor emeritus of environmental studies, Wofford College, and author of *Coyote Settles the South*

“A wonderful, unique work written by a person who has a deep feeling toward our four-legged friends.”

Giovanni Padrone, canine historian and author of *Origins: In Search of Ancient Dog Breeds, First Volume, From Prehistory to Ancient Greece and Roma Canes Mundi, Second Volume of Origins: In Search of Ancient Dog Breeds*

“For the Love of Dog will guide you to build the kind of joyful bond with your dog that [the author’s father] John built with [their family dog] Chaser.”

Hilary Hinzmann, coauthor of *Chaser: Unlocking the Genius of the Dog Who Knows a Thousand Words*

“Nestled within its charming, easily read pages is everything you need to know about living with, and loving, a dog.”

Jennifer Arnold, founder/executive director of Canine Assistants, Inc. and *New York Times* best-selling author of *Through a Dog’s Eyes, In a Dog’s Heart, and Love Is All You Need*

“The most heartwarming, illustrative, and informative tale you will read this year.”

Dr. Brian Hare, *New York Times* best-selling author of *The Genius of Dogs* and professor of psychology and neuroscience, Duke University

“For the Love of Dog offers all sorts of surprises, revealing what dogs are truly all about, starting here: What’s it really like to be a dog?”

Steve Dale, CABC certified animal behavior consultant, host of *Steve Dale’s Pet World*, contributing editor of *Decoding Your Dog*, and board of directors, Human Animal Bond Association

“This delightfully illustrated book brilliantly captures the absolute joy and love dogs willingly share with us.”

Annie Phenix, author, certified dog behaviorist, member of the Pet Professional Guild

FOR the LOVE of DOG

**The Ultimate
Relationship Guide**

**Written by Pilley Bianchi
Illustrations by Calum Heath**

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**There is one thing you must do to
explore learning with your dog
or any animal. Respect the other mind
involved with you in the process.**

—John W. Pilley Jr.

Foreword

In my 2021 book with Jessica Pierce, *A Dog's World: Imagining the Lives of Dogs in a World Without Humans*, we posed the question “If humans were to disappear from the planet, would *Canis lupus familiaris*, aka domestic dogs, survive without us?”

As provocative as this question is—and a good number of people, including dog guardians, dog lovers, and dog experts, weighed in with varying answers—it helps us to more fully understand contemporary dogs. As an evolutionary thought experiment, we examined the strengths and weaknesses of free-ranging, feral dogs and homed family dogs from all over the world based on biology, natural history, and the power of observation. We discovered that the “survival of the fittest” perspective wears many hats, and it’s not only dogs of a certain size or personality who will survive on their own. The absence of humans would surely be a shocker for many dogs, but don’t forget that they already have a paw in the natural world. Jessica and I agree that many would make it absent humans.

Let’s humbly put ourselves back into the equation and modify the question to “What if humans and dogs were on the same page?” What if we were able to understand each other’s language, desires, and needs; could that bring us closer to closing the cross-species communication gap? What if we learn from dogs to use these positive feelings for other animals, recognizing that dogs are a gateway species for bridging the empathy gap with many other nonhumans?

A powerful example of this is the research by the late Dr. John W. Pilley, who set himself the goal of teaching human language to his family dog Chaser. Chaser learned the names of more than one thousand objects and various elements of grammar. Dr. Pilley provided empirical data clearly demonstrating that our dogs *are* as smart as

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we think. Yes, Chaser’s language learning was marvelous, but even more so was the rich relationship these two shared. While I didn’t have the opportunity to meet John and Chaser, I have gotten to know his daughter Deb Pilley Bianchi, who was their behind-the-scenes collaborator and who continues to carry the torch for their legacy.

Chaser is our model of what *can* be done to improve a dog’s life. John pulled back the curtain not only on how intelligent Chaser was but on the idea that many dogs can most likely do what she did with the proper supportive environment. It is simpler than one might think.

For the Love of Dog begins by diving into “all things dog” and the value of knowing who dogs are as a species. Next is recognizing that individuality in dogs is as diverse as it is in humans—there is no universal prototype dog. Dogs are clearly intelligent and emotional beings who are best friends and family members for many people (albeit not all). However, dogs have their own needs. Most of us agree that dogs need love and are willing to give love in return, but they are not unconditional lovers; we need to *earn* their respect and love. We need to understand that just like children, they need enrichment to get out of the same old, same old routines, which means guaranteeing high-quality lives—high-quality canine well-being—and the freedom to express their inherent dogness.

I began studying animal behavior in the early 1970s and spent four years videotaping groups of dogs, wolves, and coyotes in large enclosures. Slowly playing back and analyzing the tapes one frame at a time revealed how animals maintained their tight social bonds and how they followed what I call the “golden rules of fair play”: ask first and communicate clearly; mind your manners; admit when you’re wrong; and be honest.

I witnessed them snuggling with each other, and they would also chase each other, run, jump, and roll over for seemingly no other

reason than to have fun. This was play. Play is a major expenditure of energy, and it can be dangerous for young canines in captivity and in the wild. So why do they do it? Not only does play help to socialize dogs and provide much needed exercise, it also feels good and it’s fun.

If your dog likes to play, let them play to their heart’s content and then some. Play *with* them, praise them with lots of encouragement by telling them, “You’re a good dog.” Jump in the fray, get down and dirty, and you will build confidence through a reciprocal relationship based on mutual respect and trust. See if you can also decipher the golden rules of fair play and learn how dogs engage one another in many different ways. The simple act of play is a universal language and a great way to start *your* journey toward becoming fluent in dog.

For the Love of Dog will help you answer a most important question—“What is it like to be a dog?”—and show you how to enrich your dog’s life and give them the very best life possible, the wonderful result of which is not only a happy dog but also a happy human. What could be better than this wonderful, shared state of bliss—a win-win for all?

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Author of:
Canine Confidential
Unleashing Your Dog (with Jessica Pierce)
Dogs Demystified



Introduction

The word *genius* derives from Greek and Latin words meaning “to beget,” “to be born,” or “to come into being.” It is closely related to the word *genesis*. It is also linked to the word *genial*, which means, among other things, “festive,” “conducive to growth,” “enlivening,” and “jovial.” Combining these two sets of definitions comes closest to the meaning of the word *genius*: One’s potential, unleashed. One’s joy, discovered. Giving birth to one’s joy.¹

Genius was also commonly used to describe an extremely talented Border Collie from Spartanburg, South Carolina.

What's Up

People love their dogs. We can't get enough of them on social media, and dogs have not only their own accounts but millions of followers. This attraction is not simple superficiality or dogged devotion. The *New York Times* alone has published almost two hundred thousand articles on dogs and is currently averaging a new one every other day. I know these things not only because I'm a web-surfing sucker for dogs but because a member of my family was a world-famous dog. Several of these *New York Times* articles were exclusively about her.² Her fame wasn't built around her beauty or adorable cuteness—even though she had both of those attributes—it was the result of her smarts.

Her name was Chaser.

She and my father, Dr. John W. Pilley Jr., were propelled onto the world stage in 2011, when their groundbreaking research went globally viral. People could not get enough of this charming duo. An eighty-four-year-old retired professor and his six-year-old dog gave the world scientific affirmation that our pups are not only smarter than we think but significantly capable of much more.

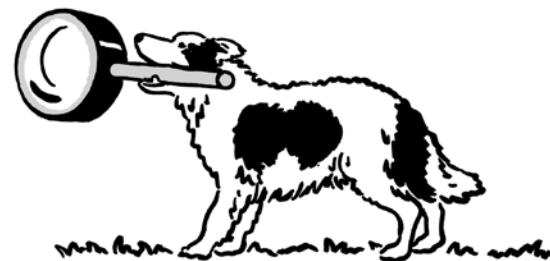
As Chaser's coteacher, producer, roommate, and water girl, I have been granted access to international heavy hitters in the canine science world and, even better, to thousands of heartfelt letters from everyday dog lovers. It became clear to me that there was vital information on both sides of the fence, and they each lacked what the other had. By using Chaser as the link, we can find not only common ground but higher ground.

WHO Da Dog?

"She is the dog the world has come to know and love, Chaser the Border Collie, the smartest and most beautiful dog in the world." These are not my words; this is an actual quote from writer Olivier Mahoney in a six-page spread on Chaser in the French magazine *Paris Match*.³ The article was back-to-back with a piece on John Travolta and—not that it really matters—Chaser had the centerfold. She also shared the cover of the *National Examiner* with Brad Pitt and the *Daily Mail* side by side with Katie Holmes. Chaser was not simply a pop media sweetheart; she was also featured in *New Scientist*,⁴ on *NOVA ScienceNOW*, and even on *60 Minutes*.

Chaser was indeed extraordinarily clever, but the truly brilliant mind belonged to the man behind the dog.

In June 2004, my parents, John and Sally Pilley, brought home an eight-week-old Border Collie puppy to become a new family member. She was also destined to become my father's new research partner. He had the goal of teaching her human language, one that had eluded him in his previous twenty-five years of working with dogs in his Wofford College classroom and laboratory. He confessed that while the dogs themselves were brilliant, he was not, but this time was different. At seventy-six years of age, he knew where he went wrong, and boy, was he right.



In science, the road to discovery is a long and crooked one. To this I can testify, as a professor emeritus of psychology. My work over the past forty-five years is evidence of this. It is filled with more failures than successes, but attempts gone awry are significant because they guide us toward truth. That truth is Chaser.

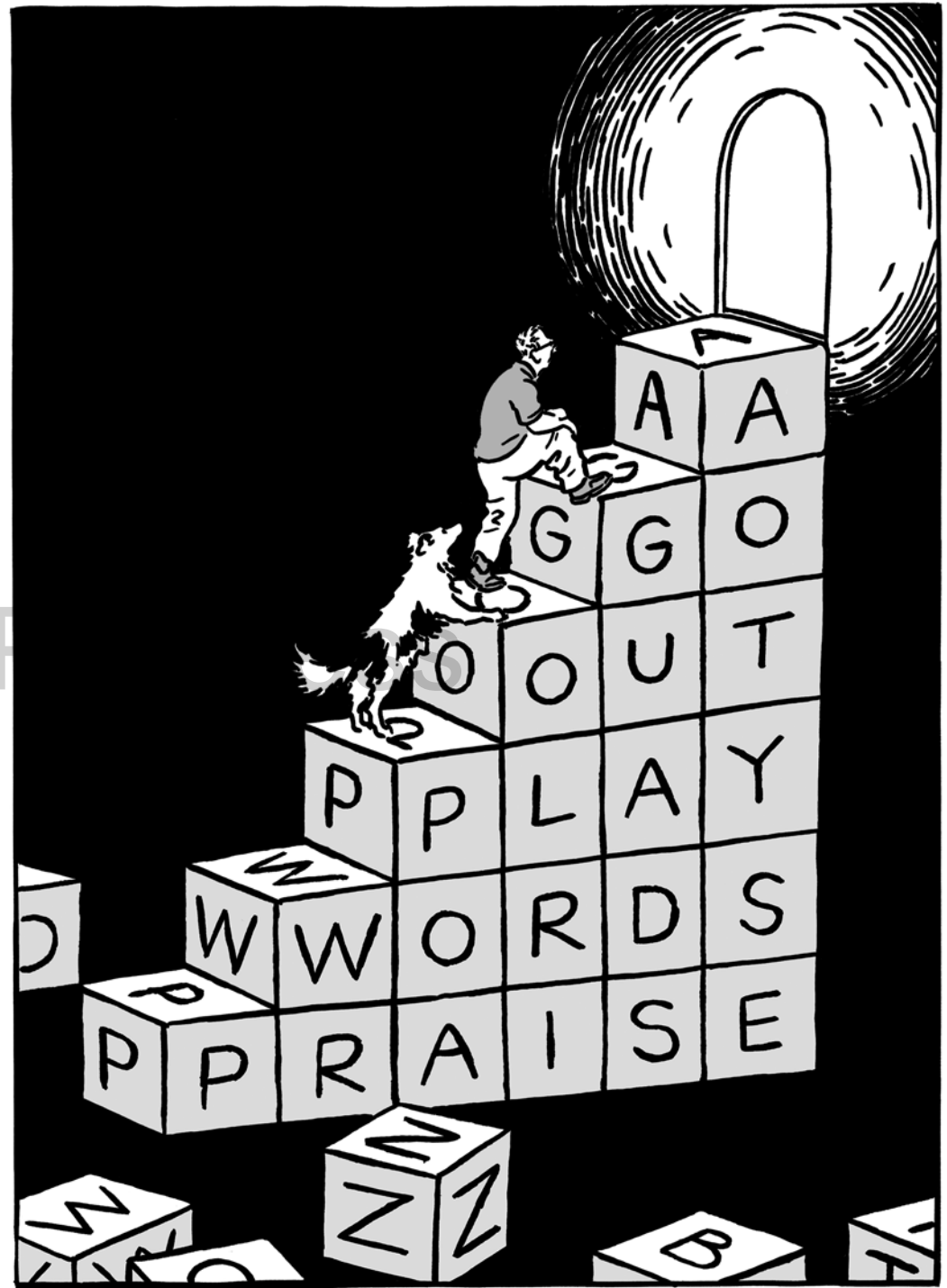
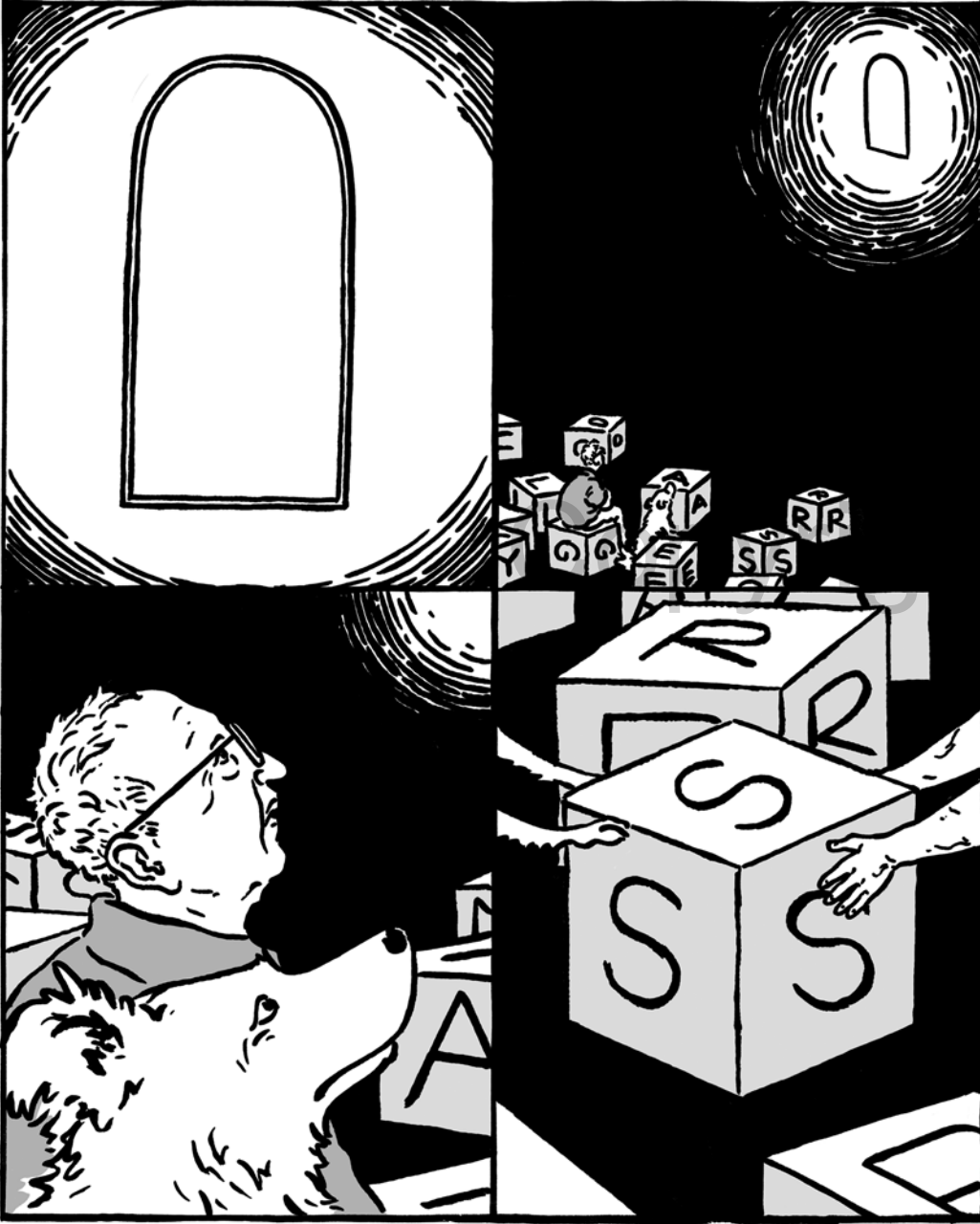
—John W. Pilley Jr.

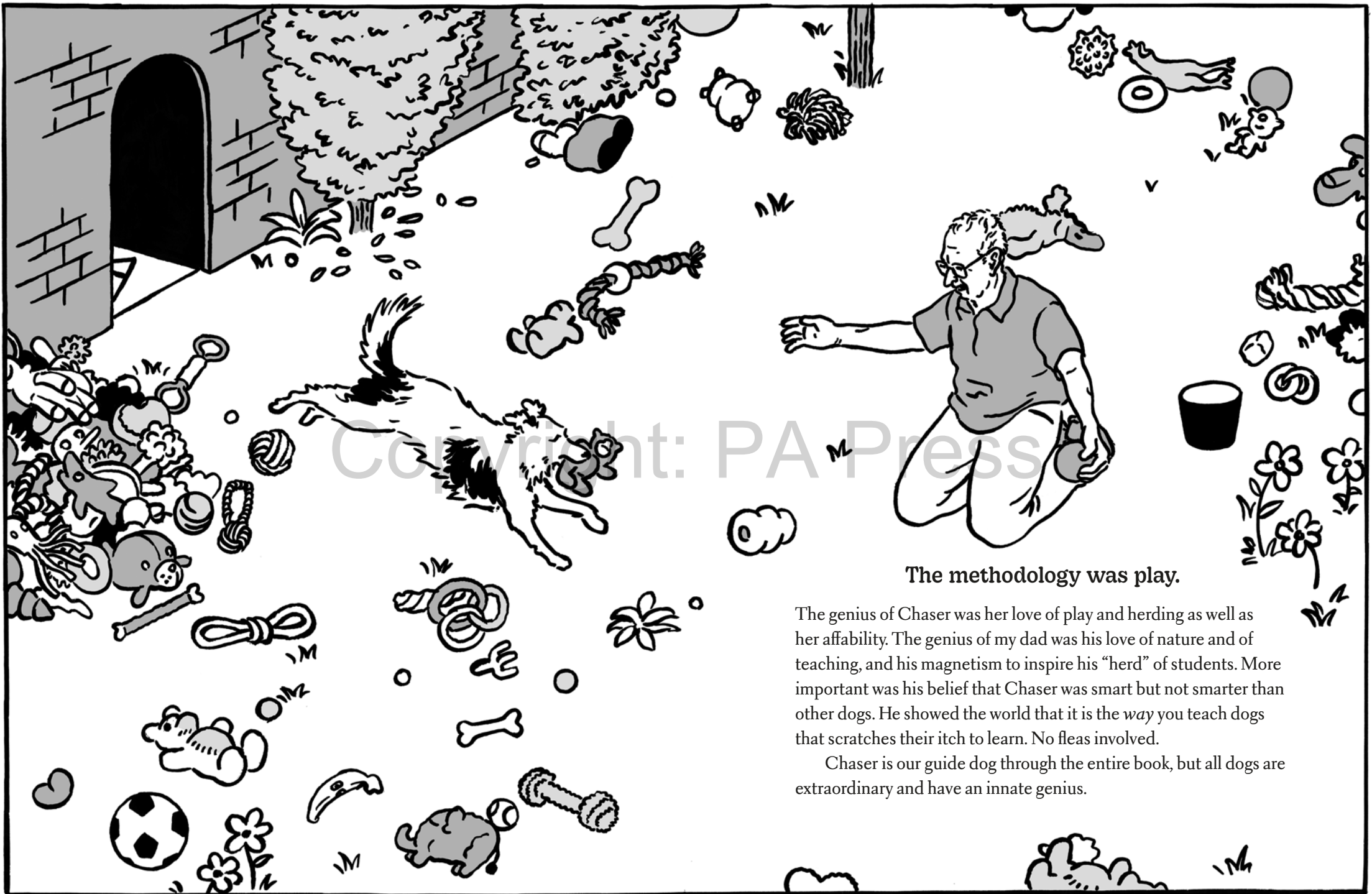




Six years later, this charismatic and charming canine and octogenarian duo took the world by storm when their scientific research was formally published in two scientific journals, Elsevier's *Behavioural Processes* and *Learning and Motivation*.⁵ A retired professor emeritus of psychology, my father taught Chaser the names of over 1,022 objects, which were her toys. She also learned hundreds of additional names, including people and locations, as well as common nouns, verbs, adverbs, and prepositions, and simple syntax in sentences. She officially had the largest formally tested language learning of any animal in the world, including primates, birds, and dolphins. Since then, she has been widely dubbed the smartest dog in the world, demonstrating in an international arena that dogs are not only smarter than they have been given credit for, but capable of so much more.

Together, as lifelong learners, John Pilley and Chaser cracked the code in teaching human language to dogs.





The methodology was play.

The genius of Chaser was her love of play and herding as well as her affability. The genius of my dad was his love of nature and of teaching, and his magnetism to inspire his “herd” of students. More important was his belief that Chaser was smart but not smarter than other dogs. He showed the world that it is the way you teach dogs that scratches their itch to learn. No fleas involved.

Chaser is our guide dog through the entire book, but all dogs are extraordinary and have an innate genius.

Can I Do It?

As I introduce you to Chaser, I need to highlight something. Chaser was not born as part of a mad science experiment. She wasn't preprogrammed or preselected to learn human language. Instead, Chaser grew up in my parents' home as a beloved dog, and this is where her journey took place, as a member of the family alongside people just like you.



Admittedly, there were a few notable differences that influenced her learning, like living with a professor emeritus of psychology as well as my mother, a nurturing nurse. Throughout my father's life his philosophy included perpetual, open-ended learning, with the goal of seeking out significant new challenges every five years. All with a dog by his side.

And then there's her background. Chaser came from a lineage of working Border Collies known for their attentiveness to people, particularly to sounds and movements. Her sire was imported from a farm in the Scottish mountains with a bloodline that was literally born and bred to give their eye to the sheep and ear to the farmer, identifying physical movements and verbal intonations that are lost on us mere mortals.

While these factors certainly could have affected the groundbreaking scope of what Chaser accomplished, the catch is that she was not some sort of animal phenom. Like every other member of *Canis familiaris*, Chaser was a dog who shared many similarities with other family dogs. She had a panache for nosing through the trash, she would curl her lip and snarl at Bobby Sue (the family cat), she was not a big fan of other dogs, and, truth be told, she didn't like to share her toys. Chaser was a dog through and through.

Chaser and her accomplishments give us insight on how we can all get to that enviable level of communication.

We are talking about you and your dog.

Our goal is to give you the keys to the kingdom in understanding *your* dog. All you need to do is to channel a couple of canine characteristics: curiosity and hope. This duo breathes life into the cobwebs of one's mind. Dogs do this inherently; there is nary a more hopeful and inquisitive soul than that of *Canis familiaris*. Let us take a page from their "play" book. My dad's philosophy was as rich and melodious as his Southern drawl: "To fully understand anything fundamental in life requires us to experience the world in three ways. Through science, poetry, and mythology. If we leave one out, we're bound to miss something important."

This is the legacy of Chaser and John Pilley.

The following words were his mantra, which he repeatedly reinforced to Chaser; me; my sister, Robin; and my mom, Sally; as well as all of his students. He would want you to know that it is true for you and your dog.

"Do it, girl, you can do it!"



Why Now?

It's fair to say that the year 2020 barreled through like a wrecking ball. It left many of us metaphorically sitting alone in the dark, wondering when the lights were going to come back on.

The good news is that light can always be found. Mother Nature takes care of that, bringing us light every day, offering answers if we know what to listen for and where to look. Just don't look down or at a screen! Devices, busy schedules, work, countless distractions, social and economic environments pull us farther away from the simple truths of life.

Now, more than ever, we need nature. And it's easier than you think.



We are drawn to dogs, a completely different species from us, a species that doesn't look like us, talk like us, or think like us. Dogs are the bridge from the human world to the natural world. They have a paw in both, which is one of their greatest gifts to us.



What is it that ties these people together:

A farmer in Oklahoma and a farmer in Australia?

The us Marines and Roman soldiers?

A diabetic boy in Pasadena City and a depressed girl in North Carolina?

A Silicon Valley entrepreneur and a homeless Ugandan boy?

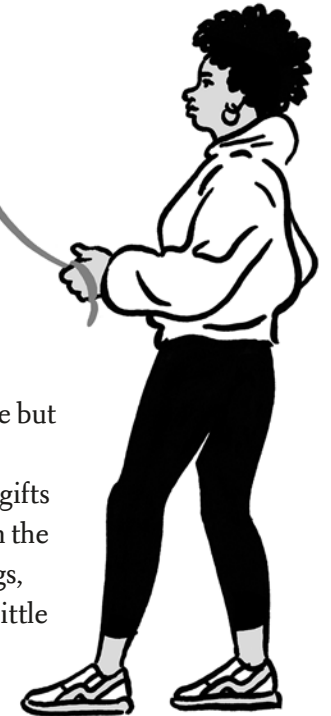
A Russian doctor and a Japanese designer?

It's not: the economy, fashion, food, language, technology, religion, health, education. It's dogs.

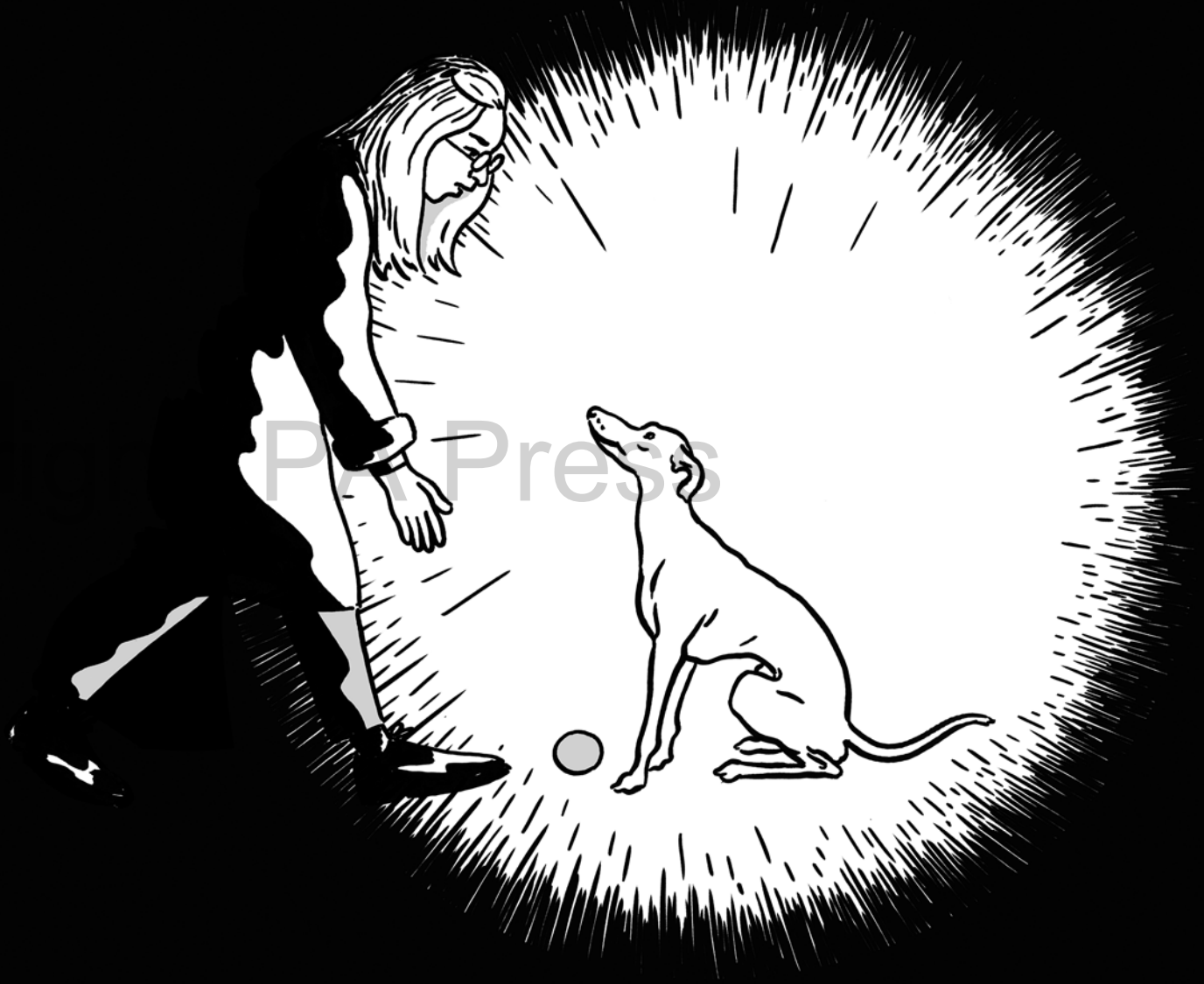
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Dogs don't care about the color of our skin, the language we speak, or the money we make. A boy on one side of the divide can love the same dog as a girl on the other side of the divide. Dogs show us we all love in the same way. Dogs are our direct connection not only to nature but to our own two-legged species.

If we can emulate dogs, tap into their innate gifts of devotion, of being in the present, of reveling in the moment, in the now, of appreciating simple things, imagine how our little lights will shine and their little tails will wag.



So even in our darkest days,
dogs can turn on the light.

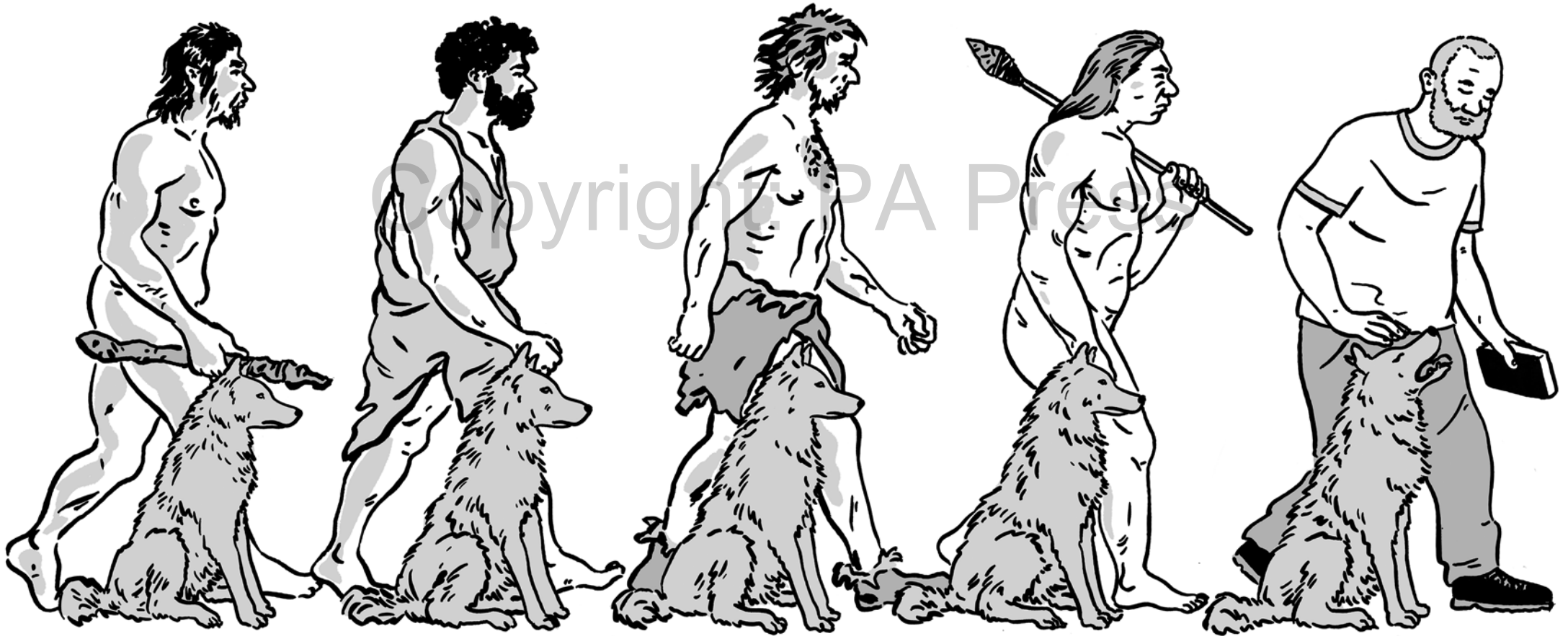


Dogs are the only nonhuman species on earth that choose us.

It's not cats, and before thou doth protest, I fully acknowledge that cats are highly revered, particularly by the ancient Egyptians. We adore our cats. They let us inhabit their world, and we are very respectful of that honor. I'm whispering this as my cats lie in the next room, taking their nap on top of my new laptop. *However*, we have not shared an evolutionary path together.

Neither have giraffes, gorillas, camels, rabbits, dolphins, pigs, birds, butterflies, beetles, or snakes. These are just a few of the currently whopping eight million, seven hundred thousand different species on the planet Earth. Give or take one or so million.⁶

We do have a significant history with the magnificent horse, but no coevolution. The only species that has shared a path with humans is dogs. For forty-thousand years they have chosen us and we them.



The Untruths of Popular Belief

Contrary to popular belief—and don't forget that popular belief recently included rubbing our puppy's nose in their poo for house-training—dogs are not just in it for the food. Researchers Juliane Kaminski and Sara Marshall-Pescini have debunked the idea that our shared evolution was based on the food supply.⁷

The REAL Truth...

...is that dogs are incredibly resourceful animals. They are wickedly wise. They have emotions similar to ours, and unlike so many humans in our lives, dogs do not give up on us.

Which prompts the question why? Why don't dogs give up on us? Why do they provide us with enduring comfort and companionship, love, devotion, and adoring physical touch, no matter how they may have been treated by humans in the past? What drives their purity of spirit? How can we become better people from their unadulterated loyalty and affection? How can we emulate their behavior to be better human beings, full of wonder, accepting and forgiving? And how can their lessons to us be made all the more powerful through greater communication as we embrace their perpetual love of play? How can we enrich *their* lives, which collaterally will enrich *our* lives even more?

Dogs *want* to learn, they *want* to communicate, they *want* to connect: they are literally lying in wait.

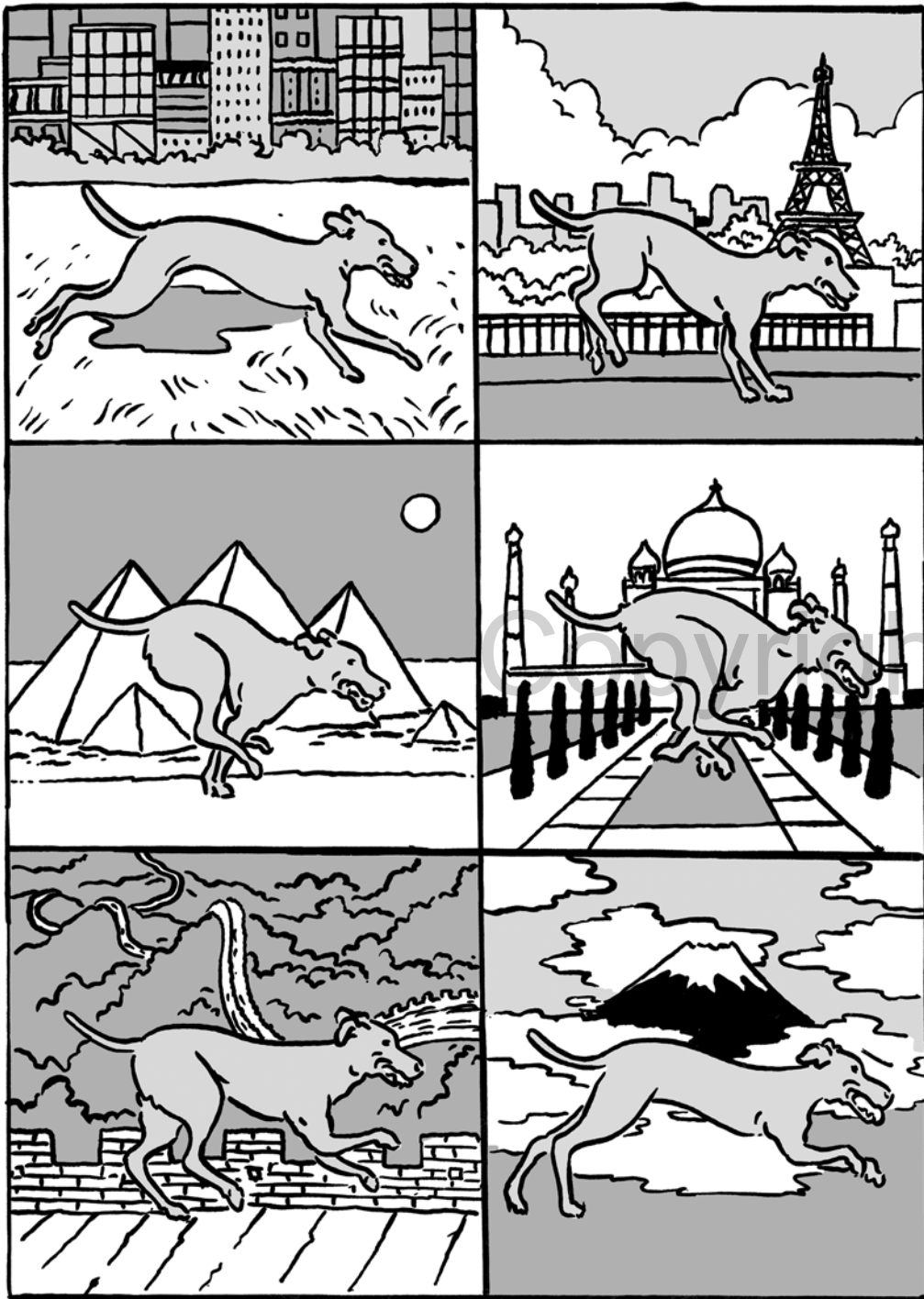


But they don't wait forever.

Dogs live short, beautiful, poignant lives, giving us ample opportunity to learn and benefit from them while experiencing the purest form of love and loss. What a magnificent gift. By opening our hearts and minds to learn from them, these incredible creatures sitting at our feet, we will greatly elevate our own species.

It's time to unleash the tether and move our relationship beyond fetch.





un·leash

\,ən-'lēsh\

transitive verb

1: to free from or as if from a leash: let loose, unbridled.⁸

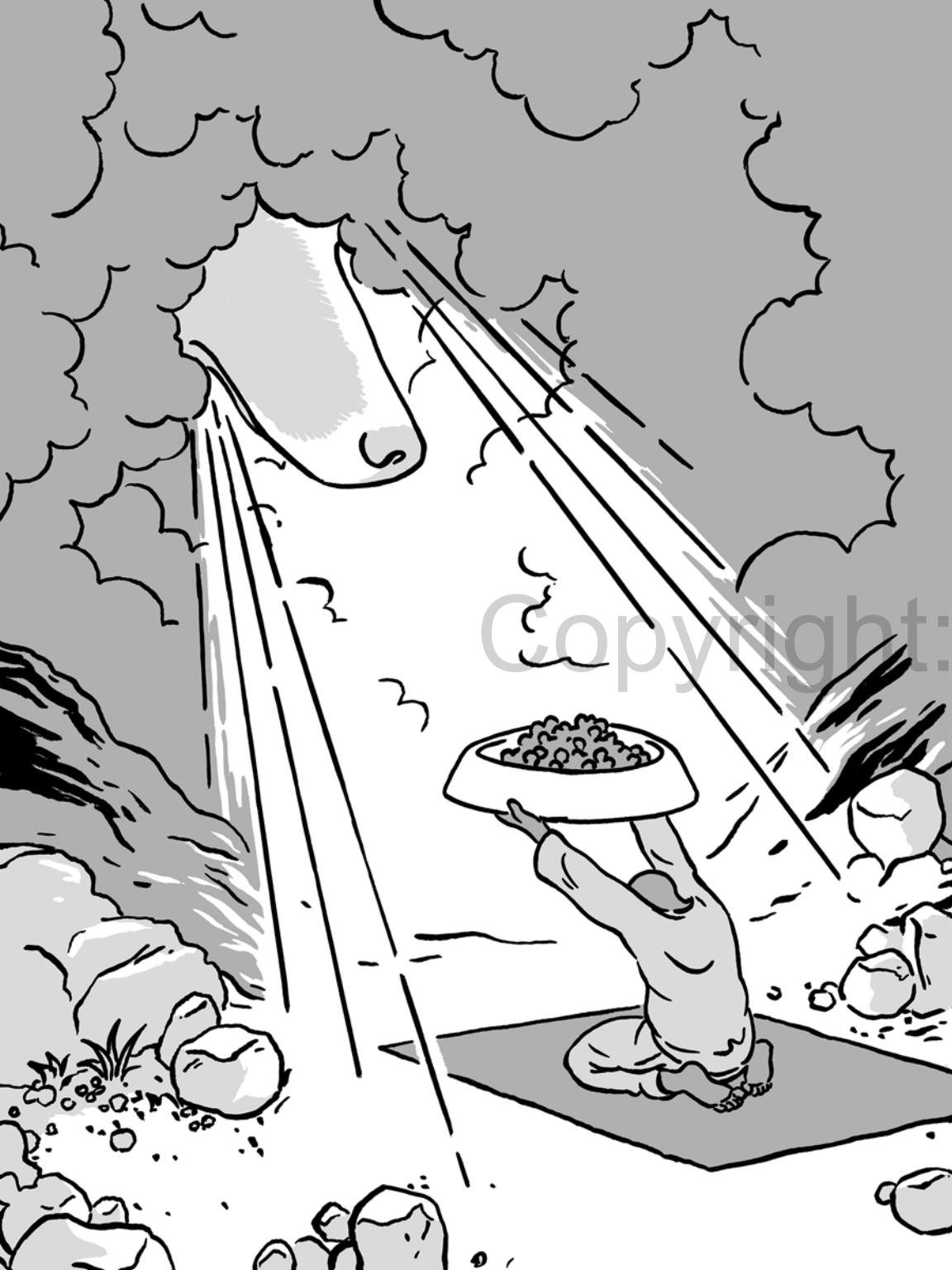
2: to set in motion, to liberate, which is borrowed from Latin *liberātus*, past participle of *liberō* (“to set free, deliver”), from *liber* (“free”).

In Classical Latin, *liber* with a short *i* means “book,” and *liber* with a long *i* means “free.”

So, does this mean that this book will set us free? We hope so.



History of Dog



What's Up

Of dogs and gods... there are countless mythological stories surrounding dogs and gods that have existed for thousands and thousands of years. Many are heroic, poignant, some a little creepy, but always jaw-dropping, as they blur the lines between fact and fiction. Are they metaphors or metadata? Perhaps both.

dog ≈ ged

In math, ≈ means *approximately equal to*.
∃ means *there exists*.

dog·ged

\ˈdɒg-əd\
adjective

having or showing purpose, perseverance;
indefatigable. “Success required dogged
determination.”

Dogged suggests an admirable, often tenacious
and unwavering persistence.



Tell Me a Story



The Myth of the Dogs of Noah's Ark

This is the story of two Afghan hounds who used their beautiful long snouts to save Noah's Ark from sinking.⁹

Once upon a time, God proclaimed that he was done with all the self-serving shenanigans of humans and animals. (Side note: I can understand humans, but animals?) God wanted to start over from scratch, so he teamed up with this five-hundred-year-old guy named Noah to pioneer the reboot of his beloved earth. The secret plan was that Noah would build a massive three-story ship called an Ark, where he would gather his family, which consisted of his wife, their three sons, and their respective wives. God then instructed Noah to wrangle two of every species on the planet, one male and one female, to bring with them. This included any creature that wiggled, walked,

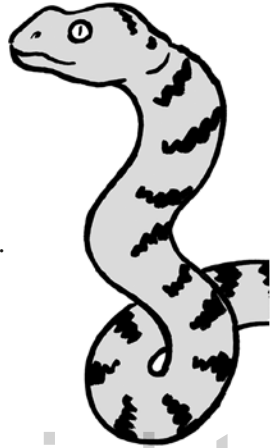




ran, jumped, crawled, or slithered. These lucky beings would be Adam and Eve 2.0, bearing the responsibility to populate the newly reformatted, restored-to-factory-condition world. The 411 was that God would then conjure massive, unrelenting rain, which would create a huge flood, thus throwing all of humanity into

an aquatic, very low-oxygen environment that was highly inhospitable to landlubbers.

Noah had all the animals on the boat ready for launch except for our fun-loving, loyal partners in crime, *Canis familiaris*. Wouldn't you know, the breed chosen to represent all dogs on earth happened to be the most elegant of dogs, the Afghan Hound. And as stylish



hounds go, they were also fashionably late. Being latecomers, the only spot left on the Ark for these pups was outside on the deck underneath an awning. Oh yes, they left the dogs outside. In the rain.

You know the story: the rains came down, the water rose, the waves crashed over the Ark, and quite unexpectedly, leaks sprang up. Noah and his family were able to plug up all the holes with the exception of two, which were gushing and sure to sink the hole-y vessel. That is, until the Afghans leapt into action and offered their slender, long snouts as stoppers to seal up the ship.

Any which way you slice it, dogs selflessly and valiantly saved the day for God's plan.



The Odyssey's Odysseus and Argos

If there was ever a tale that embodies the word *dogged*, it is the one of legendary Greek warrior Odysseus and his faithful pup, Argos. There are many interpretations and translations of this work, but most agree that it highlights not only our mutual connection to dogs but also what we have to learn from them about ourselves. Consensus has it that the Odyssey was written almost three thousand years ago by the Greek philosopher Homer and is based on the legendary Trojan War. It sort of goes like this:

Odysseus was the powerful and beloved Greek king of Ithaca. He was favored by the gods and admired by humans. As a handsome young warrior, virtue and passion flowed through his veins, and he bred a dog that was his canine equal, named Argos. Odysseus trained Argos as a pup, hoping to have him by his side for many years, but fate had other plans. Odysseus had to leave Argos behind to fight the Trojan War.

When Odysseus returned home victorious after twenty years, he understood that his beloved kingdom might be infested with thieves and ne'er-do-wells, so he entered the city disguised as a beggar. He was so well disguised that he was unrecognizable to even his closest, lifelong friend, Eumaios.

When Odysseus saw Eumaios on the street, he greeted him, hoping to gather information about his palace. Nearby was an old abandoned barnyard dog sleeping on top of a manure pile, with flies buzzing around his head and fleas feasting on his belly. As soon as the dog heard Odysseus's voice, his eyes opened and his ears went back as he raised his head and wagged his skinny tail. Argos immediately recognized his one and only master, but he was too frail to move. In this brief moment Odysseus's and Argos's eyes met in a silent touch. As Odysseus recognized his beloved dog, he swiftly brushed a tear



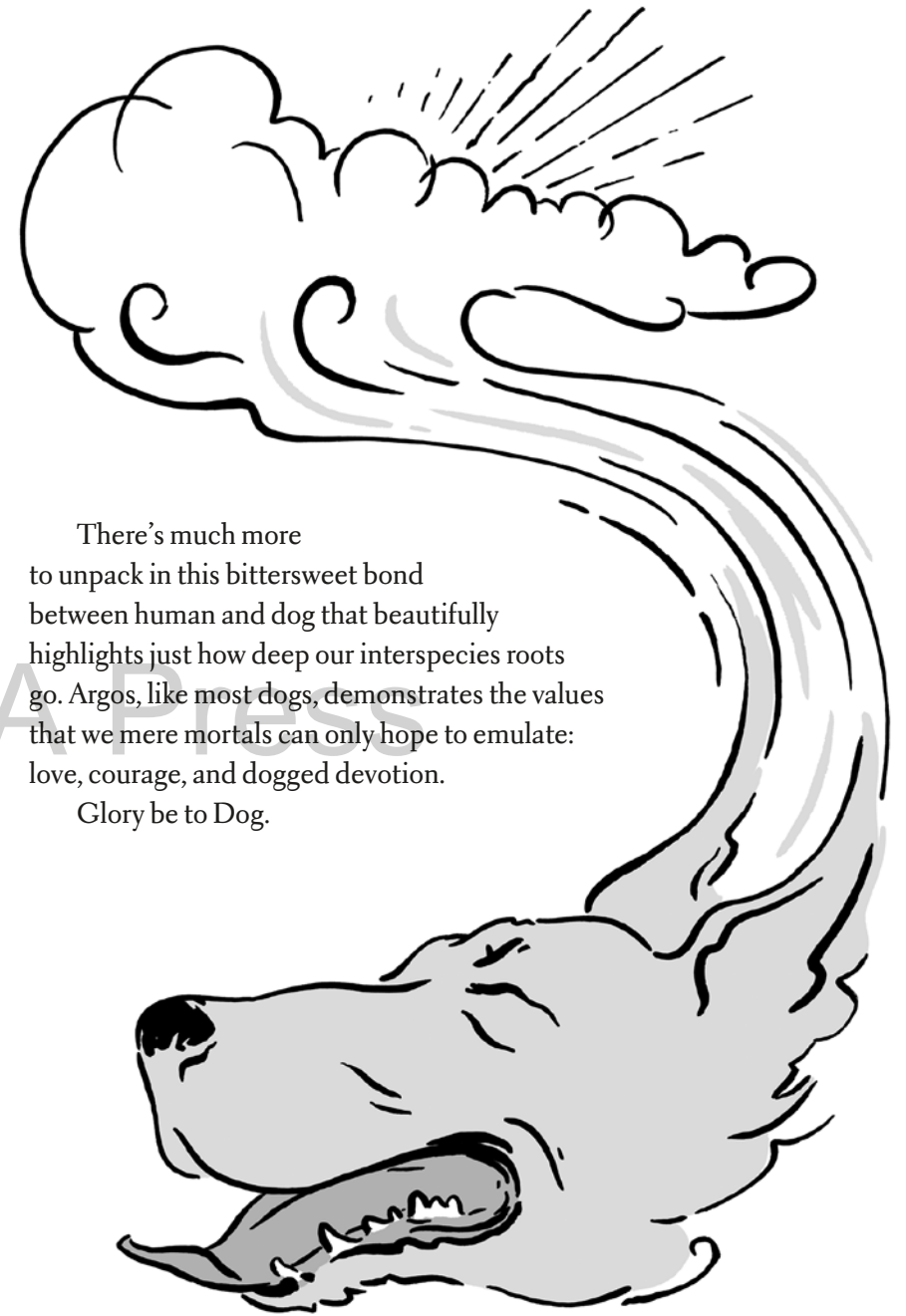


from his face, not daring to give away his identity. He motioned to Argos while he queried Eumaios: “What a noble hound that is over yonder on the manure heap. His build is splendid; is he as fine a fellow as he looks, or is he only one of those dogs that come begging about a table, and are kept merely for show?”

“This dog,” answered Eumaios, “belonged to him who has died in a far country.

If he were what he was when Odysseus left for Troy, he would soon show you what he could do. There was not a wild beast in the forest that could get away from him when he was once on its tracks. But now he has fallen on evil times, for his master is dead and gone and the women take no care of him. Servants never do their work when their master’s hand is no longer over them, for Zeus takes half the goodness out of a man when he makes a slave of him.”

This was the information that Odysseus was seeking, and he immediately entered the palace to defend his home from rebellious rioters. Alas, once again duty called, and Odysseus painfully left Argos behind. Such is the life of the tragic hero, but this was the moment Argos had been waiting for. He had finally fulfilled his own destiny of fate and faith. After seeing his beloved Odysseus after twenty years away, he knew that his job was complete. He peacefully closed his eyes and slipped into the ethereal world of the gods.



There’s much more to unpack in this bittersweet bond between human and dog that beautifully highlights just how deep our interspecies roots go. Argos, like most dogs, demonstrates the values that we mere mortals can only hope to emulate: love, courage, and dogged devotion.

Glory be to Dog.

The History of Human and Dog

Just so you know, the domestic dog and human of today are currently the final part of a very, very long story. It's complicated with brain-numbing words, so here is the "Dog-Human History Timeline for Dummies" version.

Hugs to canine historian Giovanni Padrone for his brilliant book *Origins: In Search of Ancient Dog Breeds* and for our many conversations, inspiration, and his meticulous research that this abbreviated version is based on.¹⁰

Here's a glossary of words with some common misconceptions.

Canidae fox, wolf, jackal, coyote, dog—this is not a yeast infection

Canis lupus familiaris modern-day dog—warning: don't get too familiar with an unknown dog

Canis lupus wolf—not to be confused with the autoimmune disease

Paleolithic Stone Age, 2,580,000–10,000 BCE

Neolithic the last part of the Stone Age, 10,000–3,500 BCE

Bronze Age 3,500–1,200 BCE

Iron Age 1,200–550 BCE—mass production of iron objects

Timeline of Humans and Dogs



7,000,000 years ago

Our oldest *Homo sapiens* ancestors, *Sahelanthropus tchadensis*, began the evolutionary path to humankind and coexisted with an ancient fox, *Vulpes ruffautae*. These two didn't compete for food. We ate veggies, the foxes ate meat. We simply shared the space cooperatively and did not commingle.



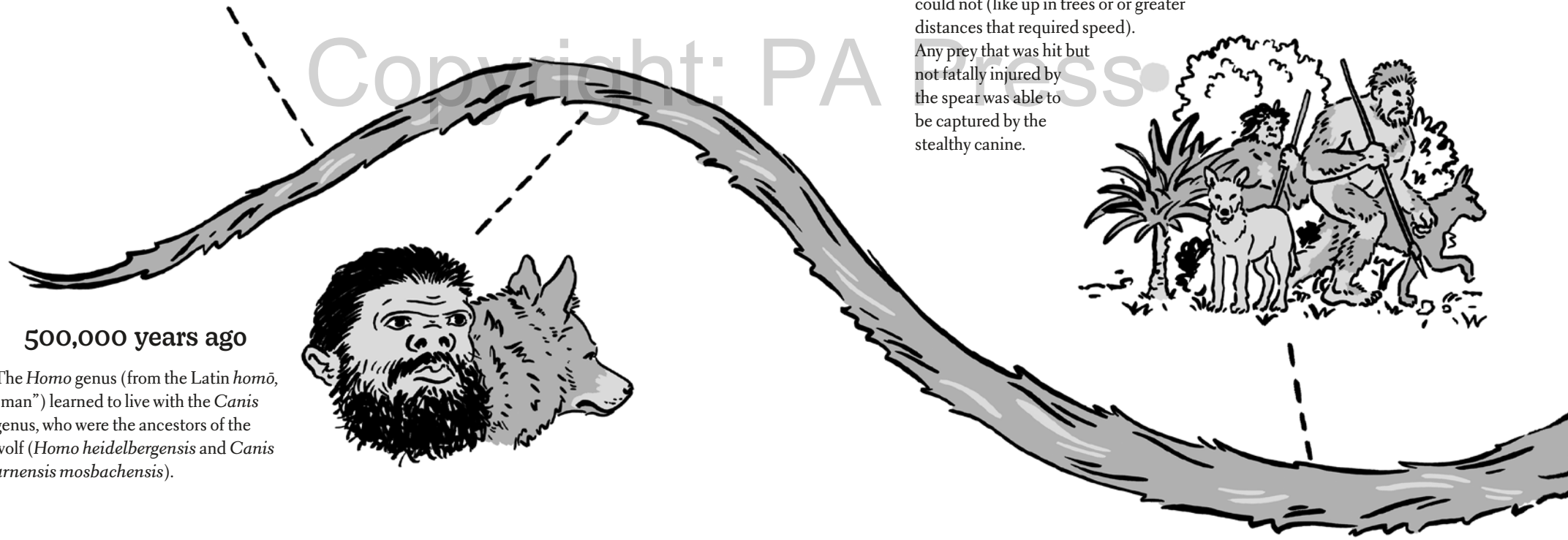
130,000 years ago

This was the turning point that led from wolf to dog. In the south of France, in Lazareth, a group of wolves suddenly began to change in appearance and behavior.

Bonjour to the budding metamorphosis of wolf to *Canis familiaris*, dogs as we know them. Until recently science believed that our beloved dogs didn't appear until 15,000 years ago. But with the fast-growing field of paleontology, the dates and bonds push further and deeper into our mutual past.

This is when the rubber hit the road, introducing the first appearance of interspecies teamwork, marking the fledgling coexistence between Neanderthals and wolves. Up until this point, their wild and independent lives consisted of pursuits, escapes, captures, and food fests. Future humans and wolves discovered that cooperating made both of their lives easier. The spears of our Stone Age ancestors could go where the wolves could not (like up in trees or or greater distances that required speed).

Any prey that was hit but not fatally injured by the spear was able to be captured by the stealthy canine.



500,000 years ago

The *Homo* genus (from the Latin *homō*, "man") learned to live with the *Canis* genus, who were the ancestors of the wolf (*Homo heidelbergensis* and *Canis arnensis mosbachensis*).



33,500 years ago

In the Razboinichya Cave in the northwest Altai Mountains of Siberia, the remains of an ancient dog were found along with our now-extinct hominin cousin *Denisovan*. This dog is the oldest link between ancestral dogs and today's modern dogs. Researchers compared the genetic sequences from the Altai bones with those from seventy-two modern dogs of seventy different breeds, thirty wolves, four coyotes, and thirty-five prehistoric canid species from the Americas. They discovered that the Altai canid is more closely related to modern domestic dogs than to modern wolves, as its skull shape had previously suggested. But that's not all: this dog was found with a hole in the skull similar to dogs found in the Czech Republic 2,300 miles away and 1,500 years later.



36,000 years ago

Fossils belonging to a Stone Age dog were discovered in the Belgian Goyet Caves. The bones were dated to be more than a whopping 36,000 years old;¹¹ scientists discovered that the skull was smaller, with a broader snout and wider cranium, than those of both ancient and modern-day wolves.¹²



35,000 years ago

Pariah dogs emerged—half-domesticated canines also known as free dogs. They were social hounds and mingled with humans but were not pets. Free dogs currently make up about 70 percent of dogs around the globe today, and according to historian Giovanni Padrone, they “mate as intended by nature, rather than at the hands of human breeders.”¹³

32,000 years ago

In the Czech Republic at Předmostí the remains of three Stone Age dogs were discovered, dated to be 32,000 years old. But these weren't simply decayed dog bones; there was evidence that these pups were touched by human hands. In their skulls was a purposefully poked hole to carefully remove the brain. This wasn't a delicacy for human consumption; this was a ritualistic act performed by the indigenous people who believed that the head contained the spirit or soul. The hole was made so that the spirit might be released to the heavens.

Notably, one of the dogs had her jaw wrapped around a mammoth bone, which had been meticulously placed in her mouth after her death.¹⁴ This careful postmortem staging signified that the dog was metaphorically and physically properly fed to accompany the soul on its journey to the afterlife.





28,000 years ago

The Chauvet Cave in southern France is practically the Louvre of prehistoric art. There are more than four hundred stunning drawings of not only herbivores but also carnivorous animals, demonstrating strategic maneuvers to track and hunt. Curiously missing in the drawings are humans, wolves, and dogs.

However, what is stunningly present in the Chauvet Cave are the fossilized footprints of a child and large dog, walking in tandem. Buddies on an adventure.



15,000 years ago

An unmarked grave was discovered in 1914 in Oberkassel, today a suburb of Bonn, Germany. The excavators found the skeletons of a man, a woman, and a single dog along with some other handmade doodads of bones and teeth. It took more than a hundred years for these bones to be properly examined by a forensic anthropologist, who found that the dog had lived only about seven months.

The examiner could determine not only the age of this pup but also even more valuable information in these ancient bones. When analyzing the molecular structure of the teeth, they found that the pup had suffered from canine distemper, a common viral infection in wild dogs, foxes, coyotes, and so forth. In itself, this discovery is not a big deal. But the

scientists discovered that this pup had three serious bouts of distemper beginning in its nineteenth week. This disease is lethal and swift. Without the intervention of humans to nurse this dog along, the puppy would never have survived as long as it did.

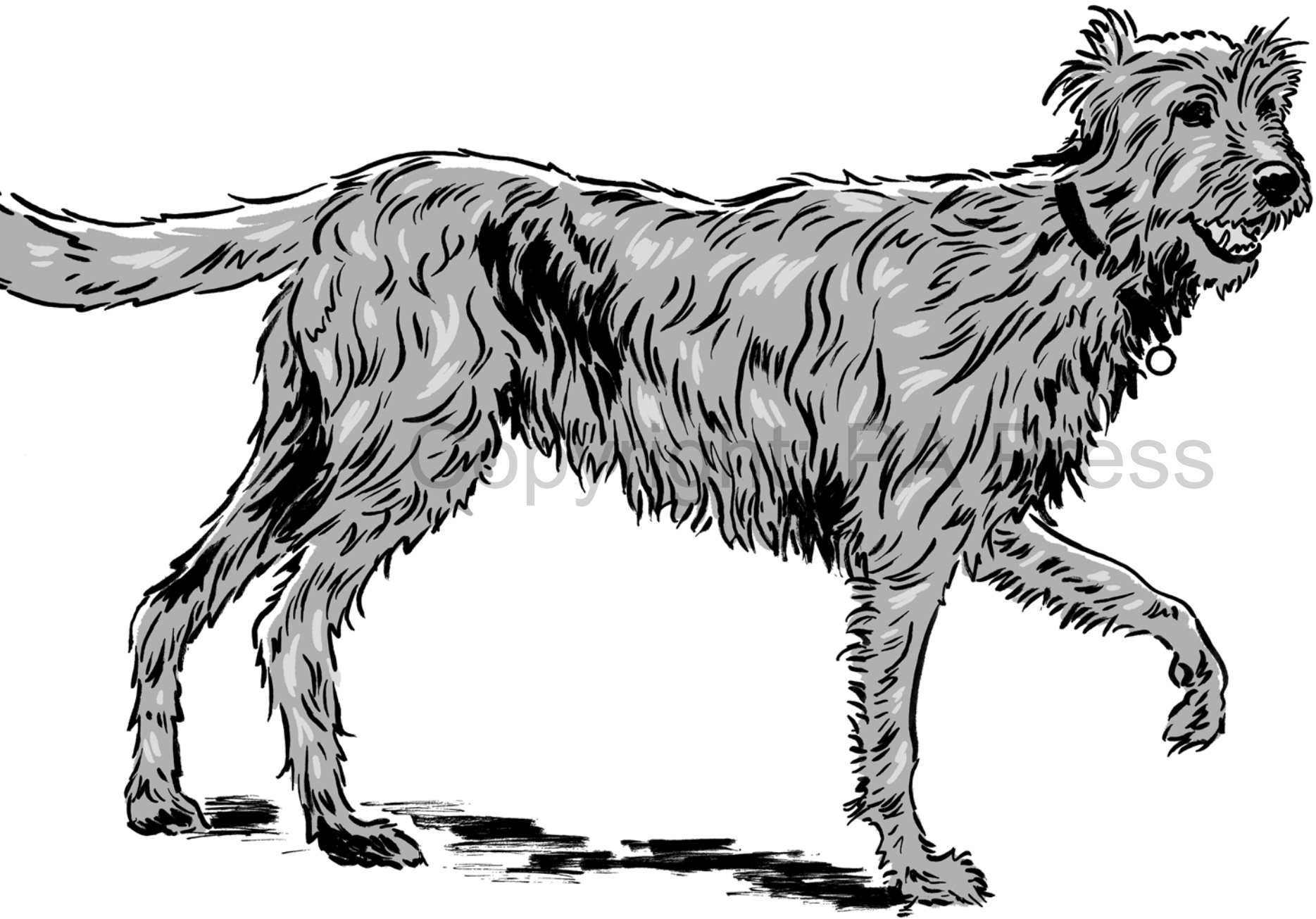
This discovery is valuable on two counts: first, the burial of the dog with the humans meant that this pup was a member of the family; second, the human care administered to help the dog overcome an illness also shows that this dog was a member of the family.

This is evidence of the emotional connection and bonds shared between our two independent, self-reliant species. The mutual attraction has clearly surfaced and taken shape.



How does science know the footprint is a dog and not a wolf? The middle digit on the front paw of *Canis familiaris* is demonstratively shortened. Hence, the proof is in the mud puddle.

Art historians also assert that portraying humans and dogs in cave art for this era and locale was bad juju. The cave artists likely considered dogs an extension of the human family, viewing them as treasured companions, skillful hunters, and courageous protectors.



The Ancient World and the Day of the Dog

Dogs have definitely had their good days and bad days historically as far as human perception and ideologies. These are a few of the good ones.

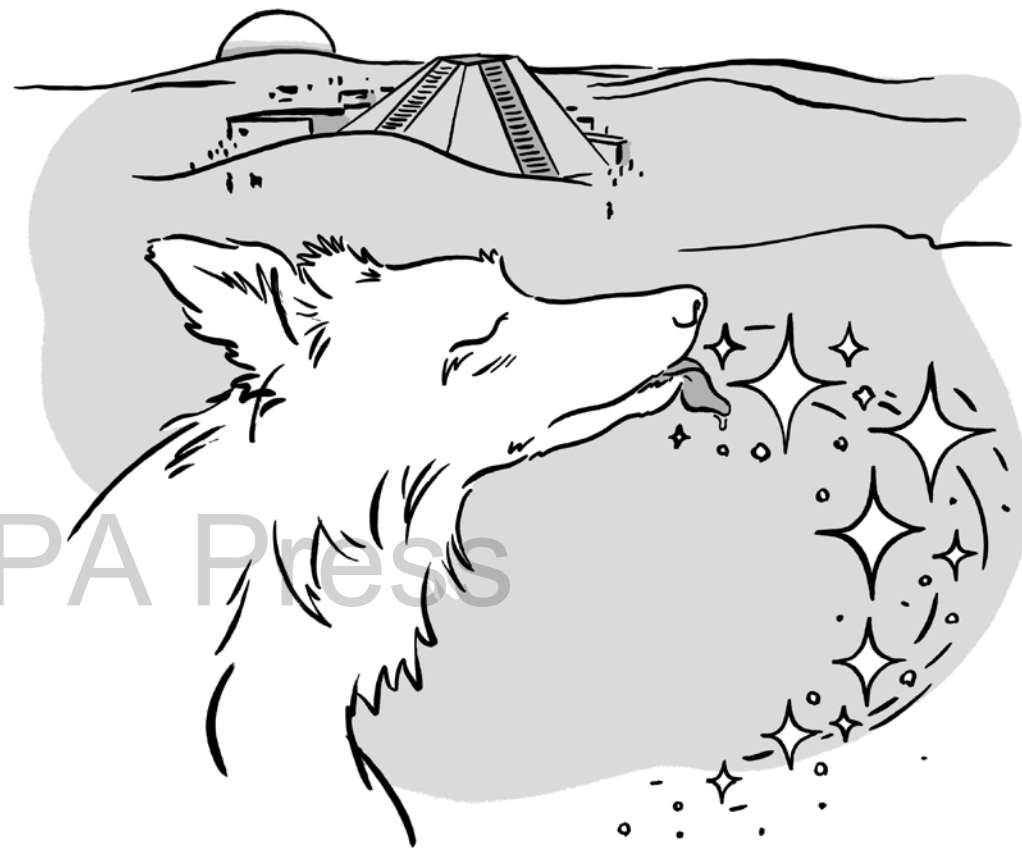
Mesopotamia

The first appearance of herding dogs and their link to divinities goes back to the ancient gods in Mesopotamia with the god of shepherds, Dumuzi.

Note: our rendition of this myth has been highly abbreviated so that we get to the good part about dogs.

Dumuzi was married to Inanna, the goddess of fertility, love, and beauty. Theirs was a frothy relationship filled with lust and laced with contempt, which was not unusual for gods. But what was unfortunate was that her relatives were huge troublemaking buttinskies. Which led Inanna to descend into the underworld. When Dumuzi didn't put up much of a fuss after she was gone, she was understandably irked and took something that was of great value to Dumuzi—his seven Saluki dogs. In a crooked dramatic twist, Dumuzi ended up in Hades and Inanna returned home with the dogs to become one of the most favored goddesses of Mesopotamia.

And then there was Gula, the Mesopotamian goddess of health and healing, who is represented with a large sheepdog by her side. It was believed that the dog's saliva had healing powers, so much so that when a dog entered one of her temples, it was considered a messenger sent directly by Gula to lick away one's wounds. Literally and metaphorically.



It is clear that dogs had an elevated seat at the table when a dog cemetery was discovered near one of Gula's excavated temples. Salukis still can be found in the ancient Mesopotamian region, now known as Western Asia and are one of the oldest breeds of dogs. They are elegant but sturdy herding and hunting hounds.

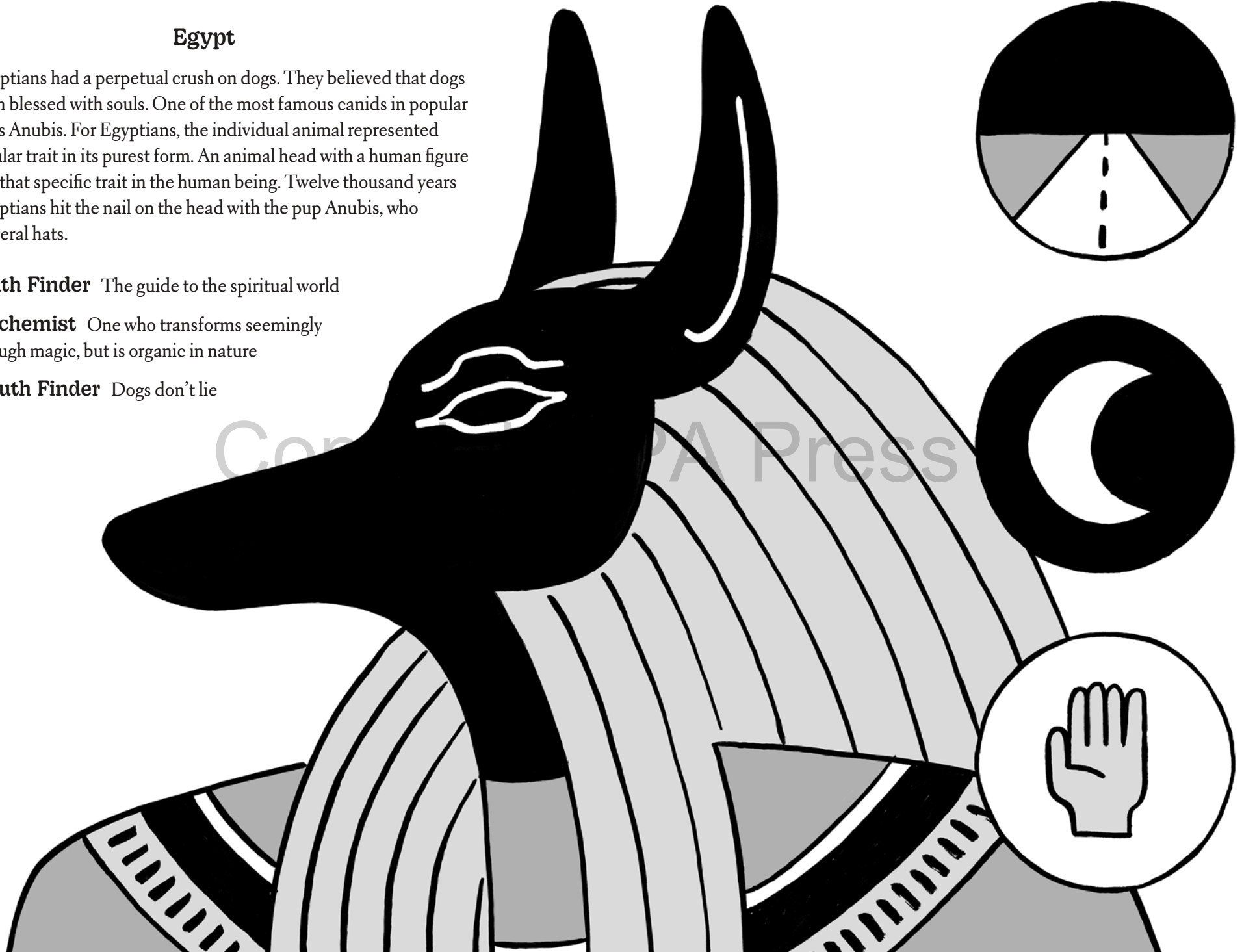
Egypt

The Egyptians had a perpetual crush on dogs. They believed that dogs had been blessed with souls. One of the most famous canids in popular culture is Anubis. For Egyptians, the individual animal represented a particular trait in its purest form. An animal head with a human figure conveys that specific trait in the human being. Twelve thousand years ago, Egyptians hit the nail on the head with the pup Anubis, who wore several hats.

The Path Finder The guide to the spiritual world

The Alchemist One who transforms seemingly through magic, but is organic in nature

The Truth Finder Dogs don't lie



Ancient Greece

The ancient Greeks thought of dogs as geniuses, as possessing a certain elevated spirit.

Plato:

“A dog has the soul of a philosopher.”

Aristotle:

“There is honor in being a dog.”

Diogenes of Sinope:

“Dogs and philosophers do the greatest good and get the fewest rewards.”



Persia

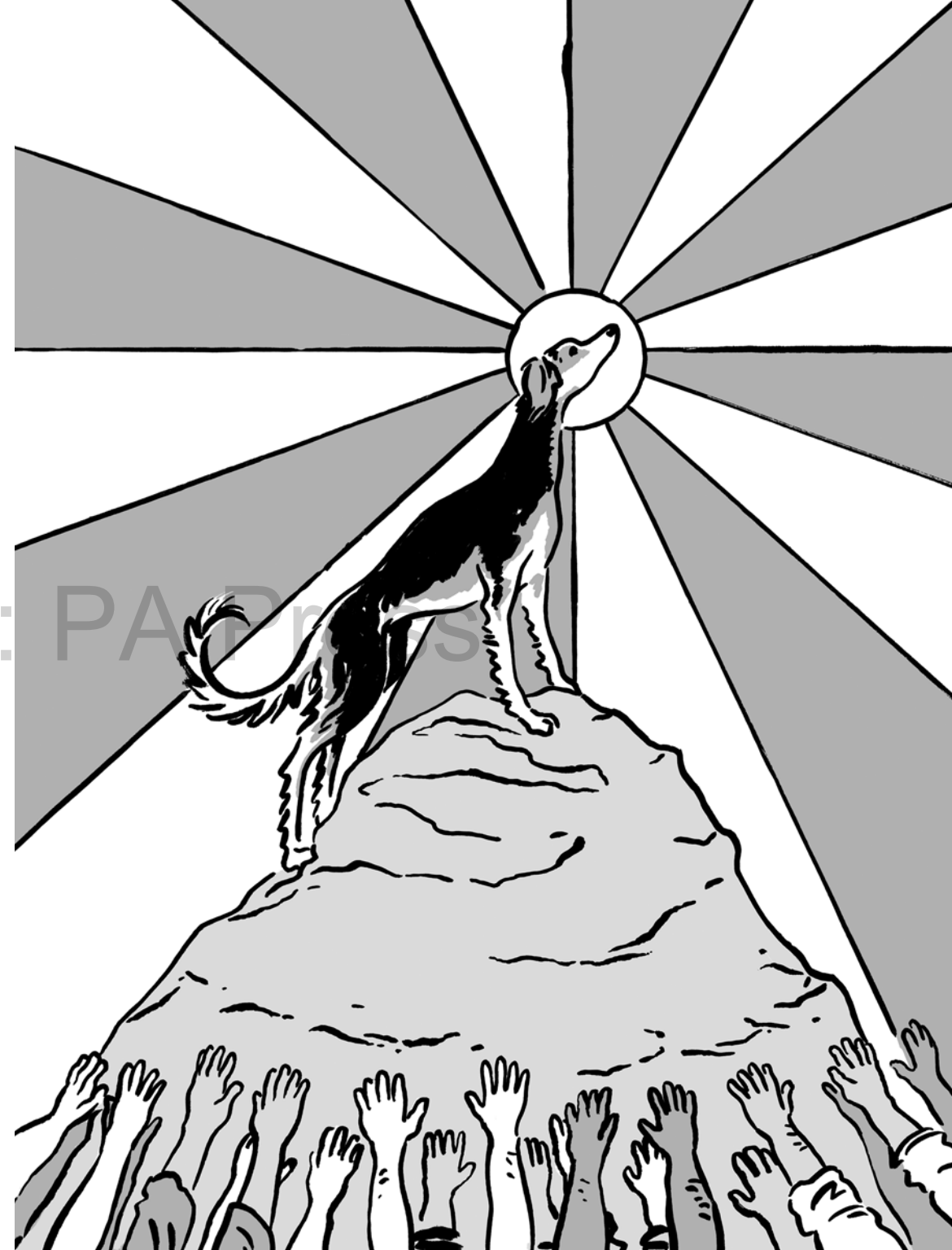
Dogs were associated with divinity by the ancient Persians. The Avesta (Zoroastrian scriptures) contains a section known as the Vendidad, which goes to great lengths in describing the beneficial aspects of the dog to humans. It details how dogs should be treated, penalties for those who abuse dogs, and how such abuse will affect one's final destination in the afterlife. Dogs were said to be the gatekeeper between the world of the living and the dead. If you didn't treat a dog with respect, love, and kindness, your chances of a one-way ticket to Hades were pretty strong. People were to care for dogs just as they would other humans. In fact, dogs were provided with funerary rites on par with humans. A dog's soul was thought to be constituted of one-third wild beast, one-third human, and one-third divine.

Rome

The ancient Romans loved their pet dogs so much that they would add tombstones to their burial site. One read: "I am in tears while carrying you to your last resting place as much as I rejoiced when bringing you home in my own hands fifteen years ago." Other ancient cultures that revered dogs are the Celtic, Norse, Chinese, and Indian.

Central America

The Mayans loved dogs in two ways: first, they were beloved companions; second, as they matured into adulthood, they became dinner. Ouch.



North Africa

The continent of Africa is the home of three of the world's oldest breeds: the Saluki, the Sloughi, and the itty-bitty Basenji, one of the oldest known breeds of dog.¹⁵ At a site in Algeria, there is a hunting scene with small dogs and a Barbary sheep about the size of a German Shepherd that dates back eight thousand years. These dogs look a lot like the Basenji.

Here is one example of the many folktales and myths surrounding the origin of the Basenji.¹⁶

According to legend, one day humans just appeared fully grown and functioning in the African Congo. Nkhango woke up with his fellow villagers along with a strange creature that had pointy ears and four legs, sporting a fireball by his side.

This creature's name was Rukubu.

Legend hints that Rukubu is the granddaddy of the Basenji breed, a dog that doesn't bark because of a peculiarly narrow larynx; instead, it has a yodel. Originally Rukubu could actually speak, and Nkhango took advantage of Rukubu's talents—his gift of fire, his ability to hunt and track prey for the tribe during the day, and his role as a watchdog at night. When Nkhango added messenger to Rukubu's job description, Rukubu finally put his paw down. Rukubu was worn out, and he told Nkhango that he was done being his lackey; he was retiring and giving up his gift of gab to lie beside his beloved fireball for the rest of his days. Hence, no chatting for dogs to come, but still a strong desire to sleep by the fire.

The real dish, according to researchers, is that it's believed that Basenji dogs were bred by villagers to be silent. After all, a silent dog is a better hunter. It's also possible that the yodel sound mimics a jackal or hyena, scaring away predators from coming near their villages.

Basenjis past and present:

- 🐾 Being small dogs, they couldn't hunt large prey, but they did help with rodent control.
- 🐾 The tomb of Pharaoh Inteff II (4,200 years old) has a dog resembling the modern Basenji.
- 🐾 There's a Basenji on a stele from 722 BCE in the Egyptian Museum of Turin.
- 🐾 The Basenji today has over 800,000 hashtags on Instagram (#Basenji).





Falling from Grace

Around 3,660 to 2,600 years ago, the Old Testament appeared, which became the scriptural foundation for the Torah, the Bible, and the Qur'an. Dogs fell far and hard from grace, and their days of being honored and glorified in the eyes of the gods were kaput. What came next has been a complicated cocktail of ideologies surrounding divine exclusivity. The new word on the street was that only human souls would reach the pearly gates of heaven. No dogs allowed. None of the animals Noah collected on the Ark were allowed into the Kingdom of God because they didn't have a higher consciousness and were without a soul. To add literal insult to injury, dogs are primarily referenced in the Bible as negative insults hurled at humans. This ideology still exists in the New and Old Testaments today.¹⁷

But it's not so simple. When more cities popped up, dogs had fewer roles in hunting, herding, and protective howling. Within these dense populations came disease, filth, and yucky contamination, which was blamed on man's best friend.

Today we know that dogs weren't the problem. Dogs were the 1.0 version of the garbage disposal, and they have always loved to clean up our crap. Literally. They are happy to eat whatever gross object, feces, or dead thing that falls on the floor, but we humans didn't know any better than to point our finger at the dog.

On a brighter note, in the past several thousand years we have had some theologies that didn't leave dogs out in the rain.

At the dawn of Islam, 2,921 years ago, Ibn Al-Marzuban wrote that "a dog is more affectionate toward his master than a father toward his son or blood brother to another."



The pre-Islamic Iranian religions of Mithraism and Zoroastrianism had a high regard for the animal world, in particular dogs: "Who kills a dog, kills his own soul."

In the Roman Catholic Church, Saint Roch is the patron saint of dogs. He was born around 1295 and lived in France during the black plague, which he unfortunately contracted doing charity work. Not wanting to infect anyone, he retreated into the forest to die alone. But as fate would have it, he was befriended by a dog who licked his wounds and brought him food. His statue with his dog is in Prague, Czech Republic.

Descartes the Whipping Post

But sadly, beliefs honoring the souls of animals were not popular. As we rolled into the seventeenth century, dogs got kicked even farther to the curb. The famous French philosopher René Descartes gave us “I think, therefore I am,” and *cogito, ergo sum* became a powerful metaphor. He was considered a pretty deep thinker, so that when he came up with his unscientific theory that dogs were simply “machines with blood,” people thought, “Okay, I guess it must be true—Descartes said it.”

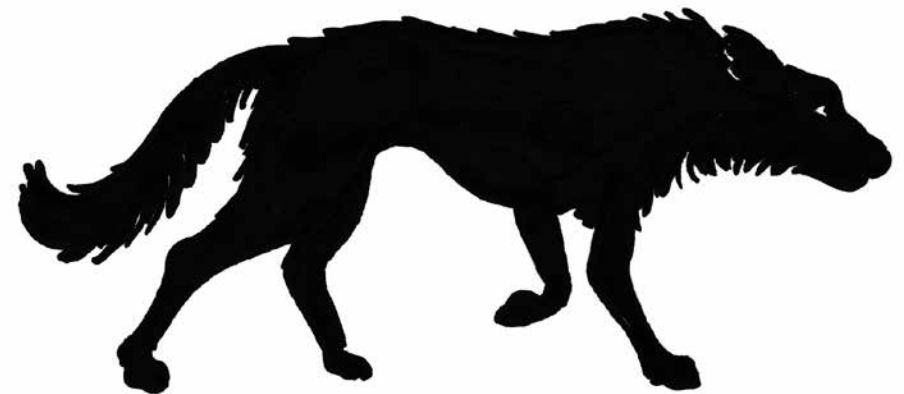
The truth was René was obsessed with learning the physiological as well as the metaphorical mechanics of the human heart. While consenting human subjects were few and far between, he chose to dissect live dogs amid their howling cries of pain. To justify his macabre quest for knowledge, he espoused that since they were not *capable* of creative thought, they could *not* feel pain.

Telling this story to my seventeen-year-old son elicited a single word: “bro...”

Sadly, whether you’ve heard of this guy or not, his assertion has shaped our treatment of animals for almost four hundred years and reinforced the backwoods ideology “It’s just a dumb dog.” His theory was backed up by the Bible proclaiming dogs as dirty, soulless creatures, and here we stand today with a tangled mess of animal abuse and significant lack of animal welfare.

It’s time for cleanup in aisle D-O-G.

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A New Playing Field



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What's Up

We ask that you think for a moment: Why does your dog do the things she does? Any idea *why* she runs out ahead of you on walks, or jumps on people or onto the couch? Depending on your answer, it's possible that you might be relying on a very outdated operating system.

The perception and treatment of dogs is long overdue for an update.

Tell Me a Story

I was visiting my folks for the holidays with my husband, Jay, and son, Aidan, and 'twas the night before Christmas when all through the house, not a creature was stirring, not even Chaser. She had fallen asleep at the top of the stairs right outside my bedroom. Most of the time she was in perpetual motion, but there she lay, with her head peacefully perched on her front paws, her eyes closed, and her beloved blue ball beside her. I well knew the phrase "You wake 'em, you take 'em," but I've never been able to let sleeping dogs lie, so I sat down on the top step beside her and went in for a cuddle.

She immediately raised her head and met my face with a brief lick as I wrapped my arms around her, giving her a little squeeze, whispering in her ear, "Hug, Chaser, hug." She remained still as stone, leaning into me as I repeated this about three times, then gave her a kiss on the head and went to bed.

The next morning, we were all sitting in the living room having coffee when my eleven-year-old son sleepily walked into the room. I opened my arms, teasing him with a "Who needs a hug?" Aidan, with the lethargy of a preteen zombie, headed in my direction but

was beaten by Chaser, who quickly appeared from behind the couch. She wiggled into my arms, throwing her body against mine, which I immediately reinforced by hugging and praising her.

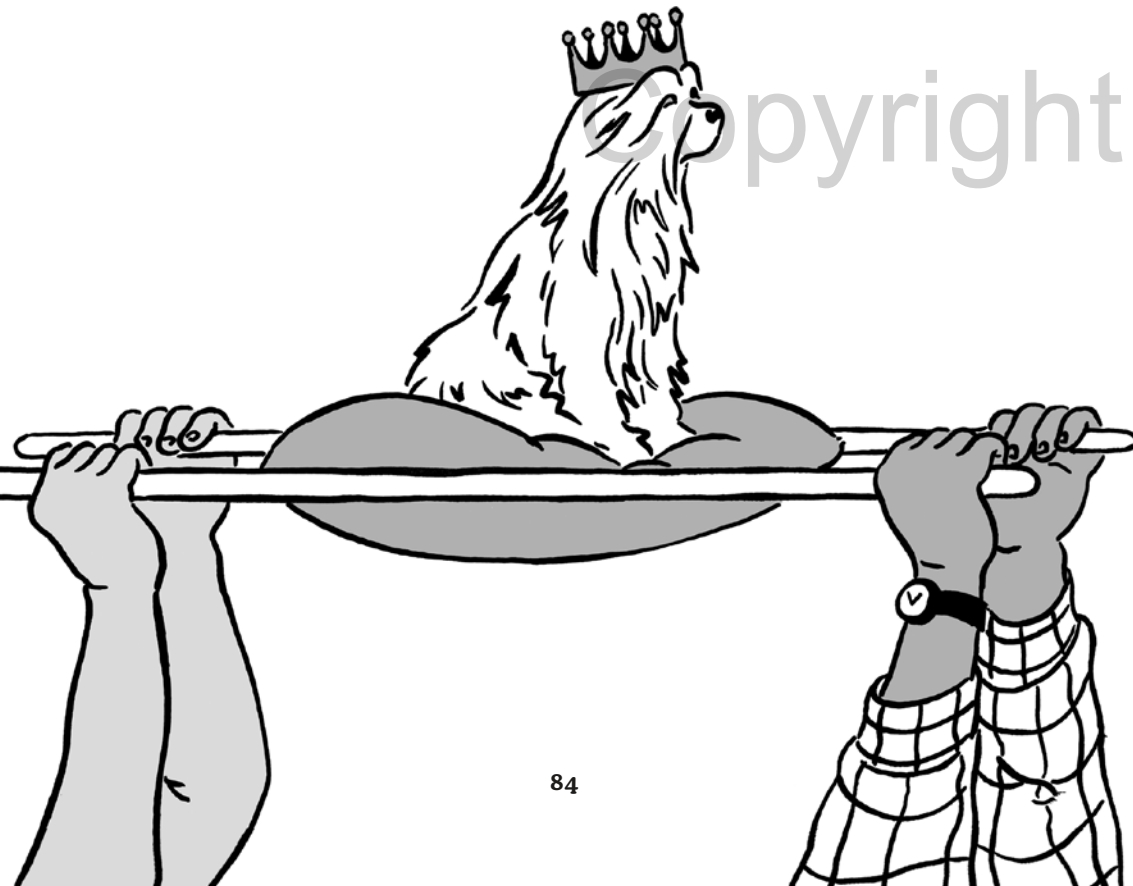
Chaser picked up on our casual morning conversation and responded not only to the word *hug* but also to the open-armed gesture. Just when you think no one is listening! After that, she was more than happy to accommodate any requests for hugs—verbal or visual.

Dogs display this type of understanding every day, and we can no longer dismiss the emotional and cognitive expressions of animals as anthropomorphizing. The rusty wheels of change are finally moving, but we're not there yet.

Old Habits Die Hard

How so? Universally there has not been one uniform way to think about dogs and why they do what they do. Dogs have been thought of in many ways, some valid, some way off base. Science refers to any species that is not human as a nonhuman animal, which itself is a little creepy, but let's go with that for now. As mentioned previously, several hundred years ago nonhuman animals were viewed as meat machines and considered mindless automatons, as professed by Descartes in the seventeenth century. Truly macabre, and it prompted my father and Hilary Hinzmann to write a piece in the Huffington Post for Halloween, titled "Descartes the Bogeyman and the Dog Who's Nailing His Coffin Shut."¹⁸

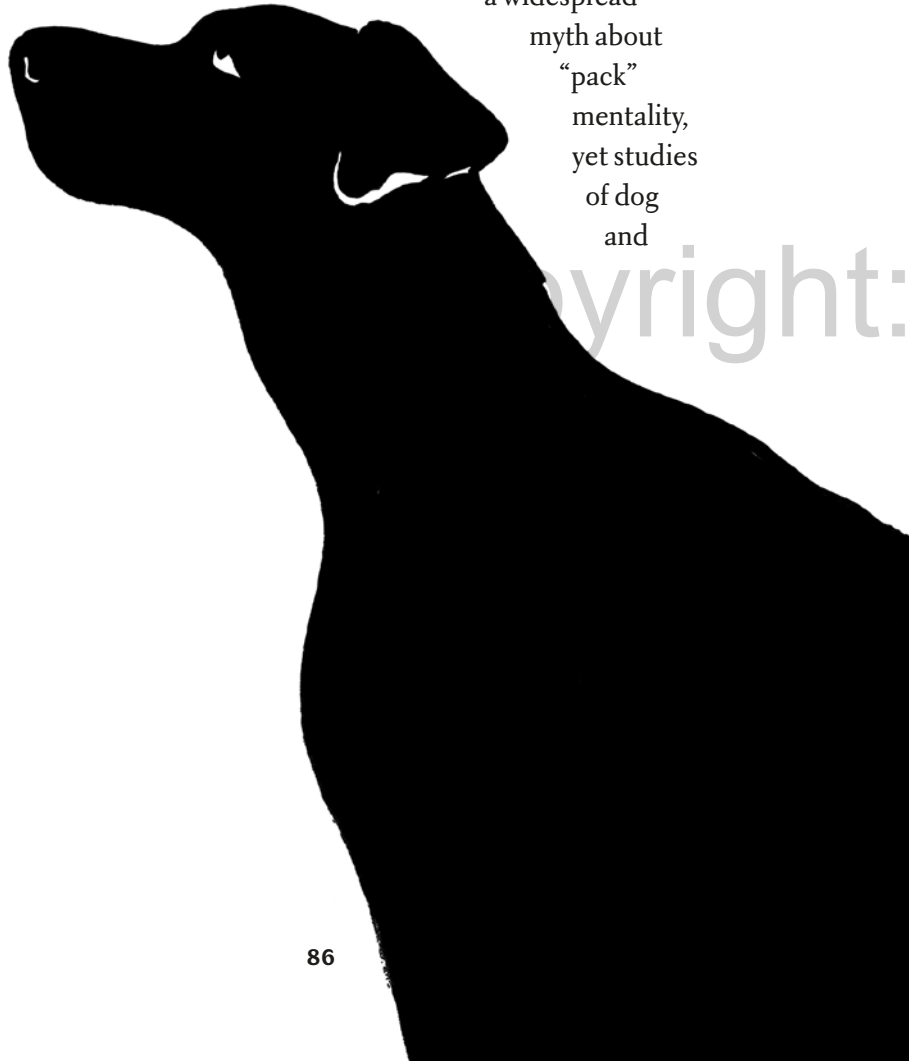
Clearly, dogs are not mindless automatons. They are living, breathing creatures who feel pain just as *all* animals feel pain. In the twenty-first century, this creepy model has been kicked to the curb in the light of scientific understanding. However, despite our much greater and more accurate knowledge of animal physiology, behavior, and cognition, there remain people who continue to abuse dogs and other animals. We now know that animals experiencing pain or physical trauma will seek out analgesics to decrease discomfort and suffering. Research also confirms that when you pleurably engage with your pup, it increases their level of oxytocin—the "love hormone"—as it *decreases* stress hormones.¹⁹



Dogs Ain't Wolves

The twentieth century painted dogs as close cousins to wolves, as essentially immature beasts vying for alpha control of not only fellow wolves but humans as well. While dogs (*Canis familiaris*) and wolves (*Canis lupus*) are related, they are not the same species and have had separate evolutionary paths for more than forty thousand

years. There is also a widespread myth about “pack” mentality, yet studies of dog and



wolf behavior conclude that dogs do not have the nature of wolves, nor are wolves instinctively seeking control. The “alpha” mentality is not symbolic of a dominant hierarchy but is simply a label to identify the mother and father. The “packs” are children, and they work as a family in concert to hunt prey, and like all animals (humans included), their behavior can be testosterone or estrogen driven.



Research shows us that wolves have been massively misrepresented and that dogs are distinctly different in many ways from their wild ancestor.

For the moment, it's a deep hole we have dug for ourselves.

But fear not, we will give you a hand to climb out.

While on the Road to Enlightenment... Trolley Car, Anyone?

In many ways, how we think of our beloved pet dogs is as though we had fast-moving planes, cars, and smartphones but still relied on trolley cars and telegraphs. What many dog lovers think dogs know, understand, and are capable of hasn't really been updated. It hasn't received the reboot that has taken place elsewhere in technology, sociology, and even religion.

But when it comes to dogs as our companions, we can really shoot ourselves in the foot in trying to identify the difference between an out-of-date trolley car and the latest jet engine. What is breakthrough information about dogs and what is myth? Many, many people talk, write, and weigh in about dogs. As we find ourselves immersed in an ever-growing dog culture, discerning quality of information is not always easy.

So what does the twenty-first century dog even look like, and how does this relate to our own dogs? What would it look like to update our thinking about our family dogs and move beyond trolley cars and into the world of jet planes?

It's animals like Chaser, with her open-ended capacity for learning, that usher in a new era for dogs and make scientific developments easy to pinpoint and impossible to ignore.

(Hugs to my dear friend, the writer Julie Hecht, canine researcher and author of the blog *Dog Spies*, hosted by *Scientific American*.²⁰ Her brilliance and generosity of knowledge has shaped the architecture of this book. Trolley cars and dogs—we love them both.)





The Nose Knows

In 2023, we know more about who dogs are and what motivates them than in any decade or century before. Studies of their DNA give us the power to investigate behavioral genetics, which has brought us closer to understanding how the dog's mind takes in and processes information.²¹ The dog's nose is being harnessed so that it can reliably discern and detect relevant molecules, like those of explosives, disease, and bad guys, or search for the dead and the really dead in forensic archaeology.²²

Did you know that dogs can detect a dead body one hundred feet below the surface of water?²³ This is just the tip of the iceberg in how we are using their powerful sniffers. With just a whiff, dogs are happily delivering valuable, life-changing information to us mere mortals about the past, present, and future.

Past Bones, pee, dead things

Present Explosives, drugs, disease, people

Future Epileptic seizures, fainting spells, diabetic alert²⁴

Getting Lost

Somewhere along the way, as humans, we lost the plot and roamed off the path. We came up with faulty conclusions about who dogs are and why they do what they do, and then clung with all our might to fallacious reasoning. This sort of reasoning is understandable because it appears to be simple, concise, and sensible. The danger of clinging to incorrect or outdated mindsets is that they can have detrimental consequences to dogs and their relationships with humans. For example, dogs are often thought to be misbehaving or acting out when they exhibit undesirable behavior. We imagine that dogs are on the same page as us, then determine that if they do something wrong, they

elected to ignore our rules. Unsurprisingly, lots of studies find that punishment-based techniques, particularly those that reprimand a dog after the fact, not only fail to decrease the undesired behavior but make the behavior happen more frequently. So what do we do?

The good news is that we have choices. Chaser and John Pilley are exemplary examples of a new mindset that is not built by clinging to outdated myths or restricted by limitations imposed from the past. By working together, putting in the time and energy, they have moved the goalposts. As a result, we have something new in which to work: a landscape where dog lovers can still employ classic teaching and obedience for safety, well-being, and communication. With Chaser as proof, we realize that another level of communication is possible.

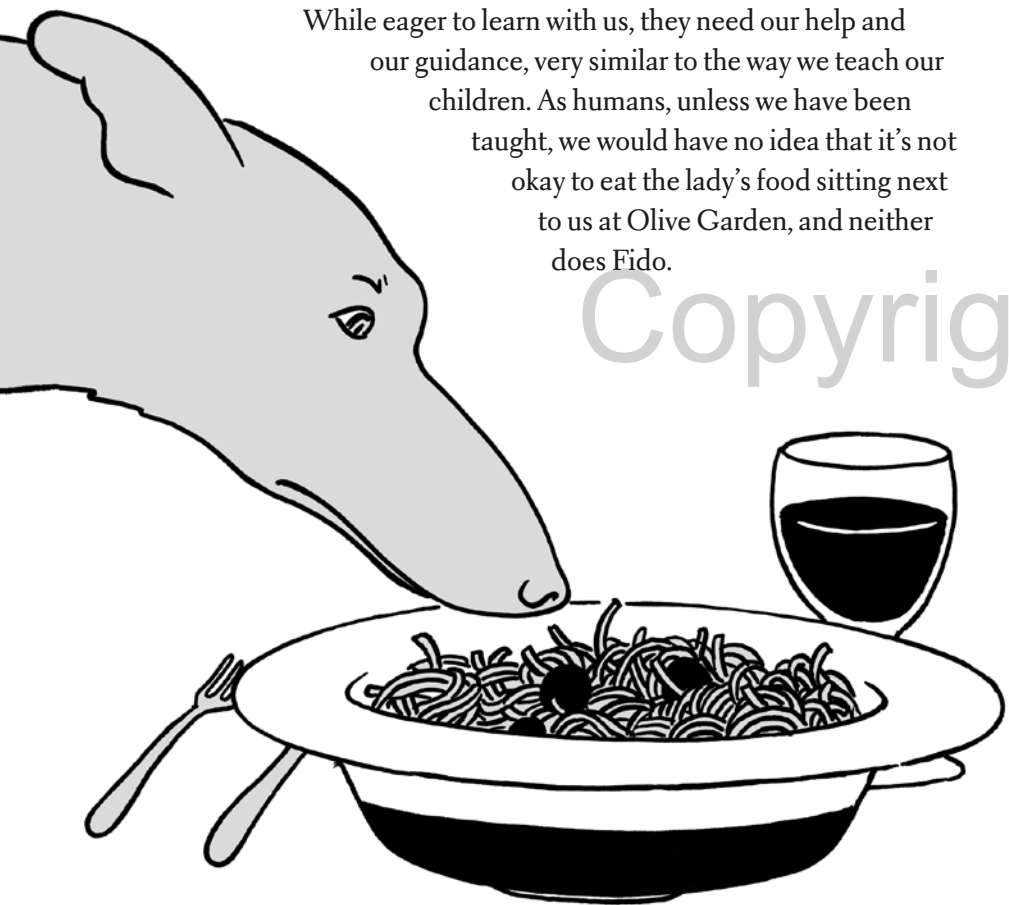
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What's a Doggy to Do?

Family dogs are living in a time of major transition, as they become more and more embedded in our families. More is expected of them, and more often than not, people expect their dogs to inherently know the rules of order. Sit, stay, come, chew this, not that, pee here, not there. But despite thousands of years by our side, they are not preprogrammed to know what to do in the human home.

While eager to learn with us, they need our help and our guidance, very similar to the way we teach our children. As humans, unless we have been taught, we would have no idea that it's not okay to eat the lady's food sitting next to us at Olive Garden, and neither does Fido.



Obedience

What we do know is that dogs are primed to engage with us. Chaser's learning highlights how certain types of interaction and learning can be more effective than others. In so many ways, our lack of imagination in recognizing their capabilities reflects our own lack of insight. Obedience is often the aim for family dogs of the twenty-first century, and while these basic skills are important, Chaser reminds us that dogs are capable of much more.

Obedience was never our goal with Chaser; it was simply a way to provide safety so that we could further enlarge her world.



Yin and Yang

In this contemporary culture, it's balance we are seeking. The yin and yang symbol is drawn in many ways, primarily using koi fish to symbolize the duality of the natural world and the rotation of the earth from west to east. The metaphors of black and white represent polarity in perpetual motion, denoting a sense of harmony and peace.

Dogs clearly demonstrate the elegant simplicity of this artful and nature-driven philosophy.



Philosophy

of

Dog



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What's Up

**“Acknowledging dogs’ loving nature
is the only way to make sense of them.”**

—Clive Wynne²⁵

Tell Me a Story

It was early evening on June 16, 2018. I’m not exactly sure of the time, but I remember that the unbearable heat of the past week was more tolerable as the sun slid behind the trees surrounding my father’s terrace. The French doors were wide open, allowing a soft breeze to wash over my dad as he quietly rested after a flurry of late-afternoon visitors. Earlier that day, he had smiled as we blasted his favorite Harry Belafonte song over the speakers, watching us dance and sing like we did in 1978.

We were grateful to have such a serene environment the past six days in hospice after the brutal harshness of the previous fifty-three. It was a waiting game at this point. Even sleeping, my father was still stubbornly clutching his fists around the sheets, refusing to let go. Dogged determination had never let him down in the past, so this was a first. As he slipped in and out of consciousness, Chaser padded around the room, wandering in and out, soliciting likely playmates in the lobby with her blue ball. Earlier in the week, she had sat in the large chair by his bed, gingerly leaning in to meet his outstretched hands, but she preferred to mingle and greet people as they came and went. She welcomed any reason to leave the room, and while she had never been

a touchy-feely dog, she would frequently come and plaster her body next to my legs for a full-body hug.

Chaser had been a trouper, and all of us had done our best to stay positive and give her some semblance of normalcy after Dad was diagnosed with leukemia in late April. My mother, Sally; my sister, Robin; my husband, Jay; and I were now sitting around a coffee table in his room when Chaser stood up, positioning herself directly in front of my father, about four feet from the foot of his bed. Her tail was down, tucked against her hindquarters, with her shoulders squeezed tight against her chest. Her head was low, her ears pinned back against her head. She stared at him for several seconds and then let out one very loud, sharp bark, standing stock-still as she continued to give him her “Border Collie eye.”

It stunned us into silence as we looked from one to the other, goosebumps creeping up our arms and down our necks. Chaser was not commanding him to “wake up”; she was bidding him “goodbye.” My father peacefully transitioned to his next adventure at 6:00 A.M. the following morning.

Dogs Are the Gateway²⁶

Dogs are our direct connection to nature, the gateway to understanding more about the natural world as well as all animals. In ancient cultures they were literally the gatekeepers to the afterlife, and today they are here by our side to guide us into this next phase of humanity, with deeper gratitude and humility about what we know and, more important, what we do not know.

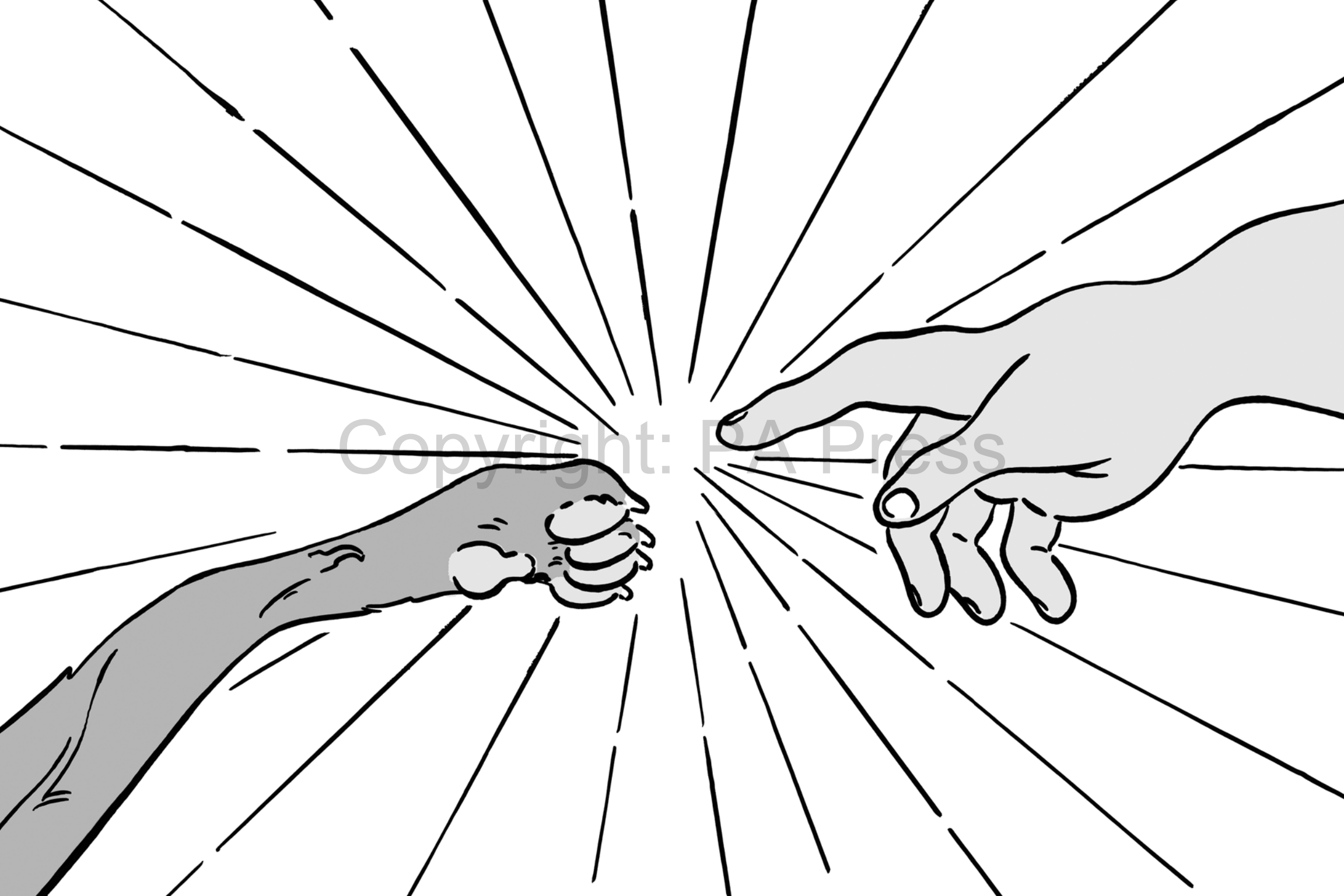
Dogs' Gravitational Pull

Have you ever seen a dog (or cat) lazing in the sweet spot of sunlight? Instinctively, they are perfectly positioned, peacefully dozing in that tiny sliver of light that illuminates their velvety fur and makes us want to reach out and touch them. We have a yearning to step inside that timeless, warm, luxurious moment of solitude and cuddle up beside them.

No amount of yoga will ever bring us to this elusive spot.

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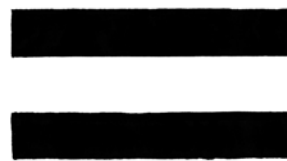




Dogs Are the Answer

What if dogs are the answer? Imagine if we can behave more like dogs, to love and play and see the beauty in everyone regardless of religion, politics, socioeconomic divides. What if we look at one another through the eyes of a dog? We all have the capacity for enthusiasm and appreciation of others. We each have something joyful to share. We all want the same things: food, shelter, a person or family who will love us warts and all, ending with a warm snuggle at night.

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Dogs Look Alike Everywhere in the World

A dingo in Australia looks the same as a Carolina dog in the United States. A Pomeranian in Japan looks the same as one in France. Dogs speak the same language globally—bridging all human socioeconomic divides.





Why Don't They Give Up on Us?

What is it about this animal that doesn't give up on us? That provides us with comfort and companionship, love, devotion, and adoring physical touch despite a past that might have included unimaginable abuse or neglect from another human. Their spirit represents the purest of humanity, unadulterated loyalty and love that uplifts us beyond any redemptive quality we might possess as humans.

Groundhog Day

Dogs protect us, fearlessly give their lives to seek out bombs and bad guys during war, sniff out disease, and then snuggle with us at night just to wake up and do it all over again with unbridled happiness. No boredom or snarkiness, no waking up like us, grumpily looking at our significant other and thinking, "Oh, it's you again." Nope, every day is like Groundhog Day with dogs, they wiggle with joy and gratitude, wagging and woofing: "YAY, IT'S YOU AGAIN!!! THIS GONNA BE THE BEST DAY EVER!!!!"



Magical, Mythical Creatures

What is
more magical
than these creatures?

Not dragons or unicorns,
because dogs certainly possess the
same mythical traits as the winged
fire-breather in their innate fierceness
to defend us. Dogs are unequivocally as
beautiful as the horned horse, with the ability to calm
and elevate us just when we need it most. It's also about
time that we, as a species, get to know *them* better as the
remarkable, mind-blowingly intelligent species that they are,
not simply some Instagram or TikTok moment.



Dogs Are the Mystery in Plain Sight

Most dog owners understand that *Canis familiaris* is “it.” Dogs are the divine, the godlike, they hold the answer—the holy grail in plain sight. They are the world’s greatest commodity and common denominator.

Dogs and humans have a longing to *belong*.

be·long·ing

\bi-'lŏŋ-ŋ, bē-\

noun

1: POSSESSION—usually used in plural

2: close or intimate relationship²⁷

Our definition: a physical nonorganic aching that is generally described to be in the upper cavity of the chest, mysteriously filled with another being’s love, devotion, and adoration beyond any capacity we ever imagined.

*A dog that is loved
has a place where they belong
In the place where they belong,
is a human that is loved.*



Dog 101

Copyright: PA



Tell Me a Story

What's Up

If you've gotten this far (or just flipped open to this page), you will be sold on the notion that *dogs and humans need each other* and that dogs have much to teach us. We will be taking a dip into Dog 101. Think of it as psychotherapy and the first step in understanding your dog.

Another part of psychotherapy is letting go. Letting go of outdated paradigms and old-school thoughts. Understanding that obedience is not the goal of your relationship and that if a behavior is aversive for you (getting yanked by the neck) it probably is for your pup too.

While research affirms our connection, dogs and people are not always on the same page. Dogs can easily have their own version and understanding of a situation, which may not be the same as what we *believe* we are conveying. This occurs whenever there is a language barrier, even when it's within the same species.

Chaser understood the concept that words had meaning, and she had reached the point where she learned new words and phrases on one trial alone. And many times, whether we wanted her to or not. One day, we were all piling into the car and my father opened the back door for Chaser. She normally hopped up effortlessly, but for some reason she hesitated before jumping into the back seat. My father, in his gentlemanly nature and sweet drawl, asked her, "Do you want me to help you?" Unfortunately, in the precise moment he posed his question, she was already in midjump as he awkwardly tried to boost her up. This clumsy maneuver accidentally twisted her legs, which elicited a tiny yelp. After that exchange, whenever we would ask her, "Do you want me to help you?" she would frog hop as fast as she could to avoid assistance. She learned that "Do you want me to help you?" meant "Now this is going to hurt."

This is a prime example that our difference in definition is more common than people realize, and it's usually the human who is the problem child.

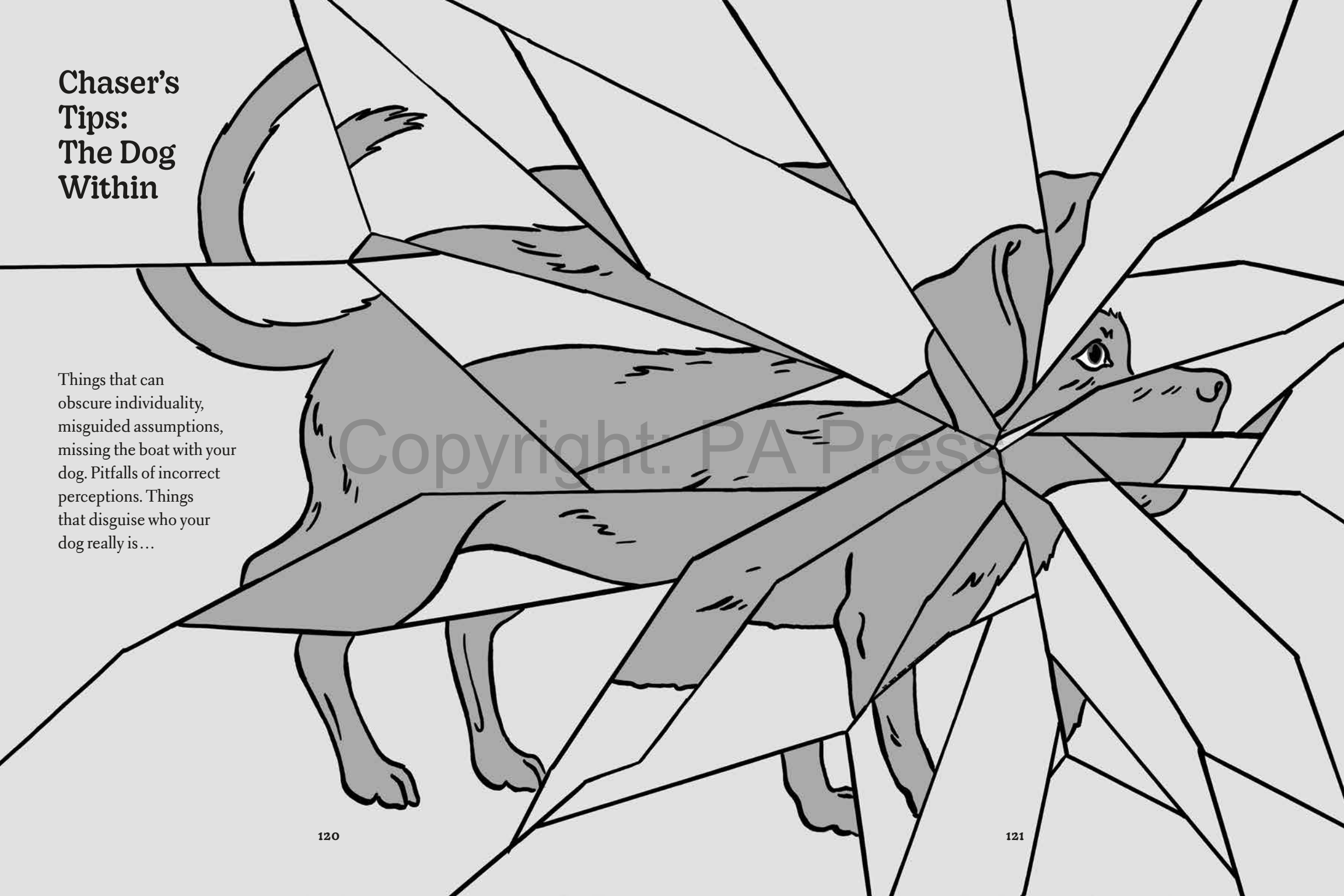
While dogs are not always on the same page, Chaser shows us that it's possible to get there.

Your new dog is a new dog, whether they are a puppy or an older rescue. The following are bumps in the road that we all trip on without knowing it.

Chaser's Tips: The Dog Within

Things that can obscure individuality, misguided assumptions, missing the boat with your dog. Pitfalls of incorrect perceptions. Things that disguise who your dog really is...

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New Experiences

Just like humans, all dogs come with their own genetic blueprint. Life experiences that are unpredictable and difficult to anticipate also contribute to the development of each dog's personality. What excites one dog completely freaks out another. Learn to identify happy from horror and tackle them together.

Expectations and Breed

Unrealistic expectations about who a dog should be or the dog's intended role in the family can really bugger up our relationships.



Breed can be a slippery factor in obscuring individuality. Understanding the generalities within breeds is important, but it does *not* dictate what a dog is going to be like behaviorally. Having behavioral expectations for a particular breed can often lead us to miss the individual nature of a dog.



Comparisons and Appearance

Comparisons to past dogs is a big one that can have us wading in the weeds. Embrace this new dog as a *new* dog. It's a clean slate, and while your new pup may be the same breed or color as your previous beloved, the relationship you carve out with this new munchkin will be unique.



Appearance gives us physiological information, like whether your dog is a powerhouse, a speed demon, or a slowpoke, but it doesn't give us insight into who the dog is behaviorally or emotionally. Some large, tough-looking dogs are big babies, and sweet-looking little dogs are honey badgers.



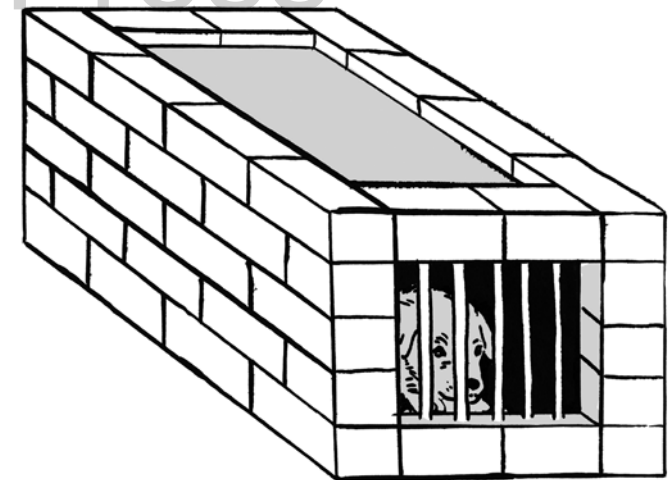
Big Bummer: Puppy Mills and Backyard Breeders

Yes, the cute doggie in the window at the mall comes from either a puppy mill or backyard breeder. It could even be your wacky neighbor, known as the crazy dog lady with too many dogs to count in her smelly backyard. These unfortunate puppy makers are breeding grounds for “desirable” breeds, which sadly set up each dog to fail by separating them prematurely from their mother and littermates, denying them a critical period of social development. Normally (or abnormally) they have no room to roam in overcrowded, unclean cages that are rife with icky diseases. These disreputable breeders create emotionally unstable dogs that largely end up in rescues.

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Previous Experiences

Failure to consider previous life experiences and how they have shaped your rescue dog is a huge miss. The *new* member of your family has a *past*. The sources of their quirks and what we consider undesirable behavior can be difficult to diagnose. As a result, the behavior can be particularly challenging to modify if you aren’t an experienced dog owner.



Body Language

“I wish my dog could talk.” (They do—shut up and listen.)

Happy or anxious? Cute videos can sometimes miscommunicate. Learn how to decipher what your dog is conveying. Dogs have eighteen muscles in their ears alone, and they can move them independently! Ears give us tons of information. Can you imagine if our ears gave away our emotions as humans? Contrary to the classic painting by Cassius Marcellus Coolidge, *Dogs Playing Poker*, dogs would be terrible poker players. Dogs use their ears, eyes, mouth, tail, and body to give us a very clear representation of what they are feeling.

Social media is filled with videos of animals that go viral because they are so darn cute. But on the flip side, many of these videos are actually animals in distress. When we misinterpret their behavior as seemingly silly, we are taking a bad situation and making it worse. You can easily identify physical signs of distress and anxiety, and when these are coupled with vocalizations, it gives a clear picture of what your dog is trying to communicate.

There are a couple of doggie behaviors that we humans commonly misread.

Butterfly kisses. These are lightning-fast licks and are many times mistaken as a cute sign of affection, but they can also be anxiety driven. Ignoring this cue is a huge misstep.

Whale eye is a little more subtle. This is when the white of the dog’s eye looks like a half moon, and it comes out of an instinctual behavior of wanting to look away but at the same time needing to keep an eye on what’s going on.²⁸ It’s good to check out your pup’s body language when they are exhibiting this dodgy move to give you greater insight as to *why* the whale eye.



Canine Body Language

I like you—can we be friends?



'Sup?



I am a happy camper.



I don't wanna do that
(stressed lightning-fast
nose lick; butterfly kisses).

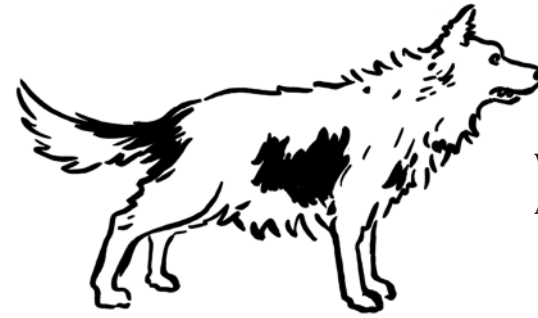
Have I told you I love you?



If you like it, you do it.



I'm in my head and having a panic attack.



Who are *you*? And why are you here?
And I think you should go now.



I'll be there in a minute—
just a little sniff will do...

Who *are* you?
(Wiggles of happiness.)
My new BFF!!



I'll do it, because I love you.
But do I have to? I'm jus' sayin'.



I'm not sure what you're sayin'
but you have my interest!



I went to the vet last week—
I'll take a pass this week.



Is this hug really necessary?

My back is itchy or I'm being submissive.



You are in my space—back off.



Jus' chillin'.

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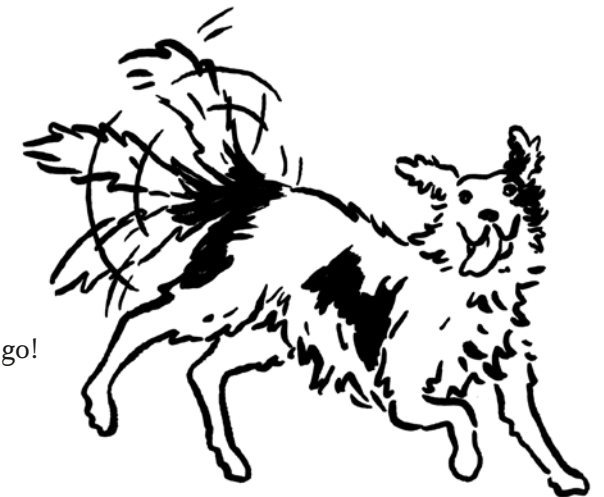


I mean it, leave me the #\$@! alone.

I don't like you.
I'm scared/angry/cranky—
leave me alone or else...

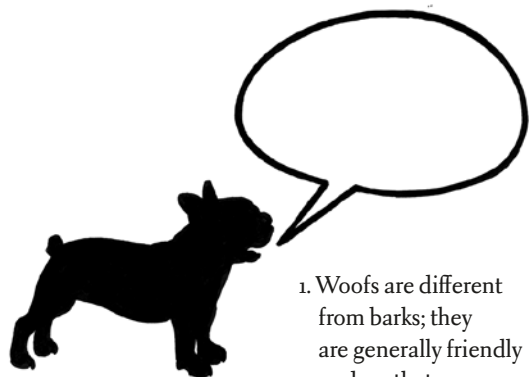


I'm so excited!
Let's go, let's go, let's go!

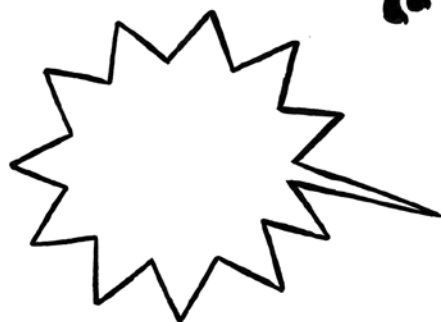


Chaser Guide to Different Woofs

These are some of Chaser's different vocalizations and what we have observed them to mean. Your dog will probably have similar sounds as well as their own repertoire. When we combined these with her body language, it gave us even more information to identify what she was communicating.



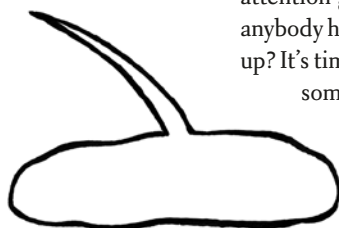
1. Woofs are different from barks; they are generally friendly nudges that are "sotto voce" (under the breath).



2. Barks are sharper attention-getters and can be friendly, anxious, or threatening.



3. Soft, low single woof—an attention-getter that says "Is anybody here?" "Can you hurry up? It's time to play, walk, eat, or something I want to do, it's not urgent, but—whassup? Check out my pine cone."



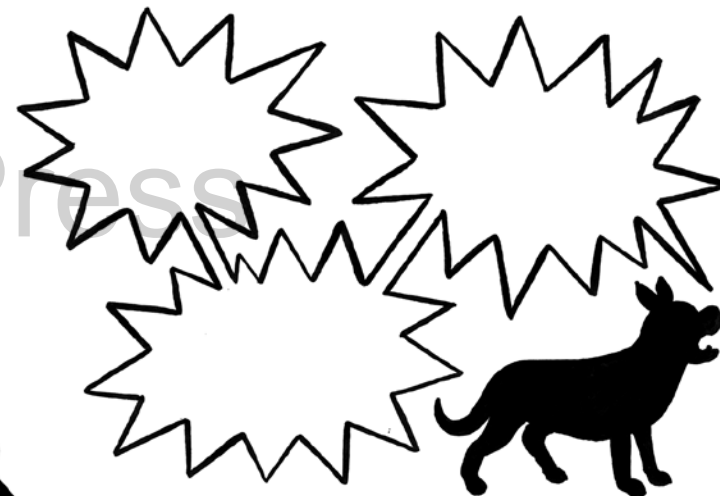
4. Higher pitched and short. A cross between a woof and a bark, can be used to say "My ball is stuck under the couch—can you reach it?" or "I think I might have to pee."



5. Medium-volume barks in rapid succession: "You gotta pay attention—I really need you to look at me, and action is needed!"



6. High-pitched yelp: "Crap, that hurts!"



Doggie Do

Pay attention with your eyes *and* ears.

Doggie Don't

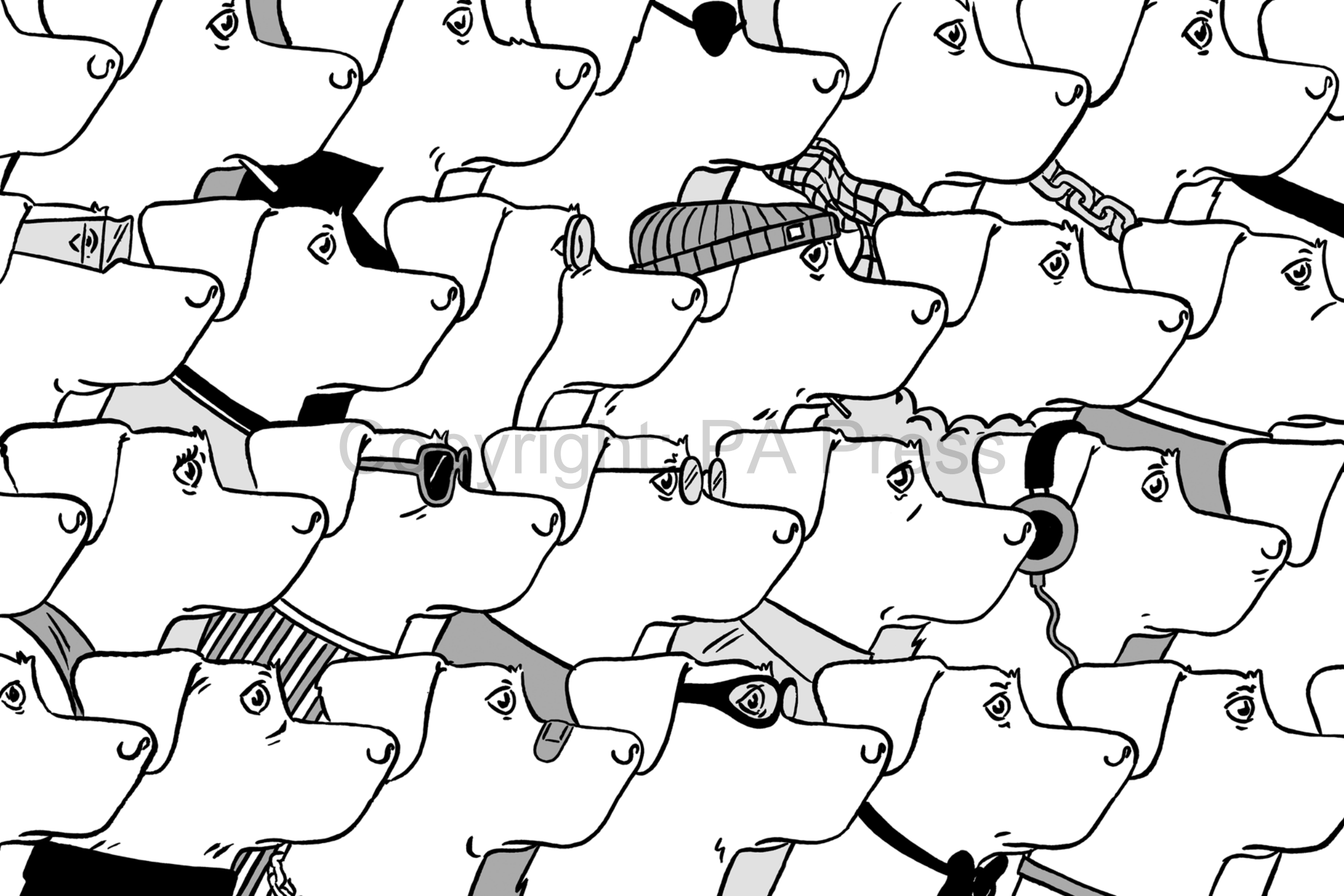
Ignore the vocalizations of your dog.

The Slippery Slope of Breeds

The diversity of breeds and the speed at which they can be modified through selective breeding is head-spinning. So, while it's good to be aware of the unique characteristics that breed can bring into the picture, it's critical to understand your dog as an individual. To emphasize our point, think of it like the fields that humans specialize in: there are scientists, artists, athletes, caregivers, teachers, engineers, and so on. Then within each field there is even greater specialization. In music alone, there are countless instruments as well as intellectual categories like pedagogy, theory, ethnomusicology, and business. We would like to believe that most of our careers are chosen because of an inherent *interest* that brings each of us some degree of satisfaction. One that allows us to scratch our personal itch, and if we can be in a profession that enables us to scratch that itch, we'll probably be successful in that job—because we like what we are doing.

The same philosophy applies to dogs. There is truly a dog for every lifestyle, and it's generally a good idea to consider a breed that will be copacetic and synergetic with your own. But buyer beware! As canine historian Giovanni Padrone warned, "You can rapidly extinguish a trait that has literally taken hundreds of years to develop by overbreeding. It is very, very difficult to put it back in." Everything hinges on the breeder. For example, Border Collies are working dogs—they love having a job to do. That is, unless they come from a breeder who just likes the look of a Border Collie and has no interest in developing their inborn skills to herd. If you don't use it, you lose it.

And for those courageous individuals who march down to the local shelter and adopt the scruffy, unidentifiable mutt: you are angels on a worthy mission, and hopefully our personality decoder might help you identify your new family member's temperament without ancestry.com.



Dog Personality Identification Decoder: Your Dog Is an Individual

John Pilley, aka jwp, was a master at extracting his students' passions by asking them questions, quietly listening, and encouraging them to follow their bliss. He was also a huge fan of the Myers-Briggs Type Indicator (a simple but lengthy ninety-minute questionnaire that gives insight into personality type and its subcategories). It gave his students a greater understanding of their strengths and interests when they had difficulty defining them themselves. *The same goes for dogs.*

Breed is a broad first step and can point us in the right direction, but as my father did with all his students, he paid attention not only to their words but to their *actions*, their behavior. And he applied the same techniques to Chaser, homing in on her likes, dislikes, strengths, and weaknesses. He then used what he learned to further build on her capabilities. It's important to understand the broad strokes before diving into the details.

Chaser's Doggie ID Calculator

1. Border Collie—*breed*
 - A. Linguist: she loves words
 - B. Herder: includes cats, toys, children, sheep
 - C. Worker: loves to have a job to do
 - D. Creative problem solver
2. Socialite—*Is your pup an introvert or extrovert?*
 - A. Loves people
 - B. Believes the world revolves around her
 - C. Does not like dogs
 - D. Sparkles when there is a lot of activity

3. "Soft" dog—*Does your dog care if you get loud and boisterous or do they hide?*
 - A. Sensitive to failure
 - B. Doesn't like confrontation, arguments, or loud voices
 - C. Cautious in trying out new activities
 - D. Submissive to other dogs

4. Two-year-old toddler—*What traits of a toddler does your dog share?*
 - A. Play is her middle name
 - B. High, high, high tolerance to repetition of games and silliness
 - C. Pushes the envelope in manipulation and having her way
 - D. If she doesn't enjoy something, she either flatly refuses to do it or will do it in full-fledged "hangdog" mode, painfully sloppy and slow, rendering the entire request unusable. It is at this point we throw the blue ball, which immediately hits Chaser's reset button.



Here is a template. If you can fill in the blanks, it might get the juices flowing to think about who your dog is as an individual. Please feel free to anthropomorphize. This is a safe space, no judging.

Doggie ID Calculator

Breed of your dog (or insert whatever they look like):

List four classic traits of this breed that your dog exhibits:

- A.
- B.
- C.
- D.

Is your pup sensitive or willful?

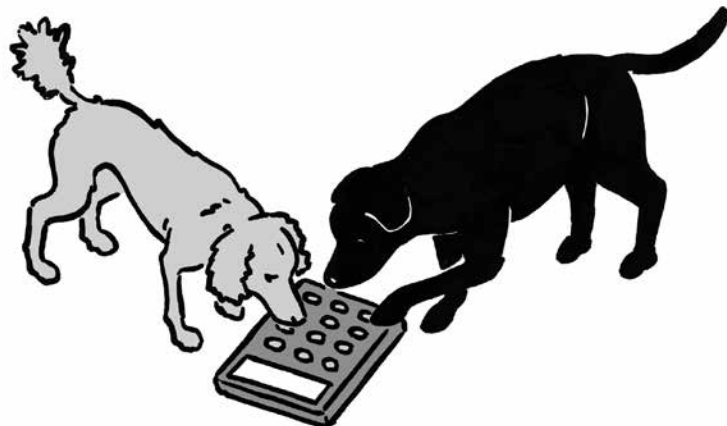
- A.
- B.
- C.
- D.

Is your pup an introvert or extrovert? Name four reasons why:

- A.
- B.
- C.
- D.

What toddler characteristics does your dog share?

- A.
- B.
- C.
- D.



Reset Buttons

We all need reset buttons. This is another lesson to learn from dogs: the ability to let go. The simple behavior of a shake-off literally reduces dog's blood pressure.²⁹

Obedience Is Not the Goal of Your Relationship

Parents of all species—dogs, domestic cats, wild cats, wolves, ducks, and most important, humans—draw hard lines in the sand for their baby’s well-being. Safety is nonnegotiable; there must be an

introduction to discipline, which is not to be confused in any way, shape, or form with abusive methods. The discipline we are referencing is not an authoritarian obedience but is derived from the Latin origin of the word *disciplina* to mean “instruction,” “knowledge.” In these first few weeks, what we are doing is setting the dog up with a set of skills intended to enlarge their world, not shrink it. Without establishing boundaries, we can’t possibly move beyond them.

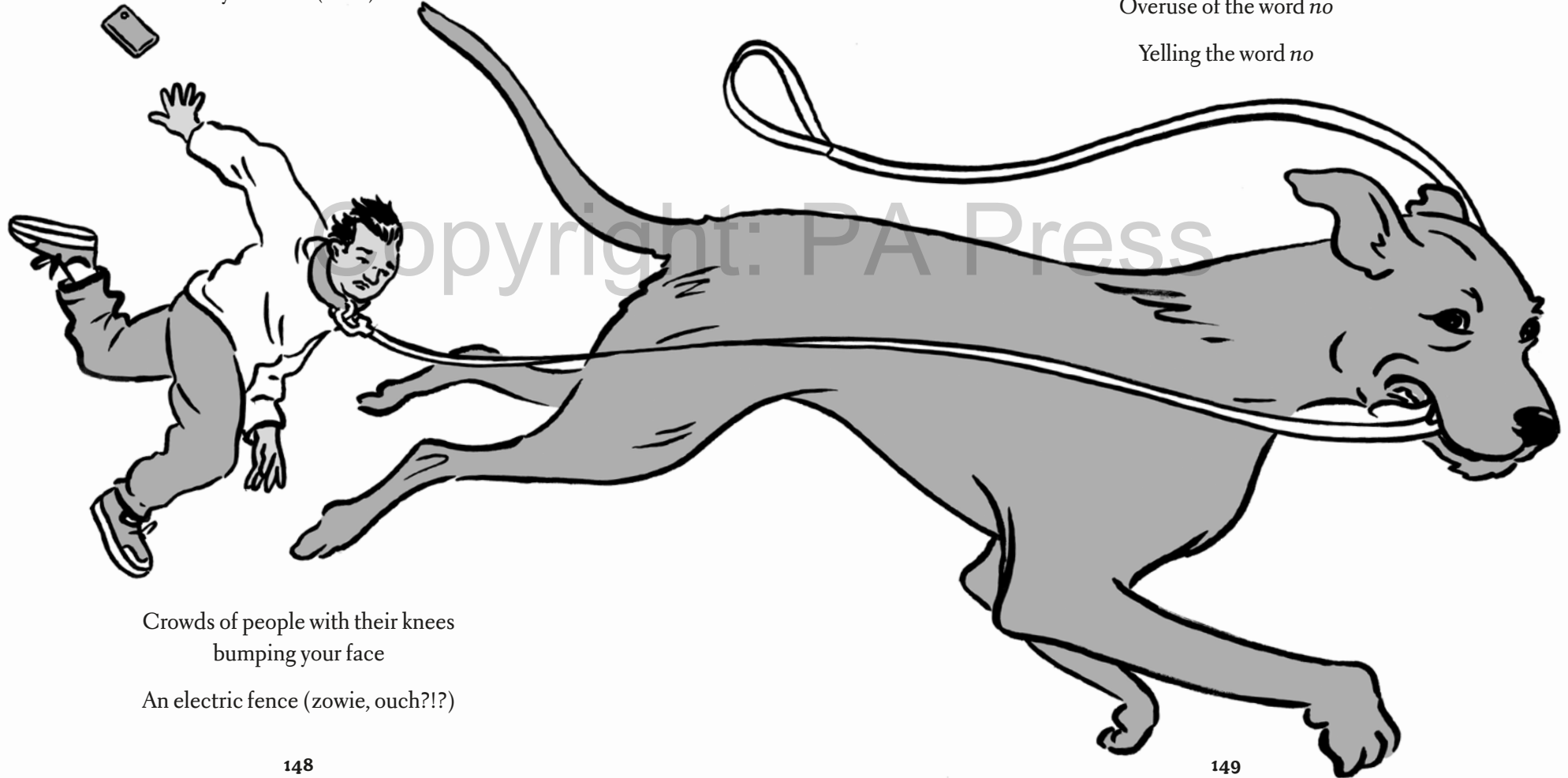


Bad Behavior (Yours—Not the Dog's)

If you don't like it, your dog probably doesn't either:

Yanks on your collar/leash³⁰

A collar that has prongs digging into
your neck (owie)



Crowds of people with their knees
bumping your face

An electric fence (zowie, ouch?!?)

An unexpected hug that is too long from someone who kisses you
on the mouth and whom you haven't seen in fifteen years.

Mom, seriously, a little protection, please?

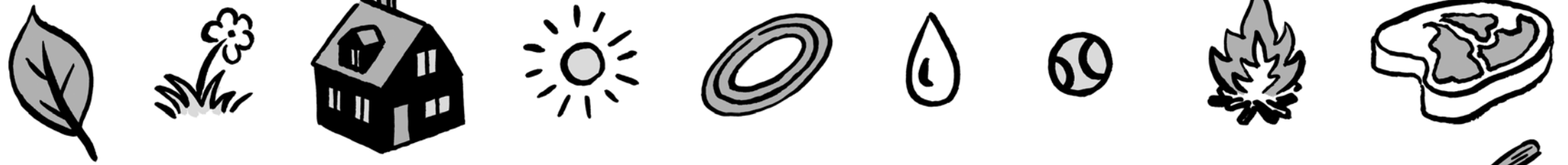
Locked in a crate for eight hours with nobody around

Locked in a crate for eight hours with people around

The word *no*

Overuse of the word *no*

Yelling the word *no*



Welfare

“Our task must be to free ourselves, widening our circle of compassion to embrace all living creatures and the whole of nature and its beauty.”

—Albert Einstein³¹

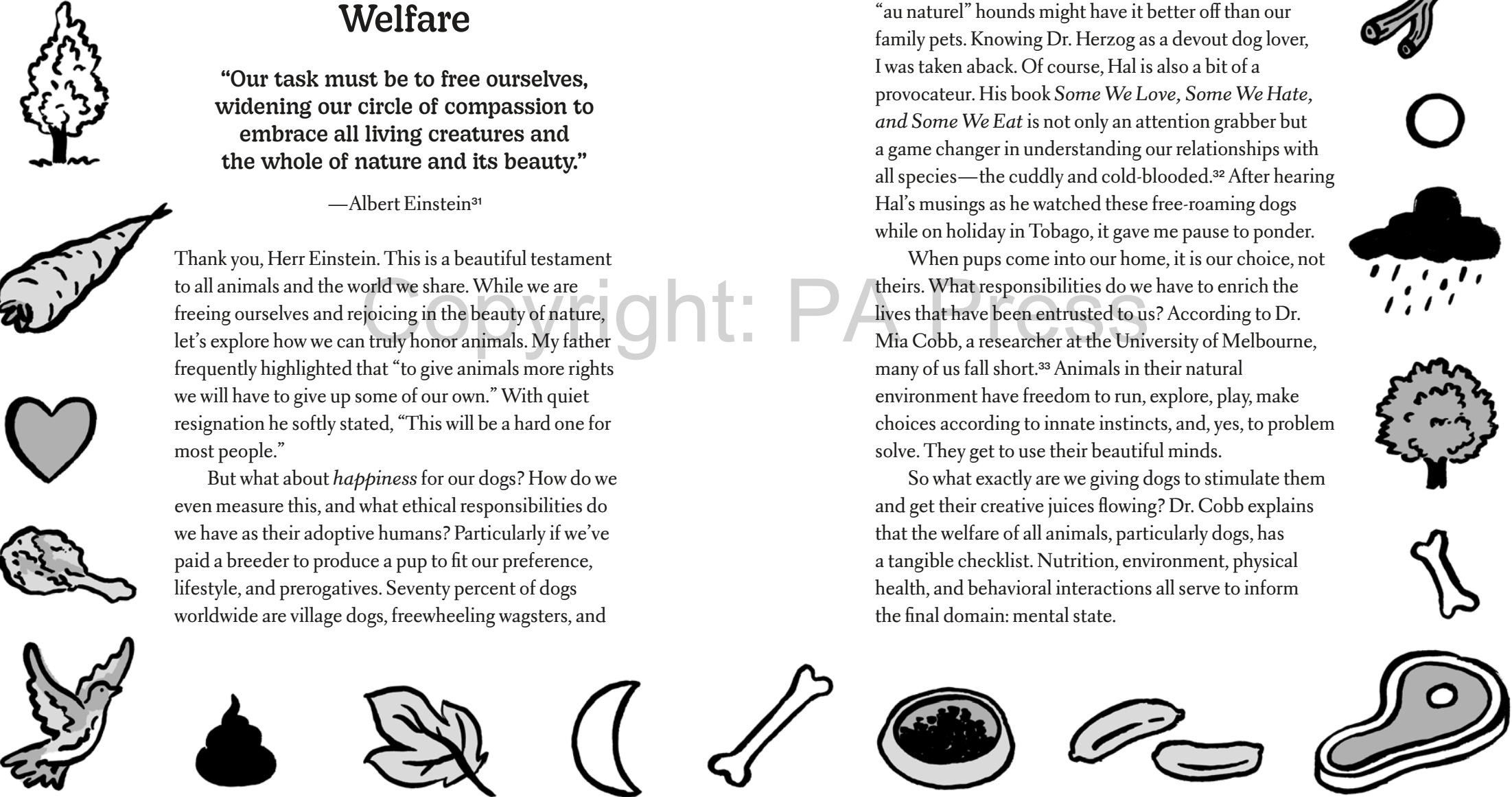
Thank you, Herr Einstein. This is a beautiful testament to all animals and the world we share. While we are freeing ourselves and rejoicing in the beauty of nature, let’s explore how we can truly honor animals. My father frequently highlighted that “to give animals more rights we will have to give up some of our own.” With quiet resignation he softly stated, “This will be a hard one for most people.”

But what about *happiness* for our dogs? How do we even measure this, and what ethical responsibilities do we have as their adoptive humans? Particularly if we’ve paid a breeder to produce a pup to fit our preference, lifestyle, and prerogatives. Seventy percent of dogs worldwide are village dogs, freewheeling wagsters, and

some researchers like Hal Herzog believe that these “au naturel” hounds might have it better off than our family pets. Knowing Dr. Herzog as a devout dog lover, I was taken aback. Of course, Hal is also a bit of a provocateur. His book *Some We Love, Some We Hate, and Some We Eat* is not only an attention grabber but a game changer in understanding our relationships with all species—the cuddly and cold-blooded.³² After hearing Hal’s musings as he watched these free-roaming dogs while on holiday in Tobago, it gave me pause to ponder.

When pups come into our home, it is our choice, not theirs. What responsibilities do we have to enrich the lives that have been entrusted to us? According to Dr. Mia Cobb, a researcher at the University of Melbourne, many of us fall short.³³ Animals in their natural environment have freedom to run, explore, play, make choices according to innate instincts, and, yes, to problem solve. They get to use their beautiful minds.

So what exactly are we giving dogs to stimulate them and get their creative juices flowing? Dr. Cobb explains that the welfare of all animals, particularly dogs, has a tangible checklist. Nutrition, environment, physical health, and behavioral interactions all serve to inform the final domain: mental state.



For dogs to have a rich quality of life, they need to be exposed to novelty and broad sensory and social experiences, as well as learning through engagement.³⁴

In natural environments dogs learn to weigh the risks and the rewards. They are exposed to on-the-job training through exploration, playing and bonding with their buds through real-life experiences that are meaningful to them. These experiences provide them with opportunities to develop competence not only as a species but as individuals. Just like us humans, they need a balanced life.

How do we accomplish this? Start by letting the puppy be a puppy.

“Let the puppy be a puppy” was jwp’s mantra in working with Chaser. These words of wisdom were spoken by Chaser’s breeder and legendary Border Collie trainer, Wayne West. There are many schools of thoughts about when to start working with your pup. Some delay learning simply due to strict regimens that employ aversive techniques,

but we don’t adhere to those methods, so it’s okay to start from the get-go. Chaser started at eight weeks and is proof that it’s never too early to learn. jwp demonstrates that it’s never too late.

This is not just a concept for youngsters. We have found that dogs of all ages have a perpetually youthful spirit of joy and devotion that spans their lifetime. We want to



continue to nurture this unique characteristic inherent in dogs that will be the foundation for teaching your dog. It largely means that your relationship will be built on give and take. No dominance here, because who likes to be bossed around? What we encourage you to do is to take turns in getting what *you* want and giving her what *she* wants. It’s a give and take, not “Do as I say.”

We never forced Chaser to do anything unless she was pursuing an unsafe situation, like chasing tons of steel on wheels, small critters with sharp teeth, or even bigger critters with larger teeth.

It’s super important for us to deliberately set the dog up to express herself and her desires in a safe way without squashing her spirit.

Understand that your dog literally loves to stop and check out all the wonderful, smelly things that our sniffers can’t detect.³⁵ It’s important to indulge this simple pleasure of exploring scent so that she can smell all the neighborhood animals, wild and domestic, who have been there before her—the cat who lives in the drain, the snippy little pup who always barks when she passes by, the bunny who steals arugula from the garden—and sometimes she wants to add her own signature to this invisible critter guest list.

This is also a rich opportunity for her to begin developing her nose for future tracking games.



Things Your Dog Really Likes That You Think Are Gross

- Smelly things
- Other dogs' poo and pee
- Strangers' buttocks
- Strangers' private parts³⁶
- Eating other animals' poop³⁷
- Eating horse and deer hoof clippings
- Rolling in dead things



Things We Do That Make Our Dogs Go Grrr

Getting in a strange dog's face (famous last words:
"Trust me, I'm good with dogs.")

Parking the dog at the dog park. Pay attention to what
is going on at the park: dogs humping other dogs,
your dog bullying other dogs, your dog being bullied
by another dog. Read the room.

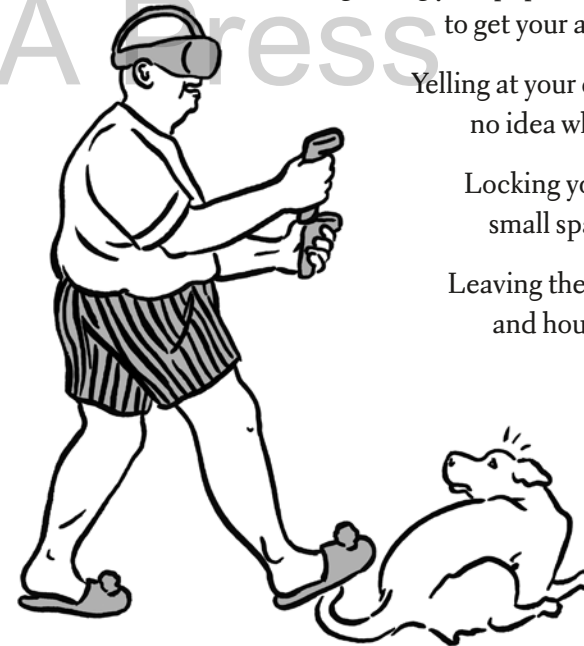
Walking your dog and talking on the phone.
Try to engage with your dog on walks—
this is a bonding period.

Ignoring your pup when they are trying
to get your attention.

Yelling at your dog, when they have
no idea what you are saying.

Locking your dog in a crate or
small space for any reason.

Leaving them home alone for hours
and hours and hours each day.



Tip Sheet: Let the Puppy Be a Puppy

Back off if you see frustration.

If you're working with your dog and you see that she's frustrated, stop whatever you are doing. Signs of frustration and anxiety in your dog are evident in your pup's body language:

- 🐾 Ears back
- 🐾 Avoiding eye contact
- 🐾 Butterfly kisses and/or fast licking of their lips
- 🐾 Compressed body hunkering closer to the ground
- 🐾 Whale eye
- 🐾 All the above

Don't stress over it, and never force learning sessions. She's just not on the same page as you, so give her a hug and take a break.

Give commands your puppy already knows.

You want to continue to build your puppy's confidence, so after an unsuccessful training session, ask her to do something that you know she can do. This is very important. We don't ever want to end a training session on a low note. It can be as simple as "come." We all like to feel good about ourselves, and so do our dogs.

Don't be afraid to get silly.

From puppydom into adulthood dogs respond to interactive gestures and enthusiasm. Chaser loved seeing us throw up our arms, get excited, and repeat silly phrases like "Who's a tuff dog?" She also loved for jwr to chase her. At eighty-nine he rarely caught her.

Never berate or strike your dog.

Never, never, never, and never. Just as elsewhere in life, be kind and loving. The goal is to be a team and never break your dog's spirit. This is truly about collaboration and not about dominance.

Speak softly.

Chaser was very sensitive to sound and didn't like loud voices. If you speak more softly, your dog will try harder to listen. Conversely, Chaser was not averse to loud machinery like the vacuum cleaner and the lawn mower. Take note of your own dog's reactions.

Laugh with, not at (happy or anxious).

Puppies and dogs do things that are hilarious and have us rolling on the floor with laughter. What appears to be cute and adorable can easily be behaviors that are anxiety driven. These can be red flags and require some loving intervention.

Doggie Dos

- Pay attention to what gets your dog excited and channel this excitement for their learning.
- Be enthusiastic. If you aren't having fun, neither is your dog.
- Take notice of body language and reactions.

Doggie Don'ts

- Break their spirit.
- Dominate your dog.
- Encourage "cute" behavior that can spiral out of control into a behavior problem.

POP-POP

The Power
of Play,
the Power
of Praise

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What's Up

The type of learning created with Chaser stemmed from her being primed and ready to rock and roll. A bunch of ideas are built into this.

First, there is the realization that dogs and all animals have emotional experiences as well as the physiological mechanisms to support them. Descartes was wrong. Animals are not empty, vacant machines. Jaak Panksepp, a neuroscientist and psychobiologist, has devoted his life to studying the physiology of emotion in the animal brain, and just like us, they have pleasure and pain.³⁸ He has even discovered that rats laugh and that learning is about activating the *pleasure* side of the spectrum.³⁹ Neurologically and scientifically speaking, play equals joy. By tapping into Chaser's joy, we hit pay dirt. Correction—play dirt.

Equally important is understanding that the way we interact with dogs—positively or negatively—affects how they feel about specific situations. Dogs can feel excited and anticipate good stuff, especially when play is involved. They also display fear and stress when aversive methods are used. Research reveals that a relationship built on punishment creates extensive behavioral issues in dogs.⁴⁰ The same as with humans: you get what you dish out.

Thus, for Chaser's learning to take place, we needed to capitalize on pleasure and happiness, which for Chaser meant play.

Tell Me a Story

Many times, we hear “My dog doesn’t like to play with toys.”

Not so fast.

I had a friend who brought his new five-month-old rescue pit bull mix puppy to my house. He was a little concerned because she didn’t like to play, so I asked him how he played with her. His response was, “Well, I don’t know, we bought her all these toys and she’s just not interested in them.”

I immediately had two thoughts. First, was she sick? Second, this is so sad.

Ruthie was a large, floppy-eared, dark-brown puppy, with the sweetest chocolate eyes and a gentle

spirit. She had no problem with eye contact and would wag her tail, but she was not an assertive dog.

I didn’t have any toys in my Brooklyn garden, but I did have a pine cone, which I picked up and started tossing in the air. I’d drop it, kick it, pick it up and run with it, and toss it again, and sure enough, Ruthie was watching. The second time I dropped it, she raced for it too. I let her grab it and enthusiastically said, “Ruthie, you have pine cone! I want pine cone!” The cat and mouse game began. I kept repeating “pine cone,” and she was jumping, running, and chasing “pine cone” until I got worn out and we had to take a break.

We did this a few more times, and not only had she unleashed her joy of play but she had learned the name *pine cone*. Her owner also discovered how to play with his dog.



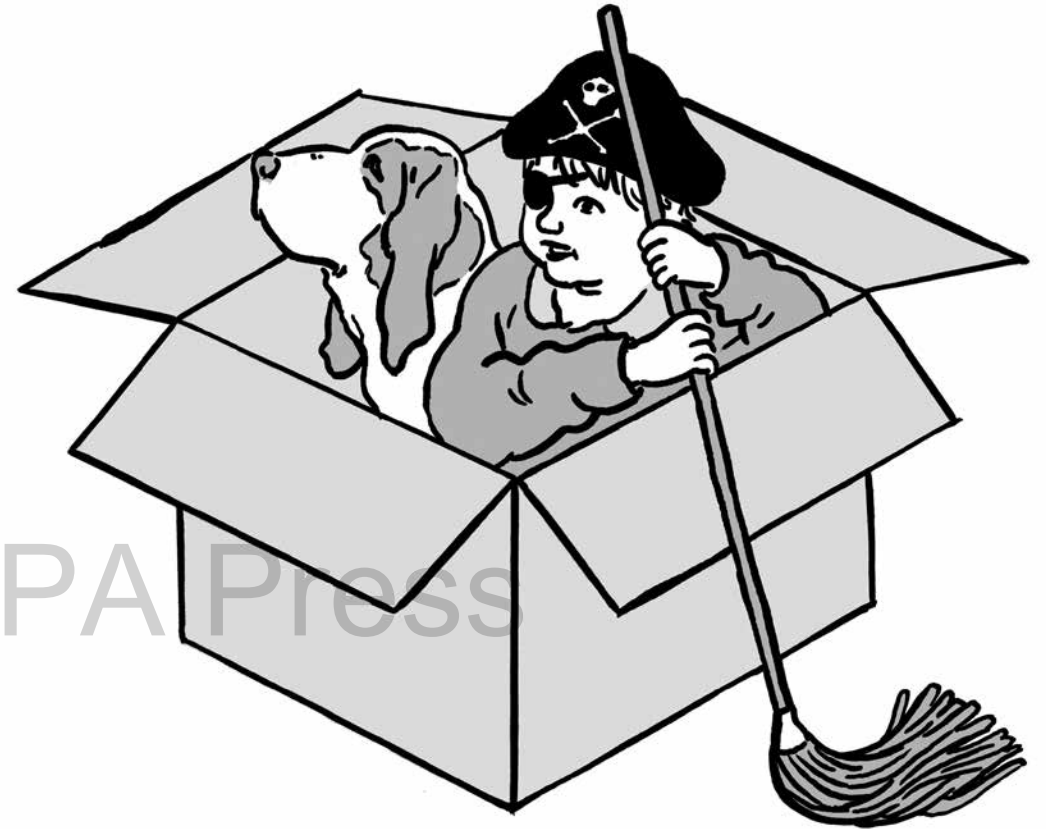
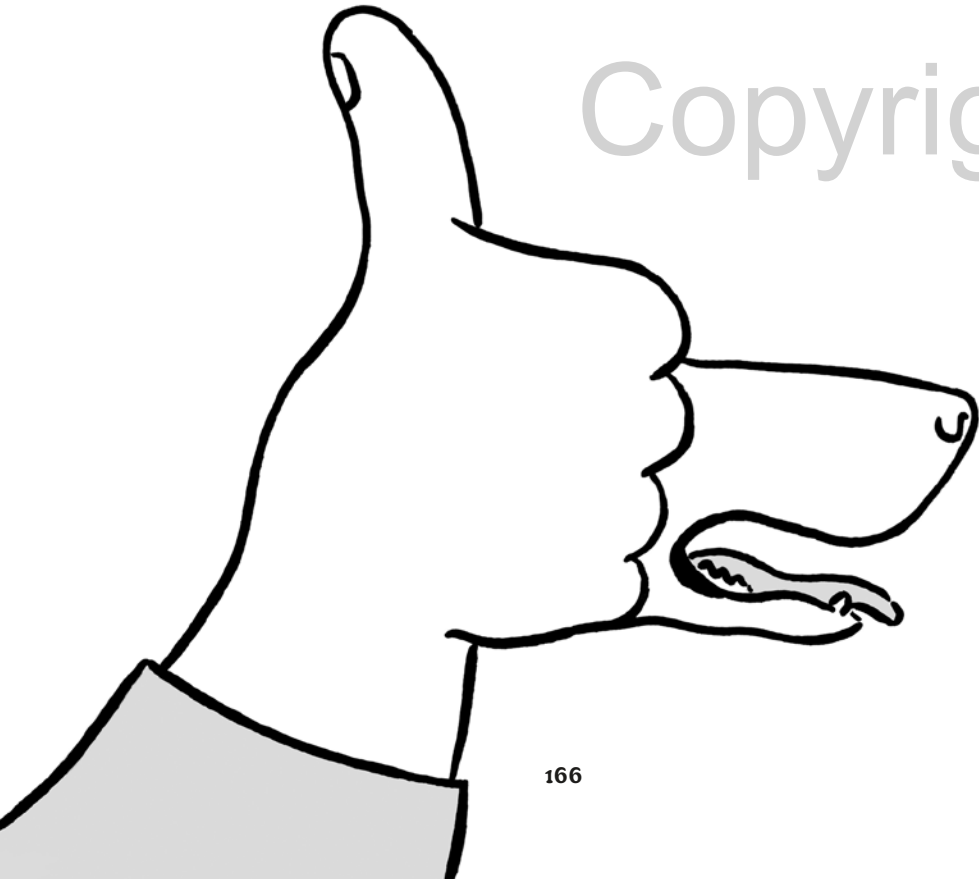
Chaser knew over one thousand words, and she had a huge pile of toys to show for it. What most people don't know is that this was just the tip of the iceberg. She could understand all kinds of words: verbs (*fetch, take*), adverbs (*slower, faster, again*), adjectives (*bigger, smaller*), prepositions (*to, on, in*), proper nouns (*SpongeBob*), and common nouns (categories of words like *ball, tree, stick*). She could understand them in simple sentences. If that has your head spinning, don't worry—thankfully there won't be a test. Yes, her language learning was very serious, but the methodology for her learning, not so much.

It was play. But this is no joking matter.

Learning should be fun. My father's research supports this philosophy—but it also supports the power of praise. When the student gets it right, let them know it over and over again.

“Good dog!” is not just for puppies; it's for humans too, and the powers that *play* and *praise* hold are virtually limitless. The simple beauty of this duo packs a heavy punch.

The world has come to lovingly identify my father, John Pilley—Chaser's teacher and research partner—as Pop-Pop. He was never self-conscious about losing his dignity and getting whimsical with Chaser. Serendipitously, Pop-Pop is an acronym for the Power of Play, the Power of Praise.



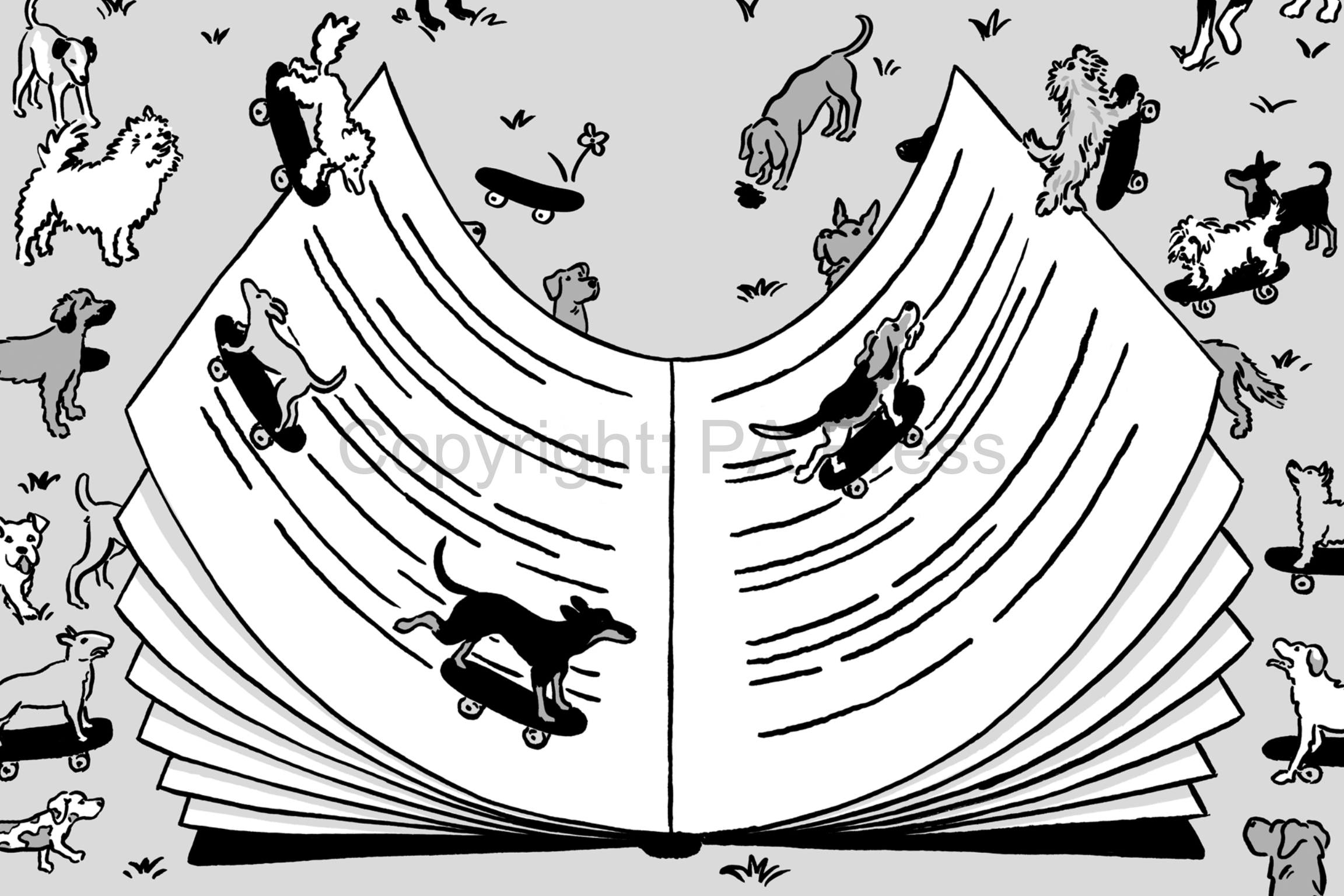
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Chaser's learning stemmed from her being motivated, excited, signed up, and interested. This concept encompassed kicking some antiquated paradigms to the curb and shining the light on a new day for dogs. Science has confirmed that dogs, similar to humans, have an extensive array of emotional experiences, and just like toddlers, they have an innate desire to play.⁴¹

The prodigious act of play is quite extraordinary. It's not only an incredibly interesting behavioral phenomenon, but it can be quite individual in nature and usually indicates positive well-being. Most important, it's a great way to help dogs learn. From family dogs to working dogs, play is an integral part of learning.

Dogs naturally play, so the absence of play can indicate poor welfare.





Play and Praise Cement Our Relationship

The seemingly frivolous behavior of “play” actually plays a critical role in cementing our relationship with the dog, and in concert with praise, it builds confidence.

Dogs learn to play as puppies, by themselves, with objects, and with one another. They play with people and even other species. We humans can spend hours watching dogs on social media who are engaged in play-based behavior that is so darn entertaining it’s addictive. And yet, play is just another day at the park for your dog. They create games like playing monkey in the middle with a beach ball, bouncing on the bed, chasing another dog around the yard, or chasing kids around the yard. They jump, leap, tug, run, and play so hard that their back legs can get ahead of their front, and they take a tumble—only to recover with a brief body shake to hit their reset button and start all over again.

These haphazard and seemingly whimsical behaviors actually provide a critical role in our pup’s development.⁴²

Chas-ah—the Play-ah

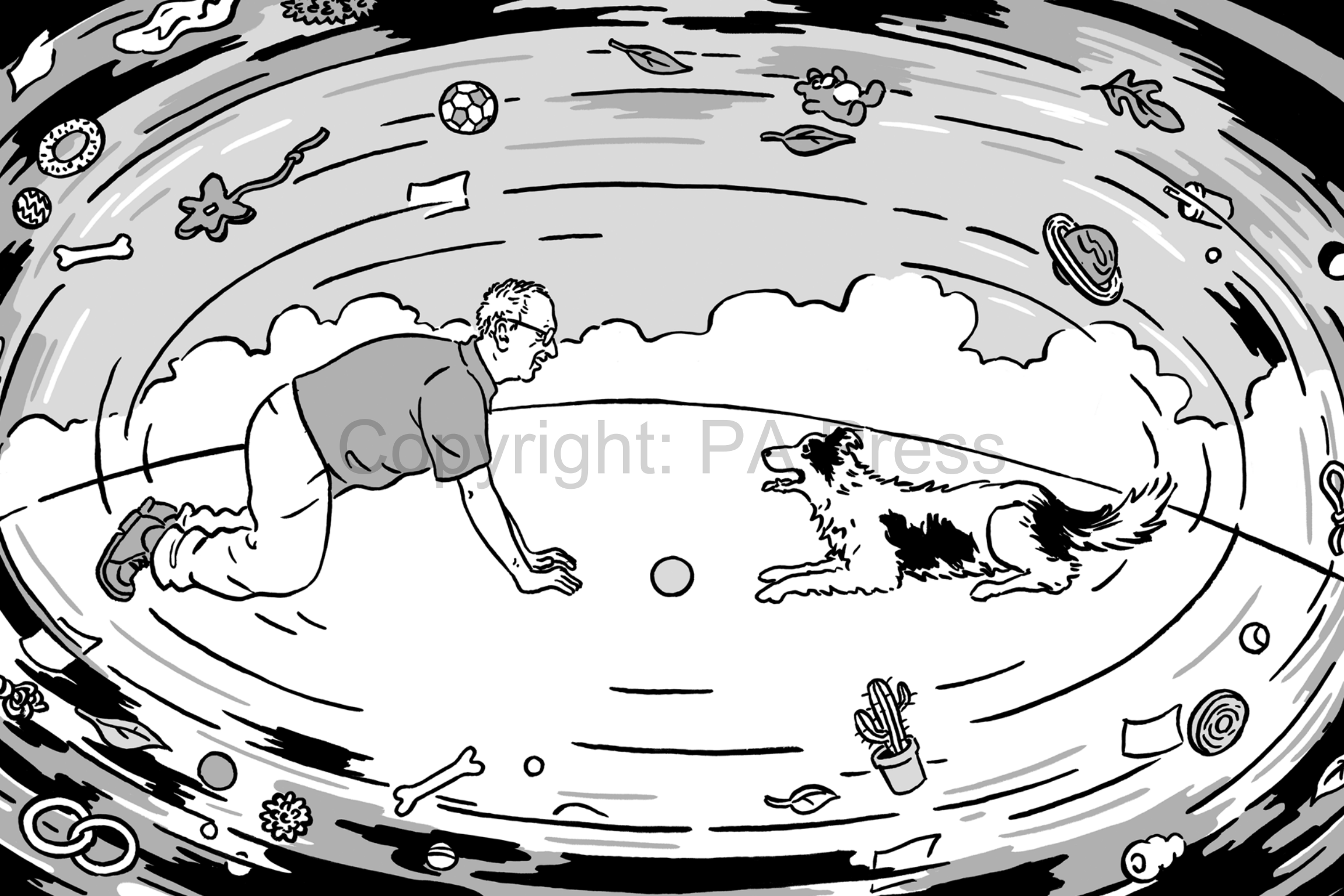
From the moment we brought Chaser home, she loved playing with toys. To describe her as “a player” is an understatement. If an object was allowed in her mouth for her to shake, rattle, and roll, then it was her favorite toy. But there was an important hitch. It was her favorite toy *only* if someone was playing with her. A playmate to toss, catch, chase, or hide the toy. While some dogs play independently, Chaser never played by herself.

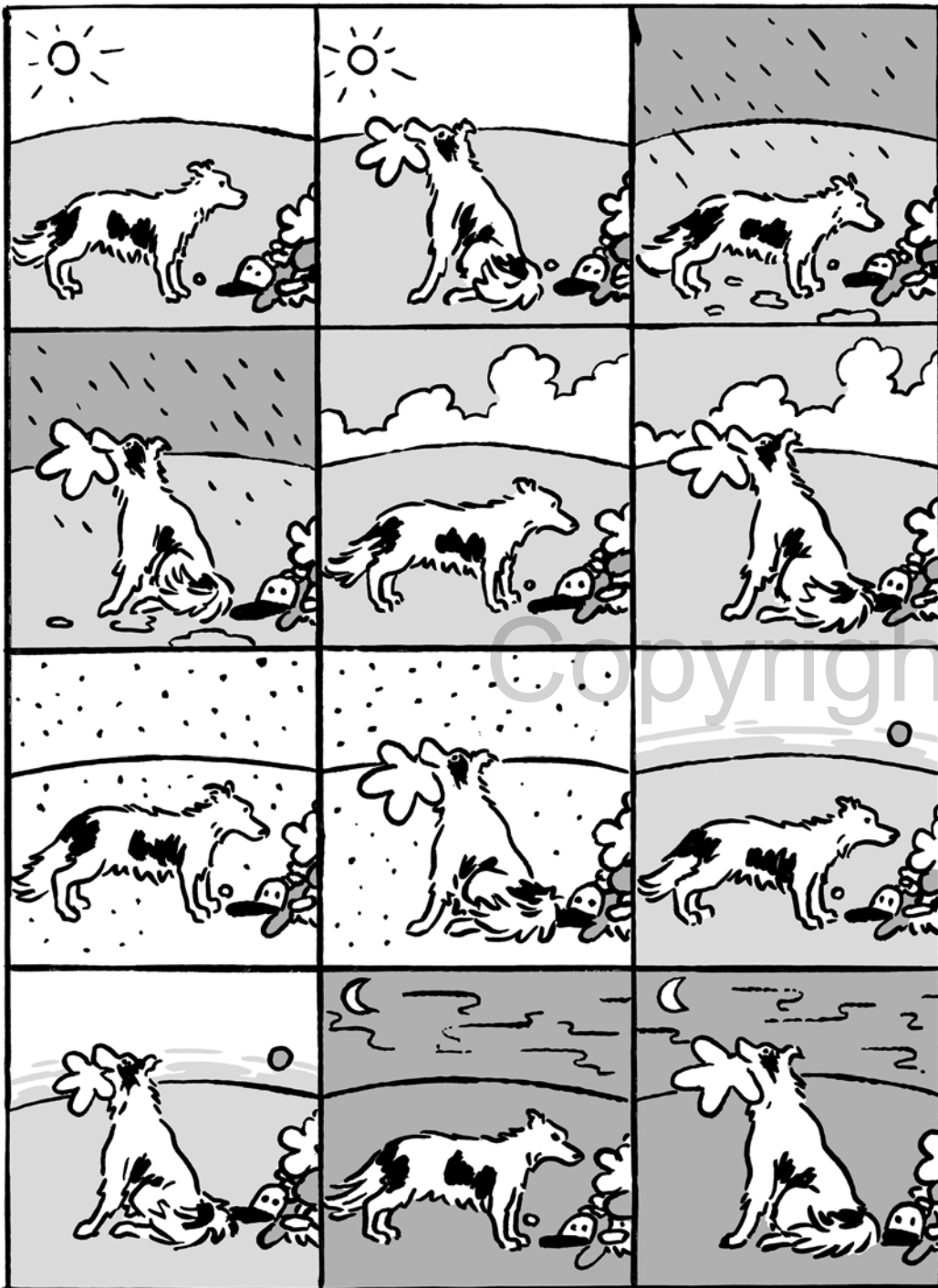
Play Fast-Tracks Learning

Channeling her innate instinct to play was literally a gold mine in teaching Chaser human language. Seeing her with her huge pile of toys seems incongruous with serious scientific research, but it’s actually not as silly as it seems.

Play literally fast-tracks learning, in humans and animals. Play deepens our bond, builds confidence, and makes learning fun. And if we are having fun, we are more likely to repeat a behavior, which brings us full circle to repetition, which is mandatory for mastering anything in life. Who, other than children, have such a high capacity and joy for playful repetition? It’s dogs.







Practice Makes Perfect!

A key element used in play is repetition, which coincidentally is a necessary element for mastery of anything in life, whether you are an illustrator (hugs to Calum!), athlete, musician, statistician, programmer, or circus performer. Practice makes perfect—but perfection's not the goal, and your dog doesn't have to be a wunderkind to learn the name of objects. The real smarty-pants is the human who initiates playful learning.

But let's pause a moment to chat about the canine memory system. How does play log the names of objects into their cranial hard drive? Just like humans, it all comes down to value. If you meet someone at a party whom you think is cute, you're more likely to remember their name. The same is true for dogs.

The key element for learning the names of objects is that the word must have value, which means the memory must have value.

If the experience is pleasurable, pairing a name with an activity or object rings the proverbial bell. For your pup, these are words like *walk*, *out*, and *good dog!* On the flip side, if the experience is painful, aversive, or simply not fun, this also connects the dots. These can be words like *vet* and *bath*, or it can be a person like your creepy Auntie Claire, who hangs on a hug a little too snugly. These words have value—positive and negative—and it doesn't take long for our pups to code these words into their short-term and long-term memory. Sometimes we even have to resort to spelling them in their presence. But that doesn't work for long. Dogs are masterful listeners and can decode the C-O-D-E with remarkable speed. That is the power of words.

So, yes, Chaser learned hundreds and hundreds of words. But in order for her to remember the names of her toys, the toys themselves had to have value. Their value was the pure enjoyment they brought



her, the engagement and fun of playing with them as we threw them to her or hid them in plain sight, on top of the table, or in the bathtub. She loved the game of hide-and-seek. Children learn through play as well as association and fast mapping, which were some of the ingredients used in Chaser's learning. For example, children learn the name of Santa Claus because he's big, jolly, and slides down the chimney once a year bringing them gifts. They learn *spoon* because it delivers yummy to the tummy. Chaser didn't have these specific types of associative markers, but what she did have was tremendously impressive.

It was joy: she simply loved to play with her toys.

But we're not done yet; that's just one facet of play. Play is not only a powerful learning tool; a playing dog means a happy dog. It cuts down on fear and anxiety and is huge in building our bond. A frolicking pup is a happy pup, and we have found that dogs don't satiate on play or praise, which can be much less distracting than treats. And cheaper.



Play Feels Good

Play is sometimes an activity that dog lovers take for granted. It's certainly an activity that has stumped animal behavior researchers for decades.⁴³ While animals have developed specific behaviors for survival, play is different. It often consists of large, vibrant, embellished movements that in the wild could easily attract the attention of predators. And because play is so acrobatic and animated, even if it doesn't attract a predator, it's certainly not conserving energy. Precious energy that an animal might need to survive in extreme conditions.

For reasons like these, researchers studying animal behavior have had a difficult time understanding *why* animals play. But let's cut through the scientific jargon: the primary reason is that *it feels good*.

To this, Chaser would wholeheartedly agree. Play in dogs is notable because they play into adulthood. While it typically peaks in young animals, in some species, humans included, play can persist into adulthood, which JWP personally found extremely rewarding in the form of kayaking, windsurfing, and biking into his late eighties.

And most important—playing with his dog.
Play enables us to be in the moment of joy.





The most valuable takeaway is: don't be afraid to get goofy and silly. Play becomes more valuable to your dog when the two of you are interacting. This is also how you can begin to teach verbs independently from nouns by saying "catch pine cone," "find pine cone," "take pine cone." So many times, we speak gibberish to our pets, and this is a fantastic opportunity to not only strengthen your bond but capitalize on everyday communication.

Stunningly, play is the same technique used with the working dogs we marvel at: the courageous heroes who fly under the radar in battle and catastrophic rescues, who sniff out bad guys, who aid in the search for the dead and for the really dead in forensic archaeology.

It's not treats, punishment, or obedience; it's play and positive reinforcement.

Praise be to dog.



Tip Sheet: The Power of Play

Playing builds confidence.

Play is a natural instinct for dogs. Activities like chasing games, fetching, and finding are hugely satisfying for your pet. It gives them an opportunity to just be a dog, which allows them to feel good about themselves.

Playing strengthens your relationship.

You'll never find a more willing and accepting playmate than your dog. Whenever you engage in play behaviors like throwing and fetching a ball, you are strengthening the bond that innately exists between people and dogs—a unique bond that has coevolved for forty thousand years.

She's doing what she likes.

We want to put the dog in a situation where there's going to be play. If we're teaching through play and thus enabling her to do things that she likes, she will be much more likely to repeat the behavior.

Dogs don't satiate on play.

Dogs are highly likely to satiate on treats, but *most* dogs never get tired of playing; they are similar to children in this way. Their joy of repetition is exceeded only by our exhaustion of it.

Play is less distracting.

Play is not distracting like treats. With food rewards, the dog can be more focused on the food, overanticipating what they believe we want them to do, rather than actually paying attention to what we are requesting.



Doggie Do

Play with your dog.

Experiment with play activities to discover what your dog likes.

Get goofy with your pup.

Doggie Don't

Don't rely on the dog park as your play session. That's good for exercise, but it's never an alternative to engaging with your dog.

Tip Sheet: The Power of Praise

Praise reinforces a behavior.

If you see something you like that your dog is doing, immediately name it and say “good girl!” No tools are necessary except your observation and lots of hugs and belly rubs.

Praise builds confidence.

We *all* need to be told we are doing a good job. We want our pups to feel good about themselves.

Dogs don’t satiate on praise and hugs.

Withholding food is not motivation for learning—a hungry dog will not focus on learning. You can use it in the beginning, but in general treats are distracting to your pup. When they are satiated, the motivation disappears. Dogs generally don’t tire of cuddles and hugs, and if your dog doesn’t like belly rubs, follow her lead and engage her with positive exclamations of “good dog!”

Praise doesn’t cost a thing.

Praise is always available at your fingertips and doesn’t cost a thing. Speak your praise softly. Your pup will listen harder and appreciate the intimacy of a softer volume.

Doggie Do

Train yourself to reinforce your dog immediately when he responds correctly to your request. No clicker is needed if you hit that immediate mark.

Doggie Don’t

Holler at your dog.

Don’t resort to negative words or exasperated body language to express your frustration. Avoid the word *no*.

Dog 2.0

Chaser's Guide to Good Behavior



Copyright: Press

What's Up

As teachers to our pups, our primary goal is to continue focusing on developing a positive relationship, which is the focal point in Chaser's guide to good behavior. That is *your* behavior, which directly affects your dog's behavior. As humans, we forget that we aren't born simply knowing stuff, and neither are dogs.

Tell Me a Story

I'll never forget when *60 Minutes* producers Denise Cetta and Sumi Aggarwal came to meet Chaser and my father before their shoot with Anderson Cooper. After introductions, the next stop of course was the toys, which were stored in over twenty-five large bins on the back porch. The lids were off, and the first glimpse of the 1,022 toys brought forth gasps from Denise and Sumi; they were like kids in a candy store as they chose twenty random toys to test-drive Chaser, who gave them flawless demonstrations for the next two hours.

At this point it was time for a break, and my sister, Robin, led Denise to the back porch once again to scope out the agility course. Robin was an integral contributor in Chaser's journey from the very beginning, and it was she who came up with Chaser's name. With a BS in psychology, she was the brawn behind the actual organization of my father's data. Her day job as an expert whitewater raft guide was seasonal, so in the off months when she wasn't working as a photographer in New York City, she was happy to assist in documenting Chaser's learning. She is a quiet force with sparkling hazel eyes, dimples so deep you could drown in them, and a smile that holds a mystery I still yearn to know.

Chaser slithered past them down the steps, grabbing her ball on the way, planting herself firmly in the middle of the yard, staring intently in their direction. Denise called Chaser to come, but Chaser stood frozen, staring at her without any indication of accommodating the request. Denise tried to coerce her more enthusiastically, but Chaser didn't budge. Frustrated, Denise turned to Robin and asked, "Why won't she do what I ask?"

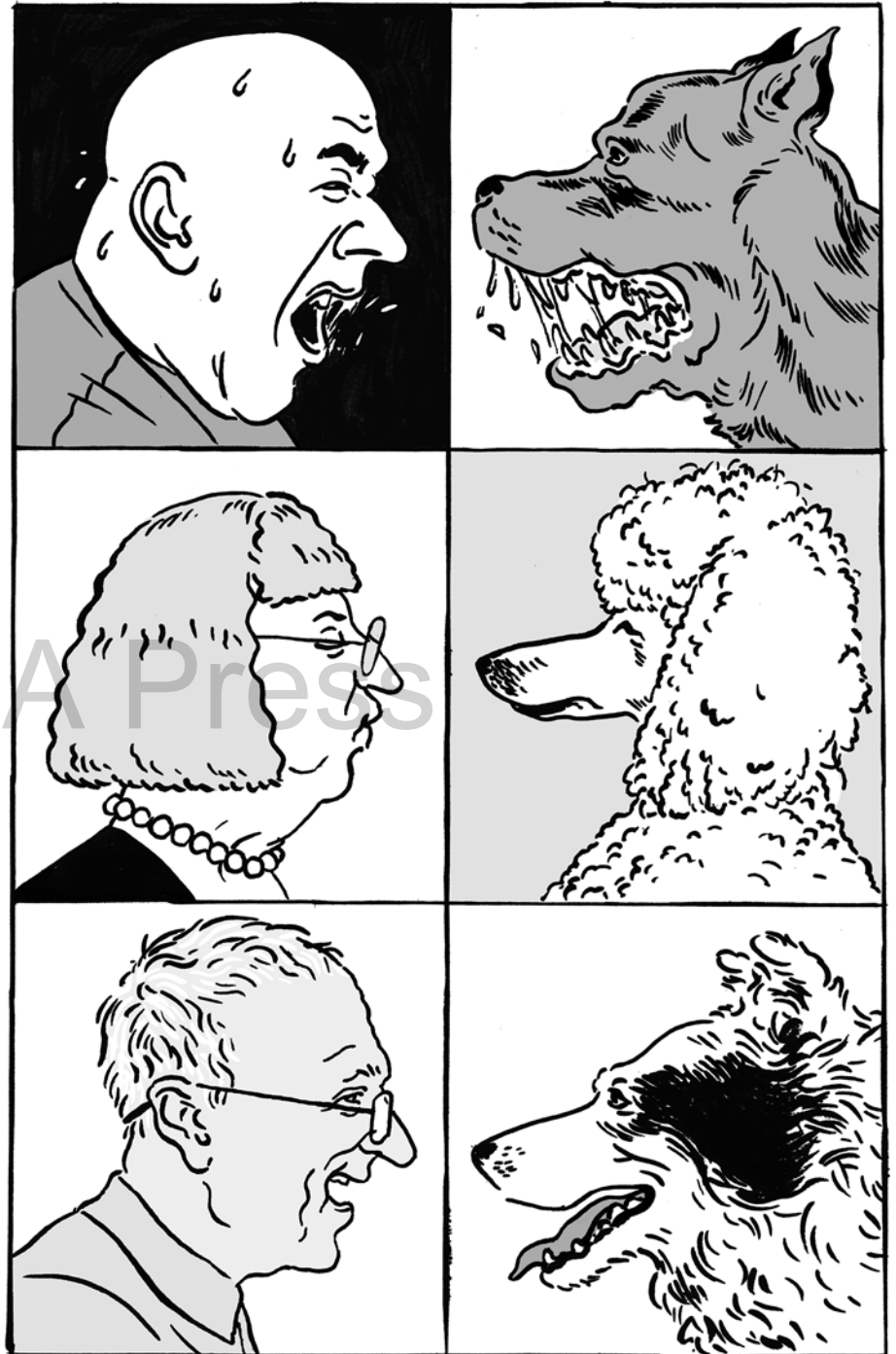
Robin slowly smiled and told Denise, "Chaser is not the most obedient dog—she has been taught to think for herself. You want her to do something for you, but she wants you to do something for her." Perplexed, Denise asked, "What does she want?" Robin replied, "She wants you to engage with her. She's telling you, by standing in the middle of the yard with the ball in her mouth, that she wants you to come over, chase her, and throw the ball. She just gave you a load of demonstrations. Why shouldn't she get her way now?"

It never occurred to Denise that Chaser would assert her own will and expect a "tit for tat." Research confirms that animals understand equity, and Chaser had an unmistakable concept of reciprocity.⁴⁴ Denise happily submitted to Chaser's request, and Chaser performed beautifully for the remainder of the day.

She had also trained Denise well.

It's Not You, It's Me. No, Seriously, It Is You.

The quality of the relationship dictates the quality of learning. You get what you give. Dogs, like children, are born pure, and it's human behavior that shapes the dog that sits before you.



To Click or Not to Click?

Clicker training can be a valuable tool in reinforcing a desired behavior. It's a classic Pavlovian technique used in dog training, and the clicker signals that a treat is coming when the pup executes the response the owner/trainer is seeking. You tell your dog to sit. Your dog sits. You click. They get a treat.

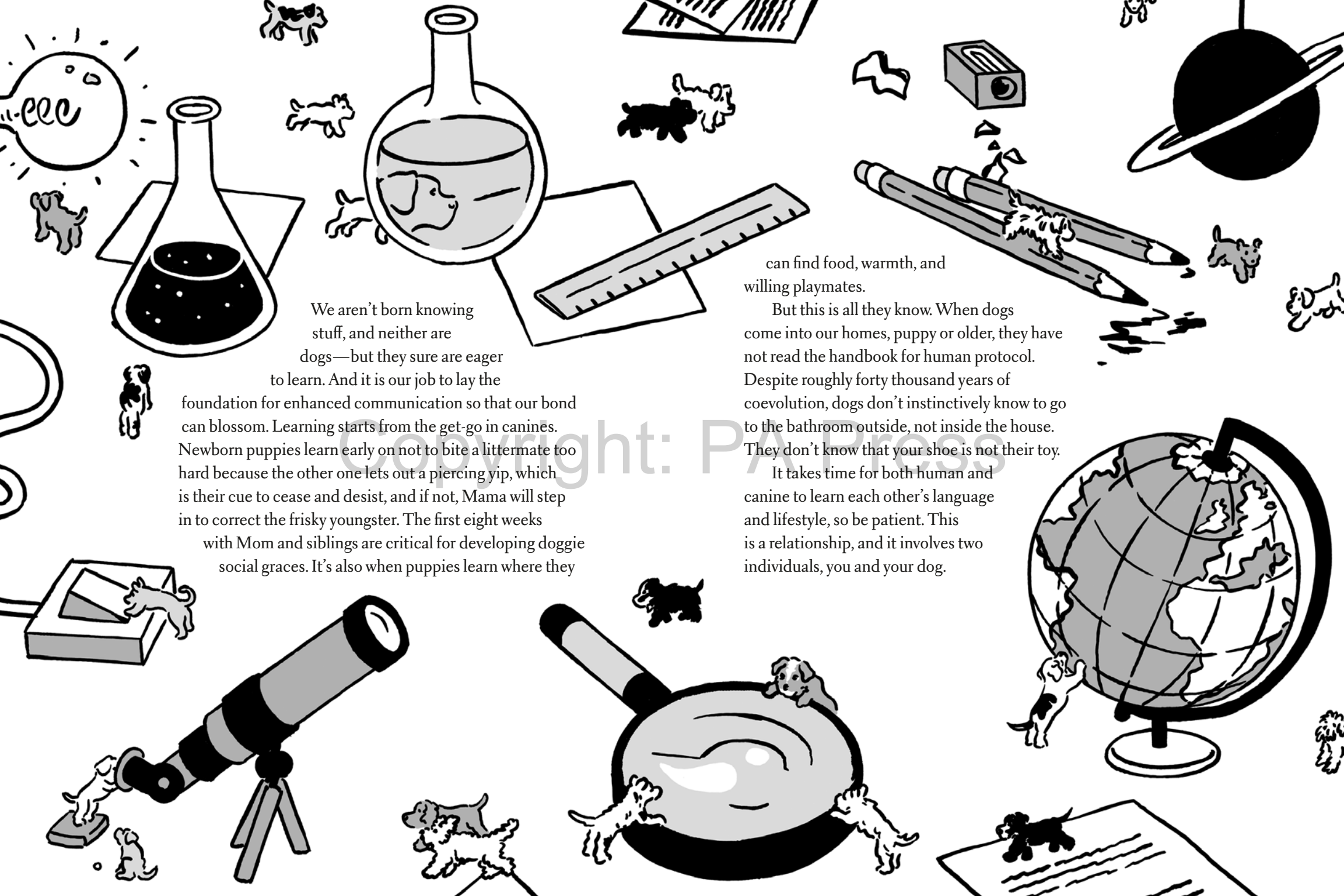
Many have asked if we used a clicker with Chaser. The answer is no. As an animal behaviorist, jwp was adept at reinforcing a desired behavior immediately. The clicker is primarily for the human to get their timing down, so they are super clear in what they are requesting of the dog. Treats are a great motivator in the beginning, but if used constantly with a clicker, they can quickly become distracting to the dog, who overanticipates the requested behavior. The pup becomes more obsessed with the thought of a treat than actually paying attention to the request.



What to Do?

My father began using dogs in the classroom in the early eighties. Our family dogs, Yasha and Grindel, were the dogs used in training, and each student had to display their mastery of teaching the basic cues of “sit,” “stay,” and “come” to the dogs before they could move on to teaching them something more creative and complicated.

The students would present their ideas to Dad, and if it was a solid proposition, he would approve, stating, “That’s a great idea.” After a long, awkward pause, inevitably they would query, “Um, how do I do it?” He advised them that they had to figure it out. They needed a specific plan and had to practice it on their friends to work out all the kinks, because he wasn’t going to let them frustrate his dogs. The students had to break it down into baby steps, and they discovered that positive reinforcement strategically executed was the key ingredient. The most challenging part of the process was coming up with a thoughtful plan and fully understanding that their own behavior dictated the outcome of the dog’s success.



We aren't born knowing stuff, and neither are dogs—but they sure are eager to learn. And it is our job to lay the foundation for enhanced communication so that our bond can blossom. Learning starts from the get-go in canines. Newborn puppies learn early on not to bite a littermate too hard because the other one lets out a piercing yip, which is their cue to cease and desist, and if not, Mama will step in to correct the frisky youngster. The first eight weeks with Mom and siblings are critical for developing doggie social graces. It's also when puppies learn where they

can find food, warmth, and willing playmates.

But this is all they know. When dogs come into our homes, puppy or older, they have not read the handbook for human protocol. Despite roughly forty thousand years of coevolution, dogs don't instinctively know to go to the bathroom outside, not inside the house. They don't know that your shoe is not their toy.

It takes time for both human and canine to learn each other's language and lifestyle, so be patient. This is a relationship, and it involves two individuals, you and your dog.

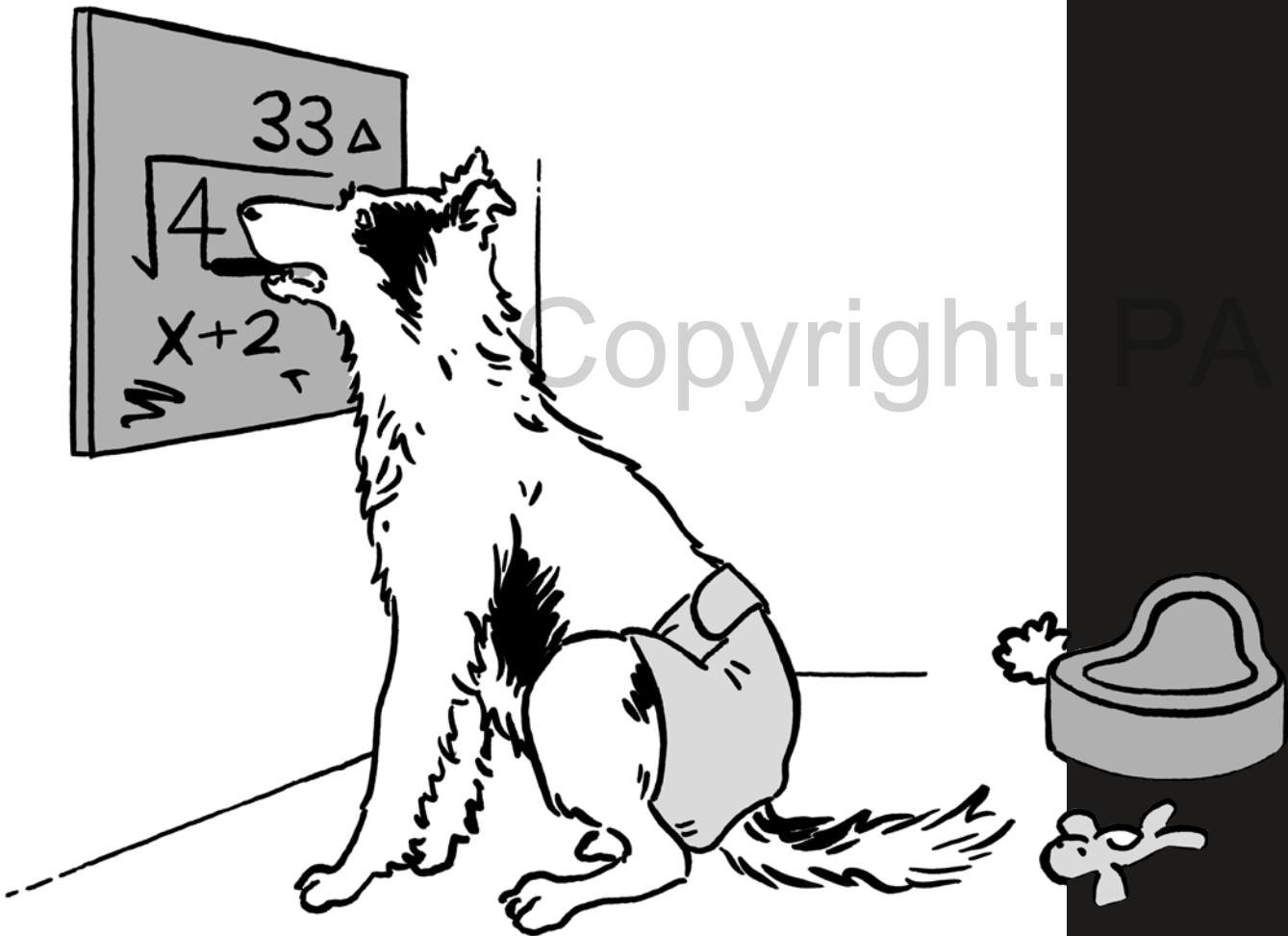
Yes, it takes two to tango. There is the human side of the equation, and there are things to consider doing or avoiding in order to build your bond. *Your* mindset will establish the parameters of what is possible for your dog.

As far back as the seventies, my father was known as the Paddling Professor for taking students on whitewater canoeing trips. This is what he advised them before they got on the river: “Canoeing requires both people.

When having trouble maneuvering the canoe, you will feel certain that it is your partner causing the problem. It probably is not.” The take-home message was, “What am I doing to create this situation? And what can I do to remedy this situation?”

An awareness of *our actions* is paramount. We must consider what we can control and be aware of when it comes to relating to our dogs.



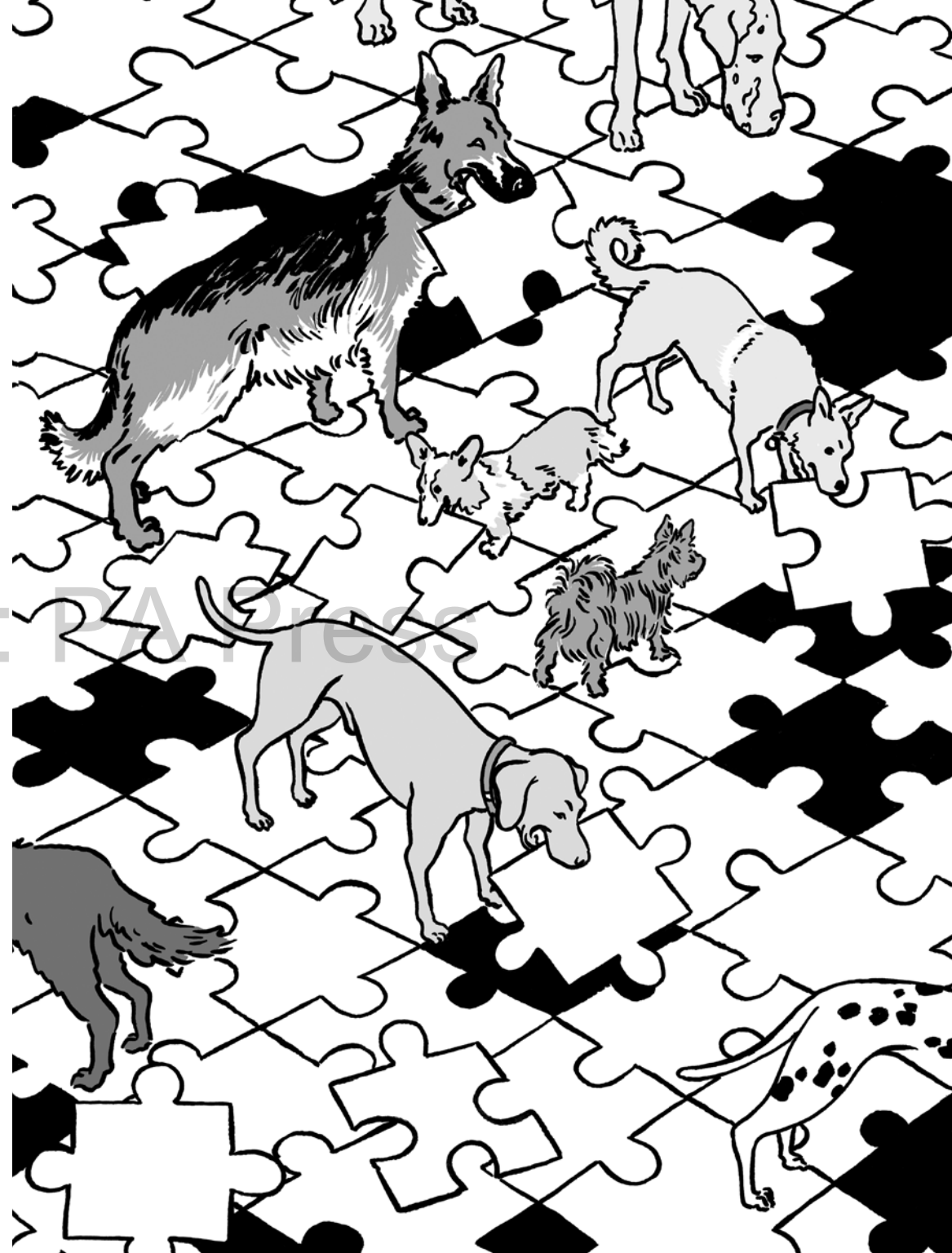


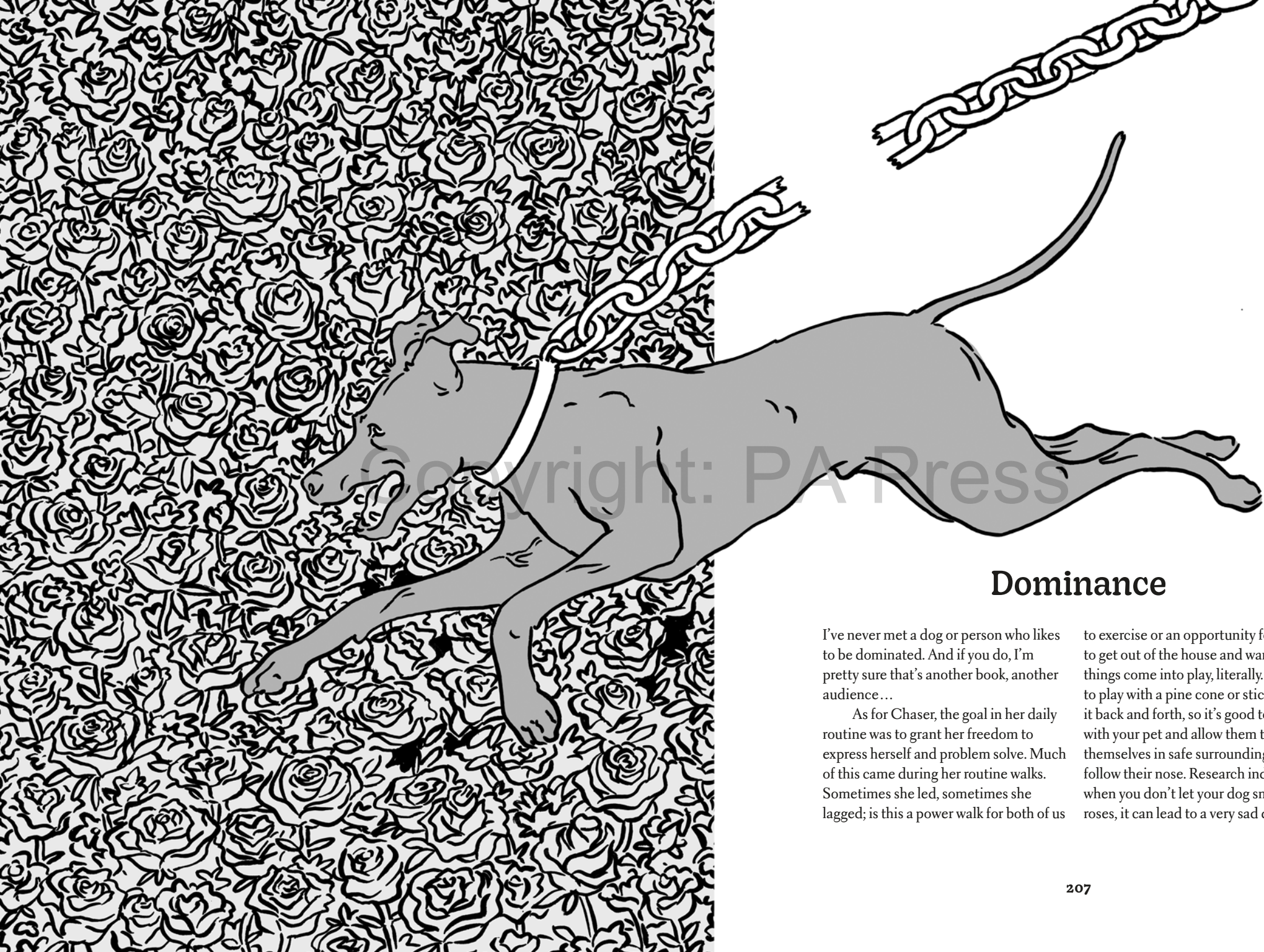
Chaser: Genius or Two-Year-Old Toddler?

Both? Yes, Chaser demonstrated an outstanding memory system worthy of Einstein himself, but she was also a perpetual toddler in many more ways than her language acquisition. She was overindulged and had over one thousand toys, which she didn't like to share. She was also the joyous toddler, enthusiastically greeting us every time we walked through the door. Like all two-year-olds, her love of repetition was indefatigable. But as plain old *Canis familiaris*, she inherently had highly developed manipulative skills, enviable intuition, the hearing of Superman, and a sniffer powerful enough to detect cancer cells.

In an *MTV News* segment on Chaser and John Pilley, reporter Amy Nicholson stated, “Pilley argues that there are two ways a mammal learns: step-by-step, reward-based obedience and creative, open-ended education.”

In human terms, it’s “the difference between ‘Plug this equation into your calculator’ and ‘Here’s the logic behind calculus.’ The first is a “robotic command”; the second, the Chaser Method, “invites the dog to solve a problem.... One simply rewards the right answer; the other inspires genius.”⁴⁵





Dominance

I've never met a dog or person who likes to be dominated. And if you do, I'm pretty sure that's another book, another audience...

As for Chaser, the goal in her daily routine was to grant her freedom to express herself and problem solve. Much of this came during her routine walks. Sometimes she led, sometimes she lagged; is this a power walk for both of us

to exercise or an opportunity for Chaser to get out of the house and wander? Many things come into play, literally. She loved to play with a pine cone or stick, tossing it back and forth, so it's good to be flexible with your pet and allow them to express themselves in safe surroundings to just follow their nose. Research indicates that when you don't let your dog smell the roses, it can lead to a very sad dog.⁴⁶

Humans Can Learn New Tricks

You want to work with your dog, but you have no idea where to start, and it can be a challenge to modify your own behavior in working with your fur baby. There's a simple exercise you can do to evaluate your aptitude to learn new techniques and work with your pup. Should you succeed, you can use this technique throughout the day for your teaching sessions.

- a. Walk to an outdoor open area or to an inside area that is free from distractions—such as your roommate / significant other watching *go Day Fiancé* or the neighbor using a chainsaw.
- b. Find an elevated surface like a rock or chair so that you can be comfortable in a sitting position, gently placing your mobile device beside you on your right-hand side (or left-hand side, if you are left-handed). Don't forget to breathe.
- c. Feel your feet firmly planted on the ground and look up at the sky with your eyes closed—feel the muscles in your neck stretch and elongate. This should feel good.
- d. Reach your hands up like you're holding an imaginary twelve-inch sphere, keeping your back straight and eyes closed.
- e. Slowly stand up with your face toward the stars, clouds, or ceiling light, with your arms continuing to reach upward, holding your invisible sphere.
- f. Balance yourself, slowly opening your eyes, and carefully take three steps forward.
- g. Semi-turn to your left, taking another three steps forward. Continue holding your sphere.
- h. Release your sphere and go find your dog. Play for five minutes.
- i. When you're done, you can return to find your phone.

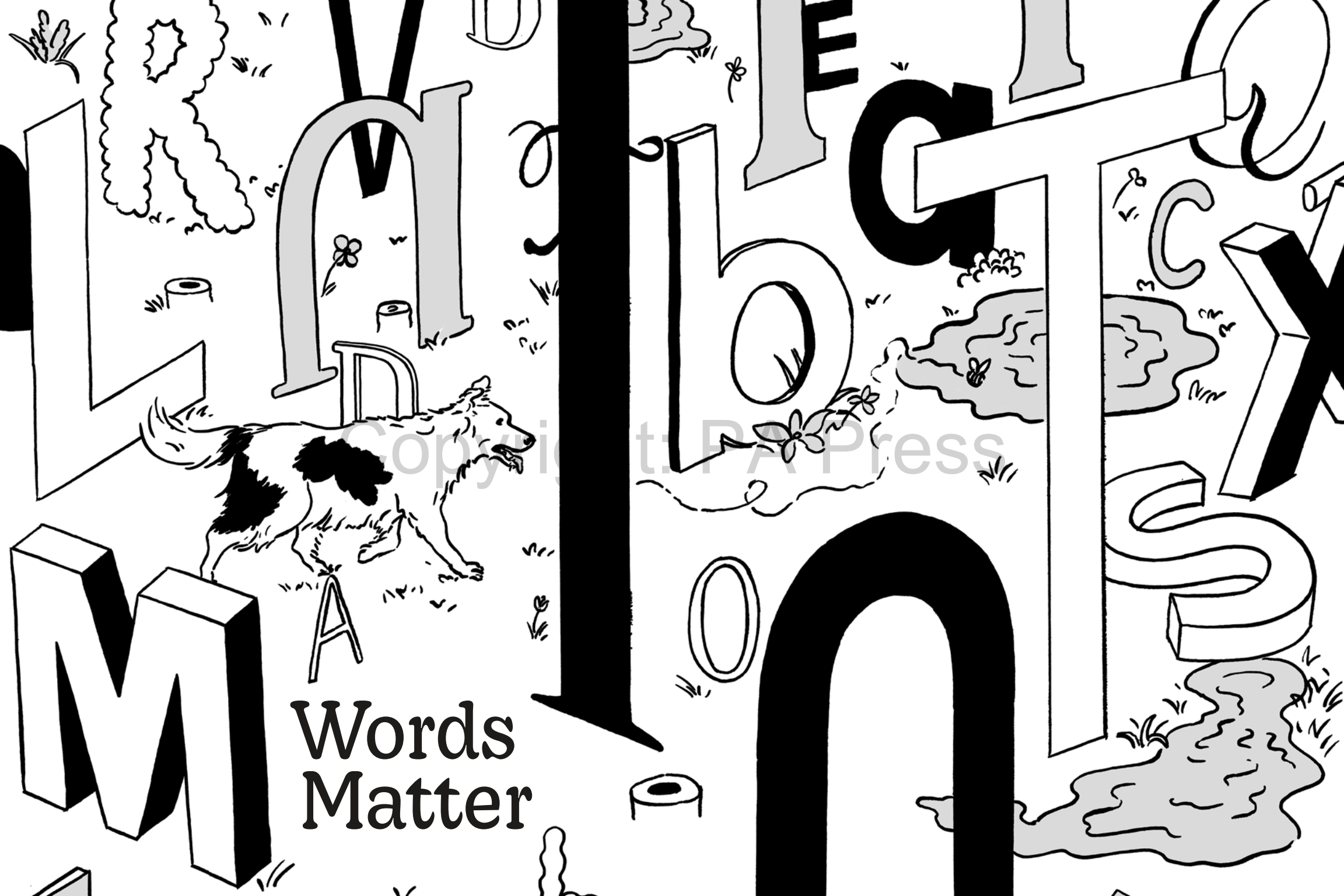
j. It's that simple. You can do it!





Speak Softly

If you speak softly, your pup will try harder to listen. When working with your dog, there can never be too much verbal reinforcement to build confidence. You want your dog to always feel good about themselves, but being excited doesn't mean hooting and hollering. That can easily wind them up, making words ineffective. We have found that using a soft, excited tone really works and requires the dog to listen even more intently.



Words
Matter

What's Up

Why teach your dog language? The answer is simple. Communication. Humans around the world use thousands of different languages to relay critical information, whether it is verbal, visual, or technical, and any method we can use to improve our connection is valuable. The more you can communicate with your dog, the better your dog can communicate with you, which enriches both of your lives. Chaser was a master at expressing herself and could easily let us know what she wanted, as well as understanding what was said to her. She even learned by eavesdropping.

Tell Me a Story

My mother would take Chaser on walks every evening with her lady friends from the neighborhood. They were a saucy bunch of seniors who met by walking their dogs and discovered they also shared a love of wine and Southern bourbon. This particular evening my mother announced that she would not be joining them.

“Why?” I asked.

Mom stated that a little dog named Casey was visiting Marie, and Chaser didn't care much for this fluffy white pup. At which point, Chaser appeared out of nowhere with a low, rumbling growl.

What *was* that? I decided to ask Chaser herself:

ME: Chaser, you don't like Casey?

CHASER: Grrr.

ME: Tell me about Casey.

CHASER: Longer growl, this time with a head shake.

ME: What about Casey?

CHASER: Big growl, head shake, bark.

This was getting interesting. I decided to ask Chaser about the other dogs that were part of her motley mutt crew.

ME: Fafner?

CHASER: Chaser stood there staring at me wagging her tail, no vocalizations.

ME: Annie?

CHASER: Same reaction as Fafner.

ME: Holly?

CHASER: Slight grr, still wagging her tail.

ME: Casey?

CHASER: Big grrr and a bark.

ME: Slick?

CHASER: Staring, wagging her tail.

ME: Bobbie Sue?

CHASER: Grrr and head shake.

ME: Dixie?

CHASER: Tiny grrr.

ME: Casey?

CHASER: Big grrr and once again a bark.

I wasn't surprised at Chaser's reactions; knowing these critters, I felt the same. However, I didn't know Casey and wondered, “Why such a strong reaction?” My mom confessed that Casey was a pushy little dog who occasionally visited Marie and was always up in Chaser's grill as well as perpetually sniffing her bum. Chaser painfully tolerated this behavior because she was a lover, not a fighter.

The moral of the story is that Chaser had learned all of these animals' names simply by hearing them over and over again, and she clearly had an opinion of each one. By having a conceptual understanding that objects and people have names, she was able to connect these dots, simply by observation.

Why Words Matter

While all dogs are excellent observers, Chaser demonstrated that they are also masterful listeners and eavesdroppers. Any dog owner who has had to resort to spelling W-A-L-K, V-E-T, or B-A-T-H knows this. And even that doesn't last for long. Dogs are constantly



attentive to our body language and our speech. Chaser's learning reinforces the ideology that words matter and the way we say them matters. Words have the power to uplift the weariest of souls or break down the strongest spirit. Communication is critical in all species, and as humans, we rely heavily on language to deliver valuable information. The better we can communicate, the greater our connection. Common ground is just one step away; we simply must believe it is there.





Was Chaser a True Genius?

In the classical sense, we have no way to measure her IQ. But if we follow Thomas Armstrong's interpretation, adhering to the Greek and Latin words that mean "giving birth to one's joy," absolutely.⁴⁷ There's a similar genius inside every living being—sometimes dormant waiting to be nurtured, activated, or discovered, other times undeniably on display. All living beings have an innate genius, and if we can tap into that for their learning, we are setting them up to succeed.

The first rule of order is that we must believe the student can learn, and if learning doesn't take place, we have to change the methods. If your dog isn't picking up what you're putting down, back up, reevaluate, and approach the task from a different perspective.

Dogs learn all the time—many times without any help from us and sometimes from other species. Our dog Bimbo was a mixed-breed, sixty-five-pound mutt who loved joining us when we rode our horses, Rusty and Cochise. He would trot along, weaving in and out as they basically ignored him, until one afternoon when he decided to stick his head in Cochise's food bucket.

With Bimbo in midchomp, Cochise calmly picked him up by the scruff of the neck, dangled him in the air, gave him a solid shake, and tossed him over the fence like a rag doll. Bimbo landed on his feet and shook it off, but from that day forward, he never tried to eat Cochise's food again. He learned this on one trial.

This was very explicit. As far as language acquisition, dogs learn many words implicitly. However, when we are teaching them, we need to be aware of what we are saying, how we say it, and the context of when we say it.

So how much can dogs understand? This is the question that drove JWP to teach Chaser tons of words—he wanted to explore the boundaries of her mind and memory system.

But don't get overwhelmed. JWP did the heavy lifting so that you don't have to. You need to carve out only short spurts of quality time with your pup; two-to-five-minute sessions a couple of times a day will do.

What he discovered was a method that is so simple it's hard to goof it up.

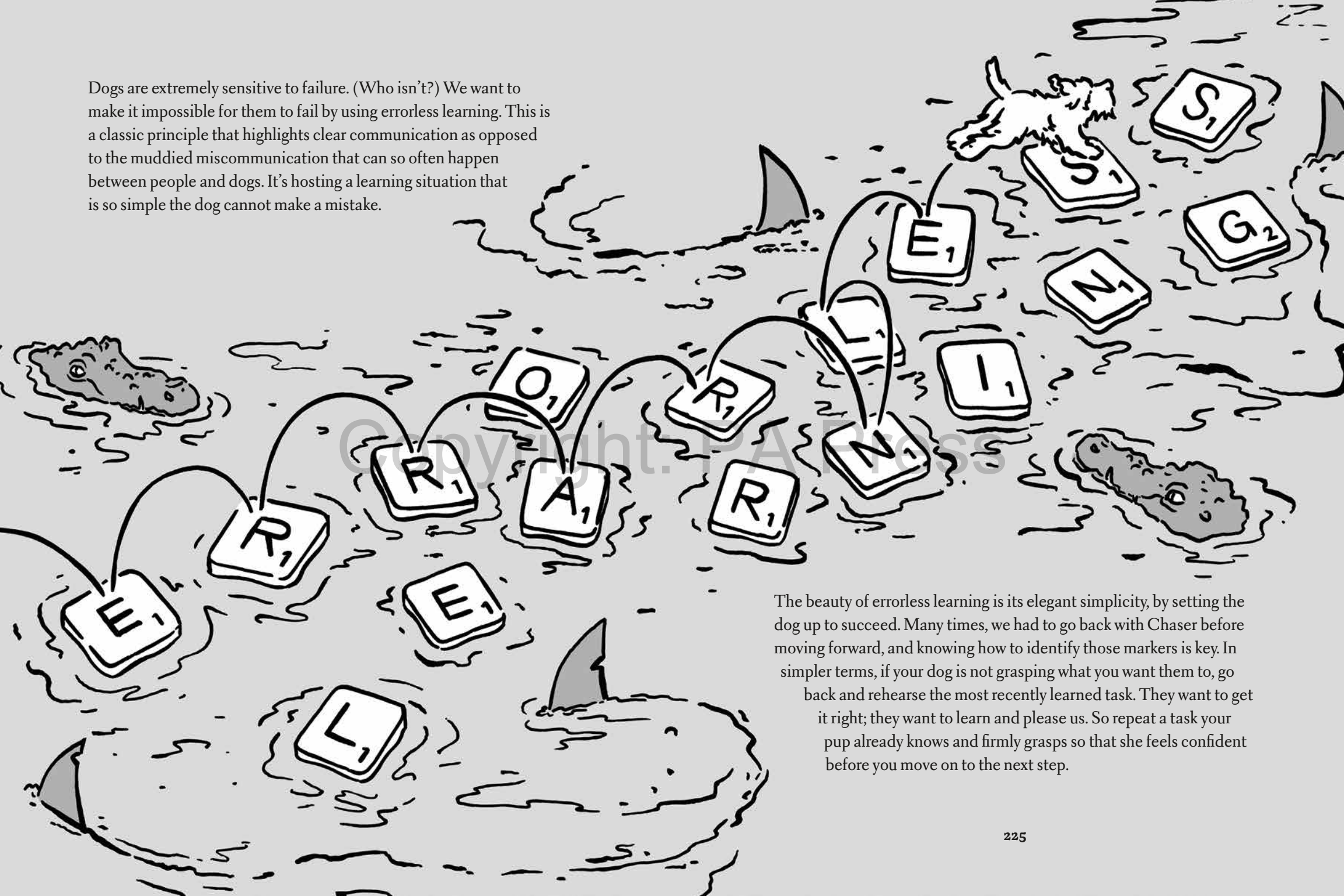




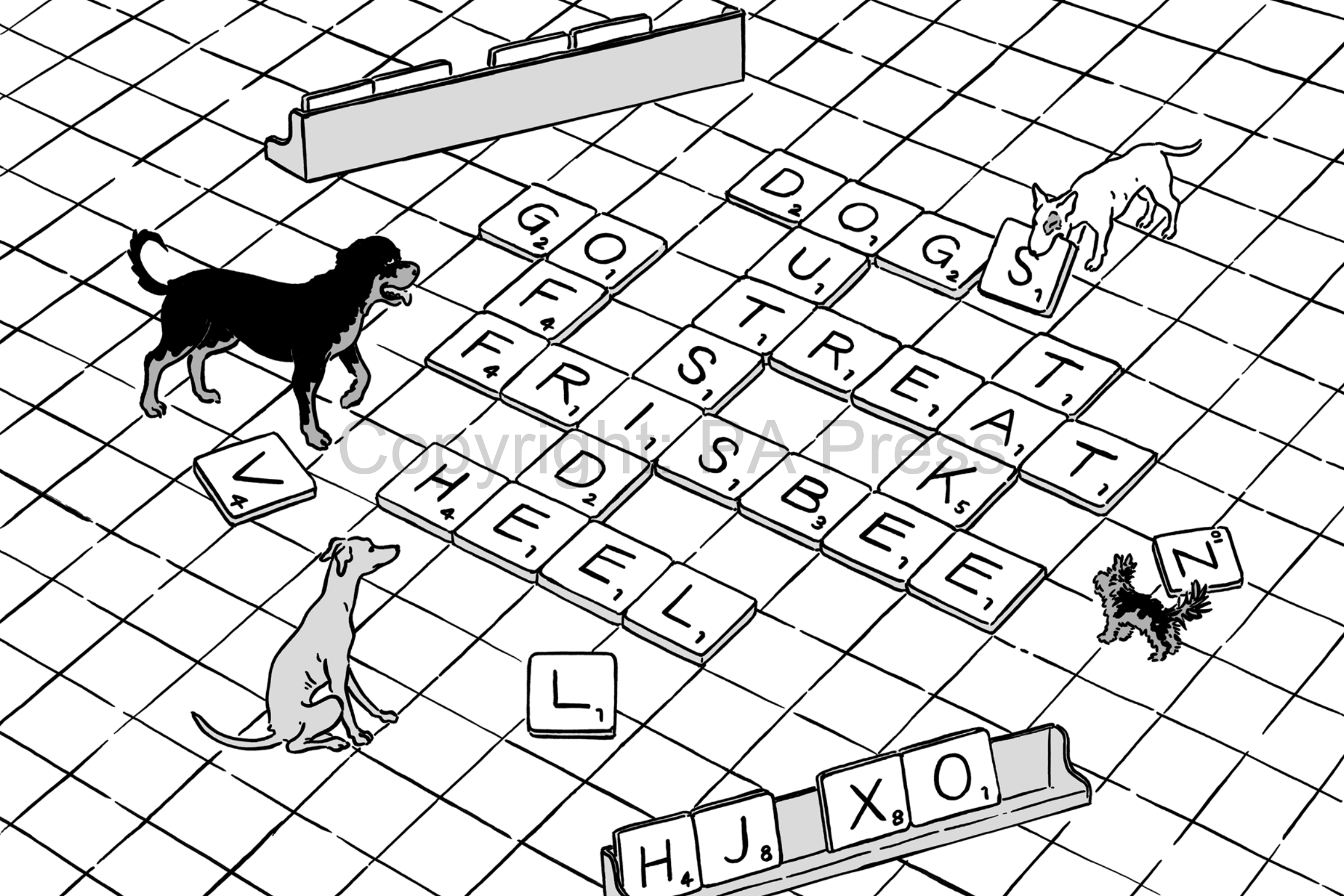
It begins with the word *no*, which should simply be a directive without negative connotations. Dogs are very sensitive to overcorrection, and too many times the word *no* is used as a harsh command. *No* should simply mean to stop what you are doing. The goal is to make the word neutral and constantly reinforce your pup with the word *yes* when they respond correctly. We accomplish this through “errorless learning.”



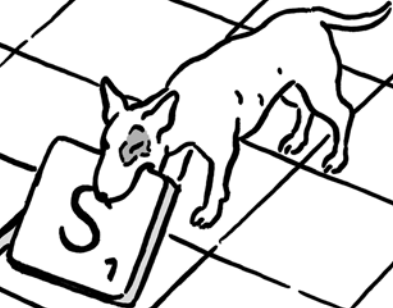
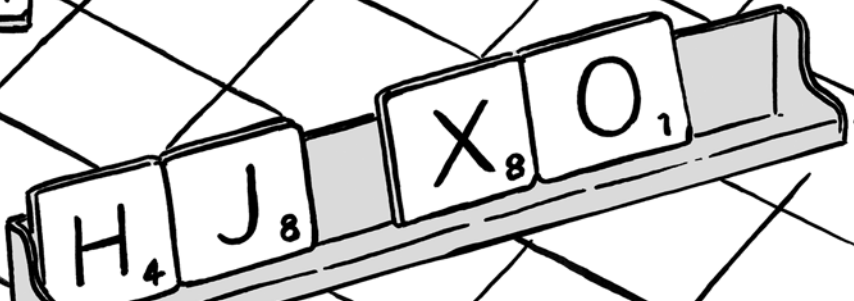
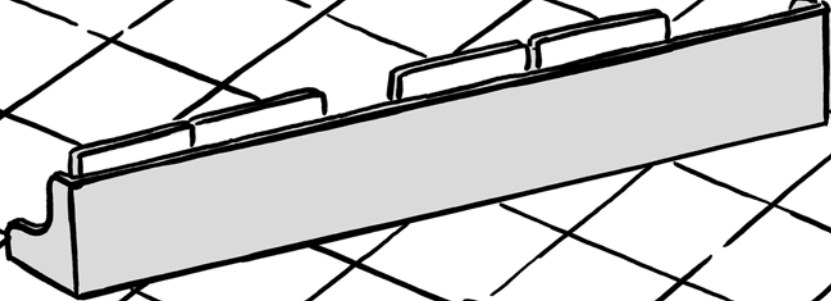
Dogs are extremely sensitive to failure. (Who isn't?) We want to make it impossible for them to fail by using errorless learning. This is a classic principle that highlights clear communication as opposed to the muddled miscommunication that can so often happen between people and dogs. It's hosting a learning situation that is so simple the dog cannot make a mistake.



The beauty of errorless learning is its elegant simplicity, by setting the dog up to succeed. Many times, we had to go back with Chaser before moving forward, and knowing how to identify those markers is key. In simpler terms, if your dog is not grasping what you want them to, go back and rehearse the most recently learned task. They want to get it right; they want to learn and please us. So repeat a task your pup already knows and firmly grasps so that she feels confident before you move on to the next step.



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Learning Builds upon Learning

An integral part of teaching your dog language is conceptual.

In school, there are certain prerequisites that lay the foundation for further learning. We must grasp the basics before we can move on to more complicated applications. To get to point C, you must start at point A and visit B along the way. Anyone who has put together a piece of furniture from IKEA can affirm that if we leave out a step, what happens next is catawampus. This is certainly true in working with your dog.

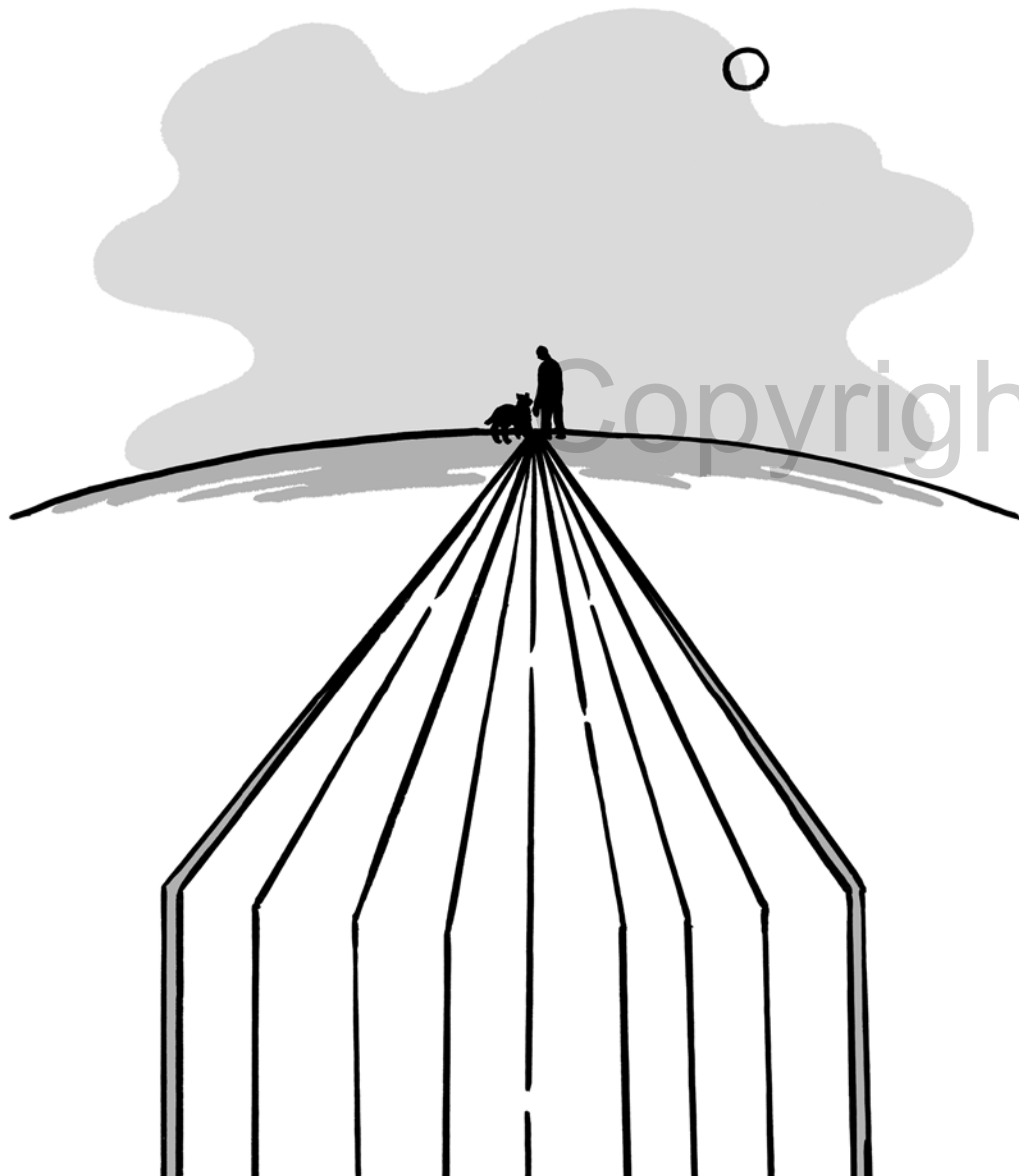




jwp discovered that learning one concept is greater than learning a hundred behaviors. Learning builds upon learning, and the more a dog learns, the more they can learn. Once Chaser had that “aha” moment that objects had names, she began to understand even more abstract concepts, such as common nouns and categories of objects like Frisbees, sticks, balls, trees, cars. She had combinatorial comprehension through our use of descriptive words like *smaller*, *bigger*, *another*, *slower*, *faster*. Currently, Chaser is the only dog in the world to empirically understand syntax and simple sentences like “To ‘cat’ take ‘big ball.’” Each word has an independent meaning.

Your dog doesn’t need to know grammar, but it would be great for her to know Gramma!

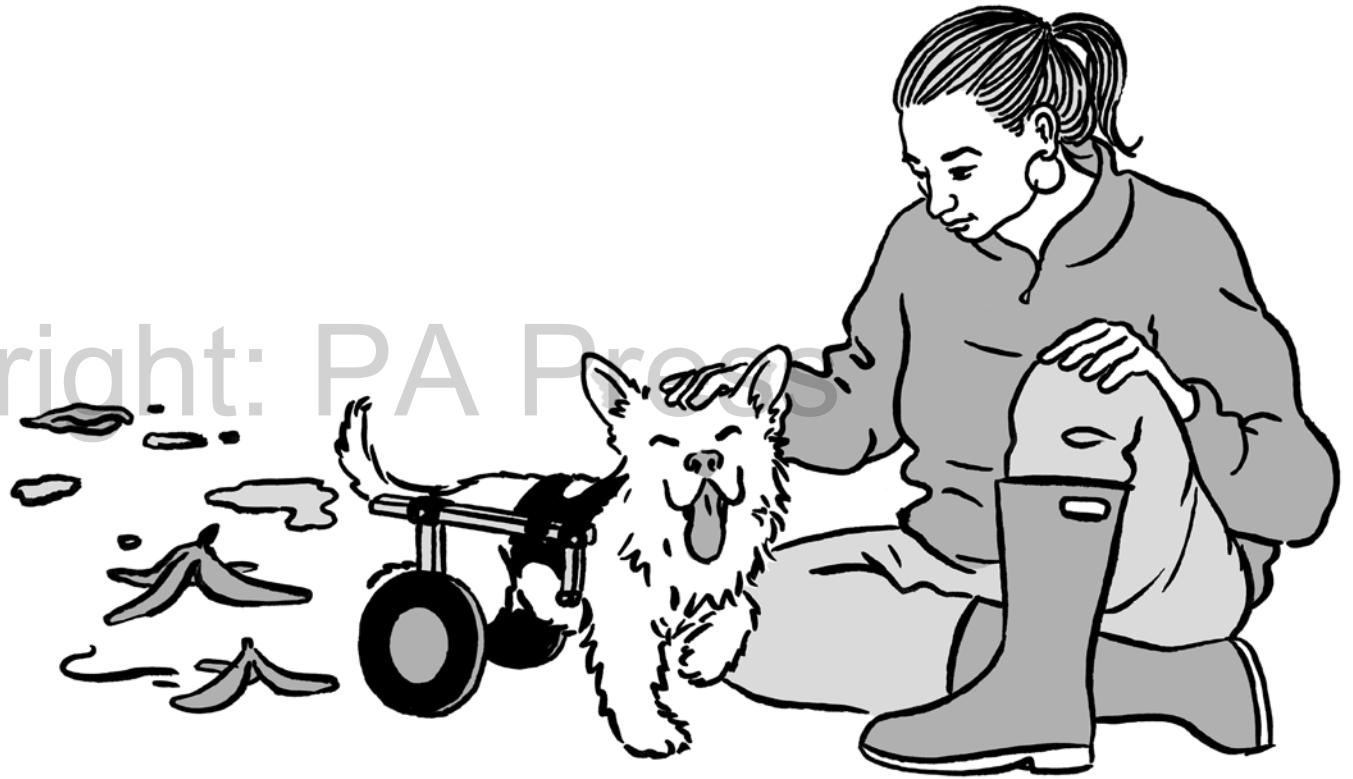
We hope that by getting to know Chaser, you will understand that while her learning was extensive, she was a very normal, happy dog. We want to reinforce that it was jwp’s method that was unique. Chaser is powerful evidence that by teaching our dogs words and concepts, their learning is fast-tracked and the dog-human relationship is deepened tremendously.



Chaser's Learning Was Boundless

The more she learned, the more she was able to learn—the same is true for you and your dog.

What you will discover in your journey with your pup is that missteps will happen and that's okay. They are valuable in pointing us in the proper direction, and you'll never find a more forgiving partner than your dog.



Chaser set the stage for a new way to think about the mind of the dog: what dogs can understand, what they are capable of, and how to incorporate their own minds into our relationships with them. jwp believed that there will be a world of many Chasers. She may go down in history as the dog with the largest vocabulary, but she will not go down in history as the only dog capable of this type of accomplishment. Others working with our method are popping up around the globe. Many members of *Canis familiaris* can display Chaser's abilities, even the dog living in your home.



Do It, Girl, You Can Do It!

This was my father's mantra to Chaser, me, my sister, my mother, and hundreds of his students. These encouraging words can move mountains. They are true for you as well.



Let's Learn the First Word

Play ball.

You will be teaching your dog nouns using play. Playing with an object gives the name of the object value in the dog's mind as well as releasing innate instinctive drives like chasing and catching. These are extremely pleasurable for the dog. A ball is a great first word, because there is so much motion for you both to toss, catch, and chase. Chaser's first toy was a racquetball named "blue." When introducing the first toy, start very simply with only that toy, which avoids confusion. This is errorless learning.

Address your pup quietly before you start with her name. Wait for eye contact before you show her the object: "Rover, this is blue." Once you have her attention, you can start having fun by tossing it and telling her to "catch blue." As you toss it, say, "Catch blue!" Once she's caught blue, reinforce her with "Good catch! Rover caught blue!" If she is hesitant to give it back to you, this is okay. Let her win, and you can playfully chase her around, saying, "Good girl, Rover's got blue, Rover's got blue, I want blue," constantly repeating the name of the object, aware of the verbs you are pairing it with. Whenever you're ready to toss the toy again, have it in your hand, holding it up and showing it to her again, announcing, "Rover, this is blue." Always get her attention before you engage with "Rover, catch blue!" Ditto, ditto, ditto.

Keep up the mood.

Keep the play sessions short, about three to five minutes. They should be highly energetic in order to sustain a focused concentration for your pet as well as yourself. Use a soft, excited voice, constantly commending your dog. Also continue to address your dog directly

to gain her attention. After speaking her name, wait again for eye contact before you ask, "Where's blue?" or "Catch blue." You can introduce "fetching" or "find" by placing the object in plain sight. If you're requesting that she fetch or find "blue" and she's having trouble locating the object, it's no problem to point and help her out: "Here's blue!" Once she finds the object, immediately praise her with hugs, pets, and verbal reinforcement. "You found blue!"

Rinse and repeat.

Continue the above for three days. Repeat these sessions several times throughout the day, keeping them playful and enjoyable for your dog and yourself. If your own motivation lags, you won't be a successful teacher. This is the perfect time to introduce and integrate other verbs like *find*, *take*, *chase*, and *fetch*. Do not play with or introduce other toys during this time. But do play games that your dog enjoys, using lots of positive reinforcement, and never try to force training on your dog in any way. When your pup can successfully bring you the named object from another room, you can then move on to another toy and repeat the process with a new object. It's great if she uses her nose to help her find the object. As you build the repertoire of toys, continue to rehearse and play with the previously learned toys to build your dog's long-term memory.

Learning takes time.

If you continue this process consistently, after a few months your dog will have that pivotal moment when it clicks in the mind and she realizes that objects have names. This creates "fast mapping," and your pet will actually be able to learn the names of objects in one trial. However, to maintain the object in her long-term memory, repetition is

necessary, as it is with all learning, human and nonhuman. At this point, their learning of nouns will become extremely rapid, and you can continue to build her vocabulary as well as move on to more advanced learning.

You can use multiple opportunities to introduce your pup to people. On walks you can also point out trees, fire hydrants, and bushes along the way. Just remember to stop, get her attention, and be very clear with “Rover, this is fire hydrant,” or “Rover, this is tree.” You can point out other trees in the park or in your neighborhood, and she will eventually grasp the concept of common nouns in that anything that is tall and has leaves on top is a tree, or anything short and red* is a fire hydrant.

Don’t miss opportunities where your pup is already interested in something, like grabbing a stick. Immediately reinforce her, saying, “You’ve got a stick! Yes, that’s a stick!” Play with her and repeat the name over and over again.

* Dogs technically cannot see the color red; it appears as a taupe mousy gray in your dog’s eyeball color wheel.

Tip Sheet: Learning the First Word

PREREQUISITE:

Obedience cues, like sit, stay, and come.

1. You will be teaching your dog nouns using play. Playing with an object gives the name of the object value in the dog’s mind as well as releasing innate instinctive drives like chasing and catching. These are extremely pleasurable for your dog.
2. Before teaching the name of a new toy, remove any distractions in the room; your phone, tv noise, another person, or another pet.
3. Keep your learning sessions short and sweet, no more than five minutes, and repeat them a couple of times throughout the day. Remember, when learning is fun, it happens very rapidly.
4. Keep your energy upbeat, using a soft, excited voice constantly commending your pup. You can’t expect your dog to be excited if you aren’t.
5. Do not introduce any new toys during this process. Be consistent. If you want to randomly play with other toys throughout the day, it’s okay, but not during the “new toy” teaching sessions.
6. When introducing the toy, start simply with only that toy, no other toys present. Begin with your dog in a sitting position and say her name softly, making eye contact before you show her the toy. After you have her attention, show your pet the object and name the toy as you say, “Rover, this is blue.” After speaking her name, wait for eye contact before you ask, “Where’s blue?”

7. Use play to combine verbs with the new object. This is the perfect opportunity to teach verbs and combine them with the object in play behaviors.

- a. “Find” blue: it’s the only object on the floor and in plain sight.
- b. “Take” blue: hold out blue in your hand for her to take it in her mouth.
- c. “Chase” blue: roll the ball on the floor for her to chase.
- d. “Catch” blue: toss it for her to catch in her mouth.
- e. “Fetch” blue: another word for “find.”

8. Remember, you’re playing *with* your dog. Not just tossing a toy in her direction for her to play with. Don’t be afraid to get goofy and chase her once she has the toy, saying, “I want blue! You’ve got blue!” If you’re both running for the toy or tugging on the toy—always let her win, *constantly* reinforcing the name of the object.

9. Play hide-and-seek with the new toy. Hide it in plain sight, again making it impossible for your pup to miss it. As she is sitting or lying down, let her watch you “hide” it. It’s a good opportunity to give the cue “Watch me!” which will also be the foundation for imitation.

Then ask her to find the toy:

- a. On a chair
- b. Under the couch—in sight
- c. In the corner of the room

No mistakes

If you see that your dog is about to make a mistake, rather than correct her, immediately call her back to you. Back up a few steps until you both get back on track.

Repetition

Repetition is a highly undervalued technique in working with your pup. It’s needed for mastering anything in life, and dogs are no different. The good news is that they have a high tolerance for repetition when it’s something they enjoy. Constantly repeat the name of the object. You cannot say it enough.

When to move on to a new toy

After several days of the above, place the toy in open view in another room and ask your pup to “find blue.” Go into the other room together; you can even show her: “Rover, here’s blue!” This will eventually become a great game of hide-and-seek, where you can use the words *yes* and *no* to give her cues that she’s on the right track—like the hot/cold game.

For a live demonstration with JWP and Chaser, see “Teaching the Names of Objects to Dogs,” youtu.be/pw-GDJi7c_w?t=236.

Doggie Do

Keep learning sessions short, only two to five minutes.

Make these sessions fun for you and your dog.

Keep your energy level high.

Play *with* your dog.

Constantly repeat the name of the object.

Reinforce her with *yes* frequently when she gets it right.

Doggie Don’t

Act bored.

Overuse the word *no*. If you find yourself saying *no* repeatedly, back up and reshape your own behavior. Do something that your dog can execute correctly to feel good about herself. It may be simply chasing a ball or giving her a hug.

Don’t be afraid to get on her level and be goofy.

Tip Sheet: Errorless Learning and the Word No

Errorless learning is hosting a situation so simple that the dog cannot make a mistake. It is also using the dog's innate instincts for play. The goal is to use the word *no* as a directive so that it doesn't have a negative connotation.

The word *no*

No is not a word that makes your dog happy, so be aware of overusing it. *No* simply means to stop what you're doing. The goal is to eliminate negative connotations to the word *no* and to constantly reinforce your pup with the word *yes* when she responds correctly. *No* should be soft and sharp, sometimes using her name: "No, Chaser."

The word *yes*

Yes should always be enthusiastic and happy, repeated frequently: "Yes, yes, yes!" In teaching, we really want to emphasize the positive, so pour on the word *yes* to set your dog up to succeed, which also builds confidence.

No mistakes

If you see that your dog is about to make a mistake, rather than correct her, immediately call her back to you. Back up a few steps until you both get back on track.

Doggie Do

Use the word *no* as a directive, as a cue for your pup to stop what she is doing.

Always end a session on a positive note
and the word *yes*!

Doggie Don't

Yell at your fur baby.

Don't let *no* be the most utilized word in your canine vocabulary. Be aware of how many times you say it, and if it's the primary cue you are giving your dog, back up to re-evaluate your own behavior.

Never let a negative experience hang in the air.

Find something that enables your dog to feel good about herself. It can be as simple as tossing a ball or kissing her on the nose.



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Problem-Solving



What's Up

Puppy Pickles

Some scientists frown on comparing human behaviors to those of animals, but the cool thing is, that's old news. Science is catching up and showing us that we have much more in common with animals than not. Chaser and many other dogs are evidence of this; they have emotional experiences just like us, and if we can remember that when we engage with them, we will be ahead of the game.

Before working with your pup, answer these questions of "How would you feel if..."

Someone yelled at you for peeing or pooping when you couldn't hold it anymore?

Someone hit you for crying?

Someone didn't speak your language and kept angrily repeating themselves with random arm movements that are scary?

Clearly these all would be unpleasant experiences for you, so don't expose your dog to them either.

Now let's stroll down memory lane with "Remember how you felt the first time you..."

Ran?

Were able to ride a bike?

Held your breath underwater and swam?

Shot a basketball through a hoop?

Hit a ball with a bat or skated on the sidewalk?

Did a somersault?

Jumped on a trampoline?

Played a video game or musical instrument?

Remember the excitement and how awkward it was the first time you did something? What looked so easy wasn't—but it was so much fun that you kept going with it. You practiced it, and the better you got at it, the more fun it was.

This is the same for dogs.

Here is the scientific verbiage: the release of an instinctual behavior is inherently positively reinforcing. The more memorable and exciting such an experience is, the more likely an individual will be to repeat it.

This can also get us into trouble.





Brainstorming

The thing that made the Jeep experience so troubling was twofold. First, my father made a JV error by not holding onto Chaser's leash. Please don't make this blunder. Second, it was the most exciting experience in Chaser's young life and thus positively reinforcing. She was going to be vulnerable to repeating the behavior of chasing cars unless effective action was taken. JWP knew that in order to teach Chaser not to chase cars as well as critters, he had to implement a plan to teach her the meaning of the word *no*. This can be a challenge when working with puppies and young dogs. There are many schools of thought that believe that you should not introduce this word in the first four to six months, and the reasoning is simple: most people overuse it. This can encourage a dog to react out of fear, which should always be avoided. JWP knew that he needed to dig deeper to search for a solution that enabled him to effectively modify her behavior without breaking Chaser's spirit.

This is a story about Chaser and a fast, red Jeep. I'm going to break it down, demonstrating each step that JWP took to turn this frown upside down.

Problem

When Chaser was a three-month-old puppy, there was a scary encounter with a shiny, red Jeep barreling down the road in front of the house. JWP was overconfident in showing off his new puppy's obedience training to a former student, Allyson Gibson. They were outside in the front yard, and Chaser was doing great, sitting under a big pine tree with her focus on JWP, until the Jeep careened down the road. Out of the blue, like a flash of furry lightning, she sped toward it, ignoring his cries of "no, no!!" He was lucky that Allyson was faster on her feet and took a dive, catching Chaser's leash just before she could disappear under the wheels.



Observation

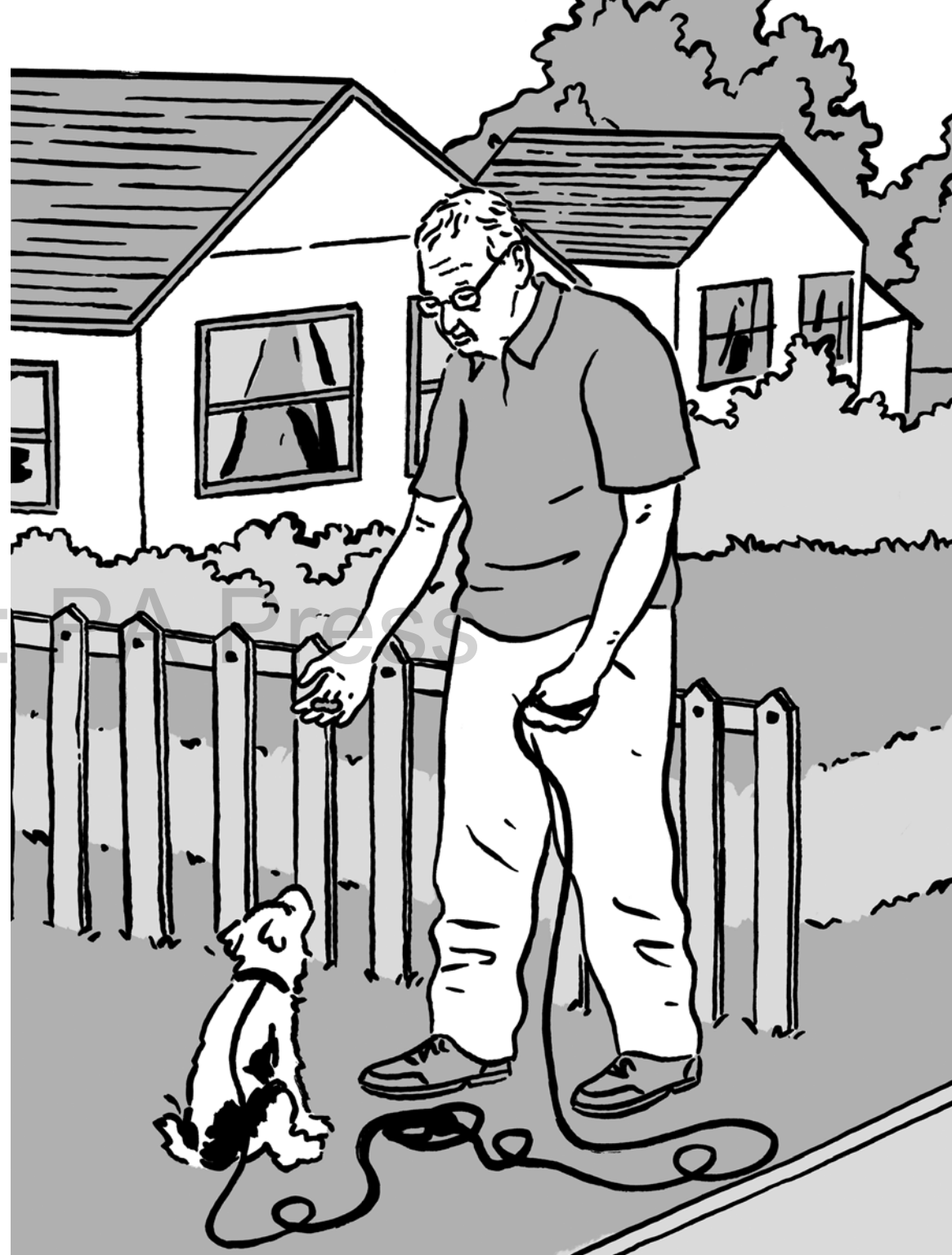
jwp discovered that on daily walks, when Chaser would see a squirrel, she would lunge to chase it, the same thing she did with passing cars. Organically, since she was on a leash, she experienced a natural jerk that was a bit of surprise to her. While it didn't make her happy, it wasn't enough of a jolt to compete with her innate instinct and desire to chase. What to do about this? He needed to literally "curb" this behavior but didn't want to squash her desire to chase other objects, like balls and Frisbees, that were immensely satisfying to her. This appeared to be a catch-22.

Solution

jwp decided to give Chaser a choice. Since she experienced a natural jerk in leaping forward, would she keep doing it if the jerk became really annoying?

When a critter scoots across the road, the dog's instinct will kick in, where they are forced to literally make a judgment call: "I know if I chase this cat I will get a tug, but it's really not that bad, and it's worth it because I love to see that cat run."

Like every young pup, Chaser was completely in the poor judgment zone, so when jwp would see her making her lunge, he would step back just a little to intensify the tug on her leash. (Note, this is not yanking on the leash.) Then just before the jerk would happen, he would say, "Chaser, no." Exactly as expected, the stronger jerk did the job, and at this point the word *no* took on a quality that Chaser didn't like and became something she didn't want to experience. Initially the word *no* to Chaser meant "Now I'm going to get a jerk," but very quickly, as her learning progressed, the word *no* lost all negative connotations and simply meant to stop what she was doing. It became a benign cue that was a directive piece of information that had no emotional qualities for her.



The Result

The takeaway is that in the natural world, when dogs engage with each other, they learn consequences through play behavior. If one dog nips a little too hard in a game of tag, the yelp of the other pup teaches them to back off a little and vice versa. To keep our animals out of the road and dangerous situations, as with our children, it takes some thoughtful consideration on our part. This also gives your pup the foundation for future problem-solving through her “faux paws.” It’s imperative to do your teaching only through positive reinforcement and to really pour on the praise, which will enable you to not only strengthen your bond but also build up your dog’s confidence.

Don’t forget that as humans we have consequences for our actions. This happens organically in our day-to-day life, like parking your car in a no-parking zone and getting a ticket. Hopefully, we learn quickly not to repeat that behavior.

Learning the Word Car

While implementing *no* in Chaser’s repertoire on daily walks, we used another technique to redirect her attention and stop her from chasing things that she shouldn’t. It was basically a bait and switch tactic, one where we would shape a *competing* response that was incompatible with chasing. In practical terms, we gave her something else to do instead of chase. When we saw or heard a car coming, we pointed to the grass and said, “Chaser, car, go to grass.” At the same time, we ran with her to the grass. We had her lie down on the grass and positively reinforced that behavior with praise and pets until the car passed. In the very beginning, treats were also an effective reward. Finally, we gave her the word to release her from lying in the grass. The cue was simply “walk on,” and we continued the walk. This is important—once the directive of “car” was cemented into Chaser’s vocabulary, occasionally we would keep walking, lost in conversation, only to realize that Chaser was nowhere to be seen. She was still patiently lying on the side of the road, staring at us, waiting for the cue to go. Eventually when Chaser would see or hear an approaching car, she would proactively plop herself down on the side of the road before we had an opportunity to say “car.” This is super easy and fun to do on your own walks with your pup.



Saying
Hello

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after
Saying
Goodbye

What's Up

Grief. It's a big one. As my great-grandmother used to say, "If you bring a dog into your home, one day you are going to get a broken heart. They don't live forever."

The question is "Is it worth it?" Are those sweet, devoted, and abbreviated years really worth giving your heart, only to know that it will eventually be broken?

This was the precipice on which my father was perched for ten years. The loss of his beloved sixteen-year-old dog Yasha crushed him, and he secretly vowed never to have another dog. Ten years passed, and thankfully my mother knew him better than he knew himself, and she gave him a puppy for Christmas.

That puppy was Chaser.

People who have read my father's book have gotten to know Yasha as well as Chaser. Many have taken me aside with a conspiratorial whisper: "Tell me, which one was the love of his life? Yasha or Chaser?" It's not a fair question, but it had me pondering. The closest I can come to an answer is that Yasha was his soulmate and Chaser was his muse. They were extremely different, and they each occupied their very own place in his heart.

That's the remarkable thing about the heart. The love for one does not diminish the love for another; it's not like pie, where each piece gets gobbled up and there's nothing left. They don't crowd, compete, or cancel each other out. While memories may fade in and out, magically resurfacing at the sound of a song or a feeling of déjà vu, love can coexist independently. The love cells of the heart are unique in this way. Okay, we know that love doesn't have physiological residence in the organ known as the heart, but it certainly feels that way. Love can ping your heart in sharp intensity

or it can wash over your body like a warm wave. Sweet or bittersweet, love is always worth the risk.

So, what's the expiration date on love lost? How do you know when it's time to move on and get another dog? Ironically, I believe it's the same answer a vet gave to an audience full of dog lovers at South by Southwest when he was asked, "How do you know when to put your beloved dog down?" He lowered his head and with deep reverence replied, "Most people wait too long."

And as Great-Granny once said after a funeral as she marched into the house, the screen door slamming behind her, "Child, it's not the letting go that hurts so much, it's the holding on."

My father confessed that he held on too long before he moved on from Yasha, and of course the next dog was Chaser, well worth the wait. Saying hello after saying goodbye is tough, because our greatest temptation is also our biggest obstacle: comparing the new pup to the one that came before. Warning, Will Robinson! This new pup is a new love, so don't compare them. If we can even just acknowledge this pitfall, we will be ready for love.



Tell Me a Story Part 1: Yasha and the Rocks

There was no denying that Chaser had her own blueprint and personality. But that didn't keep my father from assuming that she might have some of the same abilities and propensities as Yasha, which he learned the hard way.

Yasha would accompany my dad on outdoor excursions, hiking, paddling, and windsurfing in our well-loved seventies camper. He was a gypsy spirit who, like Dad, loved the water and quickly became adept at diving for rocks in rivers and swimming in strong currents. He even learned to ferry across a river to get to the other side so that he could climb onto a rock just to jump off and bodysurf a rapid. He would do this over and over and over again.

Enter rocks and boulders, which were Yasha's second love. He was really a billy goat in a dog's body, and one of our favorite day trips was to the Green River Narrows, about an hour and a half away from home. The last mile was a series of twenty-four hairpin turns on a bouncy gravel road, and our sympathies went to whoever was in the back seat with Yasha. He would begin whining and pacing back and forth in anticipation as he panted with his mouth wide open, hot, sticky drool flying left and right as he climbed over whoever was seated next to him. It took me only one time in the back seat with Yasha to always call shotgun.

At the top of the mountain there was a clearing used as a parking lot, with the mouth of the trail as the only entrance into the woods. This took us about a mile into the foothills of the Blue Ridge Mountains before we hit the turnoff point to the gorge, which was off-trail and

unmarked. Most of the time we estimated where it was by eyeballing where the mountain started to slope at a forty-five-degree angle. That being said, we don't ever advocate taking this approach to the wilderness, because veering off the trail primarily leads to trouble. My father happened to be very familiar with this particular gorge, and so was Yasha.

Whenever Yasha was with us we never had to guess where the cutoff was. He would run ahead impatiently, waiting at the turnoff point. As soon as he would see us come around the bend, he would fly down the mountain, sprinting in lightning-fast steps. How he could coordinate four legs so fast, I'll never know, but he was never out of control or skidding. We, on the other hand, had to gracelessly butt-slide down the mountain for about a half-mile to join Yasha, which deposited us in the beautiful Green River Gorge.

This was Yasha's favorite rock-climbing spot, because the boulders were wide and steep. He was able to jump from one to the next much faster than we could crawl up them. I swore his paw pads were made of rubber. He never slipped on wet rock, which was plentiful in this area aptly named "the narrows." This name was quite literal because the river needle-nosed into a six-foot-wide crevice, creating a spectacular thirty-foot corkscrew waterfall with a swimmable pool beneath it.

This is where we found Yasha. He stood at the top of the falls on a large flat boulder, greeting us to behold the beauty of nature's breast and beast, looking magnificent as his silhouette was majestically poised on the ledge. Then he turned and walked to the edge, peering over the side at the rushing water. (Sound effect of needle scratching vinyl.) I nervously asked my dad, "Is he okay there?"

Before the words left my mouth, my father called, "Yasha, come!" We were both expecting a solid recall, but Yasha was now literally in his head. We could see him calculating the distance to the other side

as he slowly started backing up, crouching for a leap, when my father bellowed, "No, Yasha, NO!!!"

It was too late. Every ounce of his common dog sense had exited stage right. As in life-altering moments, the next seconds unrolled in some bizarro, time-warped slow motion. I don't even know how that happens, but it does, and it did. The world was silenced and frozen as Yasha began his leap over the thirty-foot drop. His front legs were perfectly extended, his back was arched as his hind legs propelled him off the very edge of the boulder. If the rock he used for his trajectory was slippery, he would tumble into the swirling rapids below, but there he was midair, suspended over the falls. I blinked just in time to see his front paws land gracefully on the opposite side, close to the edge. But it wasn't over yet—his hind legs also needed to ace this landing.

He nailed it. Effortlessly. No scramble, stumble, or slipping. What the *bleep*. My dad and I doubled over in relief, we were so happy. Yasha included—he was wagging his tail, prancing with delight and proud as a pup could be. Oh, my lord, thank you, sweet Jesus.

Relief was fleeting as we realized that Yasha was now on the opposite side of the river, adrenaline pumping through his thirty-five-pound body. He was so excited to see us that he was backing up again.

Let's just say, he made it and my father never let him take that leap again. Lesson learned, but that didn't stop Yasha from boulder hopping and accompanying Dad on countless river trips and expeditions.

Excuse me while I take a cigarette break and pour a shot of Widow Jane. And no, I don't smoke, but the Widow Jane—she's a friend.

**“Whatever its value is, grief is
the price of commitment, that wellspring
of both happiness and sorrow.”**

— Marc Bekoff⁴⁸



Tell Me a Story

Part 2:

Chaser and the Rocks

My father's memories of his outdoor adventures with Yasha had him yearning to share them with Chaser. It was a gorgeous day in May 2005, and he was craving a hike in the mountains. Chaser was always ready to go, but unlike Yasha, she hadn't really experienced the wilderness. She was very athletic, so it never entered his mind that this expedition might be a little ambitious for her.

The first mile was a piece of cake for Chaser; she loved being outdoors and grabbing sticks for him to throw along the way. Once they hit the turnoff, she was game to start the steep descent. They quickly discovered that the spring rain had eroded this part of the mountain, exposing roots from the trees and making it little more than a creek gully, snaking its way down, with the gnarled roots acting as huge strainers. These weren't a problem for Dad; he could grab onto them as he scaled his way down, but Chaser's legs were so delicate that she kept getting entangled as she slid on wet leaves. He was afraid that she might break a leg, so he had her follow him as he carefully helped her navigate the twisted tangle of roots; the hike down became laborious for both of them, as they focused on the terrain immediately beneath their feet.

Finally arriving at the bottom, they were both relieved, and Chaser quickly spun in front of Dad with her ears up, prancing backward. Unlike Yasha's bold bolts, these were her polite requests to jog on ahead, and laughing, he gave her permission: "Go on, girl!" She trotted onto the gentle, sloping rock, with a small jump onto the first boulder. Well done—she glanced back for quick affirmation to continue, and he

gave her the go-ahead. As she leapt for the next boulder, she couldn't quite get her footing, clawing at the rock and clamoring on her belly. Dad quickly reacted, sprinting just in time to cushion her fall as she tumbled backward off the stone. She was unfazed, but he wasn't, and he confessed that he had foolishly misjudged the situation, compromising Chaser's safety. It bothered him, but they continued to explore a little farther upstream much more cautiously until they found a nice, flat spot by the river where they could sit in the sun and greet other hikers who came by. Unlike Yasha, Chaser much preferred charming the newcomers with wags, wiggles, and stick tossing until it was time to head back up the mountain.

The ascent took much less effort than the descent, and at the end of the day, it was a good, eye-opening experience. Settled back into the car, my dad pulled onto the gravel road, shifting the gear into low. He was determined to leave his expectations in the gorge and carve out new adventures with the sleeping beauty in the back seat.



Things to Consider When Bringing a New Furball Home

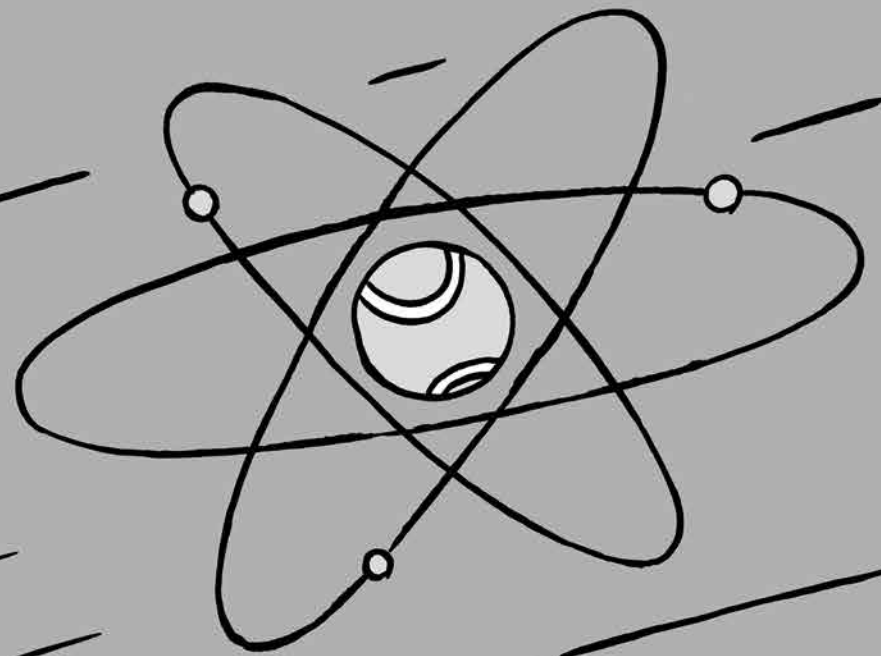
Do you have time in your schedule to devote to a puppy or a rescue dog that might have special needs? A new dog could easily be more work than your past pup.

Do you work from home or have a partner, so your pup won't be alone for hours? Dogs are social beings just like kids, and crates—which are cages—are not to be used as babysitters or a lifestyle choice.

Do you have other pets that might not welcome an energetic puppy or a new furry friend? Perhaps include them on the choice and conversation.



The World beyond Fetch



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What's Up

I hope that we have covered most subjects in the categories of wags, wiggles, woofs, words, and what tha?'s. Let's conclude with what's next.

Science and discovery are constantly moving the goalposts. It's an ongoing process. Fads that start as fringe often morph into mainstream, and human perceptions are in perpetual motion. How are we to know when the shape-shifting is not just a trend?

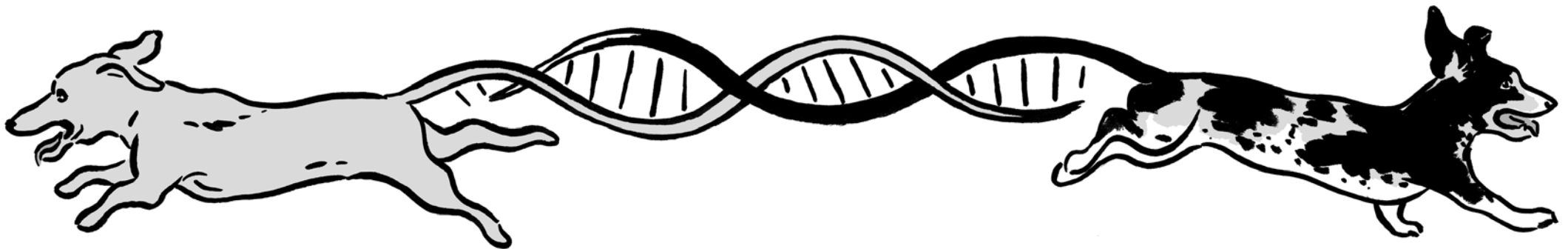
The answer is "Only time will tell." But what story will time tell us?

This brings us back to my dad's philosophy. Being a true renaissance man and lifelong learner,

he had a deep love and reverence for science, poetry, and mythology. I mentioned this at the beginning of our journey, and it's worth repeating as we wrap things up. If we don't incorporate all three into our lives, we are bound to miss something important.

Viewing the world through three different perspectives gives us a wider lens to interpret our experiences. If we simply look at life with a telescope, we can't possibly see the greater picture. And wouldn't it be more wondrous to view the world through a kaleidoscope?

How do these jigsaw pieces fit together in the great arc of dogdom?



Let Me Tell You a Story...

John Pilley began his adulthood searching for truth in the form of theology. In his pursuit of the divine, he discovered the flaws of man. Hoping to gain greater insight into the wacky underpinnings of human behavior, he dove headfirst into the study of psychology. There, as a naturalist, he found his true love of animal behavior. Thus was his destiny as a scientist and professor.

It was pretty cool growing up with a dad who was all of the above and a mother who was basically down for anything. She was truly the wind beneath all of our wings and our rock of stability. She rarely put her foot down, but the first time I witnessed her tipping point was when my sister, Robin, invited some cute, hippy-dippy guy to pitch his tent in the front yard for three days. If that wasn't cringeworthy enough, he showed up every night for dinner. Mom gathered us all into the den, whispering as quietly as her exasperated voice could project so our unwanted guest couldn't hear, "You, your father, and your sister will bring home any animal, person, or thing, and it has got to stop now!"

Her proclamation definitely limited our parameters, but it didn't discourage us from using every family pet as a science fair project. From the time Robin and I were seven years old, our favorite after-school hangout was in our father's laboratory, playing with the rats and pigeons. By the time we were in middle school, we were masters at operant conditioning and stimulus control and started to get creative in using our family dog Bimbo as well as our horses to shape silly new behaviors. We didn't know that what we were doing actually had a name until we saw David Letterman—"stupid pet tricks."

Shenanigans aside, as a scientist, whenever my father was speaking about methods and data, he was pretty hard-core in sticking to the scientific script. We had many lively conversations where I challenged

him not only about his own work but about other animal research that simply defied common sense. When I was nineteen, he told me that his current research with our family dog Yasha regretfully indicated that dogs were unable to learn nouns independently from verbs and they didn't really even know their name; it's just a cue to look.

I found this scientific snobbery offensive because it was contrary to our own experiences with our family pets. I knew that Yasha was smart as a whip, and I was convinced that my father's research had to be barking up the wrong tree. After a heated debate I retorted, "Well, *Dad*, what else is your name except to look? I suggest you remodel your methods, *Dad*." He was staring at his feet as he rocked back and forth on the porch swing. I knew he was heavy in contemplation as I gently queried "*Dad?*" He looked up at me and our eyes met as I replied, "Made you look."

I'm happy to say, he not only listened but he chose to dig deeper. Out of those many conversations he taught me that in science there's always the possibility of making an error. There are two ways:

Reading too much into data.

Reading too little into data.

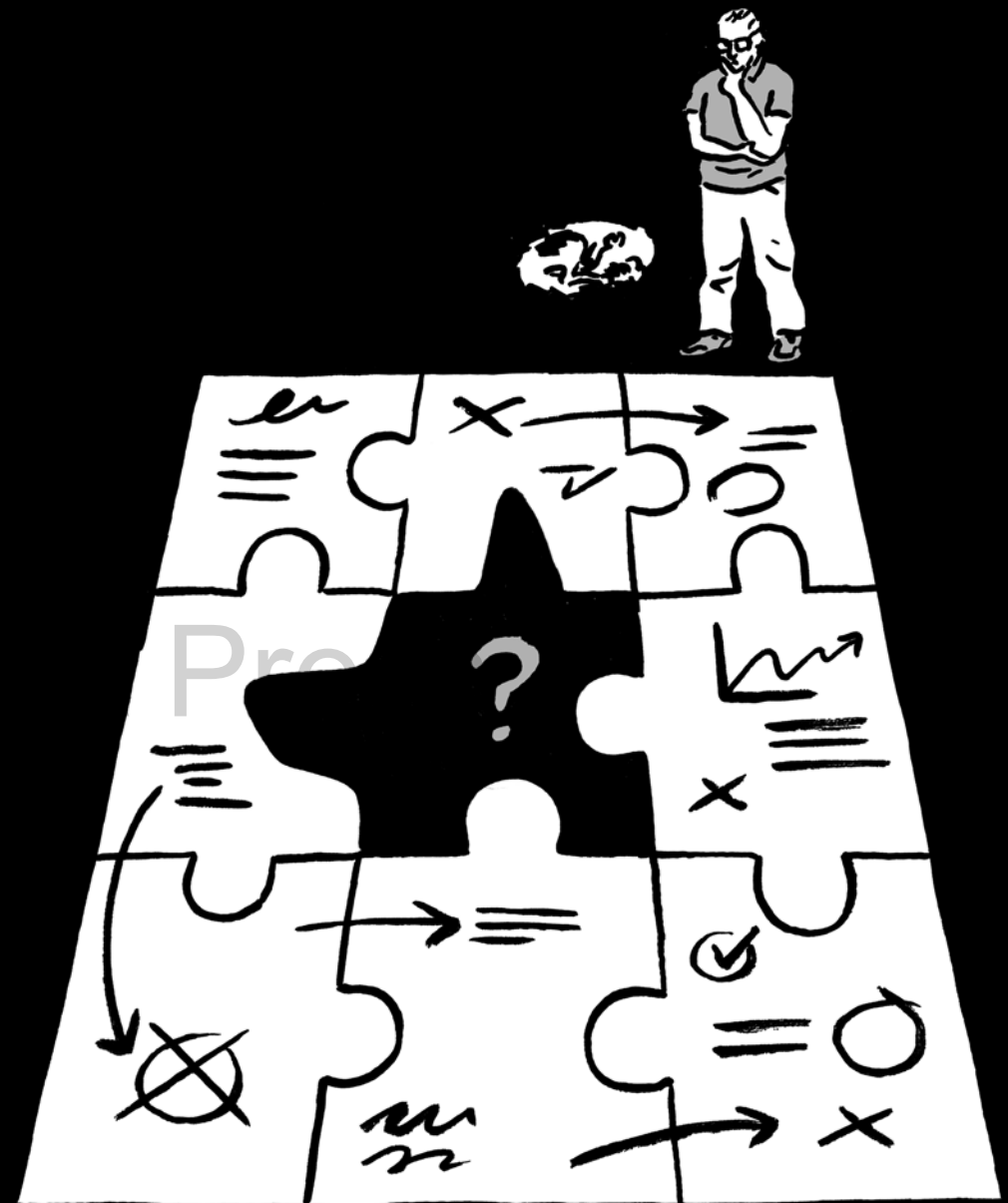
Which brings us to jwp's "aha" moment.⁴⁹

The story continues...

After my father's retirement and Yasha's death, he became obsessed with attending Border Collie trials, marveling at the nuance of the farmers' whistles and teamwork with their dogs. This day found him at the local county fair featuring an exhibition of herding competitions with the Border Collie trainer and breeder Wayne West.

My dad spent the entire day there, captivated by the joyful intensity of the dogs in their work and the closeness of their bonds with their trainers. That evening he had the privilege of sitting around the campfire with Wayne. And the other trainers, breeders, sheep farmers, and their dogs, when he had the boldness to blurt out, "You know, unfortunately our scientific research shows that your dogs don't even know their names—it's just a cue to look." There was complete silence, and awkwardness hung in the air until one crusty Southern farmer drawled, "That's what science says, does it? Well, you tell me if Jeb here doesn't know his name, how come I can call him out of four other dogs and ask him to find Bo and Beep in the herd of two hundred sheep and he will do it every time. What does science have to say about that?"

This deeply humbled my father, and he realized that his methods were flawed. He knew in that moment the critical error he made in not paying attention to the legendary farmers who had actually engaged with dogs daily for hundreds of years. He had not given homage to the mythological and practical bread crumbs left on the trail to discovery. This "salt of the earth" approach was the element missing from his research.

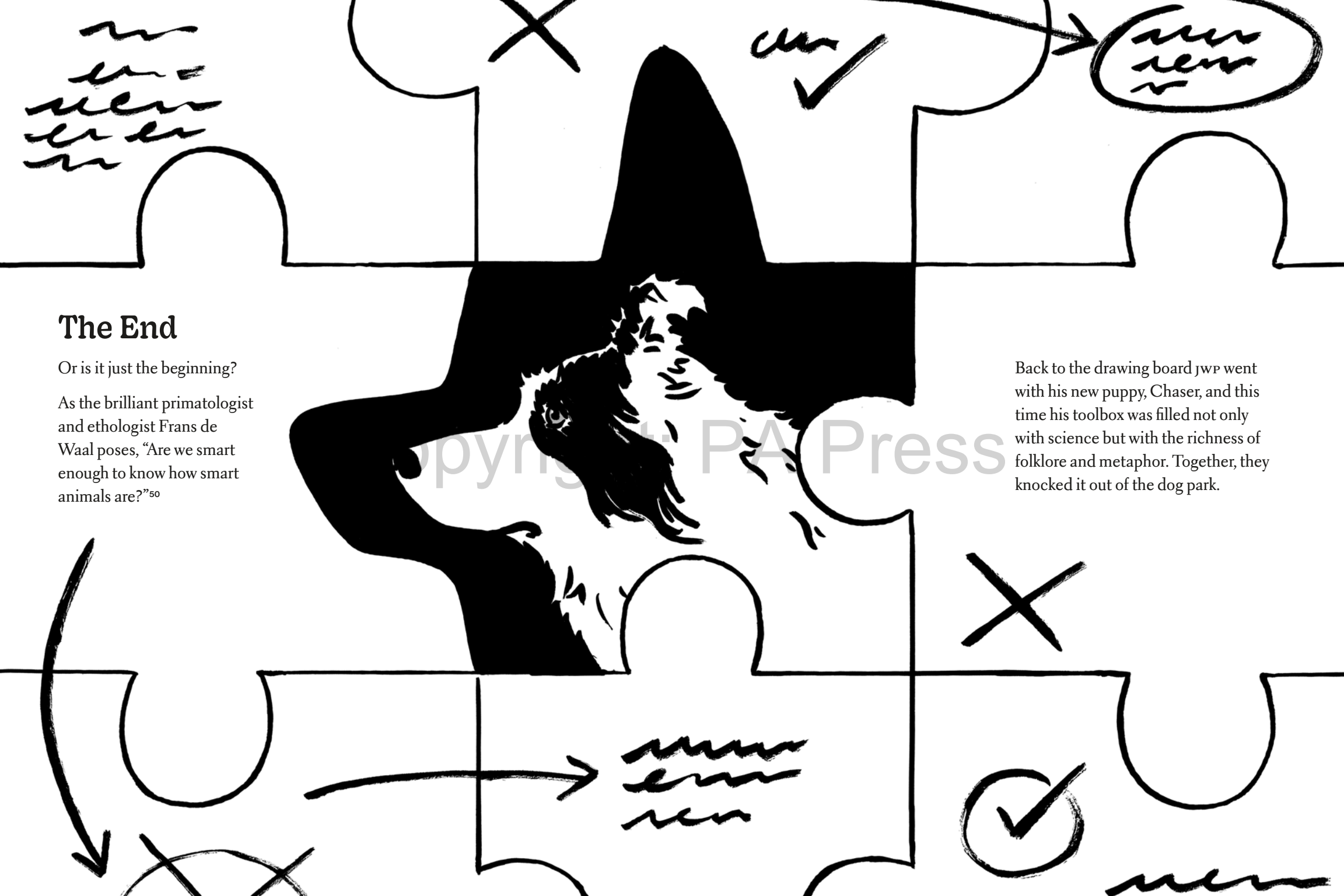


The End

Or is it just the beginning?

As the brilliant primatologist and ethologist Frans de Waal poses, "Are we smart enough to know how smart animals are?"⁵⁰

Back to the drawing board jwr went with his new puppy, Chaser, and this time his toolbox was filled not only with science but with the richness of folklore and metaphor. Together, they knocked it out of the dog park.



Which brings us to button-pushing dogs.

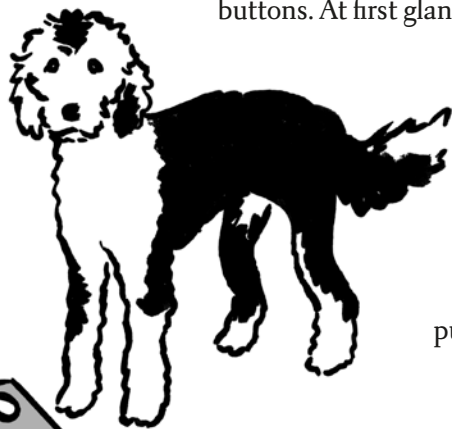
Yes, dogs certainly push our proverbial buttons in an abundance of ways. The “love” button, the “cute” button, the “cuddle” button, the “oh hell, no!” button, to name a few, but who would have thought that dogs would actually push real buttons to communicate?

If you haven’t heard of Bunny the Button Dog, prepare to be bow-wow-wowed.

I discovered Bunny the sheepadoodle when Chaser was tagged in one of her Instagram posts.⁵¹ Her human/teacher, Alexis Devine, had read my father’s book *Chaser*, and it inspired her to dig deeper into her brand new puppy’s language learning. This also led Alexis to investigate the work of speech pathologist Christina Hunger and her dog Stella.⁵²

Hunger had the novel idea to teach Stella words by using the programmable buttons used for augmentative and alternative communication with special-needs children. She was able to teach Stella to press various buttons in succession to form simple sentences, with words such as *outside*, *Stella*, and *good*. This prompted Alexis to try these buttons on for size when she brought Bunny home in 2019.

Back to the Instagram post: I left-clicked to see what was up and entered the remarkable world of Bunny and her talking buttons. At first glance, I viewed a video that had Bunny poking buttons with her paw in three-word sentences. I was mesmerized as my jaw dropped. What was Bunny actually exhibiting? Was it science or something else? It sure looked like she understood every button that she pushed, and she certainly pushed mine.

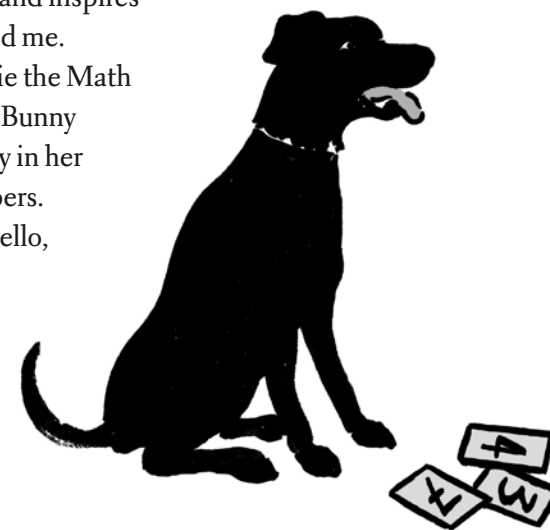


I knew that claiming this as science was a slippery slope, yet it was highly intoxicating to hear words coming out of Bunny’s paws. These provocative videos prompted countless emails to me from dog owners wanting my thoughts. I have to confess that it’s a relatively firm consensus among canine researchers, and I concur, that there’s just not enough data to confirm the assertions that button-pushing dogs understand abstract concepts like love, want, and mad. There could be anecdotal evidence, but science requires rigorous testing methods. There is simply no concrete data.

Yet.

Bunny is currently the subject of researchers at the University of California, San Diego, and while it’s likely to take some time for science to catch up to what is actually going on, I have personally witnessed the magic of Alexis and Bunny’s connection and experienced firsthand her devotion to enriching Bunny’s life through communication as well as by paying serious attention to Bunny’s needs as an individual dog. Theirs is an enviable bond. It is this remarkable connection and curiosity in *both* species that humbles and inspires millions of her followers and me.

And then there is Mellie the Math Dog. Not as well-known as Bunny but equally as extraordinary in her talent for computing numbers. Her human/owner, Mark Bello, noticed her affinity for numbers when she was just a puppy. It doesn’t hurt that Mark also has a brilliant mind for



digits. The biggest bugaboo for me is having them both slow down so that I can compute the math myself. Confession: not my best subject.

When Mark initially contacted me, I dismissed Mellie's abilities, haunted by the ghost of Clever Hans. Hans was the famous German horse at the turn of the twentieth century who set the bar super high for all animal research to come. He was indeed an extraordinary horse, and his math teacher/owner, Wilhelm von Osten, was extremely devoted to Hans. Wilhelm taught Hans to add, subtract, multiply, and divide by tapping his hoof, and Hans's perceived genius attracted worldwide attention. But with great disappointment it was discovered that Hans was not a numerical prodigy; he was simply inadvertently reading Wilhelm's body language. Wonk-wah.

Was Mellie in the Clever Hans camp? With my skeptical spectacles, I decided to fly down and meet her myself. It was an exhilarating day as I marveled at her math skills firsthand, witnessing her impromptu live performances. I watched her like a hawk and even got to test-drive her myself, giving her simple math problems that I could solve without a calculator. She aced them with no looming lurk of Clever Hans. I don't know what is actually going on in her beautiful Labrador brain, but it prompts the question: Is this science or something else?

Calling all researchers to take a deeper dive into Mellie's hard drive! Regardless, the bond between human and dog is worship worthy.

Allow me to introduce you to four-legged heroine Lucca κ458. Correction: she started out with four legs and ended up with three. She was a highly decorated and skilled military dog, deployed on April 23, 2006, from the Netherlands to the elite κ-9 unit of the Israeli Defense Forces in Tel Aviv and recruited by the us Marines. A German Shepherd–Belgian Malinois mix, she was born in 2004 and destined to sniff out IEDs (improvised explosive devices) with Marine Staff

Sergeant Chris Willingham and Corporal Juan Rodriguez in what would become a legendary four-hundred-mission canine career. For a mere six months Lucca was trained as a specialized search dog, to work off-leash at long distances from her handler, identifying the locations of deadly explosives.

Using her nose to work was literally pay dirt for Lucca. She loved to sniff stuff and was happy to have a job to perform with her human. The high-tech method used to train her? Play. She served alongside both Special Forces and the regular infantry and became so sought-after that platoons frequently requested her by name.

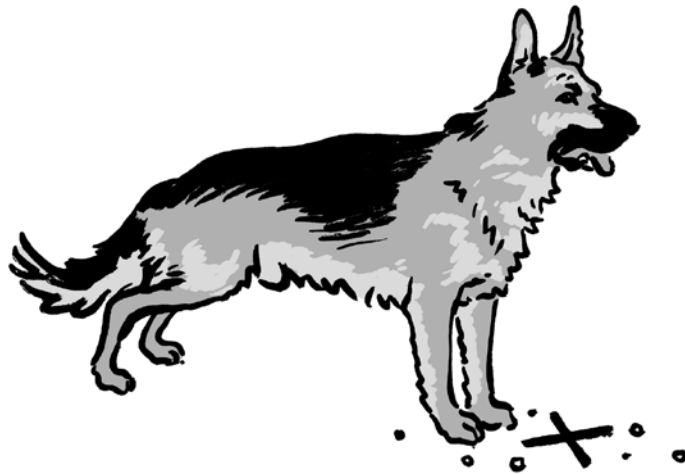
Her bonus at the end of the day was playing with the Green Berets as well as receiving their unlimited hugs. This was a win for Lucca, a win for the Marines, and a win for the brave soldiers who also really needed a hug. On March 23, 2013, she stepped on an explosive device, losing her left front leg; despite hostile sniper fire, she was rescued and airlifted by Special Forces in a Black Hawk medevac helicopter to save her life.



After her recovery, she spent the remainder of her life as a civilian pup, unaware of her celebrity and heroism, with Willingham and his family. She passed over the rainbow bridge in 2017, on a beach in California, cradled in Willingham's arms, surrounded by family and loved ones. A brilliant book about her life called *Top Dog* was penned by Maria Goodavage.⁵³

And then there was a German Shepherd dog named Solo. He was the subject of a best-selling book by Cat Warren, *What the Dog Knows*. Solo was bred to be her newly adopted puppy and was aptly named because he was a "singleton" puppy, meaning there were no other pups in the litter.

This is not a good thing. *Canis familiaris* is not intended to be birthed as an only child like us humans. They are born en masse for a reason. Pups in litters give and receive thousands of signals from each other daily, as they tumble over one another, licking and biting, squealing in pain, peeing and licking in apology.⁵⁴ This is a critical time for puppies to learn proper puppy etiquette, which sets them up to succeed as well-mannered siblings and companions. Research

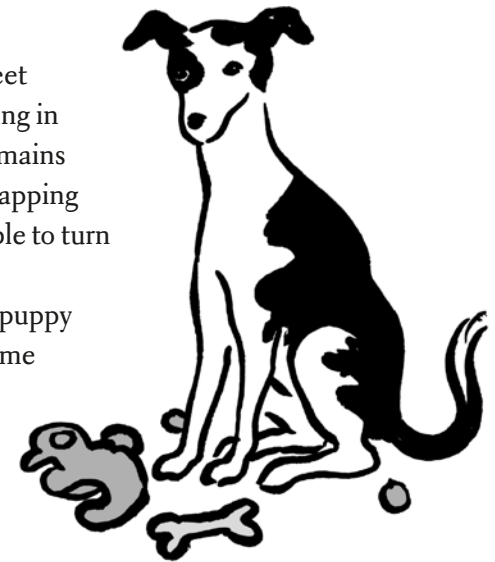


reveals that dogs have a sense of play protocol. If there's a dog who plays too aggressively, never letting other dogs win in a game of chase or consistently nipping a little too hard, they are eventually shunned by the other dogs in the park.⁵⁵

Singletons are also known to have touch sensitivity and lack of bite inhibition, and are unable to get out of trouble calmly and graciously. This is just a tiny dip in the behavioral pitfall pool, but the positive spin is that they could be extraordinary companions if bonded closely to people, the operative word being *could*. Cat hung her coat heavily on this hook, hopeful that all would work out in the end, but not before Solo was dubbed "The Little Prince of Darkness."

Cat was determined to discover Solo's happy place, which was his nose. It turned out that his sniffer was extremely adept in smelling dead things. Human dead things. Solo became an invaluable cadaver dog to the North Carolina police and first-call pup in searching for the newly dead and decomposed dead. This field has expanded tremendously, and dogs can not only detect the emissions of dead bodies under a hundred feet of water or twenty feet of concrete, but they are even aiding in archaeological digs to discover remains from hundreds of years ago.⁵⁶ By tapping into Solo's innate gifts, Cat was able to turn a misfit into a hero.

And then there's Gator—my puppy prodigy, so named because she came from the swamps of Alabama. Gator is actually just a regular dog, albeit a Border Collie.



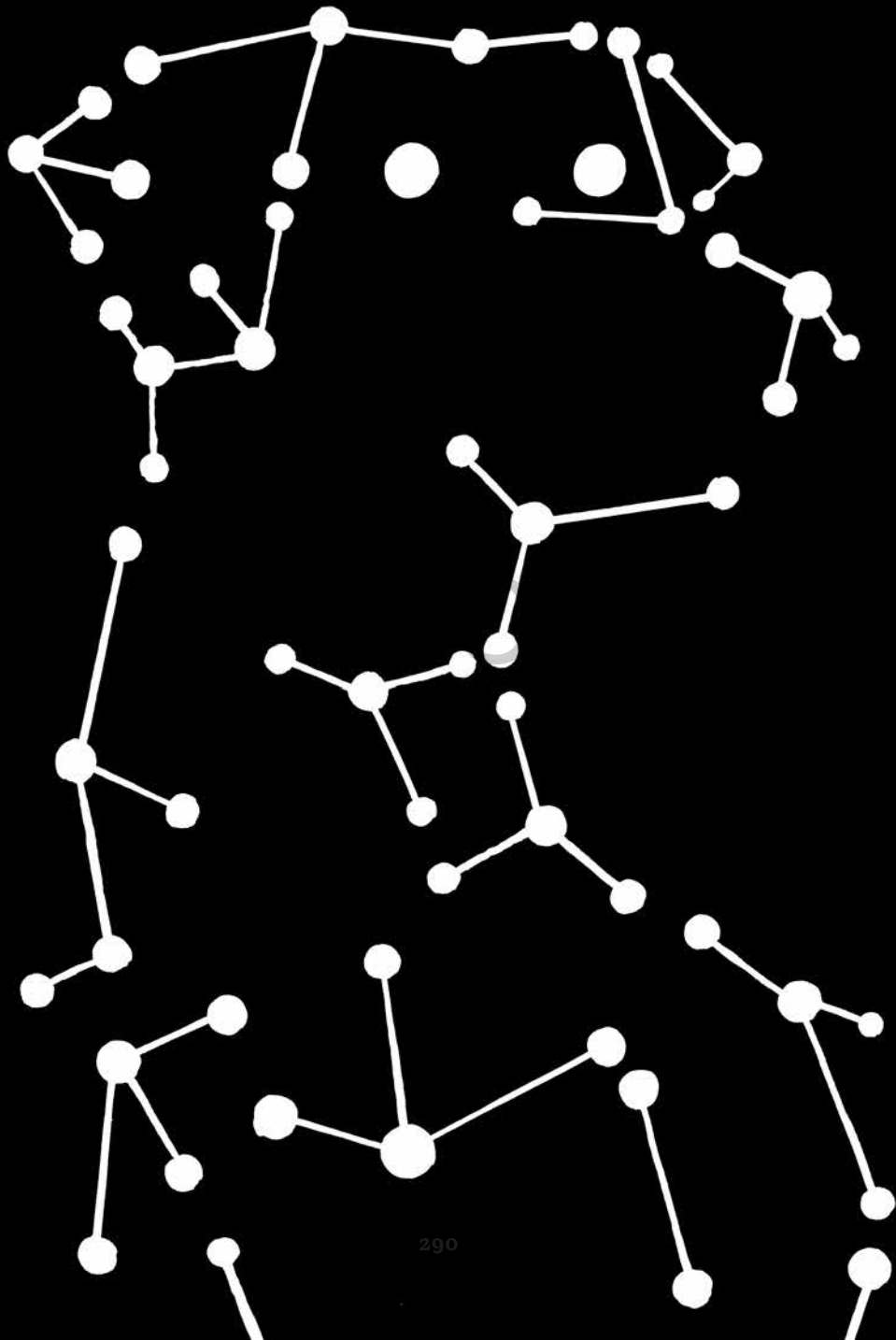
In 2017 I bumped into my family doctor, Glenn Muraca, as I was walking Chaser in Brooklyn. Accompanying him was a very tall, elegant gentleman smiling ear to ear as he bent down to greet Chaser. From this brief encounter I discovered that his name was John, he was a huge dog lover, and he was thrilled to meet Chaser. Fast-forward to January 2022, when I received a text from Dr. Muraca, who was visiting John Deignan and his wife, Denise, in their new home in Las Vegas. He sent along a photo of Gator with my father's book.

"This is my friend who worked in the office. You met him. Just got her [Gator] and she is adorable.... He read the book [*Chaser*] four times before he picked her up."

I was very excited to hear from a fan of Chaser's and wondered if John might be up for some word learning with his new ten-week-old puppy. He happily accepted the challenge. We decided that he would work with her for brief three-to-five-minute sessions, two to three times a day, using errorless learning. Her only reinforcement would be play and praise, no treats. John would record his mini sessions with her, send them to me and Ingrid Norris (our director of education at the Chaser Initiative), and we would tutor John in fine-tuning his chops with Gator. We have video documentation on her progression, and we could not be more pleased with our student.

And Gator did well too! Seriously, wrangling the human is more complicated than the dog, and we tease John because he's such a good sport. Giggles aside, at five months old, Gator has learned the names of thirty toys, combining them independently with three different verbs. She now understands the concept that objects have names, people have names, and rooms have names, and she learns new words on one trial alone. This demonstrates that it is my father's methods that are unique, and *how* we teach our pups.





It's a Wrap

These remarkable dogs are just a glimpse into the larger population of working dogs, service dogs, and emotional support dogs, as well as dogs exhibiting unexplained telepathy, empathy, rescue, and GPS-level navigational abilities. There are dogs who sniff out diabetes, cancer, COVID-19, epilepsy, and illegal substances, all with a wiggle in their wag and a shared training technique. Play.

The science surrounding dogs and their remarkable abilities has a lot of catching up to do. But the great news is that we have more and more valiant, underfunded researchers continuing to investigate and push the limits of what we know and don't know about *Canis familiaris*.

There's a reason that this magical species has been the focus of paintings, artwork, myths, and gods for tens of thousands of years. Most likely since the beginning of God Dog.

In our quest to know our dogs better, we must *desire* to understand our dog before we are *able* to understand our dog. We hope we have led you down the yellow brick road of dogs, filled with scientific knowledge, mythology, philosophy, and the poetic art of illustration, without realizing that you've tapped your shoes three times to find you are home.

Together, my father and Chaser straddled and blurred the lines between humans and nonhumans, scientifically challenging the dogma surrounding the cognitive and emotional divisions between the species, as did the great researchers who inspired him.

What my father accomplished with Chaser is a historic contribution to the world, a pivotal game changer in our relationship with and perception of animals. Other nonhuman language researchers like Louis Herman, Irene Pepperberg, and Sue Savage-Rumbaugh

inspired my father's pursuit of teaching human language to dogs. These remarkable pioneers blazed the trail in shifting our understanding of animal intelligence in their work with dolphins, birds, and primates. But it's my father who moved the needle in giving the world scientific, empirical evidence that dogs are not only as smart as we think they are but capable of much more than we have realized. In cracking the code to teach our family dog human language, he clearly demonstrated, along with the brilliant researchers mentioned above, that our unity with nature *cannot* be ignored.

His greatest hope was that there would be a world of Chasers and that other researchers would pick up where he left off with Chaser to work with their own dogs, not always random groups of dogs. Imagine the discoveries possible if contemporary researchers use the biggest advantage we have with our canine companions: the unique social and emotional bond that we share with them as the only species on earth that has shared an evolutionary process with us for forty thousand years. The greatest leaps in animal research have been made in forging a one-on-one relationship between teacher and subject, but these commitments come with the greatest risk: prematurely losing their subject. They don't live forever, and we gratefully tip our hats to the courageous scientists who have chosen and continue to choose this path, because it is the true gateway to greater discovery and understanding.

My father chose this road because he believed with every fiber of his being that dogs could learn human language, that they were capable of conceptual understanding and creative thought. He experienced firsthand the bottomless depth of devotion and teamwork possible with our family dog Yasha, and it was Yasha who opened his eyes to *Canis familiaris*'s perpetual joyful spirit of puppyhood that spans their lifetime. John Pilley understood that dogs are truly the unicorn

of species when it comes to interacting with humans; they are magic in plain sight. He marveled at the undefinable magnetism that draws our two species together and understood that science was overlooking and underestimating their unique genius.

What he discovered was that by diving into that innate inter-species bond, powerful things can happen, and untapped learning is given a fertile place to grow. This is his legacy, and we hope it inspires you to accomplish the same with your own dog.

I've learned directly from the man behind Chaser my entire life. The philosophies he used that yielded his success with Chaser are one and the same as those he used with me; my sister, Robin; my mother, Sally; and our other dogs, horses, and cats, as well as all his students. I believe his former student C. Edward Coffey, MD, Rhodes Scholar, and president and CEO of the Menninger Clinic, said it best at my father's memorial service in 2018: "I am certain all of John's students would say, 'We are Chaser,' in that this approach is exactly what he used with us—bringing us together as a family and connecting with each of us on a most personal way, to unlock our best potential and in so doing, making the world a better place."

I too am Chaser.

John Pilley is no longer in this earthy realm—that chapter is closed—but his legacy is clear and strong. The one positive thing about him not being here is that I can speak of him in the light he deserves.

I can say with complete confidence that he is guiding me, and each day I hear his voice whisper to me in that rich, melodious Southern drawl, softly repeating the same words I heard him use with Chaser time and time again:

"Do it, girl, you can do it!"

Will there be a world of Chasers?



They are already here.

Chaser: The Legacy

IN MEMORY

JOHN PILLEY
1928–2018

SALLY PILLEY
1934–2019

CHASER
2004–2019

You might wonder where Chaser and my father and mother are today. In an act of kismet and destiny, they all got their wings within the span of sixteen months. What I would like everyone to know is that these three remarkable souls loved and lived their lives with huge amounts of gusto well into their senior years. Every moment was a celebration.

Chaser rests in my folks' backyard, next to Yasha and our other family pets; she is sprinkled with the ashes of my parents. My sister, Robin, is tending the homestead. Chaser's life was celebrated in the *New York Times* as well as hundreds of international media outlets, and she was honored on *NOVA ScienceNow* and *60 Minutes*, most recently garnering well over thirty million views. Her statue and my father's footprints are commemorated in bronze, courtesy of the Balmer Foundation, gracing the beautiful downtown of our beloved hometown, Spartanburg, South Carolina. Children come from all over to sit on Chaser's back, try to snatch the blue ball in her mouth, and stand in my dad's footprints.

In their honor, we have started a nonprofit, the Chaser Initiative, which is dedicated to educating children in K–12 about their legacy, learning through play and kindness, and how dogs are truly a gateway species.

Thank you for letting me share their story and truth.

Notes

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—Pilley Bianchi

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—Calum Heath

About the Author and Illustrator

Pilley Bianchi is an award-winning musician, producer, and writer. She never imagined she would be utilizing these same skills to collaborate with her father, Dr. John W. Pilley Jr., and his dog Chaser in their groundbreaking scientific journey to confirm what dog lovers have always known: dogs are smarter than we think.

Bianchi has been a coteacher, producer, writer, and media consultant for Chaser, featured in *Time*, *People*, *Popular Science*, the *New York Times*, *Modern Dog*, *USA Today*, and film segments with *60 Minutes*, CBS, NBC, ABC, BBC, ITV, Discovery, Nat Geo Wild, and others. Bianchi collaborated with her father and his cowriter, Hilary Hinzmann, behind the scenes on their *New York Times* best-selling book, *Chaser: Unlocking the Genius of the Dog Who Knows a Thousand Words* and has appeared as an expert on Chaser on *Fox & Friends*, PBS, Dogspot.in India, CBC Canada, NPR Canada, Talk RADIO London, SBS TV South Korea, and WIRED; at SXSW; and for companies and organizations including Hill's Science Diet, the AKC, the ASPCA, the IAABC, and others. Bianchi is senior executive producer/founder of the Chaser Initiative, a nonprofit dedicated to educating children (K–12) about the legacy of John Pilley and Chaser and learning through play.

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