BOOKS

# THE METAMORPHOSIS

*What is it like to be an animal?*

BY JOSHUA ROTHMAN


*Goats, badgers, and foxes may teach us how to escape the human condition.*

THOMAS THWAITES FIRST considered becoming an animal on a spring day in 2013. He was walking Noggin, his nieces' Irish terrier, along the Thames when he found himself taking stock of his life. Thwaites was then thirty-three. A few years earlier, he'd launched his career as an artist and designer with a clever project: constructing a toaster from scratch, mining the iron and making the plastic himself. Along the way, he catalogued the environmental devastation caused by humanity's determination to toast en masse—a vast crime against nature committed in the name of breakfast. Thwaites's toaster was acquired by the Victoria & Albert Museum for its permanent collection. Although the toaster never actually made toast—a few crucial components proved too difficult to build—it was, in all other respects, a success.

Thwaites had finished his toaster three years before. Now he was beginning to worry about the future. He was semi-employed and living with his dad. Would he always be a scruffy manchild? How would he earn enough to start a family? Was the making of toasters—or other wry statements on the absurdity of modern life—a good use of his time on earth? Thwaites asked himself these questions and observed Noggin as commuters streamed past. He thought it must be wonderful to live in Noggin's eternal present—to smell the grass, the wind, and the water without worrying about the future, the past, the meaning of life, or the inevitability of death. How much simpler to be an animal!

A few days later, Thwaites sent a grant application to the medical-humanities office at the Wellcome Trust, in London. Once funds had been secured for his project ("The Committee thought that this was a wonderfully engaging idea," the trust replied), Thwaites began to consider what kind of animal he'd like to be. His initial plan was to become an elephant. Elephants were big, he reasoned, and, if he could build an elephant exoskeleton, he could climb inside it and lumber around, eating grass and living in the moment. When Thwaites went to South Africa, however, and saw some elephants, he realized that a full-grown elephant was strong enough to knock over a tree. To make himself that powerful, a massive, bulldozer-like exoskeleton would be required; the sound of the engine and the smell of gasoline would distract from animalistic bliss. Also, elephants are said to mourn their dead, covering deceased friends with leaves and branches. Since one of the project's goals was to escape the existential worry of being a person, Thwaites needed not just a smaller animal but a less intelligent one—an animal whose mental life would be simpler and more untroubled than his own.

Soon afterward, a Scandinavian shaman advised Thwaites to focus on "an animal that's near to you in terms of your shared environment." An Englishman has no business being an elephant, she said; he should be a sheep or a goat. A childhood memory surfaced: Thwaites recalled that once, when he was small, he had tried to eat a houseplant using only his mouth. A goat is so much more my level, he thought. The shaman educated Thwaites on the histories of animism and totemism. She pointed out that, for much of human history, people have made art and enacted rituals designed to cross the human-animal barrier. In the Chauvet cave, in France, there is a thirty-thousand-year-old painting of a human-bison hybrid. "Really, to want to become a goat is pretty standard," Thwaites concludes, in "GoatMan:



ILLUSTRATION BY JOOST SWARTE

How I Took a Holiday from Being Human" (Princeton Architectural Press). "In fact, historically speaking, it's almost odder to *not* want to become a goat."

THWAITES IS AN artist with an engineer's soul, and he approached becoming a goat through the lens of problem-solving. He saw three problems to be solved. The first was the goat mind. To understand it, he began spending time at Buttercups Sanctuary for Goats, a pastoral facility, in Kent. From a goat-behavior expert named Alan McElligott, Thwaites learned that goats are relatively relaxed and resilient creatures who are slaves to hierarchy—good and bad news for his prospective life as a goat. Meanwhile, to understand what it might mean to "be" a goat (or, for that matter, to "be" anyone), Thwaites began reading the philosopher Martin Heidegger, who argued that our selfhood resides not in our language-based thoughts but in the interplay of our skills, habits, and moods. Who we are is defined more by our way of interacting with the world than by our beliefs. Reading Heidegger convinced Thwaites that, to inhabit the mental life of a goat, he would need to relate to his surroundings in a goatlike way. "I need to change my context," he resolved, "to the extent that somehow I look at a chair and don't automatically associate it with sitting." He would have achieved goathood when he could see a word without reading it—or, more important, "look at a(nother) goat and think of it as another person, like me."

Next, Thwaites turned to the goat body. To learn how to move like a goat, he began meeting with Glyn Heath, a prosthetist at the University of Salford, near Manchester. He told Heath that he hoped to acquire a set of prosthetic goat legs and, upon them, gallop across the Swiss Alps. Heath, who happens to have a doctorate in zoology, pointed out that goats and people are built differently. Without a goat's strong front legs and flexible musculature, a person undertaking goatlike movements, such as galloping or leaping to the ground head first, would be badly hurt. Thwaites's riposte was to climb atop a quartet of sawn-off crutches and trot around the lab. Heath, despite himself, was delighted by the naturalness of Thwaites's gait. He agreed to work on some prosthetic goat limbs and suggested some stretching exercises.

The final problem was food. Goats eat grass, which human beings cannot digest. At the Royal Veterinary College, Thwaites helped autopsy a goat. He marvelled at the four compartments of the goat stomach and learned that the largest one, the rumen, contains bacteria that turn grass into a fermented and digestible stew. Thwaites thought, first, of adding the goat's grass-digesting microbiome to his own through a fecal transplant. But when he realized how dangerous this would be—the goat's microbes might give him a parasitic infection—he came up with a new idea: he would create an artificial rumen, chewing up grass, spitting it into a plastic bag laced with goat-gut bacteria, and then drinking its fermented contents. Thwaites explained his plan to Alison Kingston-Smith, the leader of the Herbivore Gut Ecosystems lab at Aberystwyth University. "I wouldn't do that if I were you," she said. The goat-gut microorganisms, she explained, "aren't altogether benign." Thwaites decided to skip the microbiome. Instead, he went online and bought a bottle of cellulase—the enzyme that rumen bacteria use to break down grass in the first place. He would use cellulase in his artificial goat rumen. Pleased with the elegance of this solution, he booked a flight to Switzerland, and arranged a rendezvous with a goatherd.

THWAITES DIDN'T REALIZE that he had a rival, but he did. It's hard to say when Charles Foster first considered becoming an animal, but a good guess would be a warm October night sometime in the nineteen-eighties. Foster was walking home from dinner at an East End pub when he noticed two foxes in a park. Crouched in the grass, they were turning their heads from side to side, like sphinxes nodding "no." Foster crept closer and, in his business suit, lay down to see the park at fox level. The foxes were harvesting dew-laden crane flies from the grass with their tongues. Foster extended his own tongue. He found that the flies were fuzzy, then slimy, and tasted of vanilla.

Foster is or has been a veterinarian, a lawyer, a newspaper columnist, a lecturer in medical ethics at the University of Oxford, and an adventurer. Now fifty-three, he has written, co-written, or edited thirty-four books, among them a philosophical text about human dignity and bioethics, and a travelogue about his search for the Ark of the Covenant. In "Being a Beast" (Metropolitan), Foster takes a more direct approach than Thwaites. Instead of constructing an exoskeleton or an artificial stomach, he just starts acting like an animal.

For six weeks, Foster lived as a badger in the woods. He dug an underground badger lair, or sett, sleeping there during the day and venturing out, on all fours, at night. Badgers eat earthworms. "When you put a worm into your mouth," Foster reports, "it senses the heat as something sinister," searching for gaps between your teeth until you bite down and taste "slime and the land." Foster maps earthworm terroir: worms from Chablis "have a long, mineral finish" while "worms from the high Kent Weald are fresh and uncomplicated; they'd appear in the list recommended with a grilled sole." These tastes, he thinks, are part of what it is to be a badger.

There's a lot you can't see at badger level, six inches above the ground (or under it), and so badgers rely on other senses; it's believed, for example, that they can hear the bristles of an earthworm plowing the dirt. Unable to augment his hearing, Foster trained his nose. Before moving into the sett, he bought different kinds of cheese, asked his wife to hide them around the house, and, blindfolded, attempted to find the Stilton. As a badger, he attended to the olfactory world. He found that scents expand and contract with time and the weather. On cold, dry mornings, smells huddle close to their sources and the scent-world is low and compact. As the day warms, the smells swell and drift. ("Breast-high scent," as hunters put it.) When it's damp, the scent-world grows three-dimensional. For a badger, Foster surmises, smells form

spatial structures with dimensions, boundaries, and interiors. On a warm day, a tree is "the helical shape of the scent vortex that pulls dust up into the canopy"; on a cold one, it becomes "a low hump of tart lichen with an indistinct chimney." Approaching a dead animal is like walking deeper into a building. "A dead hedgehog is the shape of hedgehog, then the shape of green scent, then the shape of tripe, then the shape of sweet, then the shape of pork scratchings, then the shape of beetle."

Foster brought his eight-year-old son, Tom, into the sett with him and, badgers being social creatures, they explored the forest together. "If I had to pick one word for the badger's experience, it would be *intimate*," Foster decides, since, "when a badger goes out, its object is to bump into food":

> We bustled and grunted and elbowed and pushed and pressed our noses into the ground. And even *we* smelled something: the citrusy piss of the voles in their runs within the grass; the distantly maritime tang of a slug trail, like a winter rock pool; the crushed laurel of a frog; the dustiness of a toad; the sharp musk of a weasel; the blunter musk of an otter.

Foster grew to like his underground home—especially the "place at the end pressed into the shape of my body." On rainy days, he savored the immersive and newly legible smells of wet earth. During a violent thunderstorm, he writes,

> Our sett was cradled in the interlocking fingers of tree roots: beech on either side, oak from above. The whole wood bent to the wind. . . . We rocked in our cradle, the roots around us straining and creaking like the timbers of a rolling ship. A wood mouse, displaced from a flooded or crumbled tunnel, scrambled in and hunched, shivering, in the crook of Tom's knee.

Foster and his cub managed to sleep—they found a way to be at home in the woods. In six weeks, however, they never met any badgers. (They heard them and tried to approach them, but to no avail.) Six months later, they returned to their sett. In wintertime, it was frozen and scentless. The walls, Foster writes, were like "jaws"; earthworms, drawn to their body heat, wriggled out of the soil "like hairy tongues." Unnerved, Foster fled back to civilization, bringing with him this image of the ultimate mystery and inaccessibility of badger life.

FOR A VARIETY of reasons—curiosity, difficulty, the thrill of estrangement—writers have long enjoyed imagining the world from an animal's point of view. When Achilles, in the Iliad, learns that his best friend, Patroclus, has been killed, Homer compares him to a lion who's realized that a hunter has taken his cubs: "Coming back too late, he grieves, and following the track of the man, he goes out and searches the mountains to find him, for a bitter anger has seized him." Where human emotions are familiar, animal emotions can feel fresh, strange, strong, and unmediated.

There are, broadly speaking, two approaches to writing about animals. In 1886, Leo Tolstoy published "Strider," a story told from a horse's point of view. Tolstoy's approach was pastoral. He imagined that horses, unencumbered by human vanity, would see the world in a clearer, calmer, and more honest light. Listening in on the conversations people have, Strider marvels at their deranged ideas. "The words '*my* horse' applied to me, a live horse, seemed to me as strange as 'my land,' 'my air,' or 'my water,' " he thinks. Human beings "strive in life not to do what they think right, but to call as many things as possible, *their own*." How much simpler—how much better—to be an animal!

James Joyce, in writing "Ulysses," took a more sensual approach. Early in the book, while visiting a Dublin cemetery, Leopold Bloom watches a rat squeeze through a crack in a mausoleum wall. Bloom, ever curious and empathetic, imagines what a corpse must taste like: "They wouldn't care about the smell of it. Saltwhite crumbling mush of corpse: smell, taste like raw white turnips."

In these pastoral and sensual portrayals of the animal self, different critiques of the human self are embedded. For Tolstoy, the problem with people is that they're marooned in their egos. The clearheaded directness of animals is a remedy for that self-obsession. For Joyce, the problem is that people are sleepy, numb, and incurious. We could learn, he thinks, from animals' eager sensuality. Tolstoy's animals teach us to be good; Joyce's teach us to be alive.

The origin stories of GoatMan and BadgerMan hail, respectively, from these Tolstoyan and Joycean traditions. For Thwaites, human personhood is stressful, absurd, and—worst of all—narcissistic: "even the Queen has worries," he writes, despite being "born into a life of the utmost privilege and prestige." By becoming a goat, Thwaites hopes to escape from his own egotistical anxiety—a pessimistic idea, when you think

about it, since it implies that, as Thwaites puts it, "to be human is to worry."

Foster has the opposite problem. He thinks that personhood is a form of self-imposed dullness and yearns for the vivid openness of animality. After his experiment in badger life, Foster began spending nights as an urban fox. "I lay in a backyard in Bow, foodless and drinkless, urinating and defecating where I was," he writes, "treating as hostile the humans in the row houses all around—which wasn't hard." One night, while pawing through the garbage, he noticed televisions flickering in nearly every house; by his count (counting, of course, not being a very foxy behavior), sixty-four out of the seventy-three households watching TV were watching the same show. To Foster's way of thinking, the people in those houses, watching "EastEnders" over their blandly globalized dinners of pizza, pad thai, and aloo gobi, were living nowhere in particular. The foxes are "the real East Enders," because they "know that there's a mouse nest under the porch at number 17A and bumblebees by the cedar decking at number 29B," and are exploring and hunting on these particular streets. An urban fox will "carry on being foxy, whereas thoroughly urbanized humans are in danger of not being optimally human," Foster writes. With an ardency worthy of George Eliot, he concludes, "We have acutely sensitive hands, but we handle the world with thick gloves and then, bored, blame it for lacking shape."


*"How was prom?"*

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IT'S PROBABLY NATURAL to see animals as our complements—to imagine that they are what we aren't. Still, there's something solipsistic about looking at other creatures and seeing a reflection of ourselves. In "Are We Smart Enough to Know How Smart Animals Are?" (Norton), the primatologist Frans de Waal bridles at our self-absorption. "Even the term *nonhuman* grates on me," he writes, "since it lumps millions of species together by an absence, as if they were missing something." Instead of comparing animals to ourselves, he argues, we should recognize that every animal is an animal in its own way.

De Waal is an admirer of the biologist Jakob von Uexküll, who, in the early twentieth century, coined a term, *Umwelt*, to capture the unique way each animal lives. Literally, *Umwelt* means "surroundings," but those surroundings can be cognitive and existential as well as physical. "*Umwelt* stresses an organism's self-centered, subjective world, which represents only a small tranche of all available worlds," de Waal explains. A reindeer's *Umwelt* includes forests lit with ultraviolet light. An eyeless tick's includes not just the smell of butyric acid, which wafts from mammalian skin, but the years-long wait for a moment of succulent opportunity.

In a classic 1974 essay called "What Is It Like to Be a Bat?," the philosopher Thomas Nagel concluded that, because the experience of using echolocation is unlike "anything we can experience or imagine," we can never really know what being a bat feels like; the best we can do is imagine it by analogy, comparing echolocation, inaccurately, to hearing or seeing. De Waal agrees with Nagel—he thinks it's impossible for any animal to fully comprehend another's *Umwelt*. But he thinks it's still worth trying to imagine another animal's point of view, even if our efforts will ultimately fail. We know about echolocation, he points out, only because, to some degree, "scientists did try to imagine what it is like to be a bat and did in fact succeed." You can't cross the species barrier but, by bumping up against it, you can learn things.

There are moral reasons, too, to push up against the limits of what's knowable. In J. M. Coetzee's novel "Elizabeth Costello," the eponymous protagonist delivers a lecture about "What Is It Like to Be a Bat?" She argues that Nagel's essay makes a typically philosophical mistake by overstating the importance of distinctions and understating the importance of commonalities. Bats and human beings almost certainly have something in common—at a minimum, they share the joyous sensation of being awake and in motion or, as she puts it, being alive as "a body-soul." Isn't that enough to give

us a meaningful window into bat life? In our efforts to imagine animal minds, there will always be a tension between sympathetic imagination and rational skepticism. Perhaps we should bend in the direction of sympathy.

"Being a Beast," especially, is about the exercise of the sympathetic imagination: the book is an atonement for a lifetime of "ontological snobbery," of "belief in a hierarchy of being" which, Foster writes, "made me an insufferable little shit for years." In one of his many past lives, Foster was a hunter who, flush with cash from his work as a barrister, took the train to the North of England to hunt stags. Foster wanted to be a beast back then, too. He thought that, in hunting deer, he might learn about them. Years were wasted, he writes, in the search for an "epiphanic Wordsworthian bloodfest" before he realized his error. It wasn't sympathy for animals, per se, that made Foster stop hunting; rather, it was politics. When he began to grow enraged at the misdeeds of C.E.O.s, he realized that he wanted to be on the side of the hunted, not the hunters—the sheep, not the wolves.

In his chapter on red deer, perhaps the best in the book, Foster describes trying to cultivate that animal's dilatory, fearful, and observant stillness. Foster crawled around the woods naked: "For six hours I watched a single stem of Robin-Run-the-Hedge move." In an effort to understand life as a prey animal, he had himself hunted by a bloodhound named Monty. While on the run, panicked, helpless, and exposed, Foster managed to cross, for a few moments, the crucial boundary between predator and prey. Most of the time, though, he was constrained by his predatory nature. "I couldn't be a victim," he writes. "Imagination and ingenuity could help me hunt down and see in myself everything except perpetual, defining vulnerability."

Foster is drawn to the limits of sympathy in part because they are also the limits of autonomy. If he could, he would sympathize with every animal, and yet he can't expand, at will, the scope of his imagination. For physical reasons, he was unable to be the animal he most admires, a swift. (You "might as well try to be God," he concludes.) For reasons of temperament, he was unable to become an otter—he found the animal's frenzied and anxious search for food upsetting. A few years ago, when I went swimming with otters (it's a long story), I was also unnerved by their manic, muscular curiosity: they stick their paws and noses everywhere, exploring every possible hiding spot in hopes of a tasty bite. (If I had to pick one word to describe the experience, it would be "intimate.") The otters were indisputably alive as "body-souls." Still, I wouldn't want to be an otter, either.

About a year after his moment of inspiration by the Thames, Thwaites stood on all fours on a mountain in Switzerland. On his hands and feet, he wore his goat prostheses; on his back, a goat-colored Gore-Tex jacket; on his head, a helmet designed to give him, at first glance, the face of a goat. (For safety reasons, he had been forced to forgo his cellulase; he planned, instead, to chew grass during the day and stew it over a campfire, in a pressure cooker, by night.) A few hours earlier, he had struggled to race down the rocky mountainside with a herd of goats. It had been exhausting and, at times, terrifying. But now he found himself in a green pasture, surrounded by goats and, beyond them, the walls of a valley. "Finally," he reflected, "I am living the goat life"—which, he found, "consists of walking to a patch of grass and eating it for five minutes or so. Walking to another patch of grass, eating that. And so on and so forth."

Thwaites began to learn "the subtleties of the different types of grass: the blue-green patches of grass are bitter, whereas the greener-green grass is sweet and much preferable." In the course of the day, he settled into a rhythm: "Chew, chew, chew." Eventually, he began to forget himself. The other goats sniffed him; he sniffed back. One goat in particular—goat No. 18—became his friend. Goat friendship is "kind of nice," Thwaites reports. "I wander after her when she moves to another patch of grass, and likewise when I move off, she's not far behind."

In the middle of the day, Thwaites made a mistake. He accidentally moved uphill, above the rest of the herd, to the alpha position. It was, he writes, "like the part in a Western when the entire saloon suddenly falls silent." In a panic, he began to wonder if he could take a goat in a fight. His new goat friend diffused the tension, however, "by simply walking through the middle of the group and starting to wander." In the end, Thwaites spent three days grazing with the goats. Later, the goat farmer to whom they belonged said he thought Thwaites had been "accepted by the herd." Thwaites regards this possibility wistfully, even romantically, and takes it as a mark of the project's success. Still, he ends "GoatMan" on an ambiguous note. In the book's final pages, a sombre photo essay shows Thwaites clambering toward a Swiss mountain peak, alone, in his goat suit. The photos suggest that, despite reading Heidegger, Thwaites hasn't succeeded in changing how he moves through the world. He's still a solitary tool-user striving to reach the summit.

Goats, of course, have been domesticated; foxes haven't. Even so, Foster made a connection. As a fox, he had developed an antagonism with a local house cat; one day, the cat peed—rather disdainfully, Foster felt—on his fox hideout. Foster decided to strike back. He hid himself beneath a sheet, on which he placed a chicken leg; when the cat seized the leg in its teeth, Foster "erupted skyward with a Vesuvian roar." He chased the cat to the end of the garden, leaping over some planks and a flowerpot. The cat balance-beamed along a fence, and Foster followed as it slipped behind a shed and into an alleyway. When Foster turned the corner, it was gone. Instead, he writes, "I looked up into vertical pupils in a sharp red head, six feet away." A fox sat high up on a wall, cradling the chicken leg in the corner of her mouth, "for all the world like a cheroot. She held my gaze: it was certainly her holding mine, not me holding hers. Then, when she chose, she let me go."

There is an irony to these books: the more Thwaites and Foster try to change into animals, the more fully they become Thwaites and Foster. That's not to say they never transform themselves. The human *Umwelt* is expansive and expandable. "Real, lasting change is possible," Foster writes, "to our appetites, our fears, and our views," and despite that change the self persists. This ability to endure through change is the miracle and mystery of selfhood. Rethinking who we are; dreaming up new ways of living; taking ourselves apart to build ourselves back up—for human beings, these activities are natural. They are our never-ending hunt. ♦