

Worlds Meaning

Animal agriculture makes a 40% greater contribution to global warming than all transportation in the world combined; it is the number one cause of climate change.

ANIMAL

Before visiting any farms, I spent more than a year wading through literature about eating animals: histories of agriculture, industry and United States Department of Agriculture (USDA) materials, activist pamphlets, relevant philosophical works, and the numerous existing books about food that touch on the subject of meat. I frequently found myself confused. Sometimes my disorientation was the result of the slipperiness of terms like *suffering*, *joy*, and *cruelty*. Sometimes it seemed to be a deliberate effect. Language is never fully trustworthy, but when it comes to eating animals, words are as often used to misdirect and camouflage as they are to communicate. Some words, like *veal*, help us forget what we are actually talking about. Some, like *free-range*, can mislead those whose consciences seek clarification. Some, like *happy*, mean the opposite of what they would seem. And some, like *natural*, mean next to nothing.

Nothing could seem more “natural” than the boundary between humans and animals (*see*: SPECIES BARRIER). It happens, though, that not all cultures even have the category *animal* or any equivalent word in their vocabulary—the Bible, for example, lacks any word that parallels the English *animal*. Even by the dictionary definition, humans both are and are not animals. In the first sense, humans are members of the animal kingdom. But more often, we casually use the word *animal* to signify all creatures—from orangutan to dog to shrimp—except humans. Within a culture, even within a family, people have their own understandings of what an animal is. Within each of us there are probably several different understandings.

What is an animal? Anthropologist Tim Ingold posed the question to a diverse group of scholars from the disciplines of social and

cultural anthropology, archaeology, biology, psychology, philosophy, and semiotics. It proved impossible for them to reach a consensus on the meaning of the word. Tellingly, though, there were two important points of agreement: "First, that there is a strong emotional undercurrent to our ideas about animality; and, second, that to subject these ideas to critical scrutiny is to expose highly sensitive and largely unexplored aspects of the understanding of our own humanity." To ask "What is an animal?"—or, I would add, to read a child a story about a dog or to support animal rights—is inevitably to touch upon how we understand what it means to be us and not them. It is to ask, "What is a human?"

ANTHROPOCENTRISM

The conviction that humans are the pinnacle of evolution, the appropriate yardstick by which to measure the lives of other animals, and the rightful owners of everything that lives.

ANTHROPODENIAL

The refusal to concede significant experiential likeness between humans and the other animals, as when my son asks if George will be lonely when we leave the house without her, and I say, "George doesn't get lonely."

ANTHROPOMORPHISM

The urge to project human experience onto the other animals, as when my son asks if George will be lonely.

The Italian psychologist Emanuela Cenami Spada wrote:

Anthropomorphism is a risk we must run, because we must refer to our own human experience in order to formulate questions

about animal experience....The only available "cure" [for anthropomorphism] is the continuous critique of our working definitions in order to provide more adequate answers to our questions, and to that embarrassing problem that animals present to us.

What is that embarrassing problem? That we don't simply project human experience onto animals; we are (and are not) animals.

BATTERY CAGE

Is it anthropomorphism to try to imagine yourself into a farmed animal's cage? Is it anthropodenial not to?

The typical cage for egg-laying hens allows each sixty-seven square inches of floor space—somewhere between the size of this page and a sheet of printer paper. Such cages are stacked between three and nine tiers high—Japan has the world's highest battery cage unit, with cages stacked eighteen tiers high—in windowless sheds.

Step your mind into a crowded elevator, an elevator so crowded you cannot turn around without bumping into (and aggravating) your neighbor. The elevator is so crowded you are often held aloft. This is a kind of blessing, as the slanted floor is made of wire, which cuts into your feet.

After some time, those in the elevator will lose their ability to work in the interest of the group. Some will become violent; others will go mad. A few, deprived of food and hope, will become cannibalistic.

There is no respite, no relief. No elevator repairman is coming. The doors will open once, at the end of your life, for your journey to the only place worse (*see*: PROCESSING).

BROILER CHICKENS

Not all chickens have to endure battery cages. In this way only, it could be said that *broilers*—chickens that become meat (as opposed to *layers*, chickens that lay eggs)—are lucky: they tend to get close to a single square foot of space.

If you aren't a farmer, what I've just written probably confuses you. You probably thought that chickens were chickens. But for the past half century, there have actually been two kinds of chickens—broilers and layers—each with distinct genetics. We call them both chickens, but they have starkly different bodies and metabolisms, engineered for different "functions." Layers make eggs. (Their egg output has more than doubled since the 1930s.) Broilers make flesh. (In the same period, they have been engineered to grow more than twice as large in less than half the time. Chickens once had a life expectancy of fifteen to twenty years, but the modern broiler is typically killed at around six weeks. Their daily growth rate has increased roughly 400 percent.)

This raises all kinds of bizarre questions—questions that before I learned about our two types of chickens, I'd never had reason to ask—like, *What happens to all of the male offspring of layers?* If man hasn't designed them for meat, and nature clearly hasn't designed them to lay eggs, what function do they serve?

They serve no function. Which is why all male layers—half of all the layer chickens born in the United States, more than 250 million chicks a year—are destroyed.

Destroyed? That seems like a word worth knowing more about.

Most male layers are destroyed by being sucked through a series of pipes onto an electrified plate. Other layer chicks are destroyed in other ways, and it's impossible to call those animals more or less fortunate. Some are tossed into large plastic containers. The weak are trampled to the bottom, where they suffocate slowly. The strong

suffocate slowly at the top. Others are sent fully conscious through macerators (picture a wood chipper filled with chicks).

Cruel? Depends on your definition of cruelty (*see*: CRUELTY).

BULLSHIT

- 1) The shit of a bull (*see also*: ENVIRONMENTALISM)
- 2) Misleading or false language and statements, such as:

BYCATCH

Perhaps the quintessential example of bullshit, *bycatch* refers to sea creatures caught by accident—except not really “by accident,” since bycatch has been consciously built into contemporary fishing methods. Modern fishing tends to involve much technology and few fishers. This combination leads to massive catches with massive amounts of bycatch. Take shrimp, for example. The average shrimp-trawling operation throws 80 to 90 percent of the sea animals it captures overboard, dead or dying, as bycatch. (Endangered species amount to much of this bycatch.) Shrimp account for only 2 percent of global seafood by weight, but shrimp trawling accounts for 33 percent of global bycatch. We tend not to think about this because we tend not to know about it. What if there were labeling on our food letting us know how many animals were killed to bring our desired animal to our plate? So, with trawled shrimp from Indonesia, for example, the label might read: 26 POUNDS OF OTHER SEA ANIMALS WERE KILLED AND TOSSED BACK INTO THE OCEAN FOR EVERY 1 POUND OF THIS SHRIMP.

Or take tuna. Among the other 145 species regularly killed—gratuitously—while killing tuna are: manta ray, devil ray, spotted skate, bignose shark, copper shark, Galapagos shark, sandbar shark, night shark, sand tiger shark, (great) white shark, hammer-head shark, spurdog fish, Cuban dogfish, bigeye thresher, mako, blue shark, wahoo, sailfish, bonito, king mackerel, Spanish mackerel,

longbill spearfish, white marlin, swordfish, lancet fish, grey triggerfish, needlefish, pomfret, blue runner, black ruff, dolphin fish, bigeye cigarfish, porcupine fish, rainbow runner, anchovy, grouper, flying fish, cod, common sea horse, Bermuda chub, opah, escolar, leerfish, tripletail, goosefish, monkfish, sunfish, Murray eel, pilotfish, black gemfish, stone bass, bluefish, cassava fish, red drum, greater amberjack, yellowtail, common sea bream, barracuda, puffer fish, loggerhead turtle, green turtle, leatherback turtle, hawksbill turtle, Kemp's ridley turtle, Atlantic yellow-nosed albatross, Audouin's gull, balearic shearwater, black-browed albatross, great black-backed gull, great shearwater, great-winged petrel, grey petrel, herring gull, laughing gull, northern royal albatross, shy albatross, sooty shearwater, southern fulmar, Yelkouan shearwater, yellow-legged gull, minke whale, sei whale, fin whale, common dolphin, northern right whale, pilot whale, humpback whale, beaked whale, killer whale, harbor porpoise, sperm whale, striped dolphin, Atlantic spotted dolphin, spinner dolphin, bottlenose dolphin, and goose-beaked whale.

Imagine being served a plate of sushi. But this plate also holds all of the animals that were killed for your serving of sushi. The plate might have to be five feet across.

CAFO

Concentrated Animal Feeding Operation, a.k.a. factory farm. Tellingly, this formal designation was created not by the meat industry but by the Environmental Protection Agency (*see also*: ENVIRONMENTALISM). All CAFOs harm animals in ways that would be illegal according to even relatively weak animal welfare legislation. Thus:

CFE

Common Farming Exemptions make legal any method of raising farmed animals so long as it is commonly practiced within

the industry. In other words, farmers—*corporations* is the right word—have the power to define cruelty. If the industry adopts a practice—hacking off unwanted appendages with no painkillers, for example, but you can let your imagination run with this—it automatically becomes legal.

CFEs are enacted state by state and range from the disturbing to the absurd. Take Nevada. Under its CFE, the state's welfare laws cannot be enforced to "prohibit or interfere with established methods of animal husbandry, including the raising, handling, feeding, housing, and transporting, of livestock or farm animals." What happens in Vegas stays in Vegas.

Lawyers David Wolfson and Mariann Sullivan, experts on the issue, explain:

Certain states exempt specific practices, rather than all customary farming practices.... Ohio exempts farmed animals from requirements for "wholesome exercise and a change of air," and Vermont exempts farmed animals from the section in its criminal anticruelty statute that deems it illegal to "tie, tether and restrain" an animal in a manner that is "inhumane or detrimental to its welfare." One cannot help but assume that in Ohio farmed animals are denied exercise and air, and that in Vermont they are tied, tethered or restrained in a manner that is inhumane.

COMFORT FOOD

One night, when my son was four weeks old, he developed a slight fever. By the next morning he was having trouble breathing. On our pediatrician's recommendation, we took him to the emergency room, where he was diagnosed with RSV (respiratory syncytial virus), which often expresses itself in adults as the common cold,

but in babies can be extremely dangerous, even life threatening. We ended up spending a week in the pediatric intensive-care unit, my wife and I taking turns sleeping in the armchair in our son's room, and on the waiting-room recliner.

On the second, third, fourth, and fifth days, our friends Sam and Eleanor brought us food. Lots of food, far more than we could eat: lentil salad, chocolate truffles, roasted vegetables, nuts and berries, mushroom risotto, potato pancakes, green beans, nachos, wild rice, oatmeal, dried mango, pasta primavera, chili—all of it comfort food. We could have eaten in the cafeteria or ordered in. And they could have expressed their love with visits and kind words. But they brought all of that food, and it was a small, good thing that we needed. That, more than any other reason—and there are many other reasons—is why this book is dedicated to them.

COMFORT FOOD, CONT.

On the sixth day, my wife and I were able, for the first time since arriving, to leave the hospital together. Our son was clearly over the hump, and doctors thought we'd be able to take him home the following morning. We could hear the bullet we'd dodged whistle past. So as soon as he'd fallen asleep (with my in-laws by his bedside), we took the elevator down and reemerged into the world.

It was snowing. The snowflakes were surreally large, distinct and durable: like the ones children cut out of white paper. We glided like sleepwalkers down Second Avenue, no destination in mind, and ended up in a Polish diner. Massive glass windows faced the street, and the snowflakes clung for several seconds before descending. I can't remember what I ordered. I can't remember if the food was any good. It was the best meal of my life.

CRUELTY

Not only the willful causing of unnecessary suffering, but the indifference to it. It's much easier to be cruel than one might think.

It's often said that nature, "red in tooth and claw," is cruel. I heard this again and again from ranchers, who tried to persuade me that they were protecting their animals from what lay outside the enclosures. Nature is no picnic, true. (*Picnics* are rarely picnics.) And it's also true that animals on the very best farms often have better lives than they would in the wild. But nature isn't cruel. And neither are the animals in nature that kill and occasionally even torture one another. Cruelty depends on an understanding of cruelty, and the ability to choose against it. Or to choose to ignore it.

DESPERATION

There are sixty pounds of flour in my grandmother's basement. On a recent weekend visit, I was sent down to retrieve a bottle of Coke and discovered the sacks lining the wall, like sandbags on the banks of a rising river. Why would a ninety-year-old woman need so much flour? And why the several dozen two-liter bottles of Coke, or the pyramid of Uncle Ben's, or the wall of pumpernickel loaves in the freezer?

"I noticed you have an awful lot of flour in the basement," I said, returning to the kitchen.

"Sixty pounds."

I couldn't read her tone. Was that pride I heard? A hint of challenge? Shame?

"Can I ask why?"

She opened a cabinet and took down a thick stack of coupons, each of which offered a free sack of flour for every bag purchased.

"How did you get so many of these?" I asked.

"It wasn't a problem."

"What are you going to do with all of that flour?"

"I'll make some cookies."

I tried to imagine how my grandmother, who has never driven a car in her life, managed to schlep all of those sacks from the supermarket to her house. Someone drove her, as always, but did she load down any one car with all sixty, or did she make multiple trips? Knowing my grandmother, she probably calculated how many sacks she could get in one car without overly inconveniencing the driver. She then contacted the necessary number of friends and made that many trips to the supermarket, likely in one day. Was this what she meant by ingenuity, all those times she told me that it was her luck and ingenuity that got her through the Holocaust?

I've been an accomplice on many of my grandmother's food-acquisition missions. I remember a sale of some pelleted bran cereal, for which the coupon limited three boxes per customer. After buying three boxes herself, my grandmother sent my brother and me to buy three boxes each while she waited at the door. What must I have looked like to the cashier? A five-year-old boy using a coupon to buy multiple boxes of a foodstuff that not even a genuinely starving person would willfully eat? We went back an hour later and did it again.

The flour demanded answers. For what population was she planning on baking all of these cookies? Where was she hiding the 1,400 cartons of eggs? And most obviously: How did she get all of those sacks into the basement? I've met enough of her decrepit chauffeurs to know they weren't doing the hauling.

"One bag at a time," she said, dusting the table with her palm.

One bag at a time. My grandmother has trouble making it from the car to the front door one step at a time. Her breathing is slow and labored, and on a recent visit to the doctor, it was discovered that she shares a heart rate with the great blue whale.

Her perpetual wish is to live to the next bar mitzvah, but I expect her to live another decade, at least. She's not the kind of person who dies. She could live to be 120, and there's no way she'll use up half of the flour. And she must know that.

DISCOMFORT FOOD

Sharing food generates good feeling and creates social bonds. Michael Pollan, who has written as thoughtfully about food as anyone, calls this "table fellowship" and argues that its importance, which I agree is significant, is a vote against vegetarianism. At one level, he's right.

Let's assume you're like Pollan and are opposed to factory-farmed meat. If you're at the guest end, it stinks not to eat food that was prepared for you, especially (although he doesn't get into this) when the grounds for refusal are ethical. But how much does it stink? It's a classic dilemma: How much do I value creating a socially comfortable situation, and how much do I value acting socially responsible? The relative importance of ethical eating and table fellowship will be different in different situations (declining my grandmother's chicken with carrots is different from passing on microwaved buffalo wings).

More important, though, and what Pollan curiously doesn't emphasize, is that attempting to be a selective omnivore is a much heavier blow to table fellowship than vegetarianism. Imagine an acquaintance invites you to dinner. You could say, "I'd love to come. And just so you know, I'm a vegetarian." You could also say, "I'd love to come. But I only eat meat that is produced by family farmers." Then what do you do? You'll probably have to send the host a web link or list of local shops to even make the request intelligible, let alone manageable. This effort might be well-placed, but it is certainly more invasive than asking for vegetarian food (which these days requires no explanation). The entire food industry (restaurants, airline and college

food services, catering at weddings) is set up to accommodate vegetarians. There is no such infrastructure for the selective omnivore.

And what about being at the host end of a gathering? Selective omnivores also eat vegetarian fare, but the reverse is obviously not true. What choice promotes greater table fellowship?

And it isn't just what we put into our mouths that creates table fellowship, but what comes out. There is also the possibility that a conversation about what we believe would generate more fellowship—even when we believe different things—than any food being served.

DOWNER

1) Something or someone depressing.

2) An animal that collapses from poor health and is unable to stand back up. This does not imply grave illness any more than a fallen person does. Some downed animals are seriously ill or injured, but often enough they require little more than water and rest to be spared a slow, painful death. There aren't reliable statistics available about downers (who would report them?), but estimates put the number of downed cows at around 200,000 a year—about two cows for every word in this book. When it comes to animal welfare, the absolute bare minimum, the least we could conceivably give, would seem to be euthanizing downed animals. But that costs money, and downers have no use and so earn no regard or mercy. In most of America's fifty states it is perfectly legal (and perfectly common) to simply let downers die of exposure over days or toss them, live, into dumpsters.

My first research visit for this book was to Farm Sanctuary in Watkins Glen, New York. Farm Sanctuary is not a farm. Nothing is grown or raised there. Founded in 1986, by Gene Baur and his then-wife, Lorri Houston, it was created as a place for rescued farmed animals to live out their unnatural lives. (*Natural lives* would be an awkward expression to use in reference to animals designed to be

slaughtered in their adolescence. Farmed pigs, for example, are usually slaughtered at about 250 pounds. Let these genetic mutants live on, as they do at Farm Sanctuary, and they can exceed 800 pounds.)

Farm Sanctuary has become one of the most important animal protection, education, and lobbying organizations in America. Once funded by the sales of veggie hot dogs off the back of a VW van at Grateful Dead concerts—there's no real need to make a joke here—Farm Sanctuary has expanded to occupy 175 acres in upstate New York and another 300-acre sanctuary in northern California. It has more than 200,000 members, an annual budget of about \$6 million, and the ability to help shape local and national legislation. But none of that is why I chose to begin there. I simply wanted to interact with farmed animals. In my thirty years of life, the only pigs, cows, and chickens I had touched were dead and cut up.

As we walked the pasture, Baur explained that Farm Sanctuary was less his dream or big idea than it was the product of a fortuitous event.

"I was driving around the Lancaster stockyard, and saw, around back, a pile of downers. I approached, and one of the sheep moved her head. I realized she was still alive, left there to suffer. So I put her in the back of my van. I'd never done anything like that before, but I couldn't leave her like that. I took her to the vet, expecting she'd be euthanized. But after a bit of prodding, she just stood right up. We took her to our house in Wilmington, and then, when we got the farm, we took her here. She lived ten years. *Ten*. Good years."

I mention this story not to promote additional farm sanctuaries. They do plenty of good, but that good is educational (offering exposure to people like me) and not practical in the sense of actually rescuing and caring for a significant number of animals. Baur would be the first to acknowledge this. I mention the story to illustrate just how close to health downed animals can be. Any individual that close needs either to be saved or mercifully killed.

ENVIRONMENTALISM

Concern for the preservation and restoration of natural resources and the ecological systems that sustain human life. There are grander definitions I could get more excited about, but this is in fact what is usually meant by the term, at least for the moment. Some environmentalists include animals as resources. What is meant by *animals* here is usually endangered or hunted species, rather than those most populous on earth, which are most in need of preservation and restoration.

A University of Chicago study recently found that our food choices contribute at least as much as our transportation choices to global warming. More recent and authoritative studies by the United Nations and the Pew Commission show conclusively that globally, farmed animals contribute *more* to climate change than transport. According to the UN, the livestock sector is responsible for 18 percent of greenhouse gas emissions, around 40 percent more than the entire transport sector—cars, trucks, planes, trains, and ships—combined. Animal agriculture is responsible for 37 percent of anthropogenic methane, which offers twenty-three times the global warming potential (GWP) of CO_2 , as well as 65 percent of anthropogenic nitrous oxide, which provides a staggering 296 times the GWP of CO_2 . The most current data even quantifies the role of diet: omnivores contribute seven times the volume of greenhouse gases that vegans do.

The UN summarized the environmental effects of the meat industry this way: raising animals for food (whether on factory or traditional farms) “is one of the top two or three most significant contributors to the most serious environmental problems, at every scale from local to global... [Animal agriculture] should be a major policy focus when dealing with problems of land degradation, climate change and air pollution, water shortage and water pollution and loss

of biodiversity. Livestock's contribution to environmental problems is on a massive scale." In other words, if one cares about the environment, and if one accepts the scientific results of such sources as the UN (or the Intergovernmental Panel on Climate Change, or the Center for Science in the Public Interest, or the Pew Commission, or the Union of Concerned Scientists, or the Worldwatch Institute...), one *must* care about eating animals.

Most simply put, someone who regularly eats factory-farmed animal products cannot call himself an environmentalist without divorcing that word from its meaning.

FACTORY FARM

This term is sure to fall out of use in the next generation or so, either because there will be no more factory farms, or because there will be no more family farms to compare them to.

FAMILY FARM

A family farm is typically defined as a farm where a family owns the animals, manages the operations, and contributes labor on a day-to-day basis. Two generations ago, virtually all farms were family farms.

FEED CONVERSION

By necessity, both factory and family farmers are concerned with the ratio of edible animal flesh, eggs, or milk produced per unit of food a farmed animal is fed. It's the disparity of their concern—and the very different lengths to which they will go to increase profitability—that distinguishes the two kinds of farmers. For example:

FOOD AND LIGHT

Factory farms commonly manipulate food and light to increase productivity, often at the expense of the animals' welfare. Egg

farmers do this to reboot birds' internal clocks so they start laying valuable eggs faster and, crucially, at the same time. Here's how one poultry farmer described the situation to me:

As soon as females mature—in the turkey industry at twenty-three to twenty-six weeks and with chickens sixteen to twenty—they're put into barns and they lower the light; sometimes it's total darkness twenty-four/seven. And then they put them on a very low-protein diet, almost a starvation diet. That will last about two or three weeks. Then they turn the lights on sixteen hours a day, or twenty with chickens, so she thinks it's spring, and they put her on high-protein feed. She immediately starts laying. They have it down to such a science that they can stop it, start it, and everything. See, in the wild, when spring comes, the bugs come and the grass comes and the days get longer—that's a key to tell the birds, "Well, I better start laying. Spring is coming." So man has tapped into that already built-in thing. And by controlling the light, the feed, and when they eat, the industry can force the birds to lay eggs year-round. So that's what they do. Turkey hens now lay 120 eggs a year and chickens lay over 300. That's two or even three times as many as in nature. After that first year, they are killed because they won't lay as many eggs in the second year—the industry figured out that it's cheaper to slaughter them and start over than it is feed and house birds that lay fewer eggs. These practices are a big part of why poultry meat is so cheap today, but the birds suffer for it.

While most people know the vague outlines of the cruelty of factory farms—the cages are small, the slaughter is violent—certain widely practiced techniques have eluded the public consciousness. I had never heard about food and light deprivation. And after learning

about it, I didn't want to eat a conventional egg ever again. Thank goodness for free-range. Right?

FREE-RANGE

Applied to meat, eggs, dairy, and every now and then even fish (tuna on the range?), the free-range label is bullshit. It should provide no more peace of mind than "all-natural," "fresh," or "magical."

To be considered free-range, chickens raised for meat must have "access to the outdoors," which, if you take those words literally, means nothing. (Imagine a shed containing thirty thousand chickens, with a small door at one end that opens to a five-by-five dirt patch—and the door is closed all but occasionally.)

The USDA doesn't even have a definition of free-range for laying hens and instead relies on producer testimonials to support the accuracy of these claims. Very often, the eggs of factory-farmed chickens—chickens packed against one another in vast barren barns—are labeled free-range. ("Cage-free" is regulated but means no more or less than what it says—they are literally not in cages.) One can reliably assume that most "free-range" (or "cage-free") laying hens are debeaked, drugged, and cruelly slaughtered once "spent." I could keep a flock of hens under my sink and call them free-range.

FRESH

More bullshit. According to the USDA, "fresh" poultry has never had an internal temperature below 26 degrees or above 40 degrees Fahrenheit. Fresh chicken can be frozen (thus the oxymoron "fresh frozen"), and there is no time component to food freshness. Pathogen-infested, feces-splattered chicken can technically be fresh, cage-free, and free-range, and sold in the supermarket legally (the shit does need to be rinsed off first).

HABIT, THE POWER OF

My father, who did just about all of the cooking in our house, raised us on exotics. We ate tofu before tofu was tofu. It's not that he liked the taste, or even that the supposed health benefits were touted as they are now. He simply liked eating something that no one else ate. And it wasn't enough to use an unfamiliar food according to its typical preparation. No, he made portobello "fingers," falafel "ragu," seitan "scramblers."

Much of my father's scare-quote cooking involved food substitution, sometimes in the interest of placating my mother by replacing a gratuitously unkosher food with a more subtly unkosher one (bacon→turkey bacon), an unhealthy food with a more subtly unhealthy one (turkey bacon→fakin' bacon), and sometimes simply to prove it could be done (flour→buckwheat). A few of his substitutions seemed to be nothing less than flipped middle fingers at nature itself.

On a recent trip home, I found the following foods in my parents' refrigerator: faux chicken patties, nuggets, and strips; fake sausage links and patties; butter and egg substitutes, veggie burgers, and vegetarian kielbasa. You might assume that someone with a dozen varieties of imitation animal products was a vegan, but that would not only be incorrect—my father eats meat all the time—it would miss the point entirely. My father has always cooked against the grain. His cuisine is as existential as it is gastronomic.

We never questioned it, and might even have liked it—even if we never wanted to have friends come over for dinner. We might even have thought of him as a Great Chef. But as with my grandmother's cooking, the food wasn't food. It was story: ours was the dad who liked to take safe chances, who encouraged us to try the new thing because it was new, who liked it when people laughed at his mad-scientist cooking, because the laughter was more valuable than the taste of food could ever be.

One thing that never followed dinner was dessert. I lived with my parents for eighteen years and cannot remember a single family meal that included something sweet. My father wasn't trying to protect our teeth. (I don't remember being asked to brush much in those years.) He just didn't think of dessert as necessary. Savory foods were clearly superior, so why waste stomach real estate? The amazing thing is that we believed him. My tastes—not only my ideas about foods, but my preconscious cravings—were formed around his lessons. To this day, I get less excited about dessert than anyone I know, and would always choose a slice of black bread over one of yellow cake.

Around what lessons will my son's cravings be formed? Although my taste for meat has almost entirely gone away—I often find the sight of red meat repulsive—the smell of a summer barbecue still makes my mouth water. What will it do to my son? Will he be among the first of a generation that doesn't crave meat because it never tasted it? Or will he crave it even more?

HUMAN

Humans are the only animals that have children on purpose, keep in touch (or don't), care about birthdays, waste and lose time, brush their teeth, feel nostalgia, scrub stains, have religions and political parties and laws, wear keepsakes, apologize years after an offense, whisper, fear themselves, interpret dreams, hide their genitalia, shave, bury time capsules, and can choose not to eat something for reasons of conscience. The justifications for eating animals and for not eating them are often identical: we are not them.

INSTINCT

Most of us are familiar with the remarkable navigational abilities of migrating birds, which are able to find their way to specific nesting

grounds across continents. When I learned about this, I was told that it was "instinct." ("Instinct" continues to be the explanation of choice whenever animal behavior implies too much intelligence [*see: INTELLIGENCE*].) Instinct, though, wouldn't go very far in explaining how pigeons use human transportation routes to navigate. Pigeons follow highways and take particular exits, likely following many of the same landmarks as the humans driving below.

Intelligence used to be narrowly defined as intellectual ability (book smarts); we now consider multiple intelligences, such as visual-spatial, interpersonal, emotional, and musical. A cheetah is not intelligent because it can run fast. But its uncanny ability to map space—to find the hypotenuse, to anticipate and counter the movements of prey—is a kind of mental work that matters. To write this off as instinct makes as much sense as equating the kick that results from a physician's mallet tapping your knee to your being able to successfully take a penalty kick in a soccer game.

INTELLIGENCE

Generations of farmers have known that clever pigs will learn to undo the latches of their pens. Gilbert White, the British naturalist, wrote in 1789 of one such pig, a female, who, after undoing her own latch, "used to open all the intervening gates, and march, by herself, up to a distant farm where [a male] was kept; and when her purpose was served"—a great way of putting it—"would return home by the same means."

Scientists have documented a pig language of sorts, and pigs will come when called (to humans or one another), will play with toys (and have favorites), and have been observed coming to the aid of other pigs in distress. Dr. Stanley Curtis, an animal scientist friendly to the industry, empirically evaluated the cognitive abilities of pigs by training them to play a video game with a joystick modified

for snouts. They not only learned the games, but did so as fast as chimpanzees, demonstrating a surprising capacity for abstract representation. And the legend of pigs undoing latches continues. Dr. Ken Kephart, a colleague of Curtis's, not only confirms the ability of pigs to do this, but adds that pigs often work in pairs, are usually repeat offenders, and in some cases undo the latches of fellow pigs. If pig intelligence has been part of America's barnyard folklore, that same lore has imagined fish and chickens as especially stupid. Are they?

INTELLIGENCE?

In 1992, only 70 peer-reviewed papers had reported on fish learning—a decade later there were 500 such papers (today it tops 640). Our knowledge of no other animal has been so quickly and dramatically revised. If you were the world expert on fish mental capacities in the 1990s, you're at best a novice today.

Fish build complex nests, form monogamous relationships, hunt cooperatively with other species, and use tools. They recognize one another as individuals (and keep track of who is to be trusted and who is not). They make decisions individually, and monitor social prestige and vie for better positions (to quote from the peer review journal *Fish and Fisheries*: they use "Machiavellian strategies of manipulation, punishment and reconciliation"). They have significant long-term memories, are skilled in passing knowledge to one another through social networks, and can also pass on information generationally. They even have what the scientific literature calls "long-standing 'cultural traditions' for particular pathways to feeding, schooling, resting or mating sites."

And chickens? There has been a revolution in scientific understanding here as well. Dr. Lesley Rogers, a prominent animal physiologist, discovered the lateralization of avian brains—the separation of the brain into left and right hemispheres with different

specialties—at a time when this was believed to be a unique property of the human brain. (Scientists now agree that lateralization is present throughout the animal kingdom.) Building on forty years of research experience, Rogers argues that our present knowledge of bird brains has made it “clear that birds have cognitive capacities equivalent to those of mammals, even primates.” She argues they have sophisticated memories that are “written down according to some sort of chronological sequence that becomes a unique autobiography.” Like fish, chickens can pass information generationally. They also deceive one another and can delay satisfaction for larger rewards.

Such research has altered our understanding of birds’ brains so much that in 2005, scientific experts from around the world convened to begin the process of renaming the parts of avian brains. They aimed to replace old terms that implied “primitive” functions with the new realization that bird brains process information in a manner analogous to (but different from) the human cerebral cortex.

The image of hard-nosed physiologists standing over diagrams of brains and arguing for a renaming has a larger resonance. Think of the beginning of the story of the beginning of everything: Adam (without Eve and without divine guidance) names the animals. Continuing his work, we call stupid people bird-brained, cowardly people chickens, fools turkeys. Are these the best names we have to offer? If we can revise the notion of women coming from a rib, can’t we revise our categorizations of the animals that, draped with barbecue sauce, end up as the ribs on our dinner plates—or for that matter, the KFC in our hands?

KFC

Formerly signifying Kentucky Fried Chicken, now signifying nothing, KFC is arguably the company that has increased the sum total

of suffering in the world more than any other in history. KFC buys nearly a billion chickens a year—if you packed those chickens body to body, they would blanket Manhattan from river to river and spill from the windows of the higher floors of office buildings—so its practices have profound ripple effects throughout all sectors of the poultry industry.

KFC insists it is “committed to the well-being and humane treatment of chickens.” How trustworthy are these words? At a slaughterhouse in West Virginia that supplies KFC, workers were documented tearing the heads off live birds, spitting tobacco into their eyes, spray-painting their faces, and violently stomping on them. These acts were witnessed dozens of times. This slaughterhouse was not a “bad apple,” but a “Supplier of the Year.” Imagine what happens at the bad apples when no one is looking.

On KFC’s website, the company claims, “We are monitoring our suppliers on an ongoing basis to determine whether our suppliers are using humane procedures for caring for and handling animals they supply to us. As a consequence, it is our goal to only deal with suppliers who promise to maintain our high standards and share our commitment to animal welfare.” That is half true. KFC does deal with suppliers that *promise* to ensure welfare. What KFC doesn’t tell you is that anything the suppliers practice is necessarily considered welfare (*see*: CFE).

A similar half-truth is the claim that KFC conducts welfare audits of its suppliers’ slaughter facilities (the “monitoring” alluded to above). What we are not told is that these are typically *announced* audits. KFC announces an inspection meant (at least in theory) to document illicit behavior in a manner that allows plenty of time for the soon-to-be-inspected to throw a tarp over whatever they don’t want seen. Not only that, but the standards the auditors are asked to report on do not include a single one of the recommendations

recently made by KFC's own (now former) animal welfare advisers, five of whom resigned in frustration. One of them, Adele Douglass, told the *Chicago Tribune* that KFC "never had any meetings. They never asked any advice, and then they touted to the press that they had this animal-welfare advisory committee. I felt like I was being used." Ian Duncan, the Emeritus Chair in Animal Welfare at the University of Guelph, another former board member and one of North America's leading scientific experts on bird welfare, said that "progress was extremely slow, which is why I resigned. It was always going to be happening later. They just put off actually creating standards.... I suspect that upper management didn't really think that animal welfare was important."

How were these five board members replaced? KFC's Animal Welfare Council now includes a vice president for Pilgrim's Pride, the company operating the "Supplier of the Year" plant at which some workers were shown sadistically abusing birds; a director for Tyson Foods, which slaughters 2.2 billion chickens annually and where some employees were also found to be mutilating live birds during multiple investigations (in one, employees also urinated directly onto the slaughter line); and regular participation from its own "executives and other employees." Essentially, KFC is claiming that its advisers developed programs for its suppliers, even though its advisers are its suppliers.

Like its name, KFC's commitment to animal welfare signifies nothing.

KOSHER?

As I was taught them, in Hebrew school and at home, the Jewish dietary laws were devised as a compromise: if humans absolutely must eat animals, we should do so humanely, with respect for the other creatures in the world and with humility. Don't subject the

animals you eat to unnecessary suffering, either in their lives or in their slaughter. It's a way of thinking that made me proud to be Jewish as a child, and that continues to make me proud.

This is why when fully conscious cattle at the (then) largest kosher slaughterhouse in the world, Agriprocessors in Postville, Iowa, were videotaped having their tracheas and esophagi systematically pulled from their cut throats, languishing for up to three minutes as a result of sloppy slaughter, and being shocked with electric prods in their faces, it bothered me even more than the innumerable times I'd heard of such things happening at conventional slaughterhouses.

To my relief, much of the Jewish community spoke out against the Iowa plant. The president of the Rabbinical Assembly of the Conservative Movement, in a message sent to every one of its rabbis, asserted, "When a company purporting to be kosher violates the prohibition against *tza'ar ba'alei hayyim*, causing pain to one of God's living creatures, that company must answer to the Jewish community, and ultimately, to God." The Orthodox chair of the Talmud Department at Israel's Bar Ilan University also protested, and did so eloquently: "It very well may be that any plant performing such types of [kosher slaughter] is guilty of *hillul bashem*—the desecration of God's name—for to insist that God cares only about his ritual law and not about his moral law is to desecrate His Name." And in a joint statement, more than fifty influential rabbis, including the president of the Reform Central Conference of American Rabbis and the dean of the Conservative movement's Ziegler School of Rabbinic Studies, argued that "Judaism's powerful tradition of teaching compassion for animals has been violated by these systematic abuses and needs to be reasserted."

We have no reason to believe that the kind of cruelty that was documented at Agriprocessors has been eliminated from the kosher industry. It can't be, so long as factory farming dominates.

This raises a difficult question, which I ask not as a thought experiment but straightforwardly: In *our* world—not the shepherd-and-flock world of the Bible, but our overpopulated one in which animals are treated legally and socially as commodities—is it even possible to eat meat without “causing pain to one of God’s living creatures,” to avoid (even after going to great and sincere lengths) “the desecration of God’s name”? Has the very concept of kosher meat become a contradiction in terms?

ORGANIC

What does organic signify? Not nothing, but a whole lot less than we give it credit for. For meat, milk, and eggs labeled organic, the USDA requires that animals must: (1) be raised on organic feed (that is, crops raised without most synthetic pesticides and fertilizers); (2) be traced through their life cycle (that is, leave a paper trail); (3) not be fed antibiotics or growth hormones; and (4) have “access to the outdoors.” The last criterion, sadly, has been rendered almost meaningless—in some cases “access to the outdoors” can mean nothing more than having the opportunity to look outside through a screened window.

Organic foods in general are almost certainly safer and often have a smaller ecological footprint and better health value. They are not, though, necessarily more humane. “Organic” does signal better welfare if we are talking about laying hens or cattle. It also *may* signal better welfare for pigs, but that is less certain. For chickens raised for meat and for turkeys, though, “organic” doesn’t necessarily mean anything in terms of welfare issues. You can call your turkey organic and torture it daily.

PETA

Pronounced like the Middle Eastern bread, and among the farmers I met, significantly better known. The largest animal rights

organization in the world, People for the Ethical Treatment of Animals has more than two million members.

The folks at PETA will do almost anything legal to advance their campaigns, no matter how bad they look (which is impressive) and no matter who is insulted (which is not so impressive). They'll distribute "unhappy meals" with bloodied, cleaver-wielding Ronald McDonalds to young children. They'll publish stickers conveniently shaped like those normally found on tomatoes that say "Throw me at a fur-wearer." They've tossed a dead raccoon on *Vogue* editor Anna Wintour's lunch at the Four Seasons (and sent maggot-infested innards to her office), streaked presidents and royalty, distributed "Your Daddy Kills Animals!" pamphlets to school-children, and asked the band Pet Shop Boys to change their name to Rescue Shelter Boys (the band didn't, but acknowledged that there were issues worth discussing). It's hard not to mock and admire their single-minded energy, and it's easy to see why you would never want it directed at you.

Whatever one thinks of them, no organization strikes fear in the factory farm industry and its allies more than PETA. They are effective. When PETA targeted fast-food companies, the most famous and powerful welfare scientist in the country, Temple Grandin (who has designed more than half the cattle slaughter facilities in the nation), said she saw more improvement in welfare in one year than she had seen in her entire thirty-year career previously. Arguably the biggest PETA hater on the planet, Steve Kopperud (a meat industry consultant who has given anti-PETA seminars for a decade), puts it this way: "There's enough understanding in the industry now of what PETA's capable of to put the fear of God into many executives." It didn't surprise me to learn that companies of all kinds regularly negotiate with PETA and quietly make changes in their animal welfare policies to avoid being publicly targeted by the group.

PETA is sometimes accused of using cynical strategies for attention getting, which has some truth to it. PETA is also accused of arguing that humans and animals should be treated equally, which they don't. (What would that even mean? Voting cows?) They are not a particularly emotional crowd; if anything, they are hyper-rational, focused on making their austere ideal—"Animals are not ours to eat, wear, experiment on, or use for entertainment"—as famous as Pamela Anderson in a swimsuit. A surprise to many, PETA is pro-euthanasia: if the choice, for example, is between a dog living its life in a kennel or being euthanized, PETA not only opts for the latter, but advocates for it. They do oppose killing, but they oppose suffering more. People at PETA love their dogs and cats—many companion animals join them in PETA's offices—but they are not especially motivated by a be-kind-to-dogs-and-cats ethic. They want a revolution.

They call their revolution "animal rights," but the changes PETA has won for farmed animals (their biggest concern), while numerous, are not victories for animal rights so much as for animal welfare: fewer animals per cage, better-regulated slaughter, less-cramped transport, and the like. PETA's techniques are often vaudeville-esque (or tasteless), but this over-the-top approach has won modest improvements that most people would say don't go far enough. (Does anyone oppose better-regulated slaughter and less-cramped living and transport conditions?) Ultimately, the controversy around PETA may have less to do with the organization than with those of us who stand in judgment of it—that is, with the unpleasant realization that "those PETA people" have stood up for the values we have been too cowardly or forgetful to defend ourselves.

PROCESSING

Slaughter and butchery. Even people who don't think that we owe farmed animals much during their lives always maintain they deserve a "good" death. The most macho, veal-crate-defending, branding-loving cattle rancher will agree with the vegan activist when it comes to killing humanely. Is this all that can be agreed on?

RADICAL

Virtually everyone agrees that animals can suffer in ways that matter, even if we don't agree on just what that suffering is like or how important it is. When surveyed, 96 percent of Americans say that animals deserve legal protection, 76 percent say that animal welfare is more important to them than low meat prices, and nearly two-thirds advocate passing not only laws but "strict laws" concerning the treatment of farmed animals. You'd be hard-pressed to find any other issue on which so many people see eye to eye.

Another thing most people agree on is that the environment matters. Whether or not you are in favor of offshore oil drilling, whether or not you "believe" in global warming, whether you defend your Hummer or live off the grid, you recognize that the air you breathe and the water you drink are important. And that they will be important to your children and grandchildren. Even those who continue to deny that the environment is in peril would agree that it would be bad if it were.

In the United States, farmed animals represent more than 99 percent of all animals with whom humans directly interact. In terms of our effect on the "animal world"—whether it's the suffering of animals or issues of biodiversity and the interdependence of species that evolution spent millions of years bringing into this livable balance—nothing comes close to having the impact of our

dietary choices. Just as nothing we do has the direct potential to cause nearly as much animal suffering as eating meat, no daily choice that we make has a greater impact on the environment.

Our situation is an odd one. Virtually all of us agree that it matters how we treat animals and the environment, and yet few of us give much thought to our most important relationship to animals and the environment. Odder still, those who *do* choose to act in accordance with these uncontroversial values by refusing to eat animals (which everyone agrees can reduce both the number of abused animals and one's ecological footprint) are often considered marginal or even radical.

SENTIMENTALITY

The valuing of emotions over reality. Sentimentality is widely considered out of touch, weak. Very often, those who express concern about (or even an interest in) the conditions in which farmed animals are raised are disregarded as sentimentalists. But it's worth taking a step back to ask who is the sentimentalist and who is the realist.

Is caring to know about the treatment of farmed animals a confrontation with the facts about the animals and ourselves or an avoidance of them? Is arguing that a sentiment of compassion should be given greater value than a cheaper burger (or having a burger at all) an expression of emotion and impulse or an engagement with reality and our moral intuitions?

Two friends are ordering lunch. One says, "I'm in the mood for a burger," and orders it. The other says, "I'm in the mood for a burger," but remembers that there are things more important to him than what he is in the mood for at any given moment, and orders something else. Who is the sentimentalist?

SPECIES BARRIER

The Berlin zoo (Zoologischer Garten Berlin) houses the largest number of species of any zoo in the world, around 1,400. Opened in 1844, it was the first zoo in Germany—the original animals were gifts from Frederick William IV's menagerie—and with 2.6 million visitors a year, it is the most trafficked zoo in Europe. Allied air raids in 1942 destroyed nearly all of the infrastructure, and only ninety-one animals survived. (It's amazing that in a city in which people were cutting down the public parks for firewood any animals survived at all.) Today there are about fifteen thousand animals. But most people pay attention to only one of them.

Knut, the first polar bear born to the zoo in thirty years, entered the world on December 5, 2006. He was rejected by his mother, the twenty-year-old Tosca, a retired German circus bear, and his twin brother died four days later. It's a promising beginning for a bad TV movie, but not for a life. Little Knut spent his first forty-four days in an incubator. His keeper, Thomas Dörflein, slept at the zoo in order to provide twenty-four-hour care. Dörflein bottle-fed Knut every two hours, strummed Elvis's "Devil in Disguise" on his guitar at Knut's bedtime, and was covered in cuts and bruises from all the roughhousing. Knut weighed 1.8 pounds at birth, but by the time I saw him, about three months later, he had more than doubled his weight. If all goes well, he will one day be about two hundred times that size.

To say that Berlin loved Knut would be a tragic understatement. Mayor Klaus Wowereit checked the news every morning for fresh pictures of Knut. The city's hockey team, the Eisbären, asked the zoo if they could adopt him as a mascot. Numerous blogs—including one by *Der Tagesspiegel*, Berlin's most widely read paper—were dedicated to Knut's hourly doings. He had his own podcast and webcam. He even replaced the topless model in a number of daily newspapers.

Four hundred journalists came to Knut's public debut, which far

overshadowed the EU summit taking place at the same time. There were Knut bow ties, Knut rucksacks (that's German-English for backpack), Knut commemorative plates, Knut pajamas, Knut figurines, and probably, although I haven't verified this, Knut panties. Knut has a godfather, Sigmar Gabriel, the German environment minister. Another zoo animal, the panda Yan Yan, was actually *killed* by Knut's popularity. Zookeepers speculate that the thirty thousand people crowding into the zoo to see Knut overwhelmed Yan Yan—either overexcited her or depressed her to death (it wasn't clear to me). And speaking of death, when an animal rights group raised the argument—only hypothetically, they later claimed—that it would be better to euthanize an animal than raise it in such conditions, schoolchildren took to the streets chanting “Knut must live.” Soccer fans chanted for Knut instead of their teams.

If you go to see Knut and get hungry, just a few feet from his enclosure is a stand selling “Wurst de Knut,” made from the flesh of factory-farmed pigs, which are at least as intelligent and deserving of our regard as Knut. This is the species barrier.

STRESS

A word used by the industry to elide what is being referred to, which is:

SUFFERING

What is suffering? The question assumes a subject that suffers. All the serious challenges to the idea that animals suffer tend to grant that animals “feel pain” at one level, but deny them the sort of being—the general mental-emotional world or “subjectivity”—that would make this suffering meaningfully analogous to our own. I think this objection hits at something very real and alive for many people, namely the sense that animals' suffering is simply

of a different order and therefore not really important (even if regrettable).

We all have strong intuitions of what suffering means, but they can be extremely difficult to capture in words. As children, we learn the meaning of suffering by interacting with other beings in the world—both humans, especially our family, and animals. The word *suffering* always implies an intuition of a shared experience with others—a shared drama. Of course, there are special kinds of human suffering—the unfulfilled dream, the experience of racism, bodily shame, and so on—but should that lead one to say that animal suffering is “not really suffering”?

The most important part of definitions of or other reflections on suffering is not what they tell us about suffering—about neural pathways, nociceptors, prostaglandins, neuronal opioid receptors—but about who suffers and how much that suffering should matter. There may well be philosophically coherent ways to imagine the world and the meaning of suffering so that we come up with a definition that won't apply to animals. Of course, this would fly in the face of common sense, but I'll grant that it might be done. So, if those who argue that animals don't really suffer and those who argue that they do can both offer coherent understandings and present persuasive evidence, should we be dubious about animal suffering? Should we grant that animals might not *really* suffer—not in the ways that matter most?

As you can guess, I would say no, but I'm not going to argue over this. Rather, I think the essential point is simply to realize the magnitude of what is at stake when we ask “What is suffering?”

What is suffering? I'm not sure *what* it is, but I know that suffering is the name we give to the origin of all the sighs, screams, and groans—small and large, crude and multifaceted—that concern us. The word defines our gaze even more than what we are looking at.