The Animal in Ottoman Egypt

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PART TWO

BARK AND BITE

In-Between

In the lands of the infidel Franks, the so-called Europeans, every dog has an owner. These poor animals are paraded on the streets with chains around their necks, they're fettered like the most miserable of slaves and dragged around in isolation. These Franks force the poor beasts into their homes and even into their beds. Dogs aren't permitted to walk with one another, let alone sniff and frolic together. In that despicable state, in chains, they can do nothing but gaze forlornly at each other from a distance when they pass on the street. Dogs who roam the streets of Istanbul freely in packs and communities, the way we do, dogs who threaten people if necessary, who can curl up in a warm corner or stretch out in the shade and sleep peacefully, and who can shit wherever they want and bite whomever they want, such dogs are beyond the infidels' conception.

-Orhan Pamuk

When humans have written about other animals, they have more often than not written about dogs.1 Dog domestication and human history have indeed marched in lockstep, fusing together the fates of both species.² Biologists, historians, anthropologists, ethologists, and others have long argued about whether humans made dogs or dogs made humans. Yes, we domesticated them for hunting, protection, and companionship, but they have also clearly managed to control us to their benefit by making us feed, support, and provide for them. "So who then," as Michael Pollan has usefully asked with regard to certain plants, "is really domesticating whom?"3 Humans can survive without dogs, but domesticated dogs cannot survive without humans. As the history of bulldog breeding shows, many domesticated dogs bred for characteristics such as loyalty, cuteness, pedigree, size, coat color, and playfulness literally cannot be brought into this world without humans (caesarean rates for bulldogs are over 80 percent).4 Given this imbalance, it is clear that dogs have succeeded in forcing us to keep them around. Rousseau had a dog named (interestingly enough for us) Sultan.5 In his last days, Hitler purportedly only trusted his dog Blondie, who-along with Eva Braun—was killed at the Führer's side as the Russians entered Berlin.6

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Ronald Reagan loved his Lucky and Rex. Toto, Lassie, and Rin Tin Tin are all household names in the United States and in many other countries as well.7 The examples of humans and dogs together are nearly infinite. Why all this attention to canines?

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This chapter argues that dogs' material and symbolic existence in-between the worlds of the human and the animal is what has kept them tied to humans for so many millennia. When so many humans have looked into so many dogs' eyes, they swear they have seen the human. Yet when those very same dogs kill, snarl, and shit, the very same humans are quickly reminded of the animal in the dog.8 Humans have been drawn to dogs precisely because they usefully call into question the supposed dividing line between human and animal, wild and domestic, nature and culture, civilization and instinct, kingdom and dogdom. Dogs are unique crossers of all sorts of boundaries that illuminate just what those boundaries are, how they came to be, why some are so invested in maintaining them, and in which directions they might be moving.

The history of dogs in the Muslim world has generally been misunderstood. Contrary to the conventional thinking that they were always considered ritually impure in Islam and, therefore, that Muslims and dogs have been forever locked in an antagonistic relationship, the actual historical record of Muslims' writings about and interactions with dogs is on the whole much more positive.9 Dogs were more often than not seen as productive species in human communities. 10 They herded livestock, were commonly involved in hunts, provided their masters with companionship and protection, exemplified ideals of loyalty and trustworthiness, fought in wars, and were living consumers of urban and rural waste. Dogs in Ottoman Egypt, as elsewhere, were therefore economically, socially, culturally, and ecologically productive historical actors.11 Ottoman officials indeed actively encouraged the increase and maintenance of dog populations by providing them with food and water and by punishing those who committed violence against them.

The history of human interactions with dogs in Egypt over the last five hundred years is built upon a set of ideas about dogs in Islamic societies that dates back to the time of the Prophet. The enormous corpus of religious, legal, medical, and cultural texts that served as the backdrop for ideas and practices connected to dogs in the early modern period makes clear that Muslims and others in Islamicate societies were not wholly sure how to deal with the many dogs in their midst. For some, dogs were indeed animals to be feared because of their smelly saliva, life on the streets, or perceived cursed nature. For others, dogs were the most trusted living companions a human could have. 12 The story of dogs in Egypt in the sixteenth, seventeenth, and eighteenth centuries continued much of the tradition of these mixed ideas about the functional in-betweenness of dogs in human society.

Against the classical literature about dogs, the actual historical record of the animal in Ottoman Egypt brings to life an even more positive sketch of the human-dog relationship. Like livestock, dogs were everywhere in Ottoman Egypt and ultimately had to be dealt with in culturally, economically, politically, and socially serious and productive ways. For the first few centuries of Ottoman rule in Egypt, human-dog interactions were mutually constructive. Dogs protected, provided companionship, participated in military campaigns, ate trash, and helped in the hunt. In return, humans provided food and water for them, prohibited killing them, and wrote a great deal about them.

At the turn of the nineteenth century, this relationship—like so much else in Ottoman Egypt-drastically changed. Dogs in the early nineteenth century were no longer considered productive and constructive members of society. They came to be seen primarily as noise polluters, competitors for urban space, potential disease vectors, and useless sources of filth. They were therefore deemed economically negligible and ultimately culturally ignorable. For these and other economic, demographic, and epidemiological reasons, dogs became increasingly expendable in the early nineteenth century and eventually became targets of eradication campaigns. Their stories reveal how human relationships with canines changed more over the fifty years between 1780 and 1830 than they had for millennia before that. Their stories also help to explain changing notions of disease and health at the turn of the nineteenth century, reforms in urban sanitation and politics, and the growing power of the Ottoman-Egyptian state to exact interspecies violence. The history of changes in human-dog relations in Ottoman Egypt is thus part and parcel of the history of the enormous transformations that forged Egypt at the turn of the nineteenth century.

The Prophet's Puppies

The constructive relationship of mutual reliance and productivity between dogs and humans in the early modern period was the product of centuries of ideas about dogs in Muslim societies. Much of the classical Islamic religious and legal literature about dogs turns on the question of the animal's saliva. 13 The origins of this debate can be traced to a Prophetic report (hadīth) citing the need to wash a container several times—even cleaning it with a shower of dust, according to one variant of this report-after a dog's licking of the vessel. The various versions of this hadith instruct that the container be washed different numbers of times (one, three, five, or seven); sometimes the directive to use dust is included and sometimes it is not. Another report states that if a dog touches one's garment, the garment is to be rubbed forcefully if dry and washed with clean water if the dog left it moist. 14 Other hadīth claim that the Prophet instructed that any

place where a dog had lain down was to be washed for fear that some of his saliva had dripped on the ground. In short, it was thought that a dog's saliva was impure and could void a Muslim's ritual purity. The fixation in the Prophetic tradition on canine saliva has precedents in the Quran itself: "So his [the unbeliever's] likeness is as the likeness of a dog. If you attack it, it lolls its tongue out; if you leave it, it lolls its tongue out."

Many commentaries written about dog saliva cite deference to the authoritative hadīth insisting on the washing of a vessel touched by a dog as the primary justification for the judgment that the animal and its saliva were impure. Thus dogs, like pigs, were to be taken as impure, despite any evidence to the contrary.¹⁷ Many jurists, however, took issue with this opinion. A number of Mālikī legal scholars began from the premise that everything in nature must be considered pure, unless proven otherwise through lived experience or by the authority of a textual tradition. To argue against the stated position that dogs were impure, these scholars therefore attacked the reliability and authenticity of many of the texts about dogs. Other writers took a different tack and posited that edicts to wash a vessel licked by a dog were aimed at preventing the spread of disease among the community of believers. They argued that a container only had to be cleaned if it could be firmly established that the dog that licked it was known to be infected with a disease. 18 If there was no proof of infection, then the dog's purity had to be assumed and accepted. A different set of jurists made a distinction between rural and urban dogs. They claimed that only the latter were impure because they consumed human and other garbage. Using a similar logic, others argued that domestic dogs were pure—thanks to their human masters who fed, housed, cleaned, and cared for them—while wild or feral canines or street dogs were impure. These arguments for and against the notion of the impurity of dogs, and particularly of their saliva, not only reflect the depth and complexity of religious, legal, and cultural thinking on the subject but also show that dogs were constant members of human society demanding engagement and cultural understanding.

A similar but less-discussed issue related to dogs and ritual purity was whether or not the mere sight of the animal during prayer would nullify that prayer. ¹⁹ This idea was part of a larger tradition claiming that donkeys, pigs, and other animals—as well as women and sometimes non-Muslims—would all void the prayer of a pure (male) Muslim if they passed in front of him as he prayed. As with the issue of canine saliva, this idea also had its skeptics. Some *hadīth* unequivocally claimed that the Prophet himself prayed while dogs played near him. ²⁰ In general, it seems that the Prophet and his companions had a fairly positive view of dogs. ²¹ Indeed, no less an authority than the Prophet's wife Aisha threw the notion that canines and women were nullifiers of prayer into doubt when she argued that the association of dogs with women was demeaning to



Figure 3.1 Woman's Best Friend in Ottoman Egypt. Commission des sciences et arts d'Egypte, État moderne, vol. 1, pt. 2 of Description de l'Égypte, Basse Égypte, pl. 77. Beinecke Rare Book and Manuscript Library, Yale University.

the latter and had no basis in the teachings and actions of the Prophet. Given that this necessary constitutive condition of the $had\bar{u}th$ (the connection between animals and women) was in question, jurists ruled that the entire report was inauthentic, thus invalidating the idea that the sight of women or of dogs, pigs, and other animals voided prayer. The equivalence drawn between these various "problematic" classes of creation constitutes what the modern legal scholar Khaled Abou El Fadl calls "a symbolic nexus between marginalized elements of society."22 He explains that the ambivalence of early Islamic legal scholars on the question of dogs was a product of the fact that "discourses on dogs played a symbolic role in the attempts of pre-modern societies to explore the boundaries that differentiated human beings from animals. In that sense, the debates about dogs acted as a forum for negotiating not just the nature of dogs but also the nature of human beings." Seen through this wider lens, both the regularity and wide divergence of opinions about dogs stand as elements in a long debate within and without Islamic thought over the nature of humanity and God's creation. For these Muslim writers, dogs were a vehicle for part of this argumentation, rather than a specific end in and of themselves.

Thus, very little in the authoritative classical literature of Islam suggests that dogs were explicitly impure, unwanted, or dangerous. To the contrary, there is quite a bit of evidence advocating a much more open relationship with the animal. In addition to *hadīth* about the Prophet himself praying in the presence of dogs, other reports relate that the Prophet's younger cousins and some of his companions owned and raised puppies.²³ Dogs were known to roam freely

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around Medina, and some were even reported inside the Prophet's mosque. A prostitute—in some versions of the story it is an elderly woman or a sinning man—secured her place in heaven by giving water to a dog dying of thirst in the desert. The protective dog of the Men of the Cave that "stretches out its paws on the threshold" of their abode was likewise assured a place in paradise. Only the Quranic (not the Christian) version of this story includes a dog. There is even some debate in Islamic scholarship as to the dog's name, a clear indication of his importance. Whatever his name, he had the ability to speak and was purported by some to be the spiritual leader of the Men of the Cave and by others to be the reincarnation of a human. Another long tradition in Islamic scholarship identifies the canine endurance of wounds as a desirable attribute which military and political leaders should seek to emulate.

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That *hadīth* and other texts in the Islamic legal and religious corpus mention dogs is not at all surprising. The animal was everywhere in the world in which these thinkers were writing. Perhaps what is surprising to some is that there is no definitive answer to the question of the purity or impurity of dogs and, moreover, that there are indeed many statements expressing explicit support for the animal by and for Muslims.²⁹

Toward a Dogma

These early Prophetic reports and other religious texts suggesting a mixed view of dogs in Islamic society were superseded by the writings of the famous ninth-century theologian and scholar al-Jāḥiz. Along with several later writers, al-Jāḥiz in many ways settled the debate over whether dogs should be identified with their meritorious or malignant qualities. 30 Dogs were useful and important. Although a great many of al-Jāhiz's works describe the characteristics of different animals, address numerous aspects of animal life, and sketch various facets of the human-animal relationship, his most sustained study of these topics is the aptly titled The Book of Animals (Kitāb al-Ḥayawān).31 This mid-ninth-century book includes a massive compendium of Quranic references, hadith, and other religious writings about animals; citations to Greek scientific texts, especially the works of Aristotle and Galen; observations of Bedouin tribes near al-Jāḥiz's homes in Basra and Baghdad; discussions of relevant classical Arabic prose and verse; and engagement with other literary, scientific, religious, and cultural sources.³² Both its form and content make it an important precursor to similar later texts by the likes of Qazvīnī and al-Damīrī.33 al-Jāḥiz's book is best conceived of as both a work of Aristotelian zoology in which he is chiefly concerned with the physical forms, behavioral characteristics, and personalities of animals, and as a theological treatise striving to evidence the perfection of God's creation.

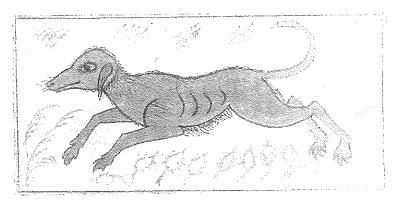


Figure 3.2 DOG FROM OTTOMAN TRANSLATION OF QAZVINI'S 'ACA'IB UL-MAHLUKAT. Walters Art Museum, Ms. W.659, 113a. Used by permission of Images for Academic Publishing.

Among walking animals—al-Jāḥiz divides creatures into four classes, those who walk, fly, swim, and crawl—dogs figure quite prominently.

In a fictitious debate in *The Book of Animals* between a supporter of the dog and a supporter of the cock, al-Jāḥiz makes a strong case for why dogs were especially praiseworthy and superior to other animals. For al-Jāḥiz, the great intelligence, compassion, and skill dogs possessed proved the wisdom and design of God's creation. As animals that shared much of the inner nature of humans, dogs held particular significance for understanding the natural world and humans' roles within it. In addition to their proximity to man in temperament and their abilities to reason and feel, dogs also served society as guardians of flocks, companions for the lonely, and aids in hunting.³⁴ Because of its detailed accounting of various aspects of dogs, al-Jāḥiz's work is also significant as one of the earliest texts to give a sense of the different dog varieties that lived in his part of the Middle East (primarily Iraq, Greater Syria, and the northern Arabian Peninsula).³⁵ Among the most common dogs of his day were the greyhound (al-salūqī), Kurdish sheepdog (al-kurdī), Pekinese (al-ṣīnī), and basset sheepdog (al-zīnī).

One particularly instructive anecdote from al-Jāhiz's work about both the closeness of dog and human and God's divine order was that of a dog that suckled a human infant. Flague had ravaged a certain household, killing all of its members and leaving their home empty. A few months passed and one of the family's heirs went to retrieve something from the house. When he entered the home's courtyard he was startled to find an infant child playing with some young puppies. Surprised, afraid, and intrigued, the man continued watching the human child until the mother of the puppies appeared. The human baby then went over to the bitch and started suckling her dugs, which she freely gave

to him.³⁷ al-Jāḥiẓ relates this story to make several points.³⁸ The first is a lesson about humanity's ineptitude and cruelty. How could this house have been boarded up and abandoned with a human child left inside? Are humans that cruel, careless, and unaware? The more important point for al-Jāḥiẓ is about the divine order scripted by God for his earthly creation. God endowed the bitch with the natural ability to feed the child and the child with the instinct to feed from the canine mother. He also ordained that this particular dog would be in the house to allow the child to survive with no other humans around him. "Divine direction," al-Jāḥiẓ remarks, is "everywhere in nature." Finally, this story is a very clear example of the intimate, innate, imperative, instinctual, and in-between shared natures of humans and dogs. ⁴⁰ Domestic dogs need humans for food, shelter, and some amount of protection, and humans—as this story clearly illustrates—in turn need dogs.

Written in the century following al-Jāḥiz's death, a text known as The Superiority of Dogs over Many of Those who Wear Clothes by the Iraqi writer Ibn al-Marzubān is the longest Arabic treatise devoted entirely to dogs and their virtues for human societies. 41 Ibn al-Marzubān's text, like al-Jāḥiz's, represents a sort of compendium of stories and verse about dogs from various cultural traditions—Persian, Indian, Greek, Arab—and therefore serves as a snapshot of the thinking about dogs in the tenth-century Muslim world. The dog and the human exist in this text as just two parts of a much larger spectrum of living things. Like all other creatures, both think, feel, act, and choose. This text's fluid interspeciality and seamless slippage between the human and the animal comes through in Ibn al-Marzubān's identification of two categories of dog-"the dog of humans (kalb al-nās)" and "the dog of dogs (kalb al-kilāb)," the former being much more dangerous than the latter.⁴² With this formulation, Ibn al-Marzubān means to say that both dogs and humans could domesticate and hence be masters of dogs. The human-possessed creatures, no doubt because of their interactions with people, were much more vile, violent, and aggressive than those dogs who remained exclusively among their canine kin. In Ibn al-Marzubān's words, "A dog of dogs does no harm to those around him; but you are constantly tortured by a dog of humans."43 This and Ibn al-Marzubān's many other vignettes about the human-dog relationship are a clear statement that he considered dogs more trustworthy, useful, loyal, and loving than humans or any other sentient being.

As an illustration of canine superiority, consider the story related by Ibn al-Marzubān of a certain unnamed king who enjoyed hunting and traveling with a dog he himself had reared.⁴⁴ The dog never left his king's side, and the king always shared his lunch and dinner with the animal. This dog even had a name, something of a rarity in the human-dog relationship as it appears in the Islamic literature of this period.⁴⁵ During a particular hunting trip, the king ordered his cook to make a milky rice pudding (tharīda) for the evening meal at the end of

a day's hunt. The cook prepared the pudding and then left it uncovered as he began to make something else. Unbeknownst to the chef, a viper entered the cooking area through a crack in the wall, ate a small portion of the pudding, and spat poison into the dish. Two living beings saw what the snake had done to the pudding: the king's trusted dog and a mute elderly servant woman also in the king's company. 46 Upon his return from the hunt, the hungry king promptly asked for his pudding. As he sat down to the table, the old woman made a gesture to warn the king about the poison in his meal.⁴⁷ She was ignored. The king then grabbed his spoon and his dog began to bark. Assuming that his faithful companion was hungry as well, the king threw some of his dinner to the animal, but the dog avoided it entirely and continued to howl. Thinking that something more serious was wrong with his dog, the king ordered his men to take the animal away so he could finish his dinner in peace. The king then dipped his spoon into the pudding. Seeing that his master was about to consume the poisoned pudding, the dog wiggled free from the guards, leapt onto the table, overturned the king's dish, and—in a sacrificial show of loyalty—lapped up the spilled pudding. Initially angered by what his dog had done, the king soon noticed the animal becoming weak. In a matter of moments, the dog fell dead with his skin peeling away and his flesh disintegrating. Realizing what had just happened, the king thanked his best friend, praised the animal's loyalty and sacrifice, buried the dog between his own father and mother, and built an ornate mausoleum over the animal's grave.

In juxtaposing the mute old woman with the loyal dog, this story creates a kind of hierarchy of being. The only two creatures who see the viper poison the pudding and who are therefore responsible for saving the king's life are the dog and the physically impaired elderly woman. Despite both creatures being unable to speak—a human subaltern who literally cannot speak and a canine that can only bark—the story makes clear that the dog was obviously a much more constructive member of this community than the woman, a human endowed with social weakness by both her sex and physical compromise. Ibn al-Marzubān's message is clear: the human is weak and incapable of saving the king; the dog is strong and not only able but also willing to sacrifice his own life to save the king's.

Of course, the woman is not the only inadequate human in this story. The foolish cook who forgot to cover the pudding, the careless architect or grounds-keeper who allowed for a crack to develop in the kitchen wall, and the king's many other servants all fail to save the life of their sovereign. Of all the beings in this story—human, canine, and viper—it is thus the dog that emerges as the most heroic of God's creatures, his sacrifice securing for him a place between the king's parents and, implicitly, in heaven for all eternity. Unlike earlier accounts from the Prophetic tradition that questioned whether or not dogs prevented humans from fulfilling certain religious or social obligations, this story clearly

shows a dog enabling the continuation of human political and social functions, as embodied in the person of the sovereign.

Several other stories in Ibn al-Marzubān's text also pit dog against snake. The two creatures indeed represent opposite ends of the animal spectrum in Islamic literature—one a loyal, trustworthy, productive member of the society of the living; the other a slithering, venomous killer of the innocent.50 Stories of dogs, humans, and snakes help to highlight the canine's privileged position as a creature existing somewhere between the human and animal realms. Their in-betweenness—at once recognizable and familiar, yet animal and other—is part of their appeal for humans. That said, juxtaposed to the snake, the dog is obviously much closer to the human than to this debased member of the animal world. Instinctually perceptive enough to sense the dangers posed by snakes, dogs in Ibn al-Marzubān's text are forever vigilant and loyal and always at the ready to protect their human masters—even at times becoming martyrs to save them.⁵¹ Above all, Ibn al-Marzubān's dogs understand their productive social roles as protectors and companions. Even when his master's judgment is impaired by alcohol, for example, the dog is ever present to watch over the human and prevent the snake from taking advantage of his master's inebriation. 52

The quintessential tale of human, dog, and snake is the one that ends Ibn al-Marzubān's text. It is a story common to many traditions and seems to have first appeared in the sixth-century BCE Sanskrit collection known as the *Paāchatantra*. ⁵³ In the sixth century CE, a Sassanian prince had the work translated into Pahlavi. After the Arab conquest of Iran in 652, the work was translated into Arabic and included in perhaps the most famous collection of allegorical tales about animals in the Muslim world, *Kalīla wa Dimna*. ⁵⁴ From the Arabic, a Greek translation was completed in the late eleventh century and a Hebrew translation in the middle of the thirteenth century. Between 1263 and 1278, the Jewish convert to Christianity John of Capua translated the Hebrew text into Latin, giving it the telling title *Directorium Humanae Vitae*. This translation was, however, not the story's first entrance into Latin Christendom, as it had also existed in French peasant legend for some time before the thirteenth century. ⁵⁵

In Ibn al-Marzubān's version of the story, a male widower left both his young son and dog home one day as he went out on an errand. ⁵⁶ He returned home a few hours later to find his dog waiting outside the front door with blood dripping from his muzzle. Assuming the worst, the man killed the dog in a fit of rage before entering his home to collect his son's body. When he approached the child's cradle, he was startled to find his son safe and sound asleep. Next to the cradle lay the chewed-up remains of an enormous viper. Realizing that his dog had saved his son's life and that he had wrongfully killed the animal, the man was filled with remorse and gave his dog a proper burial. ⁵⁷

Here again the dog appears as martyr. Wrongfully accused and killed, the dog is vindicated only in death and recognized as a hero with an honorable burial. Unlike the tale of the king and the poisoned pudding, undergirding this story of dog and viper is a lingering anxiety about the wild nature inherent in the animal. Although the dog was presumably domesticated, the assumption is that the animal—when left to its own devices—will succumb to its wild instincts and kill the defenseless child. It is precisely the perceived wild nature of the dog-turned-beast—the story is purposefully explicit about the fact that blood dripped from his muzzle—that necessitates that the creature be killed to protect human society. The line between the wild and the civilized, between wolf and trusted domesticated dog is all too thin. That the dog is not wild is, of course, the eventual irony and crucial moral lesson of the story. In the end, the dog is found to be the protector of the domestic human space from the wild savagery embodied by the viper. The multiple dualities imbedded in the now-dead body of the dog-wild and domestic, animal and human, ferocious and protective, worldly and divine-instantly and jarringly flip as the man enters his home to discover the mistake and truth of his actions. Ultimately, the dog is vindicated as an integral member of human society, in both life and death.

Here Boy

From the time of the Prophet until the tenth century, writings about dogs in the Muslim world moved from a focus on debates over the impurity and character of the dog toward a more confident stance about the animal as a constructive, productive, and integral component of human society that fulfilled necessary social, familial, and political roles. This earlier tradition was crucial in informing engagements between humans and dogs in early modern Ottoman Egypt. Two different source bases bring to life the significance of dogs as important members of Egyptian society until the end of the eighteenth century: religious, allegorical, and legal treatments of dogs, and the social historical record of humans' interactions with canines.

One of the most sustained defenses of dogs in Ottoman Egypt was penned by a religious scholar writing in Cairo between the middle of the sixteenth and the middle of the seventeenth century. Nūr al-Dīn Abū al-Irshād 'Alī ibn Muḥammad Zayn al-'Abidīn ibn 'Abd al-Raḥmān al-Ajhūrī was born in the village of al-Ajhūr in the subprovince of al-Qalyūbiyya in 1560.⁵⁹ He was a Mālikī jurisprudent (faqīh) who spent most of his intellectual career at al-Azhar in Cairo writing on various legal topics, including the permissibility of coffee-drinking and smoking.⁶⁰ He was blinded very late in life by an angry student who hit him over the head with an extremely heavy book.⁶¹ He died in

1656. His opinions and writings on the general acceptability and ritual cleanliness of the dog (tahārat al-kalb) survive in a text composed as a hypothetical debate between different schools of religious law.⁶² al-Ajhūrī represented his own Mālikī tradition against the positions of an unnamed, and possibly imaginary, Shāfiʿī scholar. The debate consisted of eight points of contention. In each of these eight sections, al-Ajhūrī first presented a reason why dogs were clean and productive beings in society; his opinion was then countered by the Shāfiʿī scholar defending the position of the ritual impurity (najāsa) of dogs; and al-Ajhūrī then responded to these critiques.⁶³ Portions of the debate revisit some of the classical disputes over the cleanliness of the dog—the issue of saliva being the most central. In stark contrast to earlier debates, however, the position advocating the impurity of dogs was no longer tenable. Thus by the seventeenth century, as al-Ajhūrī demonstrates, an evolution had occurred in the thinking about human-dog relations in Egypt, making the impurity of the animal a moot point.

For example, al-Ajhūrī writes that dogs entered the mosque of the Prophet in Medina and were cared for by those in attendance.⁶⁴ Even though the animals rested their muzzles on the carpeted floor of the mosque, leaving some saliva on the sacred ground, they were not banished from the hallowed space, and there was no indication that these areas had to be washed or cleaned in any special way. Indeed, the Prophet himself, al-Ajhūrī writes, allowed dogs to remain in the mosque and was seemingly not bothered by their presence or saliva. 65 al-Ajhūrī's interlocutor offers up the rather weak retort that perhaps the dogs in question had dry mouths and therefore left no moisture on the mosque floor. 66 al-Ajhūrī is quick to respond that this is highly unlikely given the propensity of dogs to pant and slobber. 67 More importantly, al-Ajhūrī adds, because there is no specific mention of the dogs' wet mouths, it must be assumed that their saliva was accepted as an unproblematic part of their recognized nature and was hence not considered impure 68 The feeble critique offered up by al-Ajhūrī's Shāfi'i debater and the Māliki's strong response suggest both the tiredness of these arguments against the dog by the early modern period and the ascendency of the position supporting the purity of the animal and its saliva.

Putting to rest any lingering doubts on the subject, al-Ajhūrī writes that there is no danger of impurity in the human consumption of animals collected in the mouths of dogs during a hunt, given "the ritual cleanliness of the dog's saliva (tahārat rīqihi)." ⁶⁹ This idea taps into an older one that even some Shāfī scholars accepted, namely that even if dogs are ritually impure, God made their saliva clean as a special dispensation (rukhṣa) to human hunters who needed dogs for their own sustenance. ⁷⁰ In a final example of the purity of the dog, al-Ajhūrī cites a hadīth about a man who one day came upon a desperately parched canine eating moist earth in an attempt to squeeze some water from the dirt. ⁷¹ Taking pity

on the animal, the man took off his shoe and used it to ladle water from a nearby well into the dog's mouth until he was no longer thirsty. In return for this good deed, God is said to have granted this man entrance into paradise. The Shāfi'i responded to this hadīth by claiming that the man likely first poured water from his shoe into a vessel and only then gave the water to the dog from the vessel, thereby protecting and preserving the purity of his shoe from the dog's saliva. It al-Ajhūrī responds to this challenge by making the very simple point that if such a vessel had been available, the man would surely have filled it with water from the well and given it directly to the dog rather than use his shoe as an intermediary container. It had to be assumed, in other words, first that the man's shoe was the only remotely suitable container available, and second—and most significantly—that there was no legal objection to the dog's saliva touching the man's shoe and presumably then his foot.

During his youth in the countryside and later as an adult in Cairo, al-Ajhūrī was likely quite accustomed to seeing dogs all around him. Although he approached his writings on the animal through his training and expertise in religious law, his opinions about dogs both derived from and were constitutive of a very intimate relationship between Egyptians and dogs in the early modern period. Canines were everywhere in this most lucrative of Ottoman provinces, and their many

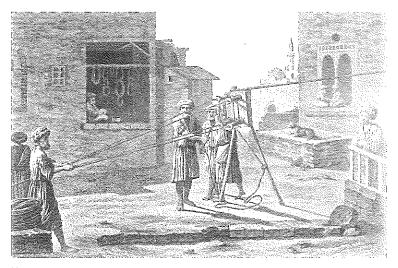


Figure 3.3 Dog Existing Happily and Unproblematically in the Social Fabric of Ottoman Cairo. Commission des sciences et arts d'Egypte, État moderne, vol. 2, pt. 2 of Description de l'Égypte, Arts et métiers, pl. 16. Beinecke Rare Book and Manuscript Library, Yale University.

social roles thus deeply affected the cultural, political, environmental, economic, and—as al-Ajhūrī shows—legal histories of Ottoman Egypt. ⁷⁴ In addition to religious and literary texts, historical chronicles and other narrative and archival sources further elucidate the essential and productive social and economic roles of dogs in human societies.

By all accounts, Cairo in the sixteenth, seventeenth, and eighteenth centuries was a city full of dogs. Antonius Gonzales, a Franciscan Recollect from the southern Netherlands who served as chaplain to the French consul in Cairo in $1665~\rm and~1666$, wrote that the city had innumerable dogs. 75 Literally every street in Cairo was home to large groups of ownerless dogs who lived by eating rubbish and thereby helped keep the city clean. 76 There were so many dogs that it was not uncommon to see packs of twenty or thirty of them following people as they walked. 77 From the time one opened one's doors in the morning until closing them at night, it was a constant battle to prevent these street dogs from getting inside one's home. These large numbers of dogs were not simply the accident of a bustling urban setting; rather, they were purposely maintained and carefully cultivated by Ottoman authorities to keep streets clean of refuse. 78 Killing these animals was illegal. Any person found guilty of violence against a dog or of killing the animal (or a cat) was strongly punished.79 This aggressive punishment of those who would harm dogs was likened to the censure of those who used force against the elderly or physically impaired—another parallel between dogs and those humans judged socially or physically weak.80

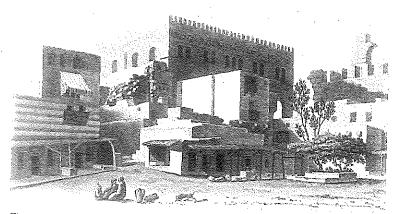


Figure 3.4 Dog Being Watered in Ottoman Carro. Commission des sciences et arts d'Egypte, État moderne, vol. 1, pt. 2 of Description de l'Égypte, Le Kaire, Citadelle, pl. 71. Beinecke Rare Book and Manuscript Library, Yale University.

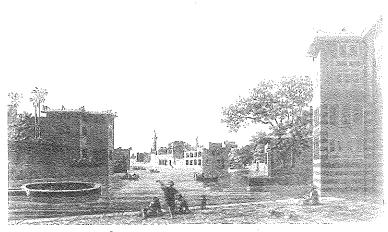


Figure 3.5 Dogs Playing in Ottoman Cairo. Commission des sciences et arts d'Egypte, État moderne, vol. 1, pt. 2 of Description de l'Égypte, Le Kaire, pl. 39. Beinecke Rare Book and Manuscript Library, Yale University.

Various institutions in Cairo existed to serve, protect, and maintain the city's canine population. ⁸¹ Feeding bins and watering troughs were placed throughout the city to provide sustenance for these animals. ⁸² Dogs were also regularly fed in mosques, many of which maintained large stone water basins at their entrances for dogs, mules, and other animals. ⁸³ Butchers, fishmongers, and various kinds of shop owners put dogs to good use as cleaning agents, guards, and helpers of various sorts. ⁸⁴ Dogs also kept unwanted vermin like rats, hares, and wild pigs out of the city. ⁸⁵

Dogs were, in short, integral actors in the urban fabric of Ottoman Cairo. They served many useful social and economic functions, and their vast numbers were noted by all who came to the city. The daily constructive interactions of Cairenes with dogs meant that the religious, historical, and literary writings of this period were heavily infused with often quite positive takes on the animal. A work written at the end of the seventeenth century exemplifies how certain features of the traditional literature concerning dogs were usefully recast as these ideas were filtered through Egyptians' experiences and understandings of dogs and humans in the early modern period.

Unlike earlier stories—the man watering the thirsty dog with his shoe, for example—in a late seventeenth-century anthrozoological reversal, it was the dog that gave sustenance to a poor and hungry man. A formerly rich man had been overcome by debt and was left penniless. 87 Hoping to regain some of his lost riches, he left his family and set off to seek a new fortune. He eventually

arrived on the outskirts of a town that seemed to have many wealthy merchants and estates. The man sat for a moment to rest before continuing on into the town. Another man soon came by with a group of four hunting dogs dressed in ornate silks and brocades with gold collars and silver chains around their necks. He tied his dogs and left to get them food, soon returning with a golden dish of sumptuous fare for each. The dog owner then left again to allow his animals to enjoy their meals. The poor and increasingly famished man hungrily eyed the dogs' meals, but his remaining pride prevented him from making a move toward their food.

One of the four dogs, however, recognized the man's abject hunger and motioned toward him as if to say, according to the account, "Come and take some of this food." The man hesitantly approached, and the dog freely gave of his food. The man eagerly ate until he was satiated. He then rose to take his leave, but the dog, in another in-between move, again motioned to the man indicating that he should take with him the remainder of the food and even the gold dish if he liked. Careful to make sure no human eyes saw him, the man put the dish in his sleeve and left the town for a different one where he promptly sold the gold dish for a great sum of money. This sale proved to be the turning point in the man's fortunes. He bought many goods, started a business, and made enough money to repay his debts. He soon returned to his home village, where his recent spoils allowed him and his family to ease back into their generally comfortable former existence.

After some time, the man felt compelled to return to the town to thank and repay the dog and his master for the gift of their dish. The man set off for the town. As he approached it, he saw that the entire city had been deserted and had completely deteriorated to nothing but "crumbling ruins and cawing ravens." As he roamed the desolate town, he came upon a decrepit old man, who asked him why anyone would come to such a godforsaken place. The new arrival told the old man his story and that he had come back to repay those who had helped him so long ago. The old man guffawed, incredulously mocking the idea that a dog had knowingly given the man a gift. Frustrated, the traveling man left the city and returned home with the following verse on his tongue: "Gone are the men and the dogs together / So to the men and dogs alike, farewell."

As in previous stories, the dog again sacrifices for the betterment and longevity of man. By giving up his food and the gold dish, the dog allowed the man to regain his economic and social station. This is lost on the old man at the story's end. Weakened by age and poverty, he was ill-equipped to grasp the generosity of the dog. The man and the dog in this story effectively communicate and even converse as if sharing the same language. The aphoristic final verse suggests an equality between human and dog, making the point that both are capable of empathy, care, and moral rectitude. The dog helps the man in the same way that masters provide for their dogs. The social world sketched in this story is one in

which humans and animals engage in intimate and cooperative relationships of social reliance and sustenance—relationships in which man ultimately relies on dog, not the other way around.

Herds, Vomit, Hunt, Warfare, Affection

Dogs played numerous other productive social roles in Ottoman Egypt. One of these was acting as caretakers and protectors of flocks of sheep and herds of goats and other animals. As a learned peripatetic holy man told a group of followers to prove to them the existence of dogs in heaven, Is aw that the Tenth Heaven was full of flocks of sheep and goats, and as you know flocks need dogs, which they are never without, and the shepherd has to have a dog to guard his flocks. Dogs additionally played constructive and instructive medicinal roles for human communities, directing people on various issues of disease and treatment. For example, Egyptians learned through the observation of dogs which plants aided in the purging of the body. Dogs were well-known gluttons and had developed a strategy of consuming certain plants to induce vomiting. Medical practitioners in Egypt, from antiquity to the Ottoman period, thus learned from dogs which plants and herbs could be used to treat human stomach ailments.

There is also a long history of hunting with dogs in Egypt and other parts of the Muslim world. Rabbits, gazelles, hares, and other animals were some of the most common prey caught by dogs in Ottoman Egypt. Togs were also used to hunt stags in Lower Egypt in the Ottoman period. The most common breed employed for both herding and hunting was the Egyptian greyhound and its close relative the salūqī. Depictions of greyhounds and salūqīs on the hunt exist from as early as the Middle Kingdom period (2134–1785 BCE). They are often shown running alongside a hunter's chariot in pursuit of foxes, hyenas, onagers, and other desert creatures. One Sometimes they are depicted moving in packs on leashes. The Egyptian pharaoh Ramses IX (r. 1131–12 BCE) loved his hunting greyhound so much that he took the unusual step of being entombed with him. Egyptian greyhounds and salūqīs were so renowned for their hunting abilities that they were traded around the Mediterranean very early on, most likely during the Minoan period. They are thought to have reached southern Europe in Greco-Roman times.

Into the Islamic period, the *salūqī* continued to hold pride of place for hunters and herders alike. Like other writers in the classical Islamic tradition, Abu Nuwas (d. 810s) describes the use of greyhounds in nearly half of his poems about hunting. ¹⁰³ The 'Abbasid caliphs were avid hunters and regularly imported *salūqī*s from Yemen to Iraq for the task. These prized creatures were housed in structures built solely for their care, had strictly monitored diets, and received veterinary treatment for injuries and disease. ¹⁰⁴ The Muslim empires of the early

modern period greatly valued hunting dogs and participated in an active global dog trade and network of gift exchange. In the Ottoman, Safavid, and Mughal courts, hunting dogs were often found in very close proximity to the sovereign. During his visit to Iran in the 1670s, Jean Chardin noted that it was only court officials and nobles who were able to afford dogs, which they proudly celebrated and displayed as symbols of status, wealth, and prestige. The Mughal court also regularly sought out hunting dogs—tellingly known as the Persian hound (sag-i tāzī). The hunting dogs—tellingly known as the Persian hound (sag-i tāzī). The early seventeenth century, Mughal emperor Jahangir asked his Safavid counterpart Shah 'Abbas to kindly send him a group of European hunting dogs. Thomas Roe to procure for him more mastiffs, Irish greyhounds, and "such other Dogges as hunt in your Lands."

The Ottoman court too imported dogs over vast distances. Mastiffs were regularly captured in Poland, Russia, and Moldavia and then brought to Istanbul. Dogs of the logs even came from as far away as China. A merchant visiting the Ottoman Empire in the early sixteenth century wrote that "in the exalted courts of the [Muslim] rulers toward the land of the Sultan of Rūm [the Ottoman sultan], there are such dogs which the Rūmīs call the 'Sasanid dog' but [which] by origin is the Tibetan dog. And these Tibetan dogs are found in the mountains of China and it is from there that one acquires these dogs." Even before the early modern period, Ottoman sultans regularly sought out and celebrated dogs. Sultan Murad I (r. 1362–89) was known to lavish ornate silver collars on his beloved and prized hunting dogs. The many luxuries and precautions afforded hunting dogs in the Muslim world, their importation over vast distances, and the wealth and prestige they commanded were almost always in service of the hunt. As a poet cited by the seventeenth-century Egyptian writer al-Shirbīnī succinctly puts it, "Hunter and dogs cannot live apart!"

To maintain their corps of hunting dogs, the Ottomans developed a very sophisticated and expensive regime of canine training, feeding, and exercise. The two main dogs used in the hunt were the greyhound (tazı) and the spaniel (zağar), whose keepers were known as tazıcılar and zağarcılar, respectively. Divided by breed, the dogs were housed in separate quarters in Üsküdar. In each of two very spacious rooms, up to sixty dogs were kept on extremely slack chains fixed to the wall. Both rooms were heated by fireplaces at each end. Sofas lined all four walls, and there were also sheepskins strewn about for the dogs to sleep and lounge on. Each dog was walked and groomed by his handlers every morning and evening. It is The dogs were so well fed and immaculately kept that a French visitor to their lodgings in the early seventeenth century described the canines as "marvelously polished."

Dogs were also regularly used for military purposes in Ottoman Egypt. 117 The most common cadre of dog soldier used by Ottoman armies throughout their

early imperial conquests and by various military factions stationed in Egypt were a group of mercenary dog keepers known in Ottoman Egypt as the saymāniyya. 118 These soldiers were originally the keepers of dogs used as advance forces in military campaigns. 119 The animals would be sent in as a first strike team to maul enemies and scare them from their positions. 120 The saymāniyya were just one of many factions within the Ottoman janissary corps devoted to the upkeep and care of imperial hunting dogs. 121 Others included the turnacībaṣī, ṣamsuncubaṣī, and zaġārcībaṣī. 122 Still, the saymāniyya were the most prominent of these canine fighters and were regularly used to great effect. In a battle between the Egyptian notables Ghītās Bey and Ismā'īl Bey ibn 'Awwad Bey in 1714, for example, each side used dogs to attack the other. Ghītās Bey's men finally triumphed, thanks to a combined force of sixty saymāniyya, muskets, cannons, and a group of hired Bedouin troops. 123

Even Cairo's seemingly endless numbers of street dogs were used in warfare. 124 In 1711, a soldier named Muḥammad Bey employed a regiment of street dogs to aid him in attacking the 'Azab barracks near Rumayla Square in the vicinity of the Cairo Citadel. He sent out his men to collect twenty dogs from the area around the square. These men were then instructed to tie a wick to each of the dogs' tails. The animals would be kept in a storehouse in the area until time came to spring the attack. The wicks on their tails would then be lit, and they would be released to run toward the 'Azab barracks. Cannon and musket fire behind them would both provide cover and scare the dogs into running faster. Confused, surprised, and terrified by this onslaught of enflamed canines—the plan went those held up in the barracks would fire on the dogs, thereby exhausting their ammunition. In the unlikely event that a dog actually reached the barracks alive, this would be all the better from the perspective of Muhammad Bey and his attacking forces. According to al-Damurdāshī's account, in the end, this attack plan failed and the barracks were successfully defended. 125 Later that evening after the battle, a soldier walking in Rumayla found one of the canine combatants howling from the pain of his burned tail. He picked up the injured dog, took it to his barracks, and attended to the animal's wounds.

In the previous stories of dogs sacrificing for humans—the dog who kills himself by eating the king's poisoned pudding or the dog who defends the baby by killing the viper—dogs give freely of their well-being and even lives to save humans from destitution, danger, and death. A crucial aspect of these stories is that the humans recognize the canine sacrifice that has saved them only after it is too late. The feelings of guilt and remorse that result are meant to impart a moral lesson. In the story of the soldier's compassion for the burned dog, however, the animal's sacrifice and the human's remorse are of a very different order. The animal does not willfully sacrifice himself, but is indeed sacrificed by the humans. The human's remorse is for an act of violence committed knowingly, consciously,

and deliberately, not for violence done in error as in the earlier stories. Thus, by the eighteenth century dogs acting compassionately, willfully, and selflessly on behalf of human society were replaced by humans exercising a monopoly over social agency and using animals as tools for selfish and worldly purposes, warfare foremost among them.

Furthermore, the soldier's show of compassion toward the dog in this final story is one of only a handful of examples pointing to an affective relationship between humans and dogs in the early modern period. It stands as an exception that indeed proves an early modern rule. As I have shown in this chapter, although there were myriad constructive and productive relationships between dogs and humans in early modern Ottoman Egypt, none of these indicate a strong or widespread affective relationship between Egyptians and dogs (and certainly not general human sensitivity or concern for animal emotion or pain). The soldier did tend to the hurt battle dog, and hunters too seem to have cherished their dogs, but these shows of affection derived not from compassion but concern and respect for the social and economic utility dogs provided for humans. While present-day human-dog interactions are principally mediated through companionate relationships of affection, love, comfort, and emotion, in the early modern period the human-dog relationship was based primarily on loyalty, security, aid, protection, productivity, the prestige derived from hunting, and the utility of the canine consumption of waste. Dogs were, in other words, useful and beneficial for human communities primarily because of their economic, social, political, military, and pharmacological attributes and abilities. Their value was not built on any emotional or affective basis.



Despite the virtual absence of an affective mode of interaction between humans and dogs in early modern Ottoman Egypt, dogs were nevertheless conceptualized as existing somewhere between the human and animal worlds. They possessed admirable and desirable human traits—loyalty, economic and social productivity, keen perception, modesty, a willingness to sacrifice—often much more so than many humans. They were thus kept close to human communities. In various realms of life—from medicine to warfare to morality—humans and dogs were engaged in cooperative and constructive—though, again, not affective—relationships throughout the Ottoman period. Dogs kept Cairo's streets clean, aided in military exercises, taught humans how to heal their own bodies,

caught game for political prestige, and helped maintain supplies of sheep and goat meat. Recognizing the utility and importance of dogs to their multiple human worlds, Egyptians and Ottoman urban authorities sought to support and safeguard these animals—to provide them with food, shelter, and protection. There were even waqfs (pious foundations) to support and protect canine welfare in early modern Istanbul. 126 Humans who perpetrated violence against urban dogs were regularly and severely punished. Even during times of plague in Egypt, special attention was devoted to dogs and cats to ensure their safety. 127 Dogs were thus recognized and valued for their unique and indispensible contributions to many realms of early modern life and were intertwined with humans through established modes of social, economic, military, and medicinal interaction.

At the same time, dogs were still set apart from humans as wild and animalistic. They ate garbage, were ultimately instinctual, and shat and copulated on the street. No matter how intertwined they were with humans, dogs were always infinitely distant from the human realm. It was the maintenance of this in-betweenness of dogs—ever-present yet forever other, human and nonhuman—that made them so productive for early modern Egyptians. They could be used to keep the city clean and to mark a moral and existential difference between humans and other animals. Needless to say, this multifunctionality of dogs could only obtain in a situation of intense dog-human proximity and regular interaction like the one that existed in early modern Ottoman Egypt.

While this set of circumstances continued more or less throughout the early modern period, it would drastically and dramatically change in the early nineteenth century and is thus a crucial indicator of the enormous shifts that marked human-animal relations at the turn of the century. The social role of dogs would change more in the decades around 1800 than it had for millennia. This transformation would have monumental consequences for both humans and dogs and for Egyptian society more broadly. As the next chapter shows, new notions of public sanitation, hygiene, social organization, public health, and governance would eventually render dogs' former productive functions unnecessary, meaningless, and then obsolete. Without a constructive and productive role to play in human societies, dogs emerged primarily as sources of annoyance, disease, pollution, and danger. As a result, it would soon come to be deemed necessary to remove them from the realms of human habitation. Thus, paradoxically, as affective bonds between humans and dogs began to emerge in the nineteenth century partly to replace older social, economic, and ecological roles for dogs in human society, widespread violence against the animal also increased. In the early nineteenth century, dogs were no longer valued for loyalty, productivity, utility, or security. They were certainly no longer used to draw equivalences between the human and the animal. Dogs were indeed no longer anything but animal. Dogs were no longer in-between.

Evolution in the Streets

The first reason people kept a dog was to acquire an ally on the hunt, a friend at night. Then it was to maintain an avenue to animality, as our own nearness began to recede. But as we lose our awareness of

all animals, dogs are becoming a bridge to nowhere. We can only pity

-Edward Hoagland

In the early decades of the nineteenth century, dogs' in-betweenness became a problem in Ottoman Egypt. Canine in-betweenness posed a direct threat to the increasingly rapacious and powerful Egyptian state bureaucracy of this period. Dogs challenged its ideas and practices of order, its strict definitions of spaces and social roles, its disciplinary control and modes of policing, and its attempts to forge a legible society and economy. As the Ottoman-Egyptian state endeavored to make all of these governing ideals reality, it faced not only a canine challenge but also the pressures of Cairo's rapidly increasing population and its demands for space and work. The main strategy the state administration employed to deal with the dog challenge was to attempt to remove the animal from the city entirely. This removal was primarily accomplished by pushing Cairo's trash outside the city's walls. With this social, economic, and sanitary function taken away from dogs in the first third of the nineteenth century, they were given new roles in Egypt—disease vectors, noise polluters, sources of filth, and menaces to social order. These emergent ideas about dogs went hand in hand with new notions of disease etiologies, hygiene, urban sanitation, and governance—all of which reinforced the imperative to remove dogs from the city.² Some humans did try to invent other novel and more accommodating roles for dogs in Egyptian society at the time—chiefly as companionate species—but these efforts were overwhelmed by the dominant wave of recently imagined and more troublesome roles and attributes ascribed to dogs.3

These shifts in the human-dog relationship in the early nineteenth century had many enduring consequences. Attempts to remove dogs from Egypt's cities resulted in interspecies violence on an unprecedented scale. The radical

alteration of Cairo's urban environment separated dogs from urban waste for the first time in millennia, creating a divergent evolutionary pathway for dog species in Egypt. The Egyptian example therefore shows how, in the environmental historian Edmund Russell's words, "the state has been an evolutionary force."

What happened to dogs in this period forever changed understandings of governance in Egypt and shaped the relationship of both the human and the nonhuman populace to the state. In the early modern period, the loyalty of the animal was to his individual master, and the master had both a monopoly of control over his animal and a set of responsibilities to that creature. In the nineteenth century, the singular master in Ottoman Egypt became the state. Loyalty, allegiance, and deference—canine and otherwise—were to be given exclusively to the state. The state, rather than families, households, or individuals, was to be the sole and final arbiter and caretaker of life, economy, and society. These understandings and practices of governance affected the lives of Cairo's street dogs before they targeted Egypt's humans. The independent and sovereign dog master or, even more problematic, the unattached street dog with seemingly no interest in any human connection, could not continue to exist under Egypt's new state regime of order, fixity, and control.

Dogs' social, political, and economic fortunes were thus forever reshaped in this period. So too were their biological futures fundamentally set on a new course. The history of dogs and their many relationships at the turn of the nineteenth century reveals that nearly every aspect of interspecies interactions, from the place of dogs in Cairo to canine evolutionary biology, was altered by the epochal transformations in Egyptian society in this period. The forceful consequences of these new modes of rule in Egypt that forever changed dogs' lives and genes would also soon come to echo in the lives of humans and other creatures.

On the Prowl

Dogs were removed not just from Cairo but from rural Egypt as well. As domesticated animal populations declined at the end of the eighteenth century and human laborers came to replace them as the preferred tools of rural agricultural work in the early nineteenth century, dogs became less important as guards and night watchmen over other animals. Fewer livestock in the countryside meant dogs began losing their roles as overseers of herds, historically one of their principal functions in human societies.

What replaced dogs as guardians of personal property in the Egyptian countryside were law and the police. The most important new instrument created by Mehmet 'Ali's state to order, monitor, manage, and administer the countryside was the 1830 Law of Agriculture (Qānūn al-Filāḥa), which unintentionally but

directly dealt a severe blow to the roles of dogs in rural Egypt.8 The fifty-five individual statutes of the law have a lot to say about domesticated animals and tellingly nothing to say about dogs.9 The protection of livestock was completely given over to the work of bureaucrats dispatched to the countryside. These legal and policing agents were tasked with ensuring that animals were not wrongfully taken from their owners, and if they were, that the thieves were adequately punished. Instead of a dog's snarl, growl, or howl, bureaucrats, legal statutes, and administrative proceedings now protected individuals' personal property. Just as peasants replaced animals as the bulk of Egypt's rural labor regime, so too did human representatives of the state and the law replace dogs as guardians of domesticated animal populations.

BARK AND BITE

For example, statute thirty-four of the 1830 law served to fulfill dogs' former function of protecting fields from the intrusion, destruction, and consumption of other animals.10 The new law stated that if a domestic animal that ate or otherwise damaged a farmer's crops was determined, after investigation, to have escaped because of its owner's negligence or been intentionally let loose, the owner had to financially compensate the victim for the damaged goods and was also subject to fifty lashes.11 If it was determined that the offending animal's owner was not at fault and that the animal acted of its own volition, the owner was still held responsible but only had to pay the price of the damaged crops. Whereas dogs used to defend fields from the threats of wandering forage animals, the logic of the centralizing Egyptian state in the early nineteenth century determined legal statute to be a superior and more desirable form of property and crop protection than dogs.

Another clause in the 1830 law charged the village qaimmaqam or shaykh with the responsibility of preventing animal thefts in the countryside. 12 If such a theft occurred and was prosecuted, the thief would be required to pay the animal's rent to the owner and would also be punished with twenty-five whips of the kurbaj. Here again, humans and law replaced dogs in their former role as guardians of domesticated animal herds. Dogs used to try to scare off thieves; even when they could not prevent a theft from occurring outright, they were crucial in helping to alert others. In the early nineteenth century, the responsibility for discovering and deterring thefts in rural Ottoman Egypt was transferred from dogs to village qaimmaqams. Other relevant sections of the 1830 law outlined punishments for those who killed another person's domestic animals, 13 stipulations concerning slaughter, 14 and penalties for the illegal sale of animals.15

Taken together, these new regulations were a key aspect of Mehmet 'Ali's attempts to institute a novel regime of order in the Egyptian countryside. 16 Part of this effort included replacing what were deemed ineffective procedures and unadministratable actors with the ordering, rationalizing, and legibilizing

control of a centralized bureaucracy and legal code. 17 While perhaps not intentionally aimed at stripping dogs of their productive social and economic functions in the countryside, the 1830 agricultural law was one of the most important legal instantiations of a new rural reality that shaped, and was shaped by, larger processes affecting the human-animal relationship in early nineteenth-century Egypt. This new reality involved increasingly interventionist governing techniques, capitalist market relations, and fewer dogs.

Kill the Dogs

As in the countryside, in Cairo human police also came to replace dogs as means of security. The removal and replacement of dogs in urban security first emerged under the occupying regime of Napoleon's army during its three-year incursion. 18 On the night of November 30, 1798, French military forces undertook a campaign to rid Cairo of the many dogs that constantly harassed them during their nighttime security marches.19 Engaging in the security function they had upheld for centuries, these dogs harangued the strange and unknown French troops who patrolled Cairo's streets, barking at them and chasing them from lanes and alleyways.²⁰ To rid the city of what was to them a nuisance and security risk, these soldiers walked through Cairo's streets that November night with baskets of poisoned meat that they fed to as many dogs as they could find.21 By morning Cairo was filled with dead dogs.22 Men were hired to remove the dog carcasses to dumps outside the city where the bodies were in all likelihood burned. 23 This massive dog eradication effort was the first documented episode of systematic and sweeping dog killing in Egypt.24

Almost two decades later, there was a similar instance of violence against Cairo's dogs that specifically invoked the earlier French incident. On September 10, 1817, the Egyptian pilgrimage caravan left Cairo for the Hijaz. That year there was a shortage of boats to transport pilgrims across the Red Sea from Suez to Mecca and Medina. Many of these pilgrims, some of whom had traveled great distances from North Africa or southeastern Europe, had no choice but to return to Cairo disappointed that they were unable to complete their journey. This massive influx of people led to enormous congestion in the city, which was doubly magnified by the chaos caused by the many infrastructural projects Mehmet 'Ali was undertaking in Cairo at the time. Not only was the city crowded with people, but many lanes and alleys were also clogged with raw materials, merchandise, foodstuffs, wood, and dirt from construction sites. Horses, donkeys, and camels were also jostling for space, since they were used to carry building materials and to remove stone, dirt, and rubble from construction sites. 25 The

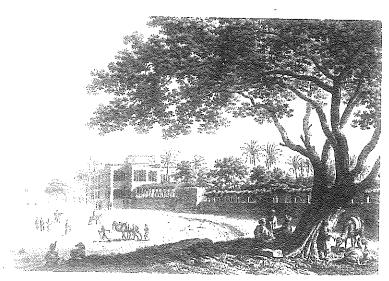


Figure 4.1 Dogs and Other Animals in the French Encampment in Cairo. Commission des sciences et arts d'Egypte, État moderne, vol. 1, pt. 2 of Description de l'Égypte, Le Kaire, pl. 40. Beinecke Rare Book and Manuscript Library, Yale University.

city was, in other words, packed with people, animals, and goods. al-Jabartī goes on to describe this situation in 1817:

Add to all this the packs of dogs, sometimes as many as 50 in one street, continuously barking and howling at passersby and one another, disturbing everyone especially at night and making sleep impossible. The French did well in killing these dogs. Once settled in Cairo they saw that these large packs served no need or purpose [min ghayri hāja wa lā manfa a] except barking and baying at them in particular since they were strangers. Therefore a party went around the city with poisoned meat and by morning all the streets were littered with dead dogs. Adults and boys dragged them by ropes into vacant lots outside the city; thus the earth and its inhabitants (al-ard wa man fihā minhā) were rid of them.²⁶

As the praise and invocation of earlier French anti-dog efforts suggest, Egyptians were more than happy to borrow the ideas and practices of large-scale dog eradication measures from the French. Like other techniques of Egyptian governance in the early nineteenth century, the state's treatment of dogs largely derived from Mehmet 'Ali's perception and desired emulation of European ideas and models of rule. His employment of European advisors and consultants to assist him

in creating various industries and an administrative infrastructure for military training and education is a well-known phenomenon.²⁷ Less well-known is that this emulation of colonial European politics and violence also played out outside of the formal institutions of the state.

In contrast to the earlier French violence, the dog killings of 1817 were not based on any explicit security or military concerns. Rather, issues of public order and urban density—such as noise, pollution, annoyance, and social necessity were, by the 1810s, the most exigent concerns for those seeking to rid Cairo of its dogs.²⁸ Other dog eradication attempts by Mehmet 'Ali's government in this period also invoked these anxieties as justifications for the removal of dogs from Egypt's cities. In one such operation, Mehmet 'Ali sent his men out to round up as many dogs as possible from Cairo and Alexandria.²⁹ These animals were then boarded onto a ship in the harbor of Alexandria, and the vessel was sailed out to sea and sunk so as to rid Egypt's streets of these canines in one fell swoop. At roughly the same time (in the late 1820s) for roughly the same set of reasons, Ottoman sultan Mahmud II similarly attempted to rid Istanbul of its street dogs by rounding them up and sending them to an island in the Sea of Marmara. The vessel carrying these dogs, however, capsized near the city's shore, and the unwanted canines swam back to Istanbul.31 Issues of public order, urban health, sanitation, annoyance, and disease control were thus the primary factors shaping the human-dog relationship in urban Egypt (and elsewhere, of course) in the first half of the nineteenth century.32

This sort of mass violence against dogs was new to Egypt in the early nineteenth century and was largely unthinkable a few decades earlier. How to explain this gigantic shift in the human perception and treatment of animals? Where did all this violence come from? Part of the answer to these questions lies in the clear distinction al-Jabartī makes in his account between useless street dogs that barked and prevented sleep and the implicitly more civilized and socially valuable "earth and its inhabitants." This distinction evidences the new and growing gap being forged in Egypt in this period between the human and the animal.34 This gap emerged in the countryside through shifting labor regimes that made human labor vastly more important than animal labor, thus separating the work of the two species as never before. In Cairo and elsewhere, the founding and expansion of numerous governmental, educational, military, and legal establishments came to define the human realm much more clearly in this period as a regulated and controlled space of learning, health, law, policing, and bureaucratic productivity. Dogs blurred the boundaries of these increasingly protected and policed spaces, literally and figuratively crossing into them when they were not supposed to—even shitting in them—and therefore presented a direct challenge to the growing authority of the state's bureaucracy. Like the human social world, the realm of the animal was becoming much more starkly defined, closely

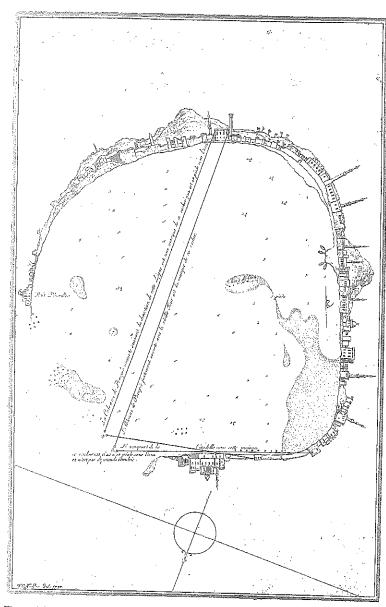


Figure 4.2 Alexandria Harbor. Norden, Voyage d'Égypte et de Nubie, 2: pl. 2. Beinecke Rare Book and Manuscript Library, Yale University.

managed, and spatially cordoned-off in the early nineteenth century. This widening gap between dogs and humans made it much more palatable, even desirable and obligatory, to enact violence against dogs and eventually attempt to do away with them altogether. If a parallel human world could easily exist without the need for dogs to undertake productive social functions—humans or other social actors having taken over these tasks—then why keep dogs around at all? Dogs thus became a problem in Cairo not through any action or fault of their own but because of the changing anthrozoological state around them. One of the solutions to this problem was to kill the dogs.

A Dirty Job, but Somebody's Got to Do It

The changing relationship between Cairo and its dogs was a phenomenon found in cities across the Ottoman Empire and throughout the world in this period. From Istanbul to Seattle, dogs in cities since the nineteenth century have been markers of both civilization and uncivilization. The modern America, most sophisticated urbanites want dogs, but only if secured on leashes and if their feces are collected by their owners. Dogs on the loose or without the proper vaccinations are a telltale sign of urban disorder. Similarly, in late nineteenth-century Istanbul, reformers debated what the presence of so many street dogs in the city meant for the city's status as a modern ordered metropolis and what, if anything, should and could be done to remove them.

In Cairo, the first half of the nineteenth century represented a time of reordering, sanitizing, clearing, and building in the context of a massive influx of people to the city.³⁹ Streets were cleared of dirt, garbage, and debris.⁴⁰ Quarantine measures were instituted as a means of controlling disease.⁴¹ Lakes, canals, and other urban bodies of water were drained and filled in to remove what were thought to be problematic sources of disease and to provide more land for urban expansion.⁴² All of this, of course, had important consequences for Cairo's street dogs.⁴³

For Mehmet 'Ali's government, street dogs were bothersome pests, potential disease vectors, and dirty beasts that had to be expunged from the city. Mehmet 'Ali's plans to clean and reorder the city thus included a campaign to remove dogs from the spaces they had historically inhabited and to take from them their essential role in urban life as consumers of the city's garbage.⁴⁴ Intertwining efforts in the early nineteenth century to cleanse cities of canines and to reorder urban trash removal thus altered the human-dog relationship more profoundly in a few decades than had centuries of interspecies relations before that.⁴⁵

In the seventeenth and eighteenth centuries, Cairo's street dogs drew their sustenance from the food and water provided by Ottoman authorities, from what they could forage on the city's bustling streets, and most importantly

from Cairo's many trash mounds. Cairo was renowned for its garbage mounds, so much so that these heaps of trash and the many dogs they supported made Cairo a point of reference for cities across the globe. When visiting China in the middle of the nineteenth century, for example, the British traveler George Fleming was reminded of what he had seen in Cairo years earlier: "Closely allied to the Pariah dog of India, the savage pests of Cairo and Egypt generally, those of Syria, and those snarling droves which we have been so often obliged to pelt off with stones by moonlight, in the narrow streets of Stamboul,—the Pariah dog of North China is, like them, allowed to breed and to infest the towns and villages free from disturbance, to congregate on the plains or in the field during the day, or to kennel in the graveyards; while at night they prowl about the streets like our scavengers at home, sweeping off the quantities of filth and trash that strew the thoroughfares." Thus Cairo's dogs joined those of other cities in the Ottoman Empire as the globe's archetypal street dog. 47

The garbage mounds these canines ate from were often the first sights visitors saw as they approached the outskirts of Cairo from the Nile in the west, and they also served as elevated vantage points allowing visitors to view the city off in the distance. 48 These extramural mounds were the result of centuries of the city's residents disposing of their garbage by throwing it over the walls away from view.⁴⁹ Over the years, there thus accumulated "an almost continuous band of high mounds which virtually surrounded the city on all sides."50 These mounds even came to serve a protective function by reinforcing the city's walls, and they were also some of the highest available lookout points for guarding the city. During the French occupation, Napoleon's soldiers took advantage of the elevated position provided by these mounds to build watchtowers and defensive positions on top of them all around the city.51 For Cairo's dogs, the city's mounds were especially inviting. They would comb through the debris to find anything of consumable interest and leave the rest. 52 The mounds inside the city walls were less impressive than those outside but were nonetheless noticeable to all who visited Cairo. These intramural mounds were much smaller than their extramural counterparts primarily because the city's dogs kept them in check. They had learned over the years that the freshest and best food scraps and other waste were to be had inside the city, and there was thus fierce competition among Cairo's street dogs for the choicest intramural morsels.53

At the end of the 1820s and the beginning of the 1830s, Mehmet 'Ali and his son Ibrahim took to clearing these rubbish mounds. 54 From their perspective this was a crucial step in solving some of the city's major infrastructural, demographic, and planning problems. They sought to remove these mounds to make room for more construction to serve an ever expanding population and to rid the city of what they took to be stinky sources of disease. 55 These cleared garbage mounds could then be put to good use filling in the city's many swamps and lakes, another

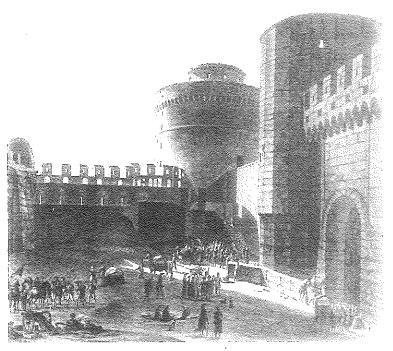


Figure 4.3 Mounds, Dogs, and Humans inside Cairo's Walls. Commission des sciences et arts d'Egypte, État moderne, vol. 1, pt. 2 of Description de l'Égypte, Le Kaire, Citadelle, pl. 69. Beinecke Rare Book and Manuscript Library, Yale University.

major component of urban reform in this period. ⁵⁶ A British traveler visiting Cairo in December 1832 observed that Cairo's dirt and garbage, "when carried out of the city, is not thrown, as formerly, into heaps, but is employed in filling up the pits, hollows, and inequalities which are found in the environs. In the meanwhile all the old mounds of rubbish are clearing away at a vast expense, and the land thus gained is laid out in gardens and olive plantations." ⁵⁷ Throughout the early 1830s, Ibrahim used refuse to fill in and level land across Cairo and its vicinity. Garbage mounds were cleared to make room for building on the site that would become Garden City; soon thereafter, Ibrahim ordered trees to be planted and roads to be constructed there. ⁵⁸ The trash from this area was taken to fill in the lake of Birkat Qasim Bey in the southern part of the city. This newly reclaimed land was then also developed. Later in the 1830s, other rubbish heaps were cleared from the northern and northwestern sections of the city to fill in lowland areas around the new road between Būlāq and Azbakiyya.

While the removal of garbage mounds increased the amount of urban land available for human construction, the process was detrimental to Cairo's dogs.⁵⁹ It deprived them of important sources of food and places of congregation. Many accounts of the work undertaken to clear these trash mounds note the intense barking and "savagery" of the dogs watching the removal of the mounds they used to frequent for sustenance. 60 Dogs clearly understood that the world around them was drastically changing for the worse.⁶¹ From the perspective of the humans who shared the city with these dogs, removing Cairo's garbage mounds meant the animals were becoming increasingly irrelevant. What good were dogs in Cairo if they no longer helped to keep the city clean? It was not simply that dogs were no longer useful and productive for human communities, but they were also judged to be directly detrimental to urban life. As ideas about disease changed in the early nineteenth century and sickness became understood as a function of the physical and natural environments around human bodies, large groups of mangy, smelly, dirty dogs were deemed increasingly undesirable in the midst of large human populations. 62 Thus the issue of Cairo's garbage and the dog populations it supported crystallized three major problems related to the governance of the city: waste removal, disease, and the availability of usable space.63

The first problem was what to do with massive amounts of human and human-generated urban waste. With more people producing more garbage and more pressure for housing space, the solution to this problem was to either move waste outside the city altogether or collect it to fill in Cairo's urban lakes and ponds.⁶⁴ The second related issue was how an expanding urban population impacted conceptions of disease in Cairo. Urban proximity—between individual humans and between humans and other animals-created anxieties about how diseases developed, moved, spread, and were cured.65 Mehmet 'Ali and most of his governmental officials—in contrast to the majority of the European medical community in Egypt—were contagionists. 66 They believed that physical proximity to the sick and to filth made the healthy more vulnerable and susceptible to disease. Smelly piles of garbage, dank bodies of water, and scraggly dogs all came to be seen as potential disease vectors that needed to be expunged from society.⁶⁷ As the historian Khaled Fahmy observes about this period, "It was the concern about the city's smell, informed as these concerns were by the dominant miasmatic theory of the spread of diseases, that informed most of the authorities' policies."68 These new ideas about the relationships among disease, place, and the human body made dogs objects of medical knowledge, government action, and urban policing in unprecedented ways in Egypt. 69 Finally, anxieties about disease and Cairo's garbage impacted human-dog relations by pitting humans against dogs in a situation of increased pressure on and competition for scarce resources and shrinking urban spaces. 70 In a landscape in which space was

at a premium and in which dogs no longer possessed productive social and economic functions, a novel, adversarial relationship developed between the two species. In this newly competitive and hostile interspecies arena, it was quite obvious that human populations had the upper hand and would soon use that advantage to violently push dogs and other creatures out of Cairo as they took over the spaces these animals used to inhabit and control.

Man's Worst Friend

Another major consequence of the decline in dog populations in Cairo was a change in human attitudes toward dogs. They came to be seen much more negatively in the early nineteenth century and with more revulsion, fear, and violence than had been the case for at least the previous millennium. The perceived negative characteristics of dogs—some old, some new—emerged as the most dominant human view of the animal: ritual impurity, annoyance, danger, the potential for disease, fecal waste. Edward William Lane, a British orientalist resident in Egypt at various points during the late 1820s and 1830s, identified the shifting attitude of Egyptians toward animals:

In my earlier intercourse with the people of Egypt, I was much pleased at observing their humanity to dumb animals...Murders, burglaries, and other atrocious and violent crimes, were then very rare among them. Now, however, I find the generality of the Egyptians very much changed for the worse, with respect to their humanity to brutes and to their fellow-creatures. The increased severity of the government seems, as might be expected, to have engendered tyranny, and an increase of every crime, in the people: but I am inclined to think that the conduct of Europeans has greatly conduced to produce this effect; for I do not remember to have seen acts of cruelty to dumb animals except in places where Franks either reside or are frequent visiters, as Alexandria, Cairo, and Thebes [Luxor].⁷¹

Lane clearly blamed this shift from the humane to the violent treatment of "dumb animals" on European influence—the French precedent of dog culls bears this out—and also linked it to the "tyranny" precipitated by new government regulations and administrative practices. Not only was Mehmet 'Ali's state becoming more exacting, intolerant, and cruel in its treatment of Egyptian animals, but it was also increasingly perpetrating this violence against Egyptian humans, leading them, Lane opines, to become more violent toward one another. It would thus seem that Egyptians' disgust of dogs—and increasingly

of certain humans—and the notion that canines were only impure (najas) with no redeeming productive social or moral capacities were ideas cemented in this period. Unsurprisingly, as Lane confirms, this was also the period in which violence against dogs first began to be perpetrated on a wide scale in Egypt. For the first time in Egypt's history, dogs were now frequently beaten on Cairo's streets for nothing more than "mere wantonness."

Another outcome of Egypt's shifting interspecies terrain was the emergence of the potential for a very different kind of relationship between humans and dogs, one that would fully develop only later. Since dogs were no longer primarily consumers of urban trash and were not, of course, entirely removed from Cairo, some of them came to play new roles in Egyptian society as companion animals. For elite Egyptians, dogs would become widespread as pets only in the late nineteenth century. There are some earlier glimpses of the developing affective relationships between humans and dogs, but these examples largely stand as exceptions that prove the rule.

In the 1330s, a lonely Cairene woman's dog died.76 With "neither husband nor child nor friend," this woman's most trusted and beloved companion was her $\log^{.77}$ When he died, she determined, against observed practice, to honor him with a proper Muslim burial, Rather than a quiet and unceremonious interment in a solemn burial site, she resolved to have her dog buried in one of the most sacred and important burial grounds in Cairo, the cemetery housing the tomb of al-Imām al-Shāfi'i. She washed the body as prescribed for a proper burial, wrapped the corpse in the appropriate shroud, and prepared a bier on which to mount the body.78 She then hired reciters of the Quran, chanters, and wailing women to perform the appointed lamentations and final rites for the body as it was processed through the woman's neighborhood to the cemetery.⁷⁹ All of this was done with the ceremony appropriate to any proper human burial.80 As the procession moved through the city, many of the woman's neighbors whispered among themselves, unsure as to who exactly had died since all assumed the woman had lived alone and had no immediate kin. Since no one knew this reclusive woman well, none ventured to ask her about the identity of the corpse on the bier.

After some time, someone eventually did question the woman about who had died, and she answered, "It is my poor child." Hearing this, a group of her female neighbors accused her of lying since it was well-known that the woman did not have any children. In an attempt to keep her secret from spreading any further, the woman confessed to these neighbors that it was her dog who had died and begged them not to tell anyone. Before long, however, word got out to the assembled crowd that the funeral procession they were a part of was for a dog. §2 The ceremony immediately came to a halt, groups of men gathered and screamed at the woman for her insolence and disrespect, the hired chanters and

Quran reciters cursed the women for embarrassing them, and the police quickly assembled to protect the woman and prevent a melee.

The love and compassion of this woman for her dog—the only real companion she had in the world, her "child" as she put it herself—is perhaps unsurprising to us today. She knew that giving her dog a proper Muslim burial in a prestigious cemetery near the tomb of al-Imām al-Shāfīī was entirely inappropriate according to established Islamic ritual and observed Egyptian practice, but she nevertheless accepted the risk of her actions to honor her beloved companion, trying all the while to hide the identity of the body underneath the shroud. ⁸³ The violent and intense reaction of the processional crowd at the discovery that this ceremony was for a dog—and at the realization of such a close affective relationship between a human and a dog—belies the shifting early nineteenth-century Egyptian attitude toward the animal. It was clearly unacceptable in this period to allow a canine to participate in a ritual designed to commemorate the human dead. ⁸⁴

In the early nineteenth century, the vast majority of Egyptians likely had no idea that Muslims and dogs had been in intense communion for centuries since the time of the Prophet, let alone that, according to some hadith, the Prophet himself sometimes prayed in the company of dogs. 85 Earlier complex arguments that had been developed and debated by Muslim scholars for over a millennium in nuanced and careful treatises about the positive nature of dogs-their loyalty, protective capacities, intellect, and productive social and economic functions in human societies—were beside the point. Instances of compassion toward the animal, of learning about the medicinal properties of various plants by observing his behavior, or of giving him a proper burial among human graves (a phenomenon with many precedents as we have seen) were all immaterial. A new human-dog order was being forged, one that separated the two creatures into two distinct realms. This was likely the period in which the modern conventional notion that Muslims always considered dogs ritually impure (najas) came to take hold as the most common understanding of the human-dog relationship in the Muslim world. Treating a dog like a human—whether in life or death was deemed a social and interspecies transgression that almost no Egyptian could tolerate in the early nineteenth century.

Thus, the story of dogs in Cairo during this period suggests something of the incongruous contradictions of the history of humans' relationships with animals. Dogs' smell, movement, barks, and waste were rarely problems for Egyptians before roughly 1815, but in the span of only a few decades, they emerged as the conceptual pillars of a project to remove dogs from Egypt. ⁸⁶ And yet even as dogs were being set apart from many parts of the human realm, some Egyptians would eventually bring them into their homes to develop affective relationships with them. These companionate relationships were not widely recognized or

respected in the early nineteenth century and would only become widespread in the twentieth. Dogs thus elicited and held in productive tension both human desire for their work and affection and human aversion to their animality and instinct. They existed on the razor's edge between the human and the animal—intimately close in emotion yet infinitely distant in biology. After living closer to the human side of the human-animal line for millennia, or at least productively straddling both sides of the line, dogs in early nineteenth-century Egypt were marked as exclusively animal. The history of the emergence of this razor's edge between the species is a mix of human choice, unintended evolutionary causes and consequences, and dog agency.

Stinky Evolution

The history of Cairo's changing relationship with its garbage in the first third of the nineteenth century, and the consequences of this history for the city's dogs, is a story of evolutionary proportions. The leveling of the city's garbage mounds ended one of the most important historic and evolutionarily conditioned roles of dogs in human communities. Canine garbage consumption was no longer a trait selected by humans, and for many decades in the nineteenth century, humans would *not* select for other dog traits. Only later in the century would they come to seek out other specific characteristics for their canines such as cuteness or breed purity. In the middle decades of the nineteenth century, dogs were chiefly pariahs with no perceived productive social or economic functions. Garbage had been taken away from them, and they were not yet pets.

While contemporary interactions between humans and dogs revolve primarily around petkeeping and affective bonds, for the vast majority of the thousands of years of dog-human relations these interactions were built around the canine consumption of garbage. Dog domestication itself is a story of human trash, which is why the Egyptian case elucidates how robbing dogs of their roles as consumers of urban waste was a process with evolutionary consequences.89 Ten thousand years ago, Homo sapiens—only about ninety thousand years old at the time—moved from being a predominantly nomadic species to one that started settling down into sedentary communities. These fixed settlements began to accumulate large amounts of waste, which early humans usually disposed of very close to their living spaces. Some of this waste included excess food and animal products that these Homo sapiens chose to avoid. Scavenging wolves eventually stumbled upon this free and relatively easy source of food. Some wolves were probably too scared or too put off by the sight or smell of these early humans to approach the discarded food. Some others though did come and take it. This was the first in a series of selections. Wolves who were braver and less fearful

of human communities became consumers of their food waste. This early trash thus brought humans and wolves into closer proximity than they had ever been before and was the first step in a long process of domestication.⁹⁰

Over generations and centuries, many humans began to recognize the benefit these wolves offered and came to tolerate their presence on the outskirts of their settled communities. Of course, humans tolerated the calmer wolves most, and perhaps some even developed constructive working relationships with tamer wolf pups, realizing that they could be put to good use for hunting and other productive activities. At a certain point, because of direct human intervention, the wolves' own selected physical proximity to one another, or some combination of these and other factors, tamer wolves began breeding with one another. Breeding among those wolves who had come into close contact with humans genetically instantiated behavioral differences. Thus began a gradual separation of the genetic lines of wolves who had been interacting with humans for generations from those who had stayed away from humans. 91 Over many generations, tamer and tamer wolves eventually emerged with physical and behavioral characteristics quite distinct from their wild wolf ancestors. 92 At the same time, humans killed, drove off, or ran away from those wolves and other animals for which they did not have any desire or use. The result was that only those animals that would readily submit to human actions and could be easily controlled remained in the gene pool available for wolf domestication. These wolves thus came to be selectively bred through interspecies interactions and choices for certain characteristics humans wanted or found attractive and useful. After thousands of years of this process, it became clear that the wolves with which humans were interacting were actually no longer really wolves at all, but distinct early versions of many dog species.93 Thus human preference and selection for utility, tameness, and general agreeability; wolves' attraction to human settlements and their choices to stay close to those settlements; and of course a good dose of chance, serendipity, and unintended consequences made dogs out of the wolves who first came to forage in human garbage about ten thousand years ago.

In the years between this first period of domestication and the early modern centuries, human preferences, dog behavior, and the human-dog relationship developed in many disparate and undetectable directions. Along the many twists and turns of this evolutionary history, one important trait was consistently desired—the human preference for dogs that consume garbage. For much of human history, dogs were thus one of the preferred and principal means of dealing with the problem of what to do with the things humans no longer wanted and that caused them revulsion.

Dogs stopped eating garbage in Egypt in the 1830s. Only in the early twentieth century would Egyptians start using dogs for affective purposes and as signs of class distinction and urbane domesticity. Dogs were therefore in a kind of



Figure 4.4 Dog Novelty in Early Twentieth-Century Egypt. Pyramid village, trained animal show, dog and baboon. © 1927 Museum of Fine Arts, Boston. Used by permission.

evolutionary holding pattern from roughly 1840 to 1920—between a period when one of their traits that had been desired for thousands of years was no longer being selected for, indeed was actively being destroyed, and a new epoch in which affective bonds would emerge as the most important form of interaction between dogs and humans.

Although it may initially seem surprising, a few decades is ample time for an evolutionary divergence to take place. As Dmitry K. Belyaev's famous experiments with tame and wild foxes in the 1950s and 1960s show, selecting for certain behavioral traits can biologically change an animal's genome in just fifty years. The enormous changes that occurred in Cairo at the turn of the nineteenth century, changes that altered what behavioral traits dogs were (and were not) selected for, gave them a new behavioral evolutionary niche and therefore physically modified their genes. Following from Edmund Russell's claim that "the state has been an evolutionary force," the case of Cairo's dogs shows how the state could operate at the level of both the urban built environment and the genome. For the case of Cairo's dogs shows how the state could operate at the level of both the urban built environment and the genome.

These colossal biopolitical shifts in human-dog relationships and in the dog genome around the turn of the nineteenth century are just two examples of the epochal changes historians and scientists are increasingly identifying as characteristic of an era termed the Anthropocene. This is the name given to the period from roughly the last half of the eighteenth century until the present day, a period during which human actions have come to affect the earth, oceans, and

atmosphere on a global and most likely irreversible scale.⁹⁷ Humans in the early twenty-first century directly impact over 60 percent of the world's land surface; they shape 41 percent of the world's marine environments; over two-thirds of fisheries have been depleted, exploited, or overexploited because of human harvesting; humans have caused the extinction of over a quarter of bird species; humans consume 40 percent of the plants grown in any given year; and human activities result in the emission of 160 tons of atmospheric sulfur dioxide per year, more than twice the amount of the earth's naturally produced emissions.⁹⁸ Since the late eighteenth century, humans have, in other words, become a global geological, atmospheric, and ecological force as never before.⁹⁹

The term Anthropocene was first coined by the Nobel Prize-winning Dutch atmospheric chemist Paul J. Crutzen in 2002. 100 Interestingly, the periodization he offers and that scientists and historians generally accept neatly maps onto the period of transition analyzed in this book. Crutzen writes, "The Anthropocene could be said to have started in the latter part of the eighteenth century, when analyses of air trapped in polar ice showed the beginning of growing global concentrations of carbon dioxide and methane. This date also happens to coincide with James Watt's design of the steam engine in 1784."101 This was also the year the Laki Fissure erupted in Iceland contributing to drought, famine, and disease in Egypt. 102 It is clear that the last three decades of the eighteenth century represented a fundamental moment of atmospheric, geological, ecological, and therefore human flux and transition for Egypt and the entire globe. In trying to understand the changes that occurred at the turn of the nineteenth century in Egypt and throughout the Ottoman Empire, historians must account for the transformations in energy, atmosphere, biota, and human connections to nature captured under the rubric of the Anthropocene. Are Selim III, Mahmud II, Napoleon, and Mehmet 'Ali products of the Anthropocene? It seems unlikely that the massive political, social, and economic changes that reformed the Ottoman Empire around the year 1300 are unrelated to these more fundamental global shifts. 103

This chapter maps just one of the manifestations of this global transition from Holocene to Anthropocene—the violent and sweeping reworking of physical spaces and of the environments that shape the evolution of species. ¹⁰⁴ Urban dogs' environments in Egypt were radically altered in the first half of the nineteenth century, beginning a process that set them on a slightly divergent evolutionary track. Evolution is, of course, a constant process, but that does not put it outside of history. Indeed, the history of dogs in Ottoman Egypt represents an empirical story of one particular turn in the evolutionary history and historical evolution of a specific time and place.

The period from 1770 to 1840 was a wrenching one for dogs and humans. Dogs' roles in human societies, their urban environments, the way humans came to interact with them, and indeed their very biology changed more in these few



Figure 4.5 Dogs in Cairo Zoo, 2010. Photograph by author.

decades than they had for millennia. Behind these social, political, economic, and evolutionary transformations were changing notions of disease, urban sanitation, population management, and governance. The Egyptian state had become the only viable master of both dog and human.



There are few street dogs in Cairo today. Garbage removal remains a challenge in the city, but dogs are generally no longer considered part of the solution. The Some in the Egyptian bourgeoisie—Muslims and non-Muslims alike—keep dogs as pets in their homes and apartments. As a sign of just how distant humans and canines have become in Egypt, dogs are also—curiously to some—found in the Cairo zoo. Except for the few who can afford the food, space, and vaccinations required, *Canis familiaris* has become anything but familiar in Cairo.

PART THREE

CHARISMA AND CAPITAL

During the pilgrimage season of 1811, a somewhat more forceful seizure of animals was undertaken by Egyptian authorities. Troops were dispatched with the specific aim of collecting animals from Bedouin communities since it was known that they possessed large numbers of donkeys, horses, and mules. Moreover, as in 1779, troops were stationed on all the roads leading in and out of Cairo (and other major cities) to seize any donkeys, mules, camels, horses, and other beasts of burden that were ridden or otherwise moved into or out of cities. In contrast to 1779, however, no consideration was made in 1811 for the status of the person on the animal. This collection of animals for the pilgrimage in the early nineteenth century was so extensive and efficient that people stopped riding their animals altogether for fear that they would be taken from them. Ibid., 4: 188. As these cases show, the annual pilgrimage was one of the important factors exerting pressure on Ottoman Egypt's animal supply.

144. Janet L. Abu-Lughod, Cairo: 1001 Years of The City Victorious (Princeton, NJ: Princeton University Press, 1971), 83–97; Raymond, Cairo, 293–304.

- 145. On Barak, "Egyptian Times: Temporality, Personhood, and the Technopolitical Making of Modern Egypt, 1830-1930" (Ph.D. diss., New York University, 2009), 36. John Galloway writes that Mehmet 'Ali began seeking foreign consultation, including from Galloway's brother, on the feasibility of a Cairo-Suez rail line ten years before the publication of his account in 1844. John Alexander Galloway, Communication with India, China, ఆం.: Observations on the Proposed Improvements in the Overland Route via Egypt, with Remarks on the Ship Canal, the Boulac Canal, and the Suez Railroad (London: John Weale, 1844), 22. Thus, even though construction of the first rail lines in Egypt began only in 1851, it was in the middle of the 1830s (and probably even somewhat earlier) that ideas to link Cairo and Suez by rail began in earnest. Khedive 'Abbas, Mehmet 'Ali's grandson and eventual successor, hired the well-known British civil engineer and member of parliament Robert Stephenson to oversee the construction of Egypt's first rail link between Cairo and Alexandria. For a copy of the contract for this work, see TNA, CO 1069/855 (12 July 1851). On the life and career of Robert Stephenson, see Michael R. Bailey, ed., Robert Stephenson-The Eminent Engineer (Aldershot, UK: Ashgate, 2003); Derrick Beckett, Stephensons' Britain (Newton Abbot, UK: David and Charles, 1984); L. T. C. Rolt, George and Robert Stephenson: The Railway Revolution (London: Longmans, 1960),
- 146. On some of the diplomatic wrangling involved in efforts to build railways in Egypt, see Rivlin, "Railway Question."
- 147. For a discussion of some of the economics of rail in nineteenth-century America see, for instance, Richard White, Railroaded: The Transcontinentals and the Making of Modern America (New York: W. W. Norton, 2011); William Cronon, Nature's Metropolis: Chicago and the Great West (New York: W. W. Norton, 1991).
- 148. Galloway, Proposed Improvements in the Overland Route, 18.
- 149. Ibid., 16. To avoid any possible confusion, it should be made clear that the "fellow-creatures" Galloway had in mind were human, not animal. For many different reasons, rail in Egypt, not surprisingly, had numerous supporters among British observers. For example, Thomas Waghorn, a strong advocate of funneling through Egypt post and other transport services connecting Britain and India, wrote in the 1830s "that the powers of the steam engine, will, under Providence, be one of the means of bringing the unlettered and darkened millions of the East to Christianity." Thomas Waghorn, Egypt as it is in 1837 (London: Smith, Elder, and Co., 1837), 27–28. On Waghorn's advocacy of rail in Egypt, see also idem., Truths Concerning Mahomet Ali, Egypt, Arabia, and Syria: Addressed to the Five Powers or to their Representatives in the Contemplated Congress (London: Smith, Elder, and Co., 1840). Nearly fifty years later, Lord Cromer, the head British colonial official in Egypt after 1882, wrote in July 1885 that he thought rail potentially useful for the reconquest of the Sudan. TNA, FO 633/5 (3-4 July 1885). For other British statements about the utility and importance of rail in Egypt, see TNA, FO 141/131 (14 May 1869); TNA, FO 926/15 (24 Nov. 1875); TNA, FO 633/3, p. 79 (27 Jul. 1882).
- 150. Galloway, Proposed Improvements in the Overland Route, 6.
- 151. For examples of British discussions about the Egyptian postal service in the 1870s, see TNA, FO 143/10 (1874-78).

- 152. Needless to say, British interests in rail in Egypt stemmed largely from the desire to increase the speed and efficiency of moving Indian Army troops and supplies. For discussions in this regard, see the following from the 1860s and 1870s: TNA, MT 23/4 (12 Nov. 1866); TNA, MT 23/13 (1867); TNA, MT 23/18 (1868); TNA, MT 23/27 (1871).
- 153. Galloway, Proposed Improvements in the Overland Route, 3.
- 154. For added commentary on the need to improve "the celerity and comfort of those who travel across the Desert" between Cairo and Suez, see ibid., 22.
- 155. For a critical discussion of rail as a quintessential symbol of modernity, see Marian Aguiar, Tracking Modernity: India's Railway and the Culture of Mobility (Minneapolis: University of Minnesota Press, 2011).
- 156. British officials in Egypt were very conscious of the need to maintain coal and other energy supplies in the country to fuel both rail and ship. Egypt's energy regime in the 1860s and 1870s indeed became a crucial engine of the British Empire. See, for example, TNA, FO 141/70 (13 Apr. 1869); TNA, FO 141/131 (1879); TNA, MT 23/13 (1867). For more on the coal energy regime, see Timothy Mitchell, Carbon Democracy: Political Power in the Age of Oil (London: Verso, 2011), 12–42.
- 157. Galloway, Proposed Improvements in the Overland Route, 5. Emphasis in original.
- 158. Another example of the intersecting histories of animals and machines in the Ottoman Empire, and particularly of the perceived disutility of animals in the nineteenth century, was the opening of an underground rail tunnel to move passengers up and down the steep hill between Galata and Pera in Istanbul. Built by a British company, the tunnel was opened in late 1874. To prove the tunnel train's safety and efficiency, its first runs were carried out with only animals aboard. Before this rail link, animals provided the indispensible labor needed to move loads uphill between financial centers in the Ottoman capital. After its construction, however, the only productive labor they were deemed capable of carrying out was to serve as expendable first passengers—crash dummies—on a new, unknown, and possibly dangerous means of conveyance. I take this information about animals as the train's first passengers from the station plaque about the tunnel's history.
- 159. Galloway, Proposed Improvements in the Overland Route, 18.
- 160. Tuan, Dominance and Affection, 15.
- 161. Ibid.
- 162. For the British, this preference for machine over both human and nonhuman animal labor was expressed in the late 1870s and early 1880s through the language of both economic efficiency and the purported alleviation of human suffering. Earlier in the nineteenth century, Mehmet 'Ali sought to utilize human labor for its efficacy and perceived superiority over animal labor. By contrast, in the last quarter of the nineteenth century the British came to see corvée as an obstacle to both financial gain and moral uprightness. They thus advocated for the abolition of the practice in favor of machines of all kinds—steam pumps, rail, dredging devices, and telegraphs. For expressions of this desire for machine labor over that of humans and other animals, see the "Annual Report of the Controllers General to His Highness the Khedive, 1880" in TNA, T 1/12928 (21 Feb. 1881). For further statements of British concern about the moral and financial hazards of corvée in this period, see TNA, FO 926/14 (1879); TNA, FO 633/5, 77r-78r (16 May 1887), 79r-79v (23 May 1887), 81v-33v (29 May 1887); TNA, FO 633/45, p. 23 (15 Feb. 1879).
- 163. Podobnik, "Toward a Sustainable Energy Regime," 155-61; Burke, "The Big Story," 35.
- 164. Numerous examples of this process from around the globe are given in Richards, "Global System."
- 165. For an illuminating analysis in this regard, see Bulliet, "History and Animal Energy in the Arid Zone"; idem., "The Camel and the Watermill," International Journal of Middle East Studies 42 (2010): 666-68.

3. In-Between

The literature on the history of dogs and human-dog relations is therefore vast and varied.
Most useful for my thinking on these subjects have been the following: Kete, Beast in the
Boudoir; Susan McHugh, Dog (London: Reaktion Books, 2004); Harriet Ritvo, "Pride and

Pedigree: The Evolution of the Victorian Dog Fancy," Victorian Studies 29 (1986): 227-53; Aaron Herald Skabelund, Empire of Dogs: Canines, Japan, and the Making of the Modern Imperial World (Ithaca, NY: Cornell University Press, 2011); idem., "Breeding Racism: The Imperial Battlefields of the 'German' Shepherd," Society and Animals 16 (2008): 354-71; Kenneth Stow, Jewish Dogs: An Image and Its Interpreters: Continuity in the Catholic-Jewish Encounter (Stanford, CA: Stanford University Press, 2006); Donna Haraway, The Companion Species Manifesto: Dogs, People, and Significant Otherness (Chicago: Prickly Paradigm Press, 2003); idem., When Species Meet; Robert J. Lilly and Michael B. Puckett, "Social Control and Dogs: A Sociohistorical Analysis," Crime and Delinquency 43 (1997): 123-47; Sarah Cheang, "Women, Pets, and Imperialism: The British Pekingese Dog and Nostalgia for Old China," Journal of British Studies 45 (2006): 359-87; Jacob Tropp, "Dogs, Poison, and the Meaning of Colonial Intervention in the Transkei, South Africa," Journal of African History 43 (2002): 451-72; Jan Bondeson, Amazing Dogs: A Cabinet of Canine Curiosities (Ithaca, NY: Cornell University Press, 2011); Helena Pycior, "The Public and Private Lives of 'First Dogs': Warren G. Harding's Laddie Boy and Franklin D. Roosevelt's Fala," in Beastly Natures: Animals, Humans, and the Study of History, ed. Dorothee Brantz (Charlottesville: University of Virginia Press, 2010), 176-203; Mark Derr, A Dog's History of America: How Our Best Friend Explored, Conquered, and Settled a Continent (New York: North Point Press, 2004); Amy Nelson, "The Legacy of Laika: Celebrity, Sacrifice, and the Soviet Space Dog," in Beastly Natures: Animals, Humans, and the Study of History, ed. Dorothee Brantz (Charlottesville: University of Virginia Press, 2010), 204-24; Marion Schwartz, A. History of Dogs in the Early Americas (New Haven, CT: Yale University Press, 1977); James Boyce, "Canine Revolution: The Social and Environmental Impact of the Introduction of the Dog to Tasmania," Environmental History 11 (2006): 102-29; John Grier Varner and Jeannette Johnson Varner, Dogs of the Conquest (Norman: University of Oklahoma Press, 1983); John K. Walton, "Mad Dogs and Englishmen: The Conflict over Rabies in Late Victorian England," Journal of Social History 13 (1979): 219-39; Lance van Sittert and Sandra Swart, eds., Canis Africanis: A Dog History of Southern Africa (Leiden: Brill, 2008).

2. On dog domestication see, for example, Raymond Coppinger and Lorna Coppinger, Dogs: A Startling New Understanding of Canine Origin, Behavior, and Evolution (New York: Scribner, 2001); Carles Vilà et al., "Multiple and Ancient Origins of the Domestic Dog," Science 276 (1997): 1687–89; Adám Miklósi, Dog Behaviour, Evolution, and Cognition (New York: Oxford University Press, 2008); James Serpell, ed., The Domestic Dog: Its Evolution, Behaviour, and Interactions with People (Cambridge: Cambridge University Press, 1995); Horowitz, Inside of a Dog; Mark Derr, How the Dog Became the Dog: From Wolves to Our Best Friends (New York: Overlook Press, 2011).

 His answer to this question is Michael Pollan, The Botany of Desire: A Plant's-Eye View of the World (New York: Random House, 2001).

 Katy M. Evans and Vicki J. Adams, "Proportion of Litters of Purebred Dogs Born by Caesarean Section," Journal of Small Animal Practice 51 (2010): 113–18.

- 5. Sultan inspired the title of the following, which is sadly not really about him at all: David Edmonds and John Eidinow, Rousseau's Dog: Two Great Thinkers at War in the Age of Enlightenment (New York: HarperCollins, 2006). As regards the early modern French connection to the Ottoman Empire in the realm of things animal, it is also noteworthy that the animal combat arena constructed in the royal gardens of Vincennes in the 1650s was dubbed the sérial des bêtes sauvages (the seraglio of wild beasts), a name—according to Peter Sahlins—purposefully chosen in part to evoke "the exotic world of the Ottoman palace." Peter Sahlins, "The Royal Menageries of Louis XIV and the Civilizing Process Revisited," French Historical Studies 35 (2012), 240–41.
- On Blondie, Hitler, and his other dogs, see Boria Sax, Animals in the Third Reich: Pets, Scapegoats, and the Holocaust (New York: Continuum, 2000), 87–89; McHugh, Dog, 27 and 117.
- 7. The movie star Rin Tin Tin was apparently so popular that he garnered the most votes for the first-ever Best Actor Award from the Academy of Motion Pictures in 1929. It was thought, however, that offering the inaugural prize to a nonhuman was not a good precedent for the new award, so the prize was taken away from Rin Tin Tin and instead given to Emil

- Jannings. Susan Orlean, Rin Tin Tin: The Life and the Legend (New York: Simon and Schuster, 2011), 88–89.
- On these conflicting views of dogs see, for example, James Serpell, "From Paragon to Pariah: Some Reflections on Human Attitudes to Dogs," in The Domestic Dog: Its Evolution, Behaviour, and Interactions with People, ed. James Serpell (Cambridge: Cambridge University Press, 1995), 245–56; Belk, "Metaphoric Relationships with Pets."
- 9. The following blanket statement is typical: "To the Egyptian the dog is an unclean, abhorrent animal." Afaf Lutfi Al-Sayyid Marsot, "The Cartoon in Egypt," Comparative Studies in Society and History 13 (1971), 5. See also Shehada, Mamluks and Animals, 75. For a comparative perspective on Islam's supposed canine hostility, see Sophia Menache, "Dogs: God's Worst Enemies?" Society and Animals 5 (1997): 23–44.
- 10. As in many societies, the black dog in particular was regarded by Muslim writers as more troublesome than any other kind of dog. Encyclopedia of Religion and Nature (London: Thoemmes Continuum, 2005), s.v. "Dogs in the Islamic Tradition and Nature" (Khaled Abou El Fadl).
- 11. For comparative purposes, consider that from antiquity until at least the nineteenth century there was a very active dog trade between Tibet and what is today Uttar Pradesh in north central India. Maheshwar P. Joshi and C. W. Brown, "Some Dynamics of Indo-Tibetan Trade through Uttarākhanda (Kumaon-Garhwal), India," Journal of the Economic and Social History of the Orient 30 (1987), 308–09. On some of the utility of dogs in T'ang China, see Edward H. Schafer, "The Conservation of Nature under the T'ang Dynasty," Journal of the Economic and Social History of the Orient 5 (1962): 279–308.
- 12. None of the evidence for the human-dog relationship in Ottoman Egypt suggests that dogs had individual names. In ancient Egypt, by contrast, there is a record of dog names, with about eighty having been identified. Most of the names evoke the animal's physical attributes: color, speed, size, and so on. Brewer, "Hunting, Animal Husbandry and Diet in Ancient Egypt," 451–52; Kasia Szpakowska, Daily Life in Ancient Egypt: Recreating Lahun (Malden: Blackwell, 2008), 59–60. See also Angela M. J. Tooley, "Coffin of a Pog from Ben Hasan," Journal of Egyptian Archaeology 74 (1988): 207–11. The presence of dog names in ancient Egypt was likely a function of the fact that canines were sometimes kept as pets, a phenomenon that, as I will discuss later, was quite rare in the Ottoman period.
- Abou El Fadl, "Dogs in the Islamic Tradition and Nature"; Ze'ev Maghen, "Dead Tradition: Joseph Schacht and the Origins of 'Popular Practice;" Islamic Law and Society 10 (2003), 297–313.
- 14. Maghen, "Dead Tradition," 298.
- 15. The scholar of Islamic law Joseph Schacht thought that the notion of dog impurity in Islam was borrowed from Judaism. Joseph Schacht, The Origins of Muhammadan Jurisprudence (Oxford: Clarendon Press, 1950), 216. Ze'ev Maghen disputes this idea, stating that nowhere in the Talmud are dogs cited as impure and that no evidence exists for the presence of this idea in Jewish practice between the seventh and the tenth centuries CE. Maghen believes that Schacht found notions of canine impurity in the writings of Sephardic scholars, who were themselves influenced by Islamic ideas of dog impurity. Thus, for Maghen, Schacht mistakenly took these borrowed ideas as representative of normative Jewish beliefs. According to Maghen, the evidence indeed overwhelmingly points to the exact opposite phenomenon: the influence of Islamic ideas about dogs on Sephardic Jews. Maghen, "Dead Tradition," 297–313. For a philosophical take on artistic representations of Jews and animals, see Andrew Benjamin, Of Jews and Animals (Edinburgh: Edinburgh University Press, 2010).
- 16. Quran 7: 176.
- For a study comparing ideas about the impurity of pigs and dogs, see Maghen, "Dead Tradition," 297–313.
- 18. The most likely disease referent here is rabies. For the identification of certain parasites found in street dogs in Egypt during an anti-rabies campaign in the late twentieth century, see E. M. Mikhail, N. S. Mansour, and H. N. Awadalla, "Identification of Trichinella Isolates from Naturally Infected Stray Dogs in Egypt," Journal of Parasitology 80 (1994): 151–54.
- Abou El Fadl, "Dogs in the Islamic Tradition and Nature"; Maghen, "Dead Tradition," 298-99.
- 20. Abou El Fadl, "Dogs in the Islamic Tradition and Nature."

- 21. Maghen, "Dead Tradition," 300; Ignaz Goldziher, "Islamisme et Parsisme," Revue de L'Histoire des Religions 43 (1901), 18. Goldziher's discussion of dogs during the Prophet's lifetime comes as part of a comparative study between Islam and Zoroastrianism. For a study of dogs in Zoroastrianism, see Mahnaz Moazami, "The Dog in Zoroastrian Religion: Vidēvdād Chapter XIII," Indo-Iranian Journal 49 (2006): 127–49. More generally on animals in Zoroastrianism, see idem, "Evil Animals in the Zoroastrian Religion," History of Religions 44 (2005): 300–17; Richard Foltz, "Zoroastrian Attitudes toward Animals," Society and Animals 18 (2010): 367–78; S. K. Mendoza Forrest, Witches, Whores, and Sorcerers: The Concept of Evil in Early Iran (Austin: University of Texas Press, 2011), 92–93, 104–06, 110–11, 118–20.
- 22. Abou El Fadl, "Dogs in the Islamic Tradition and Nature."
- 23. Ibid.
- 24, Ibid.
- Quran 18: 18; Encyclopaedia of Islam, 2nd ed. (Leiden: Brill Online, 2013), s.v. "Kalb" (François Viré).
- 26. Perlo, Kinship and Killing, 195-96.
- Encyclopaedia of the Qur'ān (Leiden: Brill Online, 2013), s.v. "Dog" (Bruce Fudge); Viré, "Kalb."
- Robert Dankoff, "Animal Traits in the Army Commander," Journal of Turkish Studies 1 (1977), 99–104.
- For a comparative perspective, see G. H. Bousquet, "Des animaux et de leur traitement selon le judaïsme, le christianisme et l'islam," Studia Islamica 9 (1958): 31–48.
- 30. For a capacious discussion of the Arabic literary works on animals by al-Jāḥiz, Qazvīnī, and al-Damīrī, see M. V. McDonald, "Animal-Books as a Genre in Arabic Literature," Bulletin (British Society for Middle Eastern Studies) 15 (1988): 3-10.
- 31. Abī 'Uthmān 'Amr ibn Baḥr al-Jāḥiz, Kitāb al-Ḥayawān, ed. Muḥammad Bāsil 'Uyūn al-Sūd, 4 vols. (Beirut: Dār al-Kutub al-ʿIlmiyya, 1998); idem., Kitāb al-Ḥayawān, SK, Reisülküttab 584; idem., Kitāb al-Ḥayawān, pt. I, Beinecke, Landberg MSS 236.
- 32. For general discussions of the book, see Sa'id H. Manşur, The World-View of al-Jāḥiz in Kitāb al-Ḥayawān (Alexandria: Dar al-Maareff, 1977); Charles Pellat, The Life and Works of Jāḥiz, Translations of Selected Texts, trans. D. M. Hawke (Berkeley: University of California Press, 1969), 21–22.
- 33. Qazvīnī's text is the following: Hamd Allāh Mustawfī Qazvīnī, Nuzhat al-Qulāb (Tehran: Dunyā-yi Kitāb, 1983/1984). The relevant animal portions of this text have been translated as idem., Zoological Section of the Nuzhatu-l-Qulāb. For al-Damīrī's text, see the following versions: Muḥammad ibn Mūsā al-Damīrī, Hayāt al-Ḥayawān al-Kubrā, ed. Ibrāhīm Ṣāliḥ, 4 vols. (Damascus: Dār al-Bashā'īr lil-Ṭibā'a wa al-Nashr wa al-Tawzī', 2005); idem., Ḥayāt al-Ḥayawān al-Kubrā, 2 vols., Beinecke, Salisbury MSS 78-79; idem., Ḥayāt al-Ḥayawān, SK, Harput 372; idem., Ḥayāt al-Ḥayawān, SK, Harput 372; idem., Ḥayāt al-Ḥayawān, SK, Pertevniyal 763; idem., Ad-Damīrī's Ḥayāt al-Ḥayawān (A Zoological Lexicon), trans. A. S. G. Jayakar, 2 vols. (London: Luzac. 1906-08).
- 34. Pellat, Life and Works of Jahiz, 173.
- 35. Viré, "Kalb."
- 36. Pellat, Life and Works of Jahiz, 143.
- 37. For a discussion of the reverse phenomenon—human feeding dog—see Tuan, Dominance and Affection, 92-94. According to Tuan, Pacific Islanders in the nineteenth century considered the meat of dogs nursed by human women to be the best possible kind of dog meat.
- 38. This theme of animal-suckling human is not an uncommon one in Islamic literature. One of the most prominent examples is the story of Hayy Ibn-Yaqzān, who was nursed in his infancy by a doe. Muḥammad ibn 'Abd al-Malik Ibn Tufayl, Ibn Tufayl's Hayy Ibn Yaqzān: A Philosophical Tale, trans. Lenn Evan Goodman, 5th ed. (Los Angeles: Gee Tee Bee, 2003), 106, 109. For a recent study of this story as it relates to autodidacticism, see Avner Ben-Zaken, Reading Hayy Ibn-Yaqzān: A Cross-Cultural History of Autodidacticism (Baltimore: Johns Hopkins University Press, 2011). For a broader view of interspecies suckling, see Londa Schiebinger, Nature's Body: Gender in the Making of Modern Science (New Brunswick, NJ: Rutgers University Press, 2004), 53-65.

- 39. Pellat, Life and Works of Jāḥiz, 143.
- 40. Ibid.
- 41. Muḥammad ibn Khalaf ibn al-Marzubān, Faḍl al-Kilāb 'alā Kathīr mimman Labisa al-Thtyāb, Beinecke, Landberg MSS 350. I also consulted the following published Arabic version of the text and its English translation: idem., The Book of the Superiority of Dogs over Many of Those who Wear Clothes, trans. and ed. G. R. Smith and M. A. S. Abdel Haleem (Warminster: Aris and Phillips, 1978). All page number citations refer to the published Arabic text. Ibn al-Marzubān died in 921.
- 42. Ibid., 24.
- 43. Ibid.
- 44. Ibid., 33-35.
- 45. Ibid., 33. Unfortunately, we are not told the dog's name. Interestingly, the major account of the reign of the Mughal emperor Albar in the second half of the sixteenth century states explicitly that Albar loved dogs, imported them to India from many different locations, and gave names to all of them. Abul Fazl 'Allami, The Ain i Akbari, trans. H. Blochmann, 3 vols. (Frankfurt am Main: Institute for the History of Arabic-Islamic Science at the Johann Wolfgang Goethe University, 1993), 1: 290.
- 46. Ibn al-Marzuban, Superiority of Dogs, 34.
- 47. For a useful comparative study that sheds light on the role of poisonous creatures in certain Islamic traditions, see Jürgen Wasim Frembgen, "The Scorpion in Muslim Folklore," Asian Folklore Studies 63 (2004): 95–123. For mention of a book about poisonous animals in Greco-Roman Egypt authored by Hermes the Second, see Şā'id al-Andalusī, Science in the Medieval World: "Book of the Categories of Nations," trans, and ed. Sema'an I. Salem and Alok Kumar (Austin: University of Texas Press, 1991), 36.
- 48. This part of the story evokes earlier associations made between dogs and women—associations that were strongly repudiated. Abou El Fadl, "Dogs in the Islamic Tradition and Nature."
- 49. The dog-as-hero is of course a trope that exists in multiple traditions. For the case of twentieth-century Japan, for example, see Skabelund, Empire of Dogs, 130-70.
- 50. In al-Jāḥiz's borrowed Aristotelian schema, for example, animals who walk are the most esteemed and those who crawl or slither the most lowly. Aristotle writes that "to understand the world, we must understand mean and lowly things." For a very creative and illuminating account of human-animal relations that uses this aphorism as its organizing thread, see Kate Jackson, Mean and Lowly Things: Snakes, Science, and Survival in the Congo (Cambridge, MA: Harvard University Press, 2008).
- 51. In the story of the king and his pudding, the dog dies so that the king may live. If the dog is indeed between human and animal, then perhaps he also exists, as Christ did, between God and man. If the Christian idiom holds—an idiom I do not want to push too far—then the snake is clearly a symbol of the devil and his trickery in tempting and attempting to kill man. On this symbolism, see Frembgen, "The Scorpion in Muslim Folklore."
- 52. Ibn al-Marzubān, Superiority of Dogs, 55.
- Jean-Claude Schmitt, The Holy Greyhound: Guinefort, Healer of Children since the Thirteenth Century, trans. Martin Thom (Cambridge: Cambridge University Press, 1983), 40–43.
- 54. For an Arabic version of this compendium, see Bidpā'i, Kitāb Kalila wa Dinna: Ta'lif Bidpā al-Faylasūf al-Hindī, Tarjamahu ilā al-'Arabiyya fi Ṣadr al-Dawla al-'Abbāsiyya 'Abd Allah ibn al-Muqaffa' (Bombay: Sharaf al-Dīn al-Kutubī, 1968).
- 55. The legend and its role in medieval French peasant culture is the direct subject of Jean-Claude Schmitt's extremely provocative and useful work The Holy Greyhound.
- 56. Ibn al-Marzuban, Superiority of Dogs, S7.
- 57. For a useful study of the human ethics of the burial of dogs and other companionate species, see Philip Howell, "A Place for the Animal Dead: Pets, Pet Cemeteries and Animal Ethics in Late Victorian Britain," Ethics, Place and Environment 5 (2002): 5-22.
- 58. By the fourteenth century, the Persian polymath Qazvini had the following positive take on dogs as integral and constructive members of human societies: "It is a faithful beast, patient in undergoing hardships and in enduring hunger, in rendering service and in keeping off enemies. It follows up game with quick intelligence, and although kept hungry it is faithful and

will not leave its master, acknowledging the duty of obedience." Qazvīni, Zoological Section of the Nuzhatu-l-Qulub, 34. For an eleventh-century description of capines' physical characteristics, see Ibn Bakhtīshūʻ, Tabā'iʻ al-Ḥayawān wa al-Insān, 32v-34r.

59. On the village of al-Ajhūr, see Ramzī, al-Qāmūs al-Jughrāfī, pt. 2., vol. 1: 53.

- 60. R. Y. Ebied and M. J. L. Young, "An Unpublished Legal Work on a Difference between the Shāfi ites and Mālikites," Orientalia Lovaniensia Periodica 8 (1977), 252. This article includes the Arabic text of an (as of 1977) unpublished and uncatalogued manuscript from the University of Leeds, along with its English translation. All references are to the Arabic text.
- 61. On some of the many students al-Ajhūrī trained while at al-Azhar, see al-Jabartī, 'Ajā'ib al-Āthār (1994), 1: 107-10; 2: 168 and 242.
- 62. Ebied and Young, "A Difference between the Shāfi ites and Mālikites," 254.
- 63. Ibid. ·
- 64. Ibid.
- 65. Ibid. In his eighth point, al-Ajhūrī asserts that the Prophet allowed the drinking and use for purification purposes of water from ponds between Mecca and Medina, despite the well-known fact that wild beasts (al-sibā') regularly drank from them. Ibid., 255.
- 67. The line ìs: al-kilāb luhātha lā yakhlū famuhā 'an al-ruṭūbāt wa tasāquṭ al-luʿāb. Ibid.; 256.
- 68. Ibid., 256-57.
- 69. Ibid., 254.
- 70. Maghen, "Dead Tradition," 307.
- 71. Ebied and Young, "A Difference between the Shāfi ites and Mālikites," 254.
- 72. Ibid., 255.
- 73. Ibid., 256.
- 74. Elsewhere in the Ottoman Empire, dogs were so integral to social life that they even played a role in place names. For example, the name of a village in the vicinity of Erzurum in eastern Anatolia was simply Köpek (Dog). For a case about the collection of taxes from Köpek in the early eighteenth century, see BOA, İbnülemin Askeriye 7691 (14 R 1118/26 July 1706).
- 75. Antonius Gonzales, Voyage en Égypte du Père Antonius Gonzales, 1665–1666; trans. Charles Libois, 2 vols. (Cairo: Institut français d'archéologie orientale, 1977), 2: 556. For more on this Franciscan in Egypt, see Alastair Hamilton, The Copts and the West, 1439-1822: The European Discovery of the Egyptian Church (Oxford: Oxford University Press, 2006), 80. For roughly contemporaneous descriptions of dogs elsewhere in the Ottoman Empire, see Irvin Cemil Schick, "Evliya Çelebi'den Köpeklere Dair," Toplumsal Tarih 202 (2010): 34-44.

76. It was not just Cairo that had a large number of dogs, but other Egyptian cities as well. About Damietta and its dogs, see Gonzales, Voyage en Égypte, 2: 556.

77. Ellis Veryard, An Account of Divers Choice Remarks, as well Geographical, as Historical, Political, Mathematical, Physical, and Moral; Taken in a Journey through the Low-Countries, France, Italy, and Part of Spain; with the Isles of Sicily and Malta. As also, a Voyage to the Levant: A Description of Candia, Egypt, the Red Sea, the Desarts of Arabia, Mount-Horeb, and Mount-Sinai; the Coasts of Palestine, Syria, and Asia-Minor; the Hellespont, Propontis, and Constantinople; the Isles of the Carpathian, Egean, and Ionian Seas (Exon: Sam. Farley, 1701), 319.

78. For a comparative example of the use of hogs for sanitation purposes in nineteenth-century New York City, see Catherine McNeur, "The 'Swinish Multitude': Controversies over Hogs in Antebellum New York City," Journal of Urban History 37 (2011): 639-60.

79. Gonzales, Voyage en Égypte, 1: 182.

- 80. Ibid,
- 81. Ibid., 1: 210; 2: 557.
- 82. This was also the case in Istanbul. Catherine Pinguet, "Istanbul's Street Dogs at the End of the Ottoman Empire: Protection or Extermination," in Animals and People in the Ottoman Empire, ed. Suraiya Faroqhi (Istanbul: Eren, 2010), 354-55.
- 83. Antonius Gonzales carefully notes that while dogs were allowed in mosques, they (and small children) were not allowed in churches for fear that these smallish humans and canines would disturb worshipers. Gonzales, Voyage en Égypte, 1: 222. For a study that shows how discourses about anti-cruelty in late nineteenth-century America drew commonalities

- between animals and children, see Susan J. Pearson, The Rights of the Defenseless: Protecting Animals and Children in Gilded Age America (Chicago: University of Chicago Press, 2011).
- 84. al-Damardāshī, Tārīkh Waqāyi' Miṣr al-Qāhira, 115; Gonzales, Voyage en Égypte, 1: 22.
- 85. Gonzales, Voyage en Égypte, 2: 570.
- 86. In the Ottoman capital as well, dogs and humans were in such frequent contact in the early modern period that canines regularly came to serve as symbols and similes for individual humans and human communities. When in the middle of the seventeenth century, for example, a male page (lala) in the palace was nowhere to be found, the sultan issued a firman describing the servant's wanderings as being like those of a dog (köpek gibi). BOA, HAT 1446/34 (18 B 1058/8 Aug. 1648).
- 87. al-Shirbini, Hazz al-Quhūf, 2: 238-40.
- 88. Ibid., 2: 238.
- 89. Ibid., 2: 239.
- 90. Ibid., 2: 240.
- 91. Viré, "Kalb." For a useful discussion of the social and economic importance of dogs as herders in the Indian Himalayas, see Joshi and Brown, "Dynamics of Indo-Tibetan Trade," 308-09.
- 92. al-Shirbīnī, Hazz al-Quhūf, 2: 84.
- 93. Gonzales, Voyage en Égypte, 2: 557 and 614.
- 94. For examples of dog vomit imagery in Ottoman Egypt, see al-Shirbini, Hazz al-Quhuf, 367; al-Jabartī, 'Ajā'ib al-Āthār (1994), 4: 143.
- 95. Also in the realm of the medicinal, al-Jāḥiz reports that "dog dirt" is highly effective in the treatment of stab wounds. Pellat, Life and Works of Jahiz, 146, For examples of the medicinal uses of dog excrement in twentieth-century Yemen, see Hanne Schönig, "Reflections on the Use of Animal Drugs in Yemen," Quaderni di Studi Arabi 20/21 (2002-03), 169.
- 96. Chapter Five addresses hunting more thoroughly.
- 97. Edward William Lane, An Account of the Manners and Customs of the Modern Egyptians: The Definitive 1860 Edition, intro. Jason Thompson (Cairo: American University in Cairo Press, 2003), 95.
- 98. Gonzales, Voyage en Égypte, 2: 553.
- 99. Allsen, Royal Hunt in Eurasian History, 54-56.
- 100. For an analysis of the cultural representations of foxes in various traditions, see Hans-Jörg Uther, "The Fox in World Literature: Reflections on a 'Fictional Animal," Asian Folklore Studies 65 (2006): 133–60; Martin Wallen, Fox (London: Reaktion Books, 2006).
- 101, Allsen, Royal Hunt in Eurasian History, 239.
- 102. These breeds later became known as leporarius and veltres in the Latin West. Today's European whippets and wolfhounds are the direct descendants of these early Middle Eastern imports.
- 103. Ibn al-Marzubān, Superiority of Dogs, xxxii.
- 104. On Mamluk treatments of dog diseases, see: Shehada, Mamluks and Animals, 305-07.
- 105. Allsen, Royal Hunt in Eurasian History, 55-56.
- 106. Ibid., 56.
- 107. Ibid., 240-41.
- 108. Ibid., 240.
- 109. Elisabetta Borromeo, "The Ottomans and Hunting, according to Julien Bordier's Travelogue (1604–1612)," in Animals and People in the Ottoman Empire, ed. Suraiya Faroqhi (Istanbul: Eren, 2010), 227.
- 110. Allsen, Royal Hunt in Eurasian History, 240. This quote points again to the centrality of Iran to the global early modern animal trade.
- 111. Tülay Artan, "A Book of Kings Produced and Presented as a Treatise on Hunting," Muqarnas 25 (2008), 301.
- 112. al-Shirbīnī, Hazz al-Quḥūf, 2: 283.
- 113. Borromeo, "The Ottomans and Hunting," 225–26.
- 114. For more on these two hunting breeds, see François Viré, "A propos des chiens de chasse salûqî et zagârî," Revue des études islamiques 41 (1973): 331-40.
- 115. Each handler was responsible for the daily walking and grooming of two dogs.
- 116. Polis à merveille, Borromeo, "The Ottomans and Hunting," 226.

- 117. On the many uses of dogs in multiple arenas of warfare, see Michael G. Lemish, War Dogs: Canines in Combat (Washington, DC: Brassey's, 1996); Skabelund, Empire of Dogs, 130-70; Charles L. Dean, Soldiers and Sled Dogs: A History of Military Dog Mushing (Lincoln: University of Nebraska Press, 2005); Thomas R. Buecker, "The Fort Robinson War Dog Reception and Training Center, 1942-46," Military History of the West 38 (2008): 115-40; Cooper, Animals in War; Marilyn W. Seguin, Dogs of War: And Stories of Other Beasts of Battle in the Civil War (Boston: Branden, 1998); Abel A. Alves, The Animals of Spain: An Introduction to Imperial Perceptions and Human Interaction with Other Animals, 1492-1826 (Leiden: Brill, 2011), 150-57; William W. Putney, Always Faithful: A Memoir of the Marine Dogs of WWII (New York: Free Press, 2001); Fairfax Davis Downey, Dogs for Defense: American Dogs in the Second World War, 1941-45 (New York: Daniel P. McDonald, 1955).
- 118. Saymāniyya is the plural Arabized form of the Persian singular segban (it comes to Turkish as sekban), with seg meaning "dog" and ban "keeper." For a discussion of the etymology of various words for "dog" in Turkish, see Ahmet Caferoğlu, "Türk Onomastiğinde 'Köpek' Kültü," Belleten 25 (1961): 1–11.

119. Midhat Sertoğlu, Osmanlı Tarih Lûgatı (İstanbul: Enderun Kitabevi, 1986), 309; Daniel Crecelius and 'Abd al-Wahhab Bakr, trans., al-Damurdashi's Chronicle of Egypt, 1688–1755: al-Durra al-Musana fi Akhbar al-Kinana (Leiden: Brill, 1991), 85, n. 251.

- 120. This use of dogs continues. In the 2011 American attack that killed Osama bin Laden in Pakistan, the commandos that stormed bin Laden's compound were aided by a group of canines who advanced them to sniff out any hidden explosives and to lead the way to the targets of the raid. Gardiner Harris, "A Bin Laden Hunter on Four Legs," New York Times, May 4, 2011. For an account of the U.S. military's use of dogs in Afghanistan and elsewhere, see Maria Goodavage, Soldier Dogs: The Untold Story of America's Canine Heroes (New York: Dutton, 2012).
- 121. For an early nineteenth-century example of sekban regiments using various animals for different military purposes, see TSMA, E. 1173/72 (13 C 1215/1 Nov. 1800).
- 122. Artan, "A Book of Kings as a Treatise on Hunting," 300. Into the early nineteenth century, the sixty-fourth and seventy-first regiments of the Ottoman janissary corps still regularly kept large numbers of mastiffs (s. sansun), terriers (s. zağar), and other dogs as part of their fighting forces. BOA, CS 6637 (13 M 1216/26 May 1801).
- 123. al-Damurdāshī, al-Durra al-Muṣāna, 109-12.
- 124. Ibid., 88-89.
- 125. For a slightly different version of the story of this dog attack, see al-Damardāshī, Tārīkh Waqāyi Misr al-Qāhira, 160–61.
- 126. Pinguet, "Istanbul's Street Dogs," 370.
- 127. Gonzales, Voyage en Égypte, 1: 182.

4. Evolution in the Streets

- 1. For comparative examples of how urban dogs challenged state authority, see Walton, "Mad Dogs and Englishmen"; Jesse S. Palsetia, "Mad Dogs and Parsis: The Bombay Dog Riots of 1832," Journal of the Royal Asiatic Society 11 (2001): 13–30; İrvin Cemil Schick, "İstanbul'da 1910'da Gerçekleşen Büyük Köpek İtlâfı: Bir Mekan Üzerinde Çekişme Vakası," Toplumsal Tarih 200 (2010): 22–33; Jeffrey C. Sanders, "Animal Trouble and Urban Anxiety: Human-Animal Interaction in Post-Earth Day Seattle," Environmental History 16 (2011): 226–61.
- For an account of nearly contemporaneous attempts to remove hogs from New York City, see McNeur, "'Swinish Multitude'."
- 3. The historical literature on dogs as companionate species—pets—is enormous. Studies that have been most useful to me include Kete, Beast in the Boudoir; Fudge, Pets; Grier, Pets in America; Ritvo, "Pride and Pedigree"; Tuan, Dominance and Affection; Haraway, When Species Meet.
- 4. On dog evolution, see the studies cited in note 2 of Chapter Three.

- Edmund Russell, Evolutionary History: Uniting History and Biology to Understand Life on Earth (New York: Cambridge University Press, 2011), 18.
- For a discussion of some of the political and civilizational anxieties associated with street dogs, see McHugh, Dog, 127-45.
- 7. For some of the history of and conceptual problems involved in using dogs as guardians of other animals, see the following practical guide: Janet Vorwald Dohner, Livestock Guardians: Using Dogs, Donkeys, and Llamas to Protect Your Herd (North Adams, MA: Storey Publishing, 2007).
- For a discussion and translation of this law, see Hiroshi Kato, "Egyptian Village Community under Muḥammad 'Ali's Rule: An Annotation of 'Qānūn al-Filāḥa,'" Orient 16 (1980): 183–222.
- 9. As Rudolph Peters rightly directs, the Law of Agriculture should be considered in the context of the criminal legislation promulgated by Mehmet 'Ali's government that same year. Peters, "Mehmed 'Ali's First Criminal Legislation."
- 10. Kato, "Qănun al-Filāḥa," 205.
- 11. A similar section of the 1830 law punished Bedouin who intentionally let their animals into peasants' fields. The punishment in such cases was a fine of 100 riyāls per faddan damaged. Ibid., 199.
- 12. Ibid., 195.
- 13. Ibid., 204-05.
- Ibid., 206. This section appears nearly verbatim in the criminal law of 1829. Peters, "Mehmed 'Alt's First Criminal Legislation," 188.
- 15, Kato, "Qānūn al-Filāha," 198.
- 16. Peters, "Mehmed 'Ali's First Criminal Legislation," 165.
- 17. For a useful analysis of the logic and history of these kinds of state practices, see Scott, Seeing Like a State.
- For accounts of Napoleon's invasion and occupation of Egypt, see Cole, Napoleon's Egypt; Raymond, Egyptiens et Français.
- 19. al-Jabartī, 'Ajā'ib al-Āthār (1994), 3: 51-52.
- 20. Visitors to Egypt often opined that it seemed dogs were especially aggressive toward them as foreigners and Christians. Visiting Rosetta in the early 1870s, James Morris Morgan, a former American Confederate naval officer, wrote: "I went out on to the street to look at the moon and take a little stroll. The only living thing I met was a pariah dog that snarled and disappeared through the entrance of a handsome house. While perfectly harmless to natives I knew that these wild dogs, especially when in packs, had a great aversion for Christians, and where one was met it was certain that there were many more near by, so I determined to return to my palace." James Morris Morgan, Recollections of a Rebel Reefer (Boston and New York: Houghton Mifflin, 1917), 294. For other examples of these ideas about Egyptian dogs' views of foreigners, see Frederick Henniker, Notes during a Visit to Egypt, Nubia, the Oasis, Mount Sinai, and Jerusalem (London: John Murray, 1823), 135; James Augustus St. John, Egypt and Mohammed Ali; or, Travels in the Valley of the Nile, 2 vols. (London: Longman, Rees, Orme, Brown, Green, and Longman, 1834), 2: 112. Dogs clearly know when they are encountering a person for the first time. Their abilities to perceive that person's religious affiliation, however, seem less acute. For a comparative example from T'ang China of the use of dogs to warn humans of strangers in their midst, see Schafer, "Conservation of Nature," 303.
- 21. For a comparative example of the use of poisoned meat to kill dogs in South Africa, see Tropp, "Dogs, Poison, and the Meaning of Colonial Intervention."
- 22. Dogs were also frequently victims of the various skirmishes between French and Ottoman soldiers that periodically erupted during the three years of the French occupation. In the spring of 1800, for example, there was a period of a few weeks that saw heavy fighting between French and Ottoman forces in Cairo. In addition to widespread plundering and looting in markets and elsewhere, many humans, dogs, and other animals perished as a result of these clashes. It was poor humans that suffered most from this violence. The chronicler al-Jabarti is, however, very clear in drawing an equivalence between these weaker members of

human society and the dogs and other animals that died alongside them. Thus we see in this case the persistence of the idea that certain kinds of humans and certain kinds of animals—in this example, the poor and dogs—were conceptualized as being very close to one another on a spectrum of living things. al-Jabarti, 'Ajā'ib al-Āthār (1994), 3: 158.

- 23. Aspects of this story bear resemblance to "the great cat massacre" in 1730s Paris analyzed by Robert Darnton. Especially important in both these instances of violence against animals was that the dogs and cats made noise at night, thereby robbing humans of precious sleep and preventing nighttime security marches. Robert Darnton, The Great Cat Massacre and Other Episodes in French Cultural History (New York: Basic Books, 1999), 75-104. For more on the problem of dogs as night, see Craig Koslofsky, Evening's Empire: A History of the Night in Early Modern Europe (Cambridge: Cambridge University Press, 2011), 202 and 218. On the history of the night, see also Wolfgang Schivelbusch, Disenchanted Night: The $Industrialization\ of\ Light\ in\ the\ Nineteenth\ Century,\ trans.\ Angela\ Davies\ (Berkeley:\ University\ Century,\ trans.\ Angela\ Century,\ trans.\ Angela\ Century,\ trans.\ Angela\ Century,\ trans.\ Angela\ Century,\ trans.\ Angela\ Century,\ trans.\ Angela\ Century,\ trans.\ Angela\ Century,\ trans.\ Angela\ Century,\ trans.\ Angela\ Century,\ trans.\ Angela\ Century,\ trans.\ Angela\ Century,\ trans.\ Angela\ Century,\ trans.\ Angela\ Century,\ trans.\ Angela\ Centu$ of California Press, 1988).
- $24. \ \ For a history of the phenomenon of urban dog killings in Europe, see McHugh, Dog, 130-34.$ 25. For an earlier example of the overcrowding of Cairo's streets with horses and other animals, see Rūmī, *Kitāb Ta^²rīkh Misr wa al-Nīl*, 91r–91v. For a later example, see Letter from Arthur Rodgers to His Father, March 30, 1881, Arthur Rodgers Correspondence (1865-1902), BANC MSS 2004/224 cz, The Bancroft Library, University of California, Berkeley.
- 26. al-Jabartī, 'Ajā' ib al-Āthār (1998), 4: 437; idem., 'Ajā' ib al-Āthār (1994), 4: 396.

27. See, for example, Marsot, Egypt in the Reign of Muhammad Ali, 162-95.

28. On urban dogs and noise, see Alan M. Beck, The Ecology of Stray Dogs: A Study of Free-Ranging Urban Animals (West Lafayette, IN: NotaBell Books, 2002), 68-69.

29. Viré, "Kalb."

30. Pinguet, "Istanbul's Street Dogs," 355-56.

- 31. Some of Istanbul's residents interpreted the ship's sinking as divine retribution for attempts to rid the city of its dogs. A similar operation to relocate Istanbul's strays to an island near the city occurred during the reign of Sultan Abdülaziz (r. 1861-76). On this occasion, the dogs were successfully moved to the island of Sivriada. Still, in this instance too, a fire that destroyed parts of Istanbul shortly after this dog removal was interpreted by some as divine punishment for human cruelty to dogs. Ibid.
- 32. Beck, Ecology of Stray Dogs, 45-69.

33. al-Jabartī, 'Ajā' ib al-Āthār (1994), 4. 396.

- 34. On the emergence of this separation between species, see the following very important work: Keith Thomas, Man and the Natural World: Changing Attitudes in England, 1500–1800 (London: Allen Lane, 1983).
- 35. On Seattle, see Sanders, "Animal Trouble and Urban Anxiety." On Istanbul, see Pinguet, "Istanbul's Street Dogs,"
- 36. For a partly Freudian analysis of the "redefinition of dog shit as litter," see McHugh, Dog,
- 37. For a history of sanitation in modern American cities, see Martin V. Melosi, Garbage in the Cities: Refuse, Reform, and the Environment, 1880-1980 (College Station: Texas A&M University Press, 1981).
- 38. Catherine Pinguet, Les chiens d'Istanbul: des rapports entre l'homme et l'animal de l'Antiquité à nos jours (Saint-Pourçain-sur-Soule: Bleu autour, 2008); idem., "Istanbul's Street Dogs"; Schick, "Büyük Köpek İtlâfi"; Ekrem Işm, "Street Dogs of Istanbul: The Four-Legged Municipality," in Everyday Life in Istanbul: Social Historical Essays on People, Culture and Spatial Relations, trans. Virginia Taylor Saçlıoğlu (Istanbul: Yapı Kredi Yayınları, 2001), 219-26; Taner Timur, "XIX. Yüzyılda İstanbul'un Köpekleri," Tarih ve Toplum 20: 117 (September 1993): 10-14,
- 39. Abu-Lughod, Cairo, 83-97; Raymond, Cairo, 291-308; Khaled Fahmy, "An Olfactory Tale of Two Cities: Cairo in the Nineteenth Century," in Historians in Cairo: Essays in Honor of George Scanlon, ed. Jill Edwards (Cairo: American University in Cairo Press, 2002), 155-59. In the second half of the century, the segregation of Cairo (and Alexandria) into two quarters—one European and elite, the other native and poor—emerged as the most fundamental force driving the expansion of urban Egypt. Abu-Lughod, Cairo, 98-117; Raymond, Cairo,

309-39; Fahmy, "An Olfactory Tale," 155-87. On Alexandria, see idem., "Towards a Social History of Modern Alexandria," in Alexandria, Real and Imagined, ed. Anthony Hirst and Michael Silk (Aldershot, UK: Ashgate, 2004), 281-306; idem., "For Cavafy, with Love and Squalor: Some Critical Notes on the History and Historiography of Modern Alexandria," in Alexandria, Real and Imagined, ed. Anthony Hirst and Michael Silk (Aldershot, UK: Ashgate, 2004), 263-80.

40. Abu-Lughod, Cairo, 91-92 and 95-97; Raymond, Cairo, 303.

41. Mikhail, Nature and Empire, 230-41.

42. Abu-Lughod, Cairo, 91-93; Raymond, Cairo, 302-03.

43. For an illuminating study of urban dogs, see Beck, Ecology of Stray Dogs.

44. Sometimes in Cairo, but more commonly in the countryside, donkeys were also used to haul garbage. Tietze, Mustafā 'Ālī's Description of Cairo, 51.

45. Similar things happened to hog populations in New York City in the first half of the nineteenth century. McNeur, "'Swinish Multitude."

46. George Fleming, Travels on Horseback in Mantchu Tartary: Being a Summer's Ride Beyond the Great Wall of China (London: Hurst and Blackett, 1863), 233-34. Also cited in Skabelund, Empire of Dogs, 19.

47. About Istanbul's dogs, see in this regard Pinguet, "Istanbul's Street Dogs," 353-54.

- 48. Edward William Lane, Cairo Fifty Years Ago, ed. Stanley Lane-Poole (London: J. Murray, 1896), 35.
- 49. Ibid., 62; Abu-Lughod, Cairo, 86.

50. Abu-Lughod, Cairo, 86.

51. Lane, Cairo Fifty Years Ago, 37.

- 52. In Alexandria as well, trash mounds around the city's walls were understood to be the sovereign territory of the city's dogs. Moreover, turf wars over these mounds seem to have been a regular occurrence in Alexandria, with certain packs of dogs defending their mounds from other dogs and humans too. Henniker, Notes during a Visit to Egypt, 9-10. For a conceptual discussion of the use of the term "pack" to refer to dogs, see Horowitz, Inside of a Dog, 57-61.
- 53. On the competition among intramural dogs for food from urban trash in various Egyptian cities, see St. John, Egypt and Mohammed Ali, 2: 280; Henniker, Notes during a Visit to Egypt, 24. For the comparative example of dogs eating garbage in Ottoman Istanbul, see Pinguet, "Istanbul's Street Dogs," 354-55.
- 54. Abu-Lughod, Cairo, 92; Raymond, Cairo, 302-03; Fahmy, "An Olfactory Tale," 174.

55. For more on the removal of these mounds, see Lane, Cairo Fifty Years Ago, 37.

- 56. Thus as in many cities in the nineteenth century, Cairo's expansion was literally built on top of garbage. For the case of New York City, see Edward Humes, Garbology: Our Dirty Love Affair with Trash (New York: Avery, 2012), 45.
- 57. St. John, Egypt and Mohammed Ali, 1: 140-41.

58. Abu-Lughod, Cairo, 92.

59. For another example of clearing land for expanding urban construction projects, see al-Jabarti, 'Ajā'ib al-Āthār (1994), 4: 442-44.

60. St. John, Egypt and Mohammed Ali, 1: 141-42.

- 61. Consider, for example, what James Augustus St. John had to say about Cairo in December 1832 after being away from the city for a period. "I have not been many days in Cairo, and yet I discover that many changes have taken place in its appearance even since the descriptions of the very latest travellers were written. The streets, formerly disgustingly filthy, are now remarkable in general for their cleanliness, being all swept three times a day." Ibid., 1: 140.
- 62. For a useful analysis of changing understandings of disease and environment in the nineteenth century, see Linda Nash, Inescapable Ecologies: A History of Environment, Disease, and Knowledge (Berkeley: University of California Press, 2006).

63. For a useful comparative study of these issues, see the following examination of dogs in twentieth-century Baltimore: Beck, Ecology of Stray Dogs.

64. As garbage was increasingly moved outside of Cairo's walls, new extramural mounds developed and many dogs came to live near them. Decades later Cairo would grow beyond its walls and take over these spaces as well, pushing garbage and the city's dwindling dog population even farther away from the old city center. Following from Virginia DeJohn Anderson's work on cattle in colonial America, Aaron Skabelund suggests that canines may usefully be thought of "as an 'advance guard' to expansion and as 'agents of empire.'" Skabelund, *Empire of Dogs*, 13. Indeed, in the case of Cairo's rapid nineteenth-century growth, the city certainly expanded toward areas conquered first by canines. Dogs were pushed outside the city's walls into new territory by a bulging urban population, only to be pushed even farther as the city followed them and eventually took over that land as well.

65. Abu-Lughod, Cairo, 86.

- 66. On competing Egyptian and European views of disease in nineteenth-century Egypt, see LaVerne Kuhnke, Lives at Risk: Public Health in Nineteenth-Century Egypt (Berkeley: University of California Press, 1990).
- 67. Other potentially problematic sources of disease, filth, and putridity were cesspools, slaughterhouses, fishmongers, cemeteries, and sites of regular public urination and defecation. Later in the late 1860s and 1870s, 'Alī Mubārak, chief minister of public works, set about to remake Cairo to remove all of these danger zones. Fahmy, "An Olfactory Tale"; Mitchell, Colonising Egypt, 63–94.

63. Fahmy, "An Olfactory Tale," 166.

- 69. The medicalization of urban canine populations in the Ottoman Empire would continue to develop over the course of the nineteenth century and would eventually result in the establishment of, among other things, the Institute for Dog Medical Treatment (Dari'l Kelb Tedavihanesi) in Istanbul, a facility that fell under the administrative purview of the empire's general medical services. On the history of this canine institution, see BOA, Dahiliye Îdare \$5.5 (5 L 1328/10 Oct. 1910). Similar dog veterinary facilities would be established elsewhere in the empire as well. For example, see the following on the founding of a Canine Health Treatment Center (Köpek Hastalıkları Tedavihanesi) in the eastern Anatolian city of Erzincan in 1916: BOA, Dahiliye Nezareti Kalem-i Mahsús Müdüriyeti 43.36 (14 Ca 1334/19 Mar. 1916). Moreover, like humans and other animal populations, dogs would increasingly become subject to quarantine efforts in Egypt and other parts of the empire in the late nineteenth and early twentieth centuries. For example, in 1923, dogs coming to Alexandria from parts of Europe were kept in quarantine for ten days due to fears of the Nezareti İstanbul Murahhaslığı 82.42 (1 Sept. 1923).
- Already by the fall of 1820, Cairo's housing shortage was described as "critical." al-Jabarti, 'Ajā'tb al-Āthār (1994), 4: 444.

71. Lane, Manners and Customs, 284-85.

72. Indeed, at the linguistic and rhetorical levels as well, dogs seem to have been recoded in the early nineteenth century as particularly worthy of derision, disgust, hatred, and ultimately violence. Dog imagery was rarely used before the nineteenth century to insult or to illustrate the depravity, lowness, or disgusting character of humans. By the first few decades of the nineteenth century, however, we find quite a different story, with al-Jabarti, to take but one example, frequently using dog imagery and symbolism to critique human society. For instance, he describes those seeking customs concessions in the winter of 1812 as a bunch of "greedy dogs." al-Jabartī, 'Ajā'ib al-Āthār (1994), 4: 218. A few years later at the end of 1816, taxes on market goods were suspended for a short period during which people descended on the marketplace "like mad dogs" to secure meat, fruits, and vegetables. Idem, 4: 379. Elsewhere we read of treacherous soldiers as "fighting dogs" or of distrustful peasants as a pack of dogs. Idem., 3: 361; 4: 289. Later in the first half of the twentieth century, Egyptian social reformers sometimes referred to male youths milling about on the street as stray dogs." Omnia El Shakry, "Youth as Peril and Promise: The Emergence of Adolescent Psychology in Postwar Egypt," International Journal of Middle East Studies 43 (2011), 599. The identification of people with dogs is, of course, now a common means of insult in Egypt and in many other (perhaps almost all?) societies.

73. Lane, Manners and Customs, 285.

74. Barlier instances of keeping dogs as pets in Egypt show that it was almost exclusively a practice of the foreign-acculturated elite. For instance, a Turkish woman was observed in her harem in the 1840s with a pug that was obviously kept as her pet. According to the British observer of this companionate relationship, who very clearly believed that all Muslims reviled dogs,

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this woman kept "a little pug-dog, running about unconstrained all over the apartment, even upon the leewa'n, which is considered sacred, as being the usual place of prayer; but notwithstanding this little piece of uncleanness, was allowed full liberty, and every moment polluted the clothes of his mistress by rubbing up against them. She even patted him several times with her fair hand, and laughed at his barks and antics." James Augustus Saint John, *Egypt and Nubia* (London: Chapman and Hall, 1845), 239. For a statistical analysis of petkeeping attitudes in contemporary Kuwait, see Ghenaim Al-Fayez, Abdelwahid Awadalla, Donald I. Templer, and Hiroko Arikawa, "Companion Animal Attitude and its Family Pattern in Kuwait," *Society and Animals* 11 (2003): 17–28.

75. The British orientalist painter John Frederick Lewis (1804–1876) depicts a human-animal affective relationship in Egypt in his painting A Lady Receiving Visitors (The Reception), 1873. This is an otherwise unremarkable rendition of the European male imaginary of the inside of an Egyptian harem. Important for our purposes though is that the scene shows one of the women in the harem keeping a pet gazelle. The woman and animal look at one another with a clearly knowing gaze. I have been unable to find further evidence of the claim in the caption of this painting's home institution, the Yale Center for British Art, that the gazelle was "a favorite Egyptian house pet." John Frederick Lewis, A Lady Receiving Visitors (The Reception), 1873. Yale Center for British Art, Paul Mellon Collection, B1981.25.417.

John Frederick Lewis lived in Egypt from 1841 to 1851. Much of his early career was devoted to depicting animal life, which he studied beginning at an early age during visits to menageries in Exeter Change and Windsor Great Park. The title of his first exhibited work was A Donkey's Head. After his time in Egypt, however, his career came to be defined mostly by his orientalist paintings of desert scenes, the harem, life in Cairo, and Egyptian antiquities. Oxford Dictionary of National Biography (Oxford: Oxford University Press, 2004), s.v. "Lewis, John Frederick (1804–1876)" (Kenneth Bendiner).

76. Lane, Manners and Customs, 286-37.

- 77. With no significant familial ties, this single woman was marked as socially marginal. Drawing connections between dogs and the socially liminal or oppressed (single people, the homeless, criminals, and so forth) is a common trope in literature, art, and film. McHugh, Dog, 157–70.
- 78. There was precedent in ancient Egypt for honoring dogs with proper burials. George A. Reisner, "The Dog which was Honored by the King of Upper and Lower Egypt," Bulletin of the Museum of Fine Arts 34 (1936): 96–99; Tooley, "Coffin of a Dog from Beni Hasan."
- 79. The human mourning and lamentation of dead dogs also had ancient antecedents in Egypt. In the fifth century BCE, Herodotus observed that "in whoever's house a cat dies naturally, those who dwell in the house all shave their eyebrows, but only these; if the dead animal is a dog, they shave all their body and head." Herodotus, The History, trans. David Grene (Chicago: University of Chicago Press, 1987), 2.66.
- More generally on connections between human understandings of death and dogs, see McHugh, Dog, 18 and 39–48.

81, Lane, Manners and Customs, 286.

82. In true orientalist fashion, Lane offers the following sexist side comment about this: "For an Egyptian woman to keep a secret, and such a secret, was impossible." Ibid., 287.

- 83. On the commemorative practices of humans for their companion animals and what these practices reveal about the affective relationships between humans and animals, see Stanley Brandes, "The Meaning of American Pet Cemetery Gravestones," Ethnology 48 (2009): 99–118; Howard Williams, "Ashes to Asses: An Archaeological Perspective on Death and Donkeys," Journal of Material Culture 16 (2011): 219–39; Richard Chalfen, "Celebrating Life after Death: The Appearance of Snapshots in Japanese Pet Gravesites," Visual Studies 10 (2003): 144–56; Ingrid H. Tague, "Dead Pets: Satire and Sentiment in British Elegies and Epitaphs for Animals," Eighteenth-Century Studies 41 (2008): 289–306; Anna Chur-Hansen, "Cremation Services upon the Death of a Companion Animal: Views of Service Providers and Service Users," Society and Animals 19 (2011): 248–60; Howell, "A Place for the Animal Dead."
- 84. For a short history of dog cemeteries in Europe and the United States, see Bondeson, Amazing Dogs, 250–58. On the first American pet cemetery, see Edward C. Martin, Jr., Dr. Johnson's

- Apple Orchard: The Story of America's First Pet Cemetery (Hartsdale, NY: Hartsdale Canine
- 85. Never mind that the ancient Egyptian god of the dead, Anubis, had the canis head of a jackal. McHugh, Dog, 40-41.

86. Generally on the problems of urban dog feces and urine, see Beck, Ecology of Stray

- 87. On this point, Thorstein Veblen writes in his classic 1899 study of bourgeois sensibilities that "he $[the \ dog]$ is the filthiest of the domestic animals in his person and the nastiest in his habits. For this he makes up in a servile, fawning attitude towards his master, and a readiness to inflict damage and discomfort on all else. The dog, then, commends himself to our favor by affording play to our propensity for mastery, and as he is also an item of expense, and commouly serves no industrial purpose [in the capitalism of the nineteenth century], he holds a well-assured place in men's regard as a thing of good repute. The dog is at the same time associated in our imagination with the chase—a meritorious employment and an expression of the honorable predatory impulse." Thorstein Veblen, The Theory of the Leisure Class (Boston: Houghton Mifflin, 1973), 103.
- 88. On human interests in dog breeding and efforts to create canine breeds to fulfill certain human needs and desires, see McHugh, Dog, 58-126; Margaret E. Derry, Bred for Perfection: Shorthorn Cattle, Collies, and Arabian Horses since 1800 (Baltimore: Johns Hopkins University Press, 2003), 48-102.
- 89. On dog domestication, see Horowitz, Inside of a Dog, 38-41; Russell, Evolutionary History, 63-66; Coppinger and Coppinger, Dogs; Vilà et al., "Multiple and Ancient Origins of the Domestic Dog"; Miklósi, Dog Behaviour, Evolution, and Cognition; Serpell, Domestic Dog; Derr, How the Dog Became the Dog.

90. On these points, in addition to the work cited in the previous note, see also McHugh,

91. This point is made convincingly in Vilà et al., "Multiple and Ancient Origins of the Domestic Dog."

92. For an analysis of one particular Central Asian tale about wolves, see Namu Jila, "Myths and Traditional Beliefs about the Wolf and the Crow in Central Asia: Examples from the Turkic Wu-Sun and the Mongols," Asian Folklore Studies 65 (2006): 161-77. For a general cultural history of wolves, see Garry Marvin, Wolf (London: Reaktion Books, 2012).

93. Estimates for when dogs emerged as a distinct species range widely. Vilà et al., "Multiple and Ancient Origins of the Domestic Dog"; McHugh, Dog, 13.

- 94. D. K. Belyaev, "Destabilizing Selection as a Factor in Domestication," Journal of Heredity 70 (1979): 301-08; D. K. Belyaev, A. O. Ruvinsky, and L. N. Trut, "Inherited Activation-Inactivation of the Star Gene in Foxes: Its Bearing on the Problem of Domestication," Journal of Heredity 72 (1981): 267-74. For useful discussions of some of the important ramifications of Belyaev's experiments, see Lyudmila N. Trut, "Early Canid Domestication: The Farm-Fox Experiment," American Scientist 87 (1999): 160-69; Horowitz, Inside of a Dog, 35-37.
- 95. For a general discussion of canine genetics and its implications for both dogs and humans, see McHugh, Dog, 176-91.

96. Russell, Evolutionary History, 18.

97. Will Steffen, Paul J. Crutzen, and John R. McNeill, "The Anthropocene: Are Humans Now Overwhelming the Great Forces of Nature?" Ambio 36 (2007): 614-21.

98. Russell, Evolutionary History, 49; Paul J. Crutzen, "Geology of Mankind," Nature 415

99. For a historian's reflection on what the emergence of humans as a geological force means for the writing of history of, see Dipseh Chakrabarty, "The Climate of History: Four Theses," Critical Inquiry 35 (2009): 197-222,

100. Crutzen, "Geology of Mankind," 23.

102. Oman, Robock, Stenchikov, and Thordarson, "High-Latitude Eruptions."

103. One could, of course, make a similar point about other parts of the globe that witnessed massive social and political upheavals at the end of the eighteenth century. Events like the

French, Haitian, and American Revolutions; the Russo-Ottoman War; the first European settlement of Australia; the emergence of the Qajar Dynasty in Iran; the start of a fifty-year civil war in Tonga; and much else were all likely influenced—at least in part—by geophysical, climatic, and energetic changes associated with the beginnings of the Anthropocene.

104. In Edmund Russell's words, "We have accidentally shaped the evolution of populations by

altering environments." Russell, Evolutionary History, 43.

105. Khālid Fahmī, "al-Ra'īs Mursī wa Akhlāqiyāt al-Nazāfa," Akhbār al-Adab, August 14, 2012. Available at: http://www.jadaliyya.com/pages/index/6864/ (accessed January 17, 2013); Sarah El Deeb, "Egypt's Garbage Problem Continues to Grow," Huffington Post, September 1, 2012. http://www.huffingtonpost.com/2012/09/01/egypt-garbage-problem n 1849254. html (accessed January 17, 2013).

5. Enchantment

- 1. For an illuminating discussion of this and other accounts of conversion, see Tijana Krstić, Contested Conversions to Islam: Narratives of Religious Change in the Early Modern Ottoman Empire (Stanford, CA: Stanford University Press, 2011), 75-84.
- 2. For another story of imperial rivalry involving a horse, see the following account of equestrian competition among the ruler of the island sultanate of Aceh, the Portuguese, and—through his gift of a horse—the Ottoman sultan: Casale, Ottoman Age of Exploration, 180-81.
- 3. Osman II (r. 1618-22) seems to have been the Ottoman sultan who loved horses most, He regularly hunted on horseback, wrote poetry about horses, and was often depicted in Ottoman paintings atop a horse. Advice literature written during his reign invoked equestrian themes and connected his political career to his hunting life. Most tellingly, his horse was buried on the grounds of the royal palace in Üsküdar complete with a headstone commemorating the animal's life. Tezcan, Second Ottoman Empire, 118-19. For a comparative perspective on the use of animal tombstones, see Brandes, "Meaning of American Pet Cemetery Gravestones."
- 4. On the emergence and history of the Ottoman-Safavid rivalry, see Adel Allouche, The Origins and Development of the Ottoman-Safavid Conflict (906-962/1500-1555) (Berlin: K. Schwarz Verlag, 1983); Jean-Louis Bacqué-Grammont, Les Ottomans, les Safavides et leurs voisins: contribution à l'histoire des relations internationales dans l'Orient islamique de 1514 à 1524 (Istanbul; Nederlands Historisch-Archaeologisch Instituut te Istanbul, 1987); Maḥmūd Hasan 'Abd al-'Azīz al-Şarrāf, Ma'rakat Chāldārān, 920 H/1514 M: Ülā Şafahāt al-Şirā' al-'Uthmānī al-Fārisī: al-Asbāb wa al-Natā'ij (Cairo: Maktabat al-Nahda al-Misriyya, 1991).
- 5. Generally on Ottoman-Mughal relations, see Naimur Rahman Farooqi, Mughal-Ottoman Relations: A Study of Political and Diplomatic Relations between Mughal India and the Ottoman Empire, 1556-1748 (Delhi: Idarah-i Adabiyat-i Delli, 1989); Bernard Lewis, "The Mughals and the Ottomans," in From Babel to Dragomans: Interpreting the Middle East (New York: Oxford University Press, 2004), 108-14; Muzaffar Alam and Sanjay Subrahmanyam, Indo-Persian Travels in the Age of Discoveries, 1400-1800 (Cambridge: Cambridge University Press, 2007), 298-303. On the related topics of the Ottomans in the Indian Ocean and Ottoman-Portuguese rivalry, see Özbaran, Ottoman Expansion towards the Indian Ocean; idem., Ottoman Response to European Expansion; idem., "A Turkish Report on the Red Sea and the Portuguese in the Indian Ocean"; idem., "Ottoman Naval Power in the Indian Ocean in the 16th Century"; Casale, Ottoman Age of Exploration; idem., "Ottoman Administration of the Spice Trade"; Reid, "Sixteenth-Century Turkish Influence in Western Indonesia"; Tuchscherer, "La flotte impériale de Suez."

6. For a useful holistic treatment of the three major empires of the early modern Muslim world, see Stephen F. Dale, The Muslim Empires of the Ottomans, Safavids, and Mughals (Cambridge: Cambridge University Press, 2010).

7. The literature on Indian Ocean trade is obviously enormous. Most indispensible for me have been K. N. Chaudhuri, Trade and Civilisation in the Indian Ocean: An Economic History from the Rise of Islam to 1750 (Cambridge: Cambridge University Press, 1985); idem., The Trading