

CALGARY: City of Animals

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The background of the entire page is a painting. It depicts a dog, possibly a German Shepherd, seen from the side and back, looking out over a vast, hazy landscape. The landscape is composed of rolling hills and mountains in shades of brown, orange, and red, suggesting a sunset or sunrise. The sky is a mix of light blue and white. The dog's fur is dark with some lighter patches, and its ears are pointed upwards.

silence of the song dogs

shelley m. alexander

university of calgary

The background of the page is a painting of a mountain landscape. In the foreground, there are rolling hills in shades of brown, orange, and red. In the middle ground, a large, dark, conical mountain rises against a pale, hazy sky. The overall style is impressionistic with soft, blended colors. A faint, dark silhouette of a coyote is visible in the lower-left corner of the painting.

Entertaining the notion of a City of Animals, we are challenged to accept animals like coyote: animals that are critical to biodiversity but confront our world order by sometimes living in our backyards, sometimes consuming our pets. We are required to envision how we can co-flourish, and to dream how we can fully consider these “others” –the non-human animals from which, Darwin so nicely articulated, we differ only by degree and not by kind. We must rethink our ideas of the human as central figure in this animal place. We must also visualize the expectations, ethics, and politics that entrain this place. As I see it, coyote marks our toughest journey of reconciling the self with “nature.” Having circumvented the challenges of the human world, coyote has thrown down the gauntlet—in response, we must aspire to a higher consciousness and broader compassion. We must dream our song dog back home.

The challenge of embracing coyotes in the City of Animals begins with highly polarized beliefs about species: beliefs about where coyote belongs, which behaviours are appropriate around people, what rules govern the human-coyote relationship, and whether we should kill coyotes when they break with expected norms. The dichotomous beliefs surrounding this 35–40 lb. wild dog are echoed in the multitude of names given to it, including, among others: Song dog, Trickster, Creator, Killer, Invasive Species, and Pest. Distilled further, challenges arise because of a collective intolerance of innate coyote behaviours, particularly aggression toward pets and people (i.e., attacks). This, despite aggression being an evolved trait that confers survival to all dogs and a trait tolerated within bounds when perpetrated by the family dog. The lack of willingness to tolerate certain levels of aggression in coyotes results in routine execution of these animals in order to maintain safe cities or safe places for people. I dream of a City of Animals that is inclusive. But this will require shifting our collective boundaries and tolerances around species like coyotes (or raccoons, beavers, skunks, and other “typical pests”). This chapter explores some of the issues surrounding this long-standing and ever-changing relationship that may help us envision this new city—a city that embraces coyote.

human-coyote co-evolution

Our relationship with coyote encapsulates the dissonance in our negotiations with many animals, wild or urban. It raises tough ethical questions about the too-often ugly truths of our inhumanity toward all animals.

The human relationship with coyote is an enduring one, but it is only recently that it has become complicated, estranged, and sometimes unhappy. The archeological evidence shows coyote (*Canis latrans*) evolved and is only found on the North American continent. In its current form it has enjoyed ubiquitous distribution across the continent for over one million years. As species go, coyote is old. It has witnessed the rise and fall of such iconic species as the Woolly Mammoth, Dire Wolf, Sabre-Toothed Tiger, and countless others that migrated to this continent during the last great ice age. With human occupation estimated to be less than 15,000 years before present, one might argue that early humans actually co-evolved with coyotes on the Coyote Continent. Not surprisingly, because coyotes predate human occupation, the species holds a central and sometimes revered role in many Aboriginal stories. Coyote is trickster, song dog, shape-shifter, and creator: these evocative stories depict a deep, sometimes mystical relationship between early humans, coyotes, and the environment, while illuminating ecological facts about the species that have only recently been “discovered” by Western scientists.

Revered by North American Aboriginal cultures, coyotes were subsequently persecuted without restraint by European settlers from the mid-1800s onward. Coyotes were systematically killed en masse (along with other carnivores) as part of a continent-wide effort to sterilize the land and make it suitable for cultivation and stock production. The killing mentality has migrated across generations and space, to become, in some social sectors, a de facto way of living on the land—killing coyotes is just part of what you do. Today, there are few animal-related issues that polarize Canadians like coyotes. Media debate erupts at the mere mention of the species, yielding evidence of a growing sector that disapproves of killing coyotes. Despite that voice, coyotes still hold the unenviable title of North America’s most persecuted carnivore.

The numbers of coyotes killed might be astonishing to some. In a seminal work, Fox and Papouchis (2005) estimated that over 500,000 coyotes are killed annually in the United States—a statistical trend that is echoed in Canada. That translates to a kill rate of at least one coyote per minute. The trend shows little abatement despite public backlash. In 2009 alone approximately 70,000 coyotes were killed in Saskatchewan, alongside several thou-

sand in Ontario and Nova Scotia during government-sanctioned bounties (Alexander and Quinn 2012). In tandem, dozens of coyote bodies were found dumped in Alberta—ears cut off and reportedly taken into Saskatchewan to be cashed in illegally for the \$20 bounty (Alexander and Quinn 2012). Disturbing as it may be to someone who cares for animals, the magnitude of these kills should not come as a surprise. Most provinces consider coyote a pest species, have no limits to killing, and do not legally require citizens to report killing coyotes (Alberta Environment and Sustainable Resource Development 2012). More difficult to grasp, perhaps, are the inhumane ways in which coyotes are killed or treated. They are shot, trapped, poisoned with strychnine, and sometimes just wounded for sport; coyotes are also hung upside down and dead from fence posts “to teach other coyotes a lesson to stay away.” The motivations for such human behaviour are not well understood, but in their worst manifestations are obviously perverse.

Our contemporary relationship with coyote is made more challenging by the fact that they have learned to live among us humans in ways we seemingly had never imagined possible. Their heightened adaptive capacity conferred by a million years of evolution and fine tuning to our North American environment means that coyotes can survive almost anywhere—from the desert, to lush forests, and into the densest of urban cities. Unfortunately, by “setting up shop” in cities, coyote has confronted our average sensibility of which species belong in the wild and which belong in the city. Calgary—A City of Animals—exists mostly in the Foothills Parkland Natural Region—an area that has and will always be home to coyote. In this space, people have argued they see more coyotes because coyotes are expanding in numbers and have invaded our city. Evidence I have found reading from all types of sources, from early explorers’ journals to Aboriginal stories to contemporary science, suggests that the rate of interaction has actually increased because human numbers have swelled in tandem with an expansion of our city footprint into coyote’s sacred spaces. Recognizing and reconciling ourselves to the reality that we have borrowed coyote habitat may be one necessary shift toward realizing Calgary as a City of Animals.

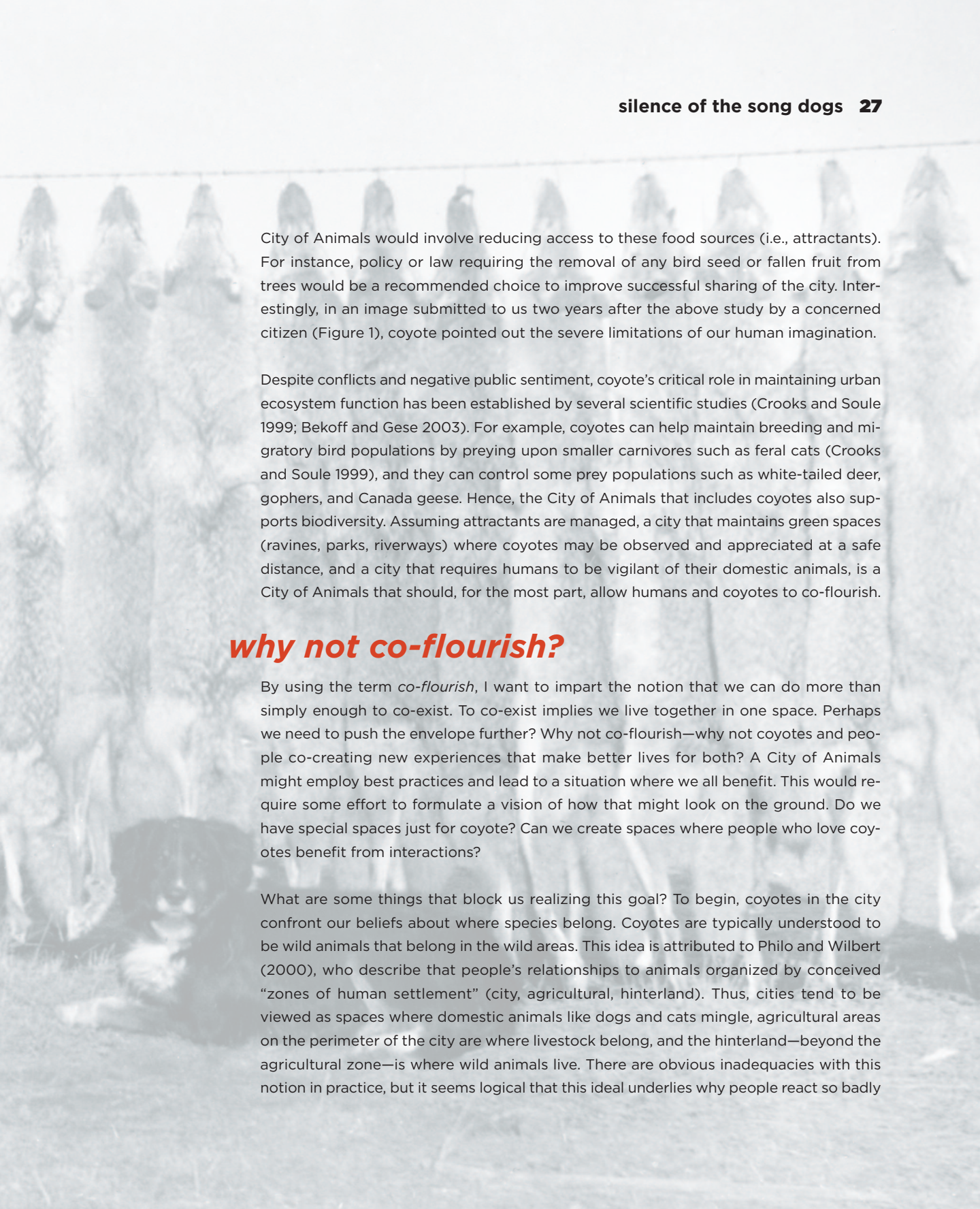
Likewise, my research has led me to believe that our relationship to coyote reflects a dissonance in our choices around greener cities. Some people describe a desire for green spaces and a love of the attending biodiversity, such as the riverside parks and protected ravines in Calgary. Yet those same people sometimes do not want coyotes in those spaces. Even though we know the predator is essential to urban biodiversity, it is not welcome to intrude in these private spaces (e.g., our backyard or ravine) or to injure or kill our most precious belongings (e.g., pets), despite the fact that this is all appro-

priate behaviour for any coyote. Wild behaviour in the city seems to be misunderstood as incorrect behaviour, for the simple reason that it is happening in the city. But coyote has no concept of urban and rural etiquette. This presents obvious challenges to achieving the City of Animals. It forces us to answer tough questions: What behaviours will we tolerate, which species will we allow to live with us, how many can live in our shared urban spaces, and under what circumstances do we silence song dogs? In total, a City of Animals that includes coyotes leaves us to re-conceive of a moral compass that can adequately guide these relationships. We do not have a clearly articulated ethical framework to attend to the liminal species, such as habituated coyotes: they are neither fully wild nor fully domestic. Our existing ethical frameworks might help us make decisions about when to end a domestic animal's life based on compassion or unacceptable levels of aggression within the human framework. But what do we make of a wild animal, with ephemeral dependence upon humans, that becomes aggressive toward people in the city? When or what behaviours are un-wild enough that it appropriate to choose its fate? A vision of the City of Animals might include moral consideration for animals despite their position on the domestic-to-wild spectrum. It is increasingly apparent that this new vision requires understanding coyote ecology as well as human attitudes, beliefs, and behaviour toward the species (Treves and Bruskotter 2014).

we understand coyote ecology in the city

Coyote is distributed from California to Newfoundland, and from Alaska and the Canadian Northwest Territories to as far south as Panama. Evolution has conferred adaptive capacities that allow coyotes to exploit most habitats, including cities. Coyote ecology in cities is pretty easy to understand: if there is food and shelter—even if it's a garbage can and a culvert—and minimal threats, coyotes will persist and reproduce. While they likely are living an impoverished life in the city—not unlike that of someone forced to live on the street after living in a house—they persist: they live. Sadly, when confronted with regular human food attractants, individual coyote behaviour may change and they can become food conditioned and act aggressively toward people.

Quite fortunately in Calgary, coyotes consume a largely natural diet of small mammals, fruits, and other vegetation. However, they also eat human source foods (e.g., bird seed, crabapples, and garbage). While the procurement of human food is not surprising, the amount of scats containing human food may be cause for concern: in one study, one in six scats contained detectible garbage (Lukasik and Alexander 2012). And, while scant, approximately 1.5 per cent of scats contained pets (cat and dog). Avoiding conflict in a



City of Animals would involve reducing access to these food sources (i.e., attractants). For instance, policy or law requiring the removal of any bird seed or fallen fruit from trees would be a recommended choice to improve successful sharing of the city. Interestingly, in an image submitted to us two years after the above study by a concerned citizen (Figure 1), coyote pointed out the severe limitations of our human imagination.

Despite conflicts and negative public sentiment, coyote's critical role in maintaining urban ecosystem function has been established by several scientific studies (Crooks and Soule 1999; Bekoff and Gese 2003). For example, coyotes can help maintain breeding and migratory bird populations by preying upon smaller carnivores such as feral cats (Crooks and Soule 1999), and they can control some prey populations such as white-tailed deer, gophers, and Canada geese. Hence, the City of Animals that includes coyotes also supports biodiversity. Assuming attractants are managed, a city that maintains green spaces (ravines, parks, riverways) where coyotes may be observed and appreciated at a safe distance, and a city that requires humans to be vigilant of their domestic animals, is a City of Animals that should, for the most part, allow humans and coyotes to co-flourish.

why not co-flourish?

By using the term *co-flourish*, I want to impart the notion that we can do more than simply enough to co-exist. To co-exist implies we live together in one space. Perhaps we need to push the envelope further? Why not co-flourish—why not coyotes and people co-creating new experiences that make better lives for both? A City of Animals might employ best practices and lead to a situation where we all benefit. This would require some effort to formulate a vision of how that might look on the ground. Do we have special spaces just for coyote? Can we create spaces where people who love coyotes benefit from interactions?

What are some things that block us realizing this goal? To begin, coyotes in the city confront our beliefs about where species belong. Coyotes are typically understood to be wild animals that belong in the wild areas. This idea is attributed to Philo and Wilbert (2000), who describe that people's relationships to animals organized by conceived "zones of human settlement" (city, agricultural, hinterland). Thus, cities tend to be viewed as spaces where domestic animals like dogs and cats mingle, agricultural areas on the perimeter of the city are where livestock belong, and the hinterland—beyond the agricultural zone—is where wild animals live. There are obvious inadequacies with this notion in practice, but it seems logical that this ideal underlies why people react so badly

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to the presence of coyotes in cities. Challenges to co-flourishing may rest largely on unarticulated concept of place, which may then inform our beliefs and behaviours toward coyotes. In a media content analysis (Alexander and Quinn 2012) and in current interviews conducted by the Foothills Coyote Initiative, the following juxtaposed statements convey some of the beliefs about coyote in the city (www.ucalgary.ca/canid-lab):

“This is our home not theirs . . . coyotes are invading the city”

“Coyotes were here first”

“It’s OK for them [coyotes] to kill a rabbit out in the wild but we shouldn’t have to watch that in the city”

“Live and let live . . . but I’d need to kill it if it came in the yard or hung around my animals”

“You have to keep the balance of nature—don’t kill coyotes, they keep the balance”

“You have to keep the balance of nature—it is important to kill coyotes or the ecosystem will go out of balance”

“I’m afraid to go outside, I shouldn’t have to live like this”

“If a coyote killed my animals, I would feel like I failed
—failed my animals and the coyote”

Reflections upon the situation of coyotes in the city, if uninformed, can lead to belief that coyotes pose a risk to humans, then feelings that we or our loved ones (including pets) are in danger, followed by behaviour of killing coyotes to mitigate perceived risk. Yet the risk is extremely low. Correcting perceptions through education may be a necessary component of the City of Animals. But what do we know of this risk right now? My previous research showed that on average three people per year were reportedly bitten or scratched (i.e., attacked) by coyotes in Canadian urban centres (Alexander and Quinn 2011). These findings are consistent with the US statistics. Pets are killed by coyotes, but not as frequently as we imagine. Small dogs are at the greatest risk, in part because they are small and in part because they look like prey to a coyote. Notably, while some small dogs were killed in their yards, over 50 per cent of those attacks were interrupted when a person intervened by going into the yard and yelling or throwing things at the coyotes, and the dogs survived despite these being predatory events. Recent interviews conducted for the Foothills Coyote Initiative have reported similar find-

ings. Yelling at coyotes, though not a recommended daily activity, is often enough to send them running and stop the predation of a domestic animal at critical times, such as when your animal is being attacked. Another way to minimize chances of attack is to become aware of your environmental and the coyote life cycle, and be vigilant during these times. For example, Lukasik and Alexander (2011) identified three key conflict drivers in Calgary, and these are largely driven by coyote ecology:

Coyote conflict reports were significantly higher during the pup-rearing season (April–June) and the dispersal period (September–November).

Neighbourhoods with ravines, river valleys, or small green spaces experienced higher conflict.

Higher rates of conflict were associated with areas in which coyotes ate more garbage.

Coyotes can be more aggressive in particular during the denning season. At this time, coyotes are more likely to protect pups and act defensively or offensively toward dense intrusions. The general descriptions of behaviour and wounds inflicted by coyotes during these altercations are consistent with territorial fights between coyotes. Hence, there is strong evidence that if people are vigilant, engaged, and take precautions to leash their dogs and stay out of denning areas then the chance for conflict or attack could be dramatically reduced, thereby avoiding the routine killing of coyotes.

why not kill?

The trouble with killing as a management technique or to control coyote behaviour is primarily that it has been shown for years to be ecologically destructive and ineffective (Crabtree and Sheldon 1999). The higher kill rate can result in a younger and younger population of coyotes (Treves and Naughton-Treves 2005). And while populations of resilient species like coyotes may rebound quickly, this regrouping is generally accompanied by the breakdown of social structure, more breeding by younger individuals, and stifling of cross-generational teaching that may be helping to mitigate attacks by coyotes on people, pets, and livestock. The scientific evidence shows that killing leads to more solitary transient individuals entering areas that previously had stable packs, and these poorly educated, younger animals may be more prone to develop dependencies on human foods or develop “risky behaviours” like killing pets and livestock (Fox and Papouchis 2005; Shivik, Treves and Callahan 2003). Gordon Haber, who spent over

forty-three years observing wolves in Alaska, spoke out for decades against the contemporary practice of killing for management (which usually prescribes killing 50–70 per cent of the population per year). Haber argued that managing wild canids by determining acceptable numbers to kill affronts our knowledge that each wolf is an individual and an important family member with particular social roles.

your calgary—a city of animals

We need to find a better solution than killing, and we must dream big. I know that living in a City of Animals will be worth it, but recognize that it will test our boundaries—perhaps beyond what we humans will be willing to concede. I believe our challenge is to push beyond co-existence and to co-flourish. If your City of Animals aims to be biodiverse then our collective understanding of predators (coyotes, owls, skunks, among others) needs to be recrafted. To truly be a City of Animals will require accepting unpleasant ecological realities, such as:

when your domestic animal leaves the safety of your home it
becomes part of the food chain

when you enter the private spaces of a coyote you might be bitten

aggression is natural, evolved, and necessary for coyotes

we can mitigate being the target of aggression by controlling
our attractants and being vigilant about pets

coyotes (like all non-human animals) are just living; humans construct conflict.

Somewhere right now a coyote lies in silence, dead, after writhing in futile anguish for hours against a leghold trap. Chances are that in the time you finish reading this paper, another twenty have died; perhaps because of having killed a beloved pet dog or nipped somebody's hand—perhaps just because they were coyotes. Killing coyotes is not a requirement, it is a choice. It is Your City of Animals—Your Choice.

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