Center for Environmental Research at Hornsby Bend

Austin Water

The Pastoral City: Urban Domesticated Animals

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Austin Water – Center for Environmental Research

Human Perspectives on Nature and the City

- The Sacred and the Mundane (Profane)
- Wilderness and the City
- Natural vs. Artificial
- Pristine vs. Degraded
- Native vs. Nonnative

Once a rock dove, now the winged rat of the city

Socioecological Narratives of Urban Nature

- What it is
- What it does
- What it means
- Where it is

Geography

Proper Place for Urban Wildlife? **All of the City is Habitat**

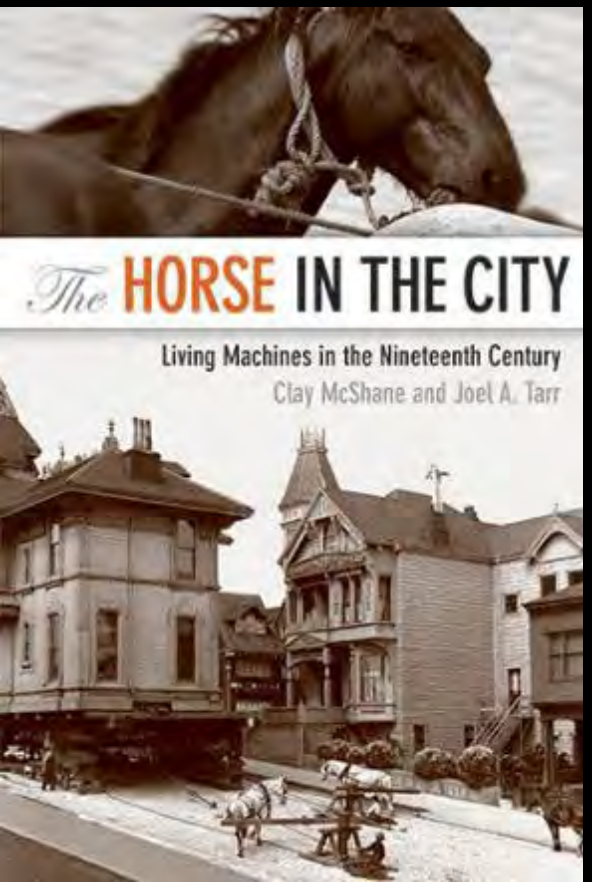
The mobility of urban wildlife allows them to exploit the entire city as habitat and ignore human boundaries for proper urban nature.

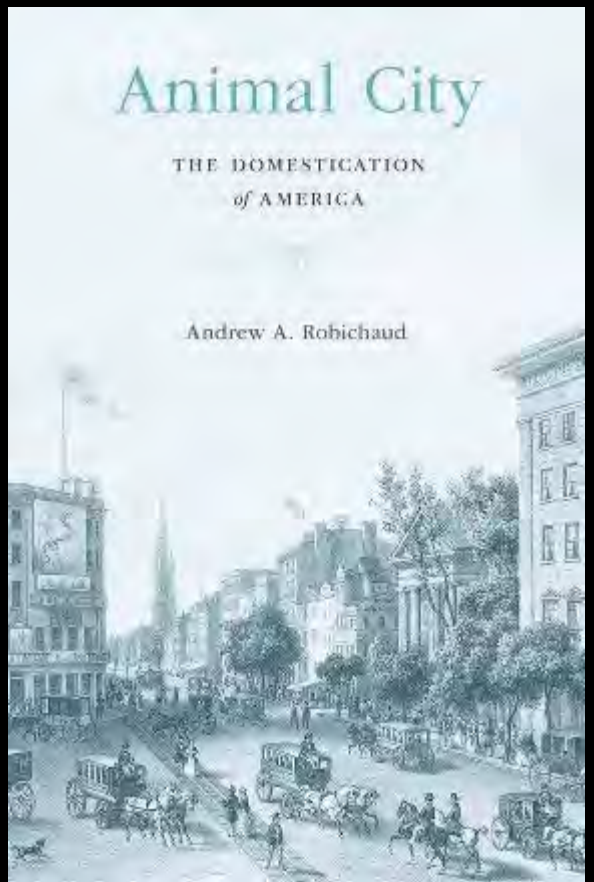
The Counter Narrative - Proper Place of Urban Nature?

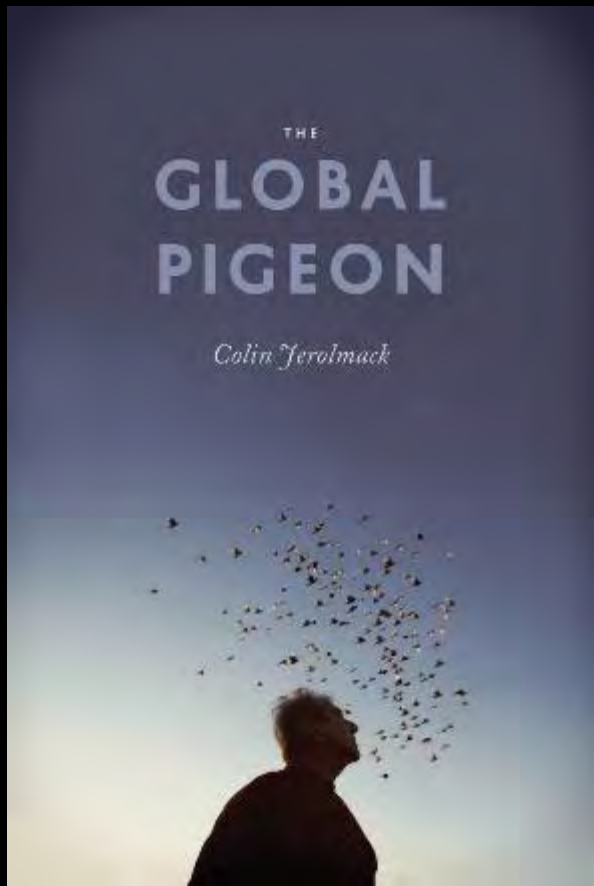
The Nonhuman City and American Urban Environmental History

"Domesticated" Animals and Cities

Horses, Pigs, Sheep, Cattle, Rabbits, Chickens, Ducks, Pigeons

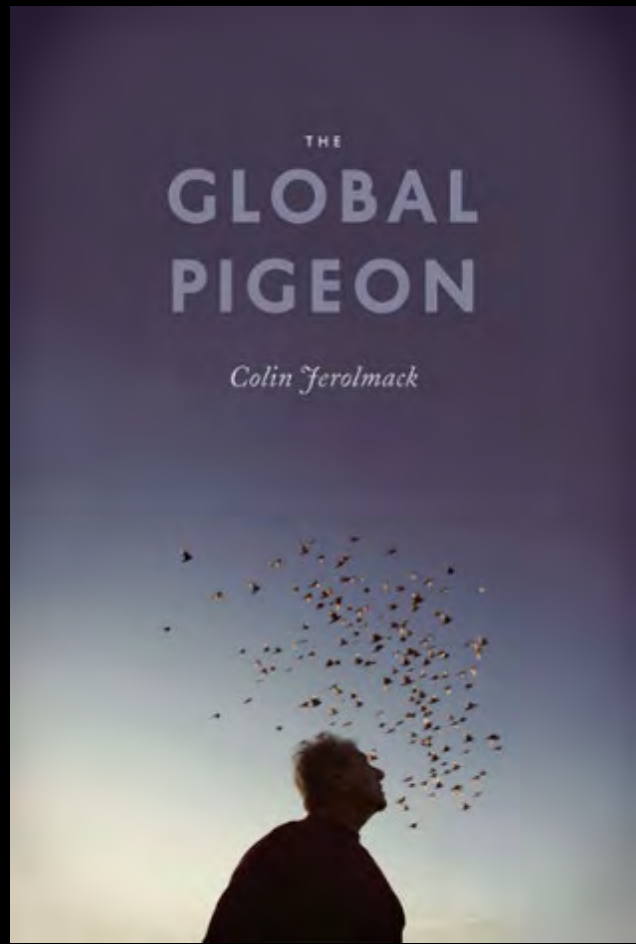






Synanthropes

A synanthrope is an organism that evolved to live near humans and benefit from human settlements and their environmental modifications



What is the relationship between urban humans and nonhumans?

Who Benefits and Who Harms? Commensal, Mutual, Parasitism



Ecological Relationships

Commensalism – an ecological relationship between two organisms in which one benefits and the other derives neither benefit nor harm. Bird Nests and Trees

Mutualism – an ecological relationship in which both organisms benefit from each other. For example, pollinators, such as bees, butterflies, and hummingbirds, benefit because they eat the collect pollen and/or nectar that they collect from flowers. Oxpeckers and African Herbivores

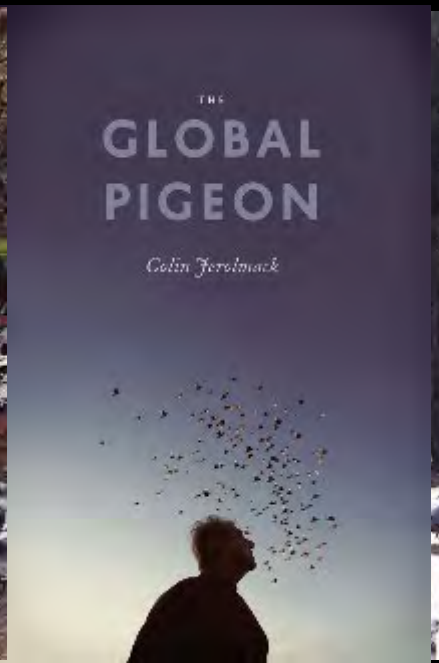
Parasitism – a symbiotic relationship in which one species (the parasite) benefits while the other species (the host) is harmed. Avian brood parasitism

Pigeons as Synanthropes? “Pedestrians”

“…as an urban sociologist, I see them as **pedestrians**: literally walking on the sidewalk and sitting on benches with us.

And they’re pedestrian in the other sense of being common and mundane. ***They use public space just like people do, and they affect how we interact in public space***.”

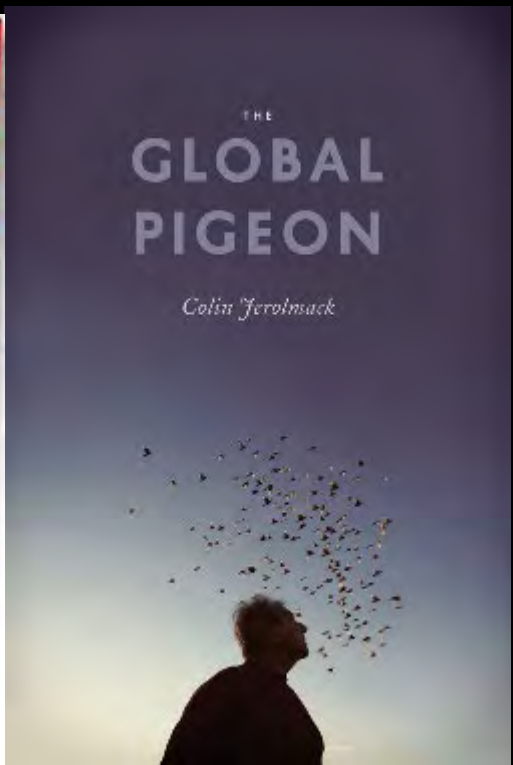
Jerolmack 2013



A Surprising Cultural Ecosystem

"Pigeons are a pervasive component of the urban landscape that inspire a uniquely visceral reaction from residents and tourists alike. **Their ubiquity defies our consistent desire to control the natural world**, represented by the range of physical interventions we've inserted into the built environment to repel them.

A closer look at human-pigeon relationships reveals **a surprising cultural ecosystem** as well: from the casual interactions these birds provoke in small parks to the time-honored practice of breeding and flying domesticated pigeons from outer borough rooftops."



Cultural Ecosystem - Pigeon Flying – Rooftop “Stock” Flying

“Pigeon flying has a long history in New York City, as well as in Chicago, Philadelphia, Baltimore, and elsewhere. People have bred pigeons across Europe and the Middle East for thousands of years and immigrants brought the practice to the United States. In *On The Waterfront*, it wasn’t just Marlon Brando’s character who had pigeons on his rooftop; all the mobsters had pigeons. From my rooftop in Brooklyn, I could see six or seven “stocks” at once, with hundreds and hundreds of pigeons.

For these men, much of their life is outdoors, on the roof, engaging with nature. They are vessels of knowledge about the city as an ecosystem and they actively insert themselves into that urban ecology. ”

Rooftop Cultural Ecosystem – A Social Thing

"What they do changes with the seasons. They have to be aware of the patterns of predatory animals like hawks, falcons, and even sometimes seagulls, and they have to be wary of street pigeons who can transfer diseases to their birds. They have to have an understanding of genetics and breeding.

When I was first writing about these guys, I had this romantic idea that this was their way of connecting with nature, that through their birds they could escape the concrete jungle. That wasn't the case at all. **It's a social thing, an informal competition**."

A Social Thing - A Formal Competition

American Pigeon Racing

Another Urban Cultural Ecosystem - Pigeon Racing

"**The idea here is to use the homing ability of pigeons**. You can take them to a place they've never been and through their ability to sense electromagnetic radiation, see ultra-violet light, and use the sun as a compass …**they can find their way home**…in the Bronx these men can put their pigeons on a truck and the truck can drive to Virginia. Then the pigeons can fly home four to five hundred miles and generally do it one day, a single day.

[The winner is] the fastest pigeon measured by yards per minute (its velocity). So there's a measurement from the starting point to each racer's coop, where the birds are released. Everyone has exact GPS measurements."

Pigeon Racing – Cultural Diversity

Joe Green's brothers introduced him to pigeon racing in 1979. Green, 46, tends to his birds every day at the Three Amigos loft in Gravesend, Brooklyn. "In the New York area, we don't have as many pigeon fliers as we want to, but we still got enough to keep the sport going."

Sometimes Green races his pigeons against birds belonging to his childhood friend Mike Tyson. The former boxing champion started raising pigeons to find some peace high above the commotion of the streets.

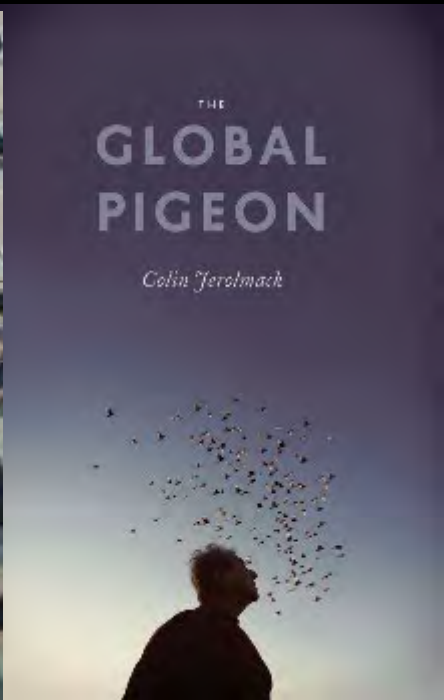
For many fanciers — a person who keeps pigeons — the tranquility of the coop counterbalances the chaos of life.

The Sacred and The Profane

"In the end, we are left with a central paradox of urbanized society's relationship to the environment: we believe that encounters with 'nature' transcend social life, yet our experience of nature is profoundly social.

Seeing the social in nature appears threatening to many environmentalists and nature lovers because it breaches the barrier between the sacred and profane worlds."

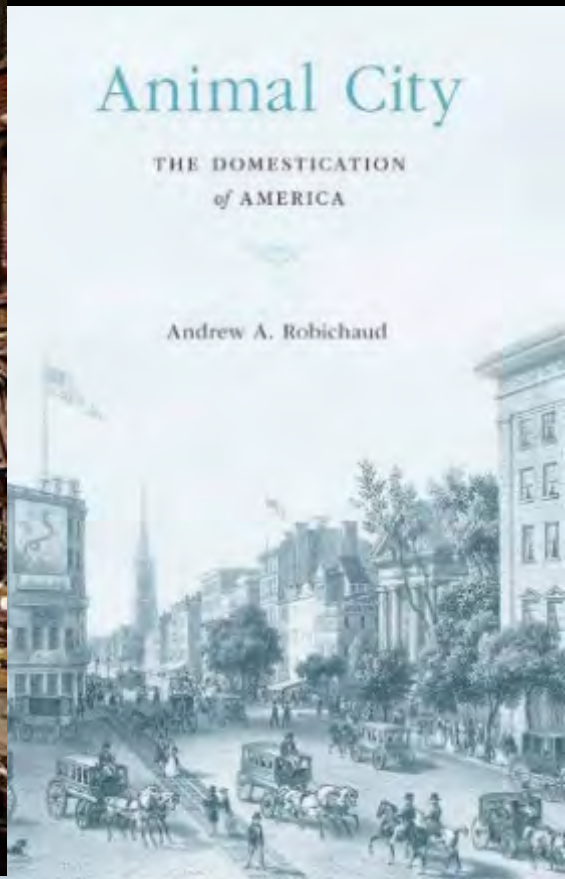
The Social in Urban Nature – Domesticated Urban Nonhumans



Cultural Ecosystem - Domesticated Animals in American Cities

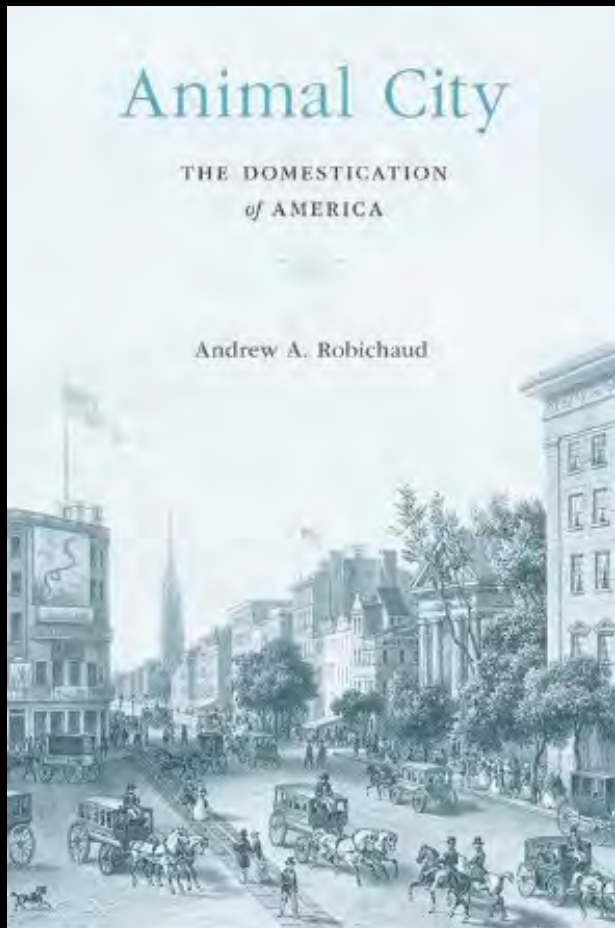
"Americans once lived alongside animals. They raised them, worked them, ate them, and lived off their products.

This was true not just in rural areas but also in cities, which were crowded with livestock and beasts of burden."



The Pastoral City: Urban Domesticated Animals

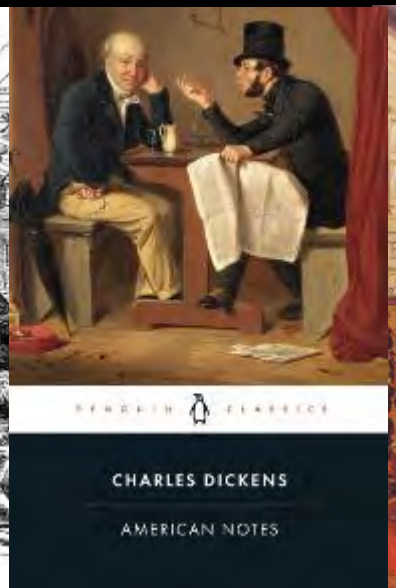
"As Americans made their way into burgeoning cities in the early nineteenth century, many brought with them the cows, horses, and other animals that had previously defined their ways of life."



The Urban Pig – Dickens in America 1842

Stepping onto Broadway, Dickens encountered “two portly sows” and “a select party of half-a-dozen gentlemen hogs” among the bustle of coaches. Dickens was captivated by the free and easy swine lifestyle—“[He] leads a roving, gentlemanly, vagabond kind of life, somewhat answering to that of our club-men at home…**He is in every respect a republican pig, going wherever he pleases, and mingling with the best society, on an equal, if not superior footing, for everyone makes way when he appears**.”

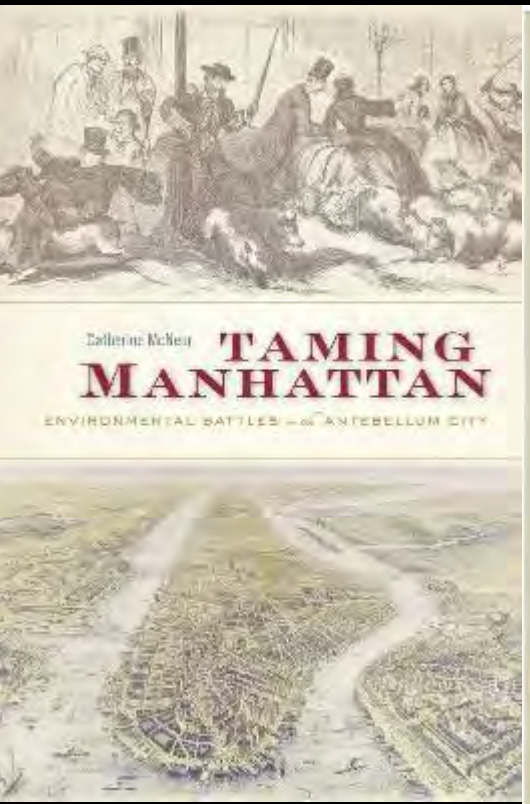
“They are never attended upon, or fed, or driven, or caught, but are thrown upon their own resources in early life, and become preternaturally knowing in consequence. Every pig knows where he lives, much better than anybody could tell him. At this hour, just as evening is closing in, you will see them roaming towards bed by scores, eating their way to the last.”

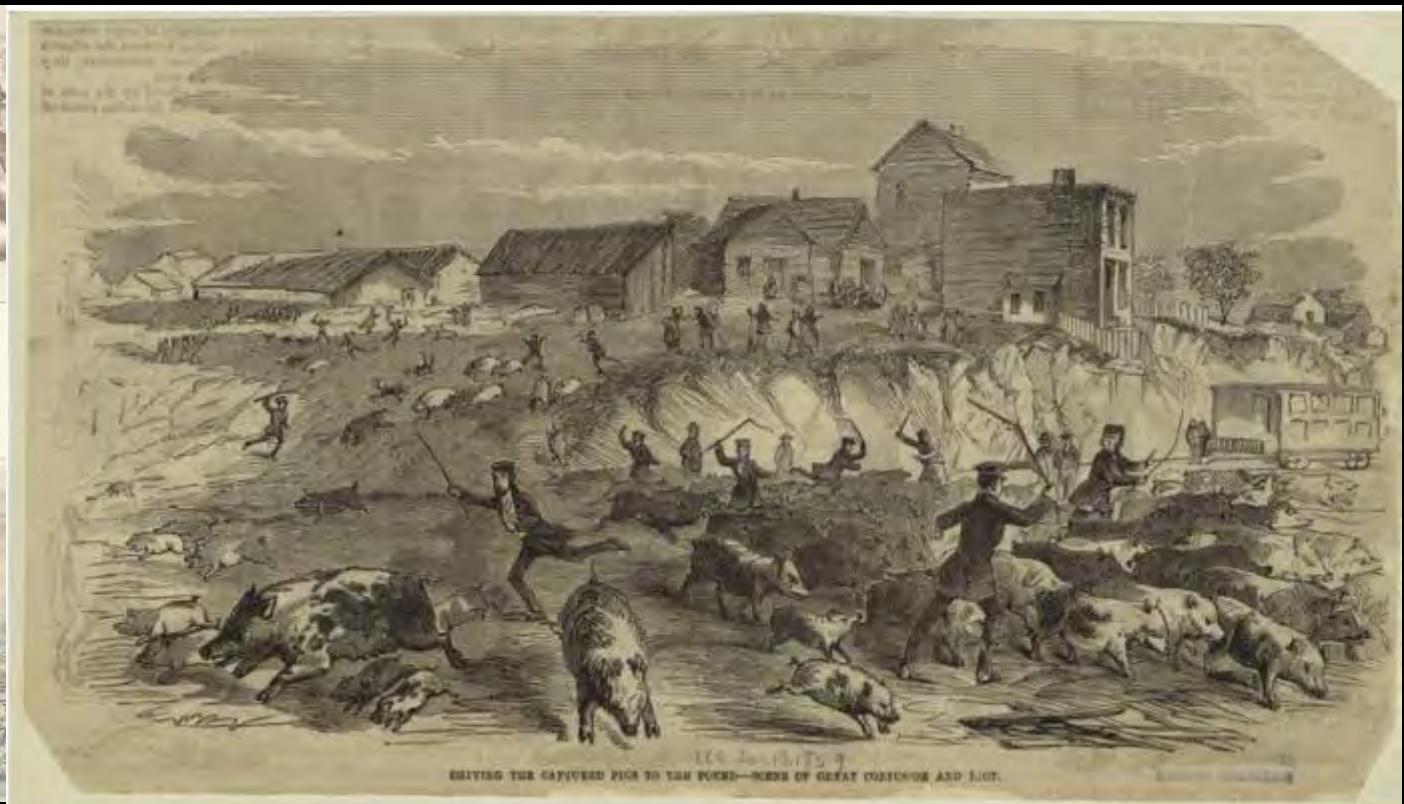


The Roving Urban Pig

"In New York, pigs wandered around the streets and consumed a lot of the garbage that was left on the curbs. ***They weren't feral - they were mostly owned by the city's poor--but you couldn't identify who their owners were.***

Pigs got into people's yards, messed up pavements, etc. but it was hard to pin who was responsible for the pig so restitutions couldn't really be made. Laws were passed again and again making it illegal to let pigs run free, but the city really didn't have the power to collect them all and send them to the pound."

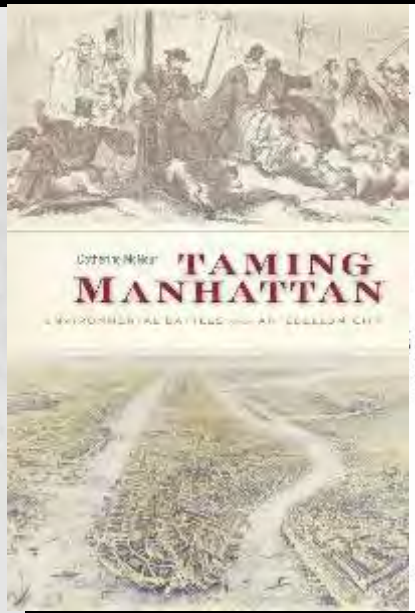


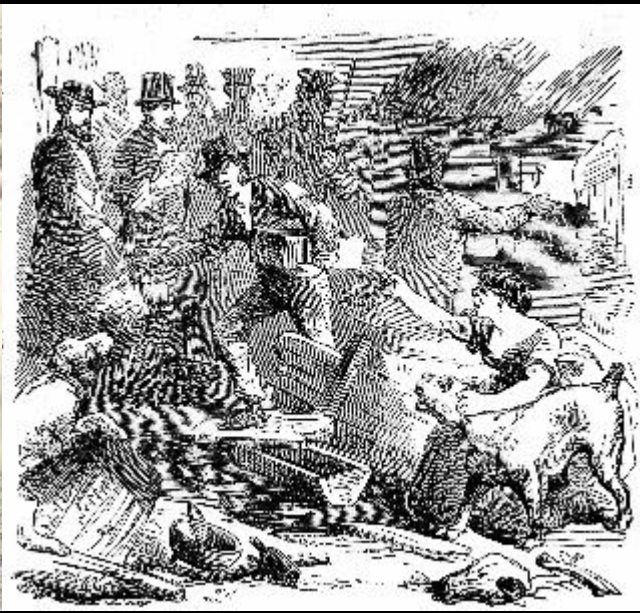


The Piggery War of 1859

In 1849, new local laws banned livestock keepers completely inside the city limits, **even penned pigs ("piggeries") were pushed further and further from the center of town as the city expanded**. Most of the urban farmers were forced to move to a section of present-day Midtown Manhattan between Sixth and Seventh Avenue– which was then a mostly empty meadow at the northern edge of town.

In 1859, a new law banned all piggeries and offal-boiling establishments south of 86th Street. Troops consisting of sanitary inspectors and municipal police visited each piggery in what is now midtown Manhattan and warned the proprietors that if they didn't remove their businesses in three days, the police would return to do it for them. When they did try to enforce the law, riots ensued! **Women were actually instrumental and most violent in a lot of these riots, because they cared for the pigs**.





The Urban Cow - The Chicago Fire of 1871

Late one night, when we were all in bed,
Mrs. O'Leary lit a lantern in the shed.
Her cow kicked it over,
Then winked her eye and said,
"There'll be a hot time in the
old town tonight!"

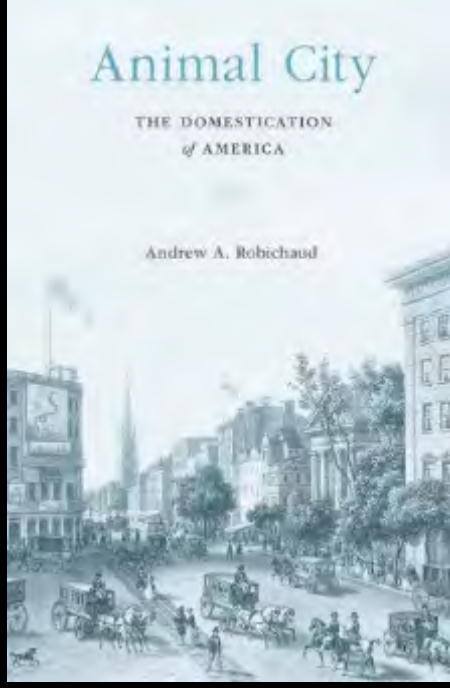
Popular Song Lyric

The Urban Cow

"The idea of a city cow, and the oddity of it, was one that emerged over time"

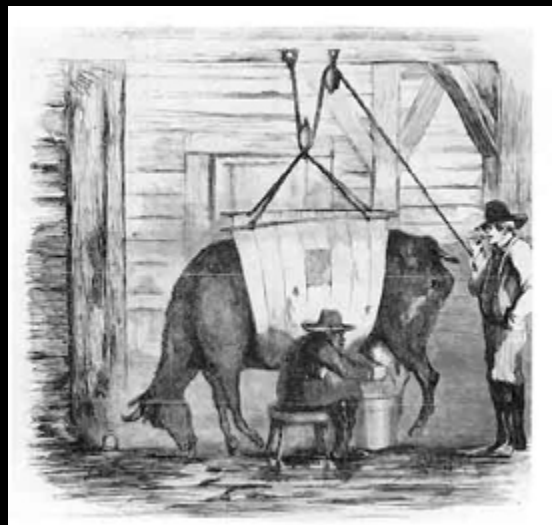
"When Americans took up new types of urban work, many did not completely disavow agricultural relationships with animals. ***There was no clean break between agriculture and industry, between country labor and city labor.***

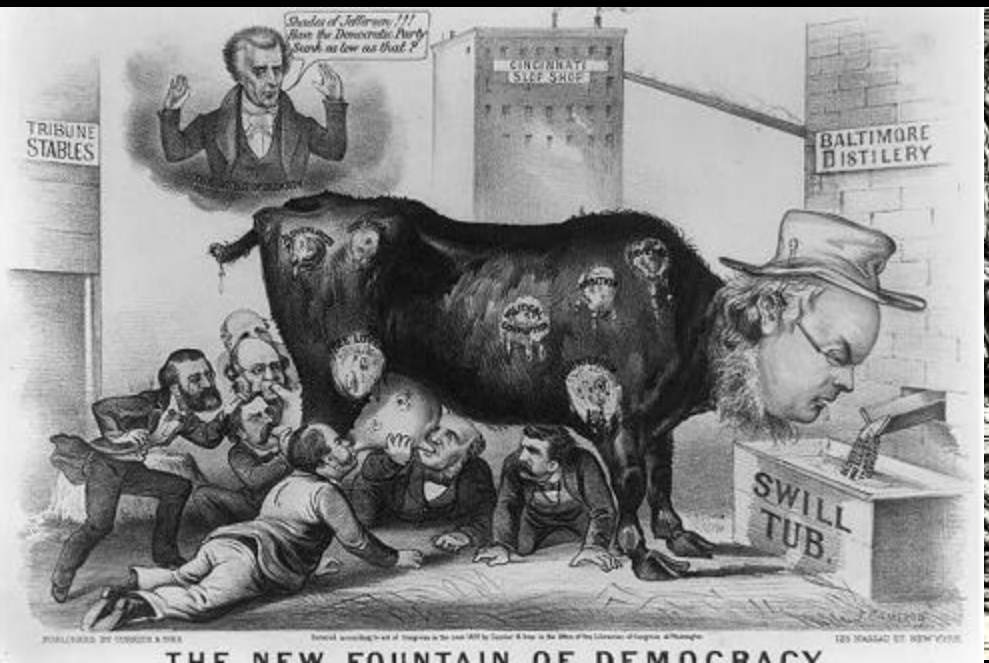
A worker might have labored all day in a shop before returning home to milk and feed a family cow. (Quite often women were responsible for the work of milking.)"



The Urban Cow Hazards

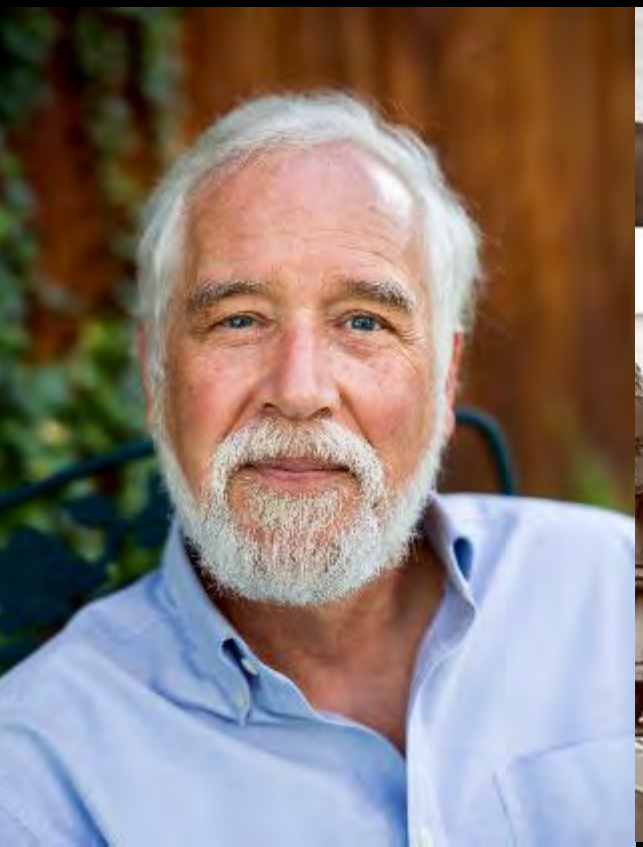
- Slaughterhouses and rendering establishments rubbed shoulders with other downtown businesses, and cattle drives were common hazards on city streets.
- Swill milk – urban dairies and feedlots where cattle were fed on distillery swill (mash). There are 18,000 cows living in these cramped feedlots in the 1840s.
- Outrage over the poor quality of swill milk inspired the first animal cruelty reforms in the country, led largely by the American Temperance movement.

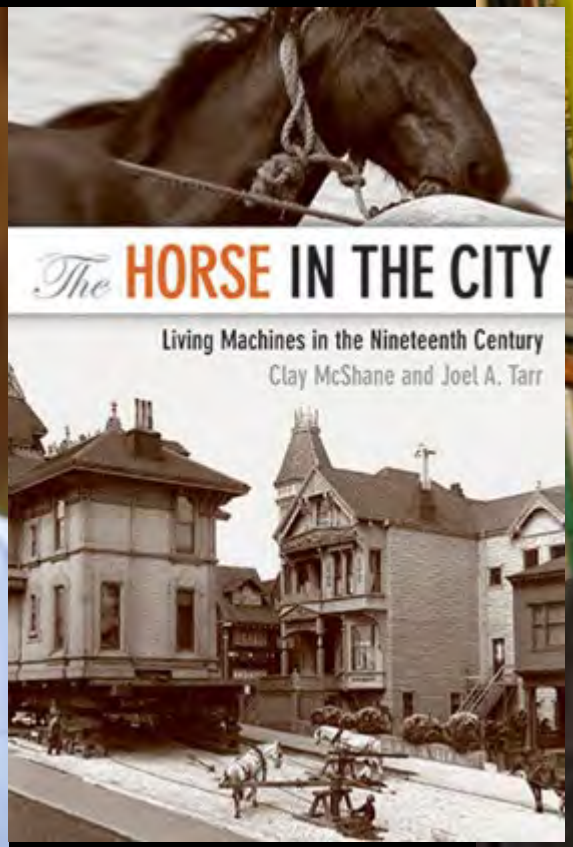


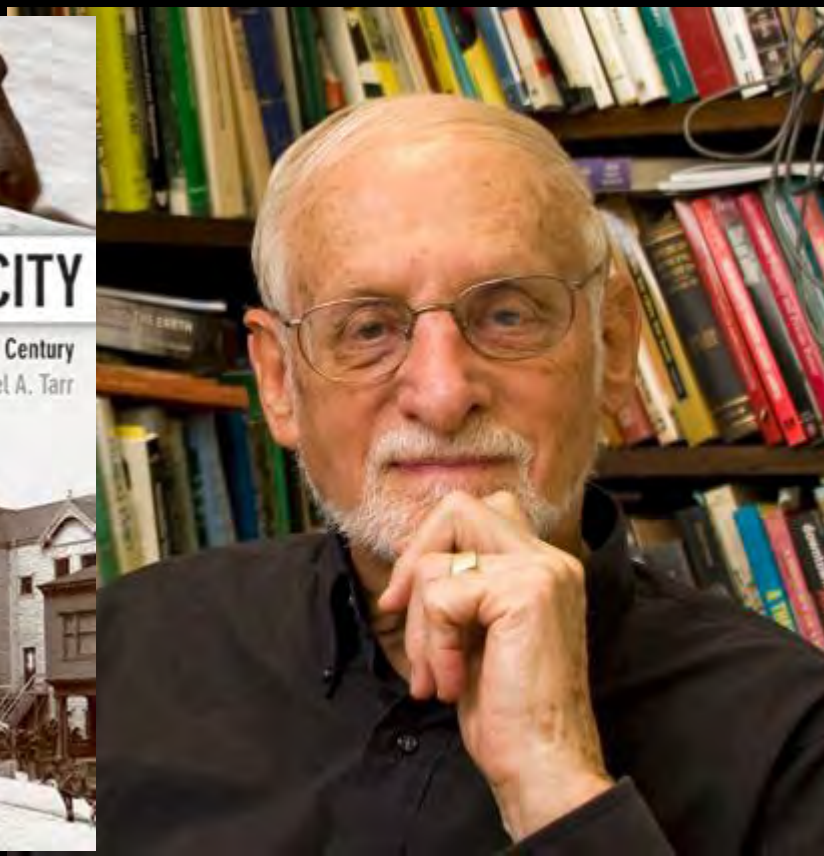


The Urban Horse – The Living Machine

The phrase highlights how horses were viewed as **essential, functional "living machines" that powered the growing urban centers of nineteenth-century America**, performing vital work in transportation, construction, and industry, while also presenting complex challenges for city dwellers.







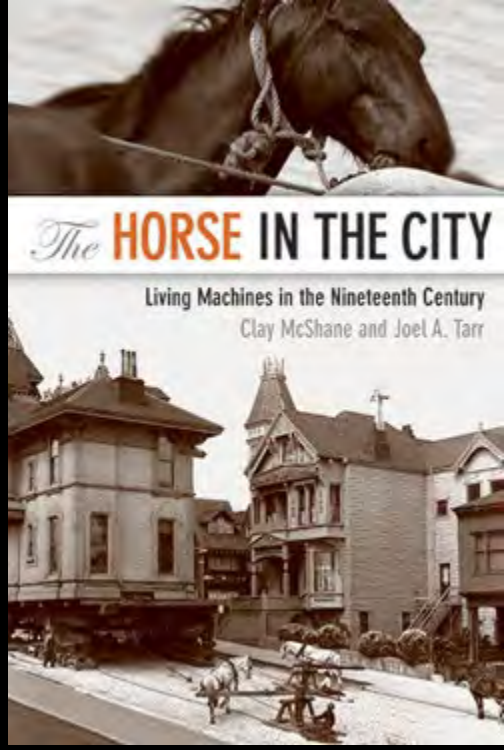
The Urban Horse

Nineteenth-century cities with populations over 100,000 averaged roughly one horse for every fifteen people, although the ratio of humans to horses varied widely from city to city.

Even where the ratio was low, however, the total number of horses could be quite large.

In 1900

- Manhattan - 130,000 horses
- Chicago - 74,000 horses
- Philadelphia - 51,000 horses



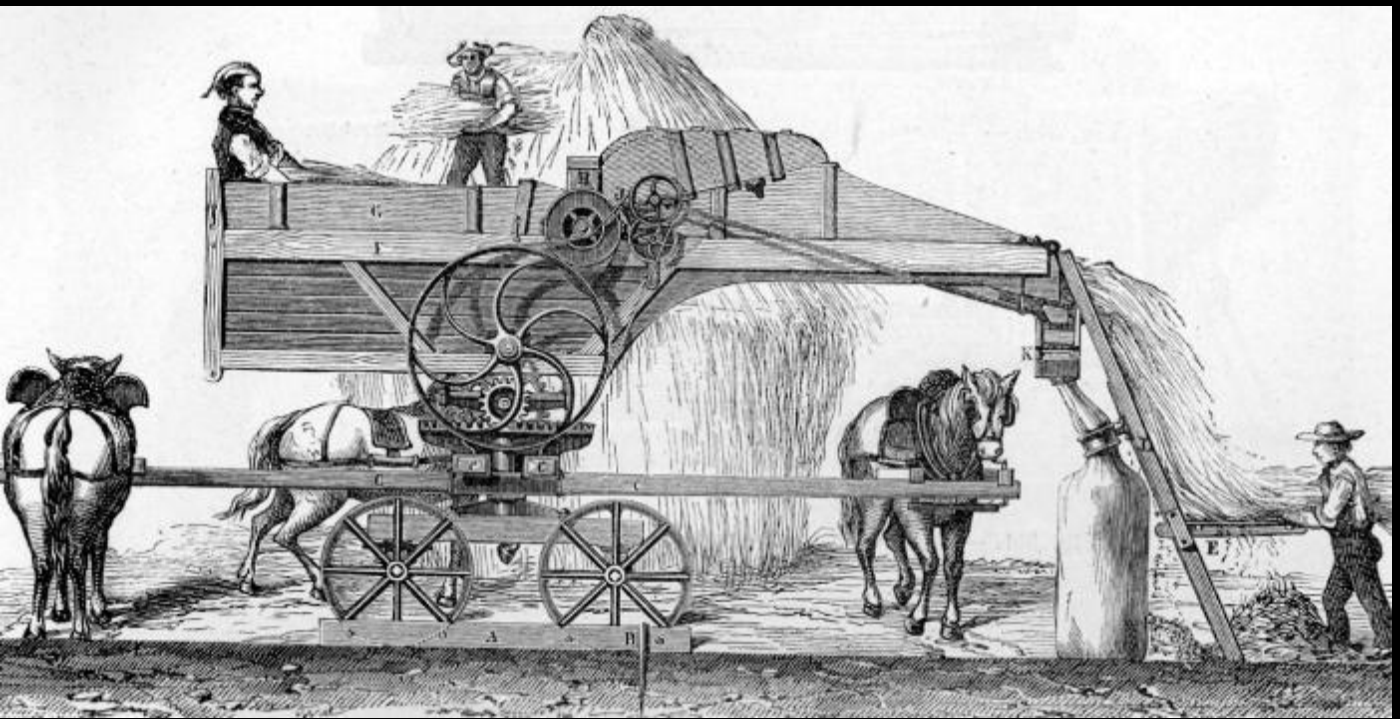
The Urban Horse as a Living Machine

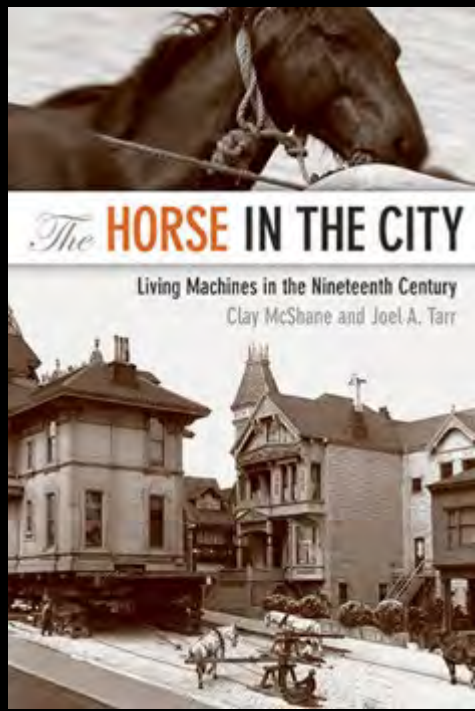
James Watt patented his steam engine 1775

- Creates a measure "horsepower" – 33,000 foot-pounds of work per minute by experimenting with horses

"The efficiency of horses…was not just a matter of strength but also their fuel consumption, initial cost, and maintenance in comparison to other animals, steam engines, or, later, electric motors.

For some loads over distances, horses were more profitable than steam."





The Peak of Urban Horses 1850s-1900

- 1850s transition from Omnibuses/carriages to streetcar
- “The power of a horse on the rail is four times as much as on the pavement.”
- Cost less – and steam engines more expensive and dangerous (explosions)
- Average streetcar horse – 5 years working 5 hours a day

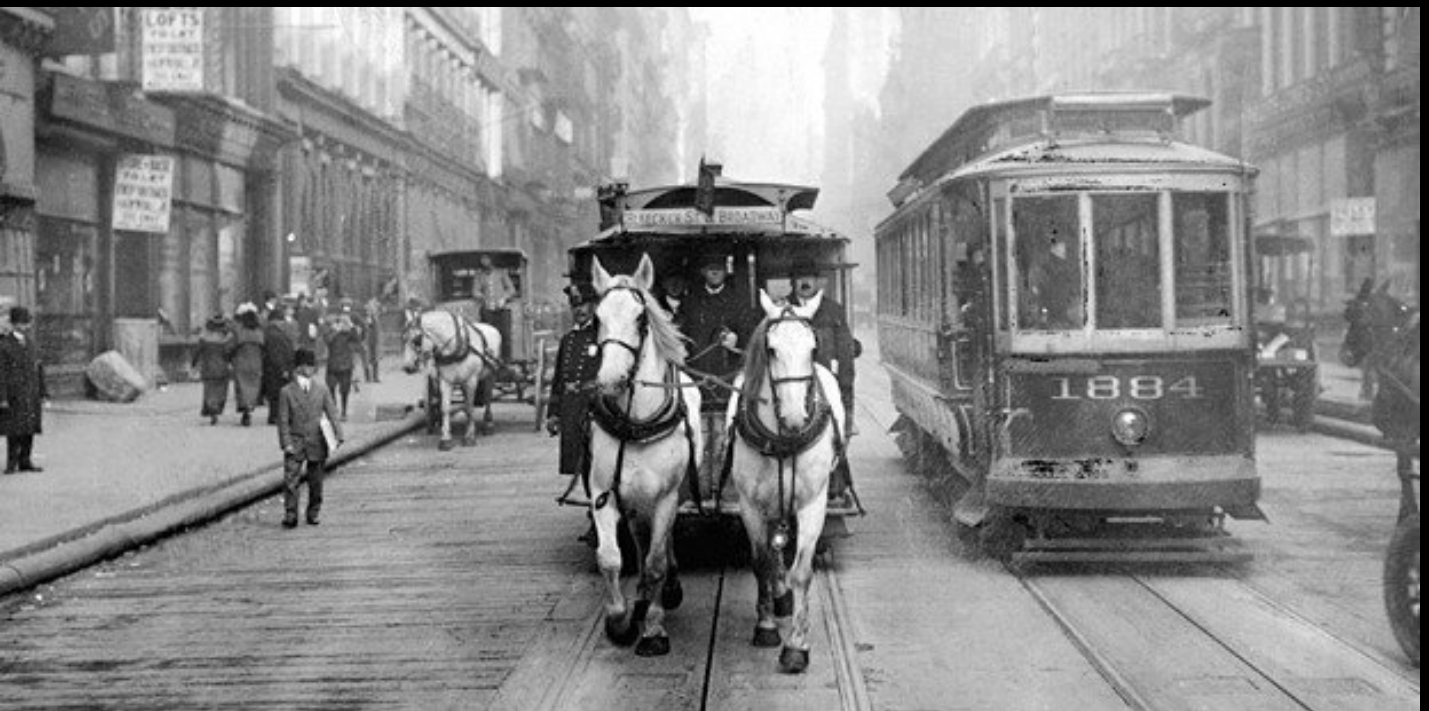
The Urban Horse Economy

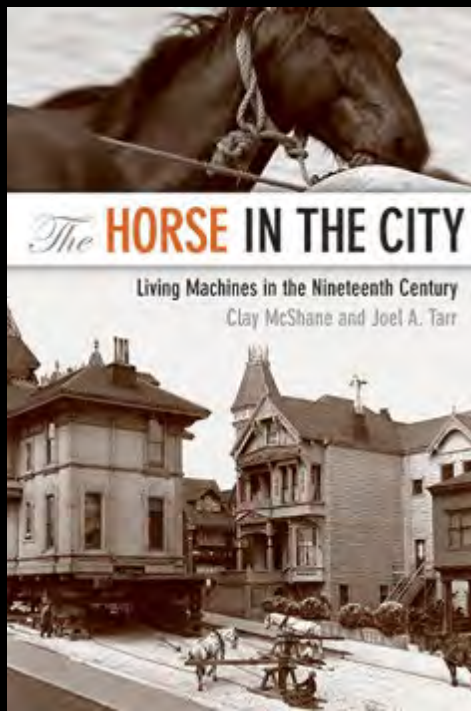
- **Marketing from Farm to City** – Chicago Stockyards 180,000/year
- **Commodifying Horse Waste** – 30-50lbs/day, farmers hauled it back after produce market delivery until 1860s (Pacific guano, rock phosphate)
- **Commodifying the Dead Horse** – 1880s Manhattan 8,000 dead/year, New York Rendering Company – hair, meat, hide, hooves, bones, vapors (ammonia), fats - $24 per carcass
- **The Urban Horse as Consumer** (feed and land)
  - 1900 – 3 million urban horses consumed 7.7 million tons of hay, 8.8 million tons of oats using 12.2 million acres (4 acres/horse) New England hay until 1830 – bulk crops close to cities
  - 4.5 million horse farms (10% urban)
- **Urban Horse Support Industry**
  - 1890 – 9,163 carriage/wagon businesses with 90,000 workers, over 1 million vehicles worth $32 million and horse cloth, harness, whips, shoes, saddles
  - Stables, veterinarians

The Disappearance of The Urban Horse

Electric Streetcars and Population Growth

- **Population growth** - Rush hour volume – each horse pulling 27% more passengers in 1890 than 1880 in NYC, traffic jams
- **The Suburb and hauling distance** – transit over 30-40 minutes = need for more speed extending commuting range and enlarging value of suburban land
- "*Early trolley cars traveled at roughly double the speed of their living predecessors, quadrupling the land available for settlement within a half hour of downtown*."





The 20th Century City – Gasoline Machines vs Living Machines

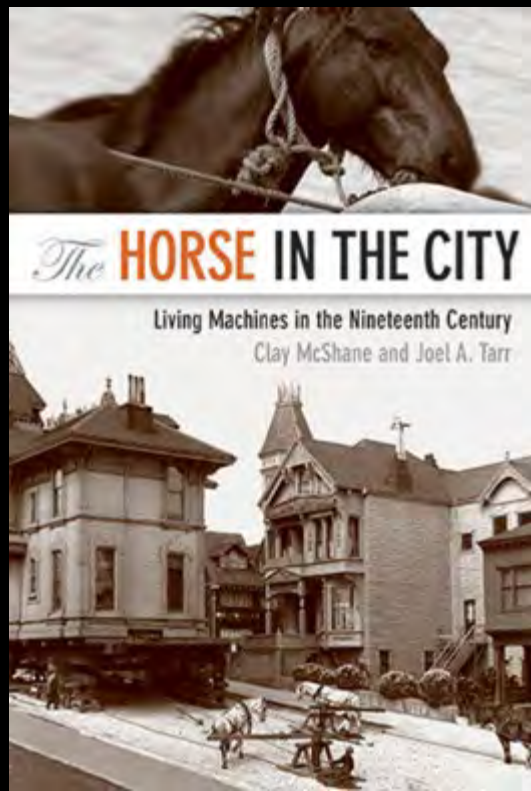
Gasoline engines – trucks for long-haul work not downtown – "the horse made economic sense for short-haul work in the city…ability to maneuver…for deliveries the involved considerable stopping and starting." **Milkmen until 1940s**

"The automobile, however, as it evolved, came to symbolize modernity…for all the horse's critical role as a flexible and evolving technology in the nineteenth century city, it could not accommodate the requirements of the modern city."

- Automobiles displace streetcars, subways/Elevated were built
- Manhattan – 6 humans/registered car, 27 humans/horse

But still today –

"We measure engine performance by horsepower and truck drivers still call themselves teamsters, both links to an equine past."



Other Urban Living Machines

A small animal power for use with a dog, sheep or goat.

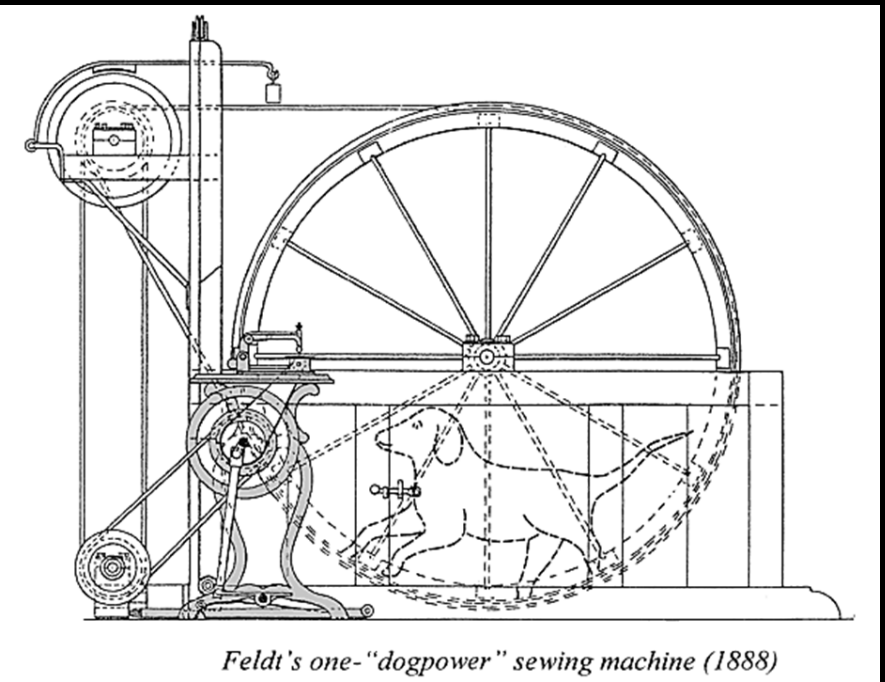
"The rear of the track frame can be easily raised or lowered by means of a lever operating a ratchet mechanism. The angle of the track is adjusted for the weight of the animal and the work required.

The power available from a treadmill is dependent on the weight of the animal and the angle of the tread, not on the strength of the animal.
The dog simply climbs the tread to maintain his position and gravity does the work."

The Living Machine

"Unquestionably a power propelled by sheep is much the cheapest, and most efficient of any of those in use.

A sheep will churn two or three times a day, even in warm weather, without inconvenience; is much less expensive to keep than a dog, as its food is mostly grass."



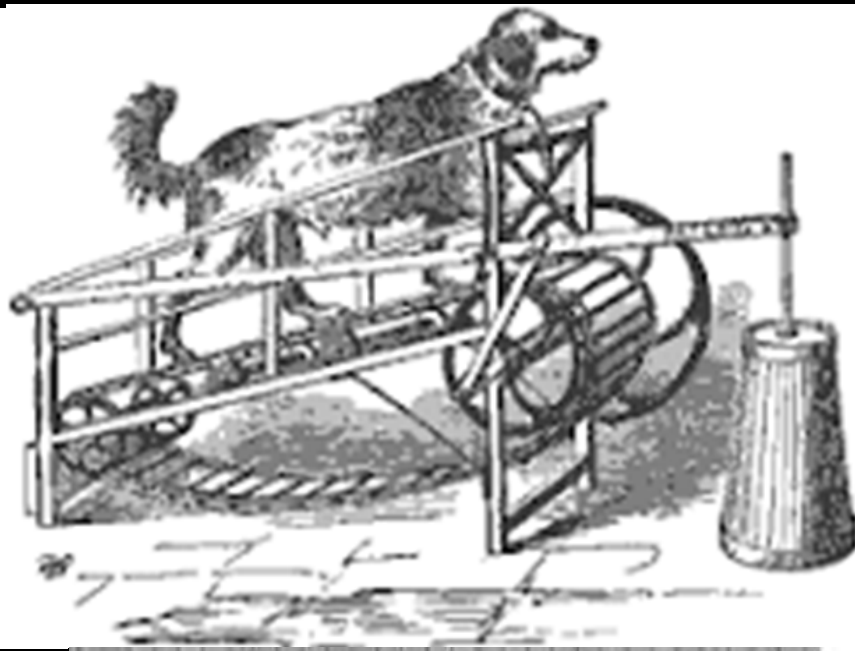
Feldt's one-"dogpower" sewing machine (1888)

The Urban Dog Machine – Past – Dog Power

First Prize Dog Power.

No. 16924. This power can be operated by a dog, goat or sheep; yields 25 per cent. more power from a given weight of animal than any other, and with adjustable bridge to regulate the required power and motion, a 30 pound animal will do the churning; if you keep a dog, make him "work his passage." The power can be connected to any churn sold by us.

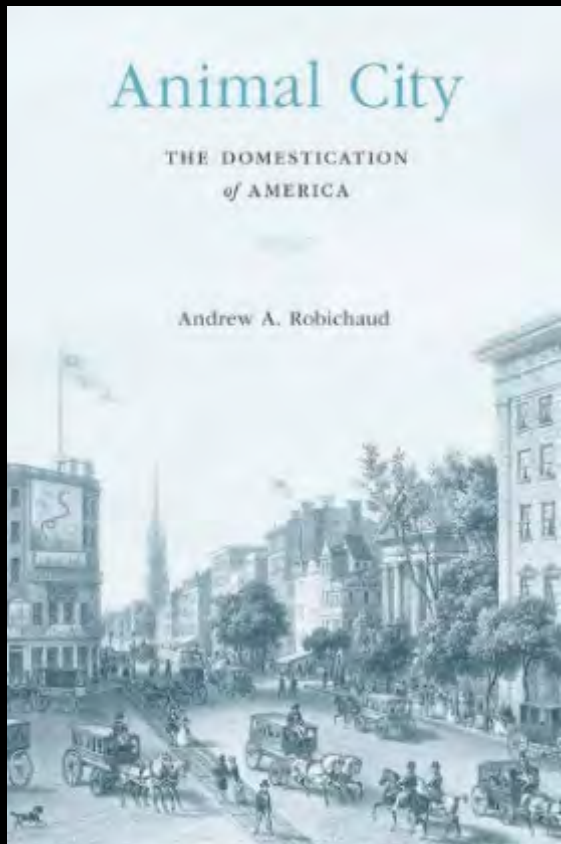
Price $15.00



The Social in Urban Nature

"But as urban areas grew in the nineteenth century, these relationships changed. Slaughterhouses, dairies, and hog ranches receded into suburbs and hinterlands.

Milk and meat increasingly came from stores, while the family cow and pig gave way to the household pet."

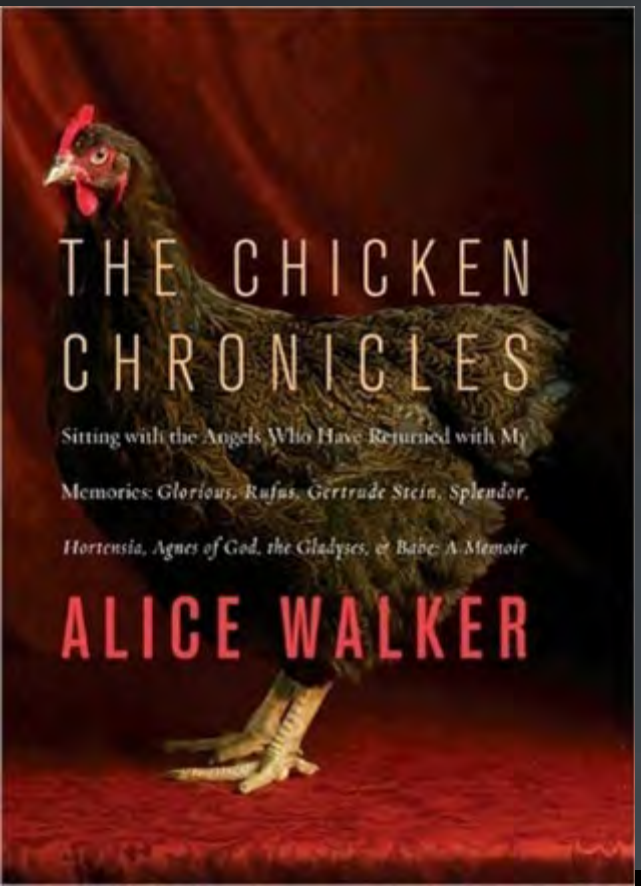


The Urban Dog Machine - Present

The Human Machine - Present

Nonhuman Pastoralists Today - Urban Domesticated Animals

"Our experience of nature is profoundly social."



Dark Pastoral – Death on the Farm

Murder In The Red Barn – Tom Waits

There was a murder in the red barn
Murder in the red barn

'Cause there's nothin' strange
About an axe with bloodstains in the barn
There's always some killin'
You got to do around the farm

A murder in the red barn
Murder in the red barn…

Synanthropes

A synanthrope is an organism that evolved to live near humans and benefit from human settlements and their environmental modifications

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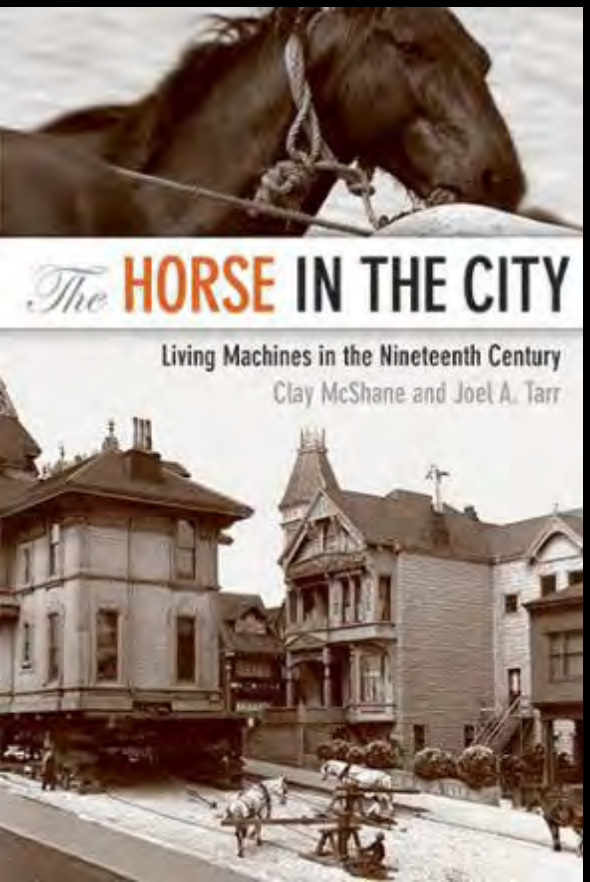

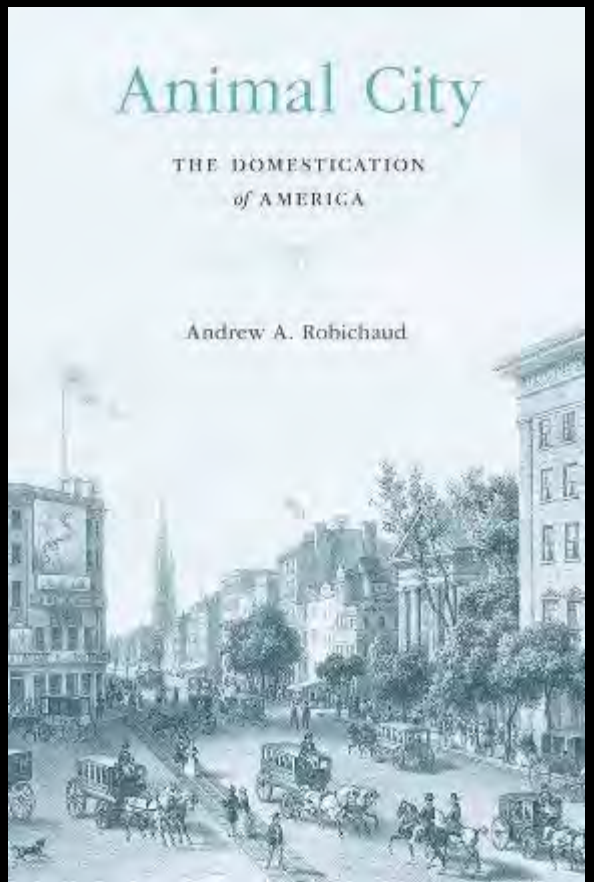

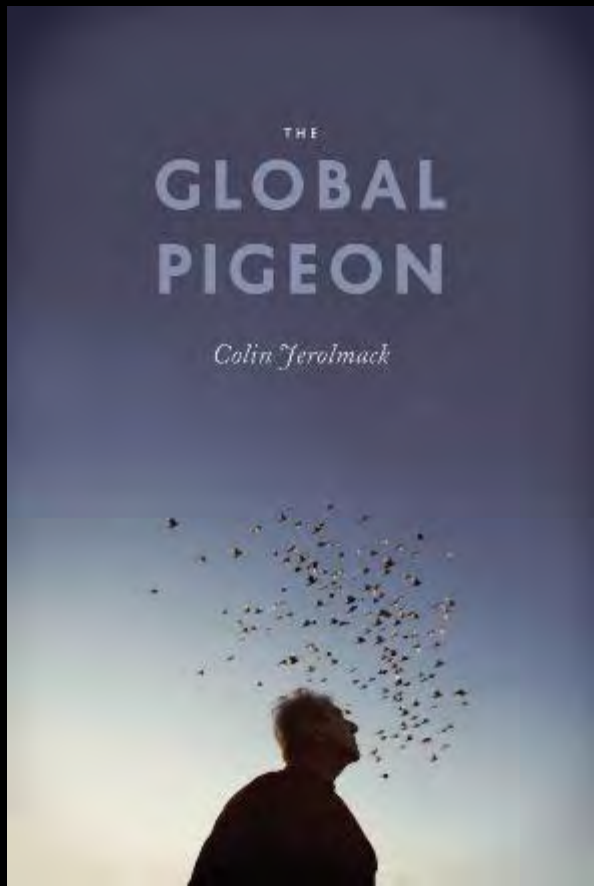

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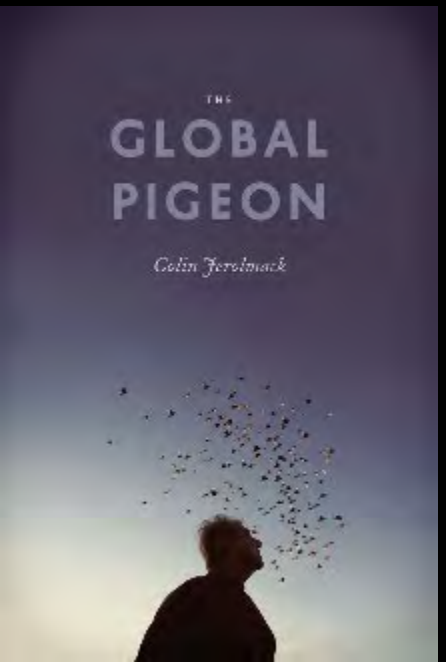
yet our experience of nature is profoundly social.

Seeing the social in nature appears threatening to many environmentalists and nature lovers because it breaches the barrier between the sacred and profane worlds."



Natural What?

Urban Nature – The Nonhuman Perspective

The Nonhuman City

The Urban Lifeworld - The Socioecological City

A coproduction of humans and nonhumans

Applause

Questions?