Many archives contain material objects. However, these objects may or may not be interesting on their own: what gives them meaning are the stories behind them and how these stories are told by the archivists. When archaeologists excavate objects from a historical site, they piece together stories that explain how the objects they find are entangled with each other. The assemblage of objects in this archive is therefore an assemblage of stories about the tidal Schuylkill river.

This object, a blue tennis ball half, was found near the railroad crossing at Locust Street on the Schuylkill Trail in Philadelphia, PA. However, it was found in its current, destroyed state: the irregular tear on the object suggests some sort of violent and perhaps unintended end to its useful life cycle as a tennis ball. Given the prevalence of dogs that are walked down the Schuylkill trail and the excavation site's proximity to a dog park, it is possible that the ball was torn apart by a canine. On the other hand, the much more immediate proximity to railroad tracks and the object's total state of decimation also suggests that it could have been run over by a train. In its afterlife, the tennis ball raises questions of agency and methods of destruction—and it can be used to tell stories about monstrous human+canine+machine+river assemblages.

***in no particular order...***
human + canine
machine + human
human + river
canine + machine
river + canine
machine + river
***what other stories can be told through this object?***

# human + canine

a story about interspecies entanglements

[photo of human walking dog on Schuylkill trail]

Chewed-up tennis balls are emblematic of the way that many people's lives have become entangled with those of dogs (and vice-versa). Individual relationships can be described as those between master and servant, owner and pet, animal and caretaker, companion and companion, or otherwise. Humans affect dogs and dogs affect humans. Many humans even consider the dogs they know as members of their own family, but the practice of keeping this species as pets transcends the household level. There are large corporations devoted to producing and selling dog food and chew toys, schools specializing in veterinary science that studies the health of dogs, and vast collections of images on the internet that demonstrate how many people desire to share their anthro-canine relationships with others. Even if a human does not own a dog, they may still walk by a dog park on their way to work, such as the one at Schuylkill River Park… or, simply by paying taxes in Philadelphia, they have in some way contributed to the existence of this public site of convergence for human + canine assemblages.

Recognizing this particular interspecies assemblage can open up the possibility of becoming attuned to the ways that we are less obviously entangled with other life forms. As we walk along the Schuylkill trail, we may remark on the cleanliness (or dirtiness) of the river. How many people are aware of the role of bivalves in filtering the water that comes from upstream (link to Jade's project)? Many people would not want to swim in the river because they're worried that unseen microorganisms will disrupt the functioning of their own bodies, which themselves are complex assemblages of many different cells and bacteria. Have you ever stopped to think about the grass planted around the trail, how it got there, and what it does? Whether we think about it consciously or not, through simply breathing, we are part of an amazingly complex system of energy transfers (link to Rose's project). What happens when we think of our actions—our existence—as affecting an intricate web of entanglements with other species that in turn affect us?

# human + machine

a story about coal and steel

[perhaps this image, or this one]

The golden age of the railroad coincides with the gilded age of American manufacturing, when human labor concentrated in mines and factories and human lives bore the effects of breathing smoke instead of oxygen. Philadelphia's development became deeply tied to the construction and maintenance of railroads, some of which still run through the city today. An 1875 book named *Philadelphia and its Environs, and the Railroad Scenery of Pennsylvania* glamorously exclaims, "What a magnificent system of iron highways, grown from this small beginning, now traverses our glorious Commonwealth! [...] Here is Philadelphia, sitting like a true commercial queen to receive the tribute which comes to her along these iron avenues from North, South, East, and West." The human + machine assemblage, though, is a complicated one because it represents both great suffering and great wealth. Let's complicate this story even more by adding the **river** to the assemblage.

Noticing how the railroad tracks parallel the river allows us to recognize the Schuylkill's industrial past. Factories and warehouses used to proliferate along the waterfront, as business owners vied for easy access to vast transportation and shipping networks. (Many of these old buildings have been demolished or renovated into trendy residential lofts or office spaces.) Apart from carrying coal barges and lumber rafts, the river became a receptacle for the growing city's sewage, since everyone expected its waters to carry away any unsightly waste. However, this was not the case. As John Frederick Lewis wrote in 1924, "The water of the river for its entire length is grossly polluted... the putrefaction of the sewage matter deposited on the bed of the river causes an almost constant ebullition of gas, and that at low tide, when the sloping banks are exposed, they show the putrefying black mud of sewage origin... The Lower Schuykill has been made... unfit for human habitation, and undesirable even for industrial purposes."

The state of the river is not as dire today as it was 100 years ago, but it still bears a legacy of industrial and municipal waste. In fact, the tennis ball from this exhibit was discarded near the trail. What determines our classification of certain objects as waste and what makes us throw them away where we do (link to Tathagat's project)?

# human + river

a story about changing attitudes towards waterfronts

[nice photo of joggers/bikers/picnickers on the trail, maybe skyline in back]

Historian John Gillis pays a lot of attention to how humans have evolved *with* the coast, in the ambiguous space between land and water. As landscape architects Dilip da Cunha and Anuradha Mathur point out, we really exist in dynamic zones of varying degrees of wetness. Our concept of the delineated "shoreline" is actually a fairly modern construct, one that originated from mariners' maps that articulated where it was safe to moor their ships. The hard line became more and more prominent as landlubber engineers attempted to domesticate the dangerous edges between land and sea, and today it in fact mirrors reality, as we have built up dams, seawalls, and harbors that create hard boundaries between these two imaginary domains.

As mile after mile of shoreline was built up, the waterfront became a working-class borderland populated by sailors, shipbuilders, fishermen, warehouse workers, and teamsters, who congregated in gritty pubs that were no place for the upper class. The bourgeois withdrew physically (and mentally from the shore) to marvel after new frontiers inland, only to subsequently "rediscover" the sea as a site for leisure where people could take their yachts out on Sundays. Various water bodies once again became a popular subject of poetry (link to Lucy's project). Today, instead of fearing that they will be beached by a storm, people flock to beaches in droves over the holidays.

The tennis ball, of course, is a mass-produced object for leisure, whether we use it to play the sport with another human or play fetch with a dog. It was manufactured fairly recently, so we can treat it as an artifact of contemporary times. That it was found on the Schuylkill Trail is indicative of our current perception of the river as a place where people can (and should) go to enjoy themselves. Our perception of the waterfront will most likely continue to evolve in the future (link to Mike's project); what objects will future humans leave behind near the river (link to Sam's project)?

# canine + machine

a story about monsters and destruction

[scary train dog image?]

Was this tennis ball ripped apart in the jaws of an excited dog or crushed under the massive weight of a passing train? Perhaps in your mind, one of these options seems more likely than the other, and you construct your own evidence as you inspect the object. It's possible you've thought of another explanation that involves neither dogs nor trains… or perhaps both?

When we imagine the canine+machine assemblage that could have destroyed this object, do we imagine a monster? How do we look at artifacts that represent our own destruction? Do we ourselves become monsters?

# canine + river

a story about invasion

[swimming dog??? idk]

If tennis balls such as this one are emblematic of “dogness,” what are all these dogs doing by the river? Would we consider dogs a *native* species? If not, does that automatically make them *invasive*?

These questions raise important issues about what we perceive to be natural and why we consider this to be something important. Many ecologists and environmental scientists talk about how the baseline for what our environment should look like continuously shifts from generation to generation. There are incredibly few places on Earth that have not been altered by human activity, many of them at the bottom of the ocean, but we still consider many places to be “true to nature.” Assessing change in particular ecosystems depends a lot on the scale we set for ourselves: when we desire to remediate the Schuylkill in order to return it to a previous state, what date do we choose? Three hundred years ago? Three thousand years ago?

Domesticated canines would probably not be a large part of the picture in either scenario. Some would say that humans wouldn’t be, either, but this presents a danger of erasing the history of the Lenni Lenape and other peoples that have lived in these lands for hundreds if not thousands of years. If this tennis ball helps us recognize the ways that canine lives have become entangled with the river, perhaps we can instead imagine a future that is more conscious of the different species that are entangled within this ecosystem.

# machine + river

a story about movement

[photo or maybe video of train running on tracks, possibly with view of water]

Thinking of the river and the railroad is useful in helping us visualize movement in terms of flows, trails, tides, and tracks. Which forms of movement happen outside of human control, and which have been carefully planned and maintained over the years? Separating the two is not as easy as it may look, for particular intentions do not always produce the desired results. Was this object destroyed on purpose or by accident? Perhaps it crossed paths with something it shouldn't have.

The tennis ball also hints at how certain types of destruction may go unnoticed. The currents of the river carry material discard downstream, making it easier for those who live upstream to forget about it. The railroad has historically linked Philadelphia to Pennsylvania's coal mines, which have ravaged the landscape and poisoned many ecosystems along with human livelihoods. Reconceptualized as a closely entangled assemblage, the machine+river entity lets us recognize how power is often rooted in routes, with material flows telling us much about who controls what. As various human actors move things around, "nature" may respond in ways that no one predicted (or in ways we did not think were plausible).

What sorts of assemblages of power made it possible—made it *likely*—that a visitor to the Schuylkill Trail would find this object here, in its current state?

# human+canine+machine+river

a story about extending entanglements

As the other sections have shown, redefining the components of a particular assemblage allow us to focus on different aspects of a story, but they rarely tell the “whole” story. For this, we need to actively extend our entanglements to acknowledge our relationships with more and more things. Hopefully, this tennis ball has proved to be a useful object for imagining these connections and the stories associated with them. What other assemblages can you think of?

I invite you to take a walk along the tidal Schuylkill River and keep an eye out for other objects that seem interesting to you. Be an archaeologist and draw clues from your environment and what you already know about the river and the object that you found: what stories does it tell?