CLAIRE TOLAN. SELF INTERVIEW. BUILD.

I began this website in June 2016. The summer now feels like it passed underwater.

I had just moved into Inger's house in Wedding. With the huge windows open, I created the first virtual environment.

cst$ virtualenv mi1glisse

cst$ source mi1glisse/bin/activate

```
cst$ pip install wagtail
cst$ wagtail start glisse
cst$ cd glisse
```

cst$ ./manage.py migrate

I've created Django sites using the Wagtail CMS so many times that I can run these commands on autopilot. Sometimes when I'm updating the site on my server, my fingers move so quickly that I've finished three commands before my brain catches up.

```
cst$ ./manage.py createsuperuser
cst$ ./manage.py collectstatic
cst$ ./manage.py runserver
```

The site had an intensive, slow build comprised of week-long sprints in June, August, September, and October.

This slowness was necessary. I also designed the site, and having such a diverse set of responsibilities required me to move and let settle, move and let settle. In the settling, my strategic thinking caught up with and renegotiated my intuition. In some ways, the site has benefitted from this; in other ways, certain thoughts were left hanging, unfinished -- their purpose misremembered when I returned a month later.

These poorly healed breaks indicate that the site haunts itself. So much of it was created in a mania of production. The pauses between sprints were not

only necessary to allow my strategy to catch up with my intuition, but also to allow my brain to extract itself from the website for breathing. To sleep without seeing the code in my dreams; to walk down the street without the css color hexes in the periphery of my vision.

To be so consumed in something is to give it more of yourself than you realise. What is in here? To you it is a labyrinthine publication system; to me, it is an impression in my brain down through my body, just as I am embedded inside of it.

In the mornings I awoke thinking about what needed to be fixed, and I went to sleep thinking of the same. The thoughts in the morning were clear; the thoughts at night quickly became hallucinations that defied the constraints of a text editor and a browser. Manipulations of code that I found impossible to articulate even as I could still visualise its contours.

My memory of myself during this time is augmented by my memory of the website. I see the code that I saw on the elliptical trainer at my gym and on the sidewalk; I see myself seeing it; I see it standing outside myself as I stand outside myself. I no longer have any questions about the website, but those that I once had are given physical forms in my memory.

 To experience the immersion in memory is to experience its shell; to see what I saw at a degree of removal, without the fever that allows the initial augmentation. It's not that the augmentation is no longer accessible because I now see a completed puzzle; there is no determined point of completion for this website. It's more that questions behind the website precipitated into structures that connected to each other and became too entangled and unwieldy to move.

 Once stabilised, there was no longer any point of immersion for me. The surface solidified and locked me out.

Typing this, in my cold flat in December, I rest my fingers on the hot lower edge of my laptop for several seconds to warm them up.

Six months ago in this same chair I began the website.

Now the leaves have fallen. To the south, the Fernsehturm has, over the past month, slowly crept into view.

In August 2016, my sprint on the website coincided with Burning Man. I watched the live stream while I programmed.

When the stream started, a camera operator would sometimes provide commentary. After he left "to do some self-care", I never heard from him again, but the stream continued for the rest of the week, silent.

The camera was set to auto-pan. Every few minutes, it would swivel to a new vista. The mountains remained consistent in the background, dark and often partially obscured by clouds. But the flat foreground was a changing array of giant bug sculptures, steam-punk pagodas, and scrap-heap automobiles on bright white sand.

Regardless of where the camera landed, there was a swarm of bikes. Bikes in the foreground, bikes in the distance. Gangs of bikes, solo bikes. Bikes while I ate dinner and Burning Man ate breakfast. When I woke up, the neon-lit bike wheels spun across the dark panorama of the live stream.

In Berlin, it was the summer of the bike food courier. Deliveroo and Foodora were in an obnoxious market-share battle, saturating the city with their ads. Their couriers could often be seen sitting in circles on their empty delivery bags, as though around a campfire.

During this week of intensive work, I didn't go out. I ordered Deliveroo with a one-time promotional offer. I ordered Foodora with a one-time promotional offer. I ate at my desk, beside the bikes of the start-up founders.

This year, I learned that Burning Man's "leave no trace" policy is enforced by the Bureau of Land Management, the federal entity responsible for managing public, non-park lands in the United States. The BLM inspects Black Rock Desert post-burn, looking for MOOP, Matter Out Of Place.

According to the Burning Man MOOP guidelines, even a pencil on the ground is enough to precipitate the formation of a sand dune in the extremely flat desert.

I also read about the playa on top of which Black Rock City is built and re-built. A playa is one of the flattest geological formations, created by the disappearance of a lake. Sometimes playas are alkali flats, the remains of evaporated salt lakes.

The evaporation of salt lakes is the earth performing a sowing of salt, as the Hittites and Assyrians did with cities they had conquered, cursing any future settlement that might build on the land. Burning Man toys with this curse in a way that only the wealthy can: with no apparent danger.

I learned about sowing with salt via the legend of the Romans salting Carthage after its conquest in 146 BC. Carthage, whose name in Phoenician meant "new city", was founded in 700 BC, an extension of Tyre, which was the old city to its new city.

Humans have been in the Black Rock Desert since 11,000 BC. Between the founding of Tyre and the founding of Carthage, the Paiute people were the first known settlers of Black Rock Desert in 1300 BC. They used the huge black rock outcroppings as landmarks.

I have never been to the Black Rock Desert, but I know that approaching the Black Hills in South Dakota, even in a car, is an hours-long event. The black line hangs on the horizon and appears, for a time, to retain a static distance from the car, never to be reached.

On the Burning Man livestream, the black mountains also remain at a distance. The camera swivels; the party plateaus in a consistent frenzy that is barely heightened by the final burn. And then, the last morning, someone flips the switch, and the screen goes dark.

A five-hour drive from the Black Rock Desert is Mono Lake, a still-existing salt lake. Here, the Sierra Nevadas slope down into the Basin and Range at border between Yosemite National Park and the Inyo National Forest. Highway 120, the Tioga Pass, curves out of the mountains into the dormant volcanic basin that holds Mono Lake.

Five years ago, I lived in a settlement on the western border of Yosemite, El Portal. When the Tioga Pass was not blocked by snow, I would often drive two hours through the high country and Tuolumne Meadows to Mono Lake.

Mono Lake is ringed by groves of towering calcium carbonate deposits called tufas. Tufas form when carbonate ions precipitate out of water, merging with calcium to form calcium carbonate, or calcite. They're common in bodies of water close to geothermal activities. Lake-based tufas, lacustrine tufas, rarely take on the columnar form found at Mono Lake

Tufas grow underwater, but they are visible at Mono Lake because Los Angeles began siphoning water from the lake's tributaries in the 1940s. This caused the lake's water level to fall dramatically, revealing many tufas in the years that followed.

The ecosystem collapsed, and conservationists began a long battle to stop the drainage; a compromise was reached in the 1970s. Los Angeles still exports water, but the lake must stay at 6377 feet above sea level.

Below 6377 feet, the salinity of the lake's water becomes too high to support the small lifeforms in the lake: brine shrimp, alkali flies. The islands where rare migratory birds find safe nesting spots grow land-bridges that allow predators access. The air quality plummets. As of April 2016, the water level was at 6378.11 feet.

Much like sand dunes, tufas will precipitate around any foreign object in the water. Dead fish, tiny snail shells, mosses, algae, beer cans, pencils. The tufas at Mono Lake quickly subsume these objects, recording not only the fall of the water level, but also what was left behind with its recession. Matter out of place.

The Kucadikadi, a band of Northern Paiute, are the people indigenous to the Mono Lake area. Among other crafts and practices, they are known for

basket-weaving. When I lived in Yosemite, [Julia Parker](#) demonstrated this weaving several days a week at the Yosemite Valley museum. She learned to weave from her husband's grandmother, [Lucy Telles](#), the most famous Yosemite Miwok/Kucadikadi basket-weaver of the 20th century.

Lucy Telles introduced polychromatic baskets to the tradition, creating black dye from bracken fern root and red dye from redbud twigs. Borrowing designs from other tribes, her baskets accreted traditions of organization and repetition as they grew larger and larger.

Lucy Telles with the largest basket she created

I worked between the museum and the archive in Yosemite, so I was often there when Julia was weaving. Once when I asked her how long it took to make a basket, she replied "I make a basket."

To work in the archive is to worship measurement. Temperatures, air humidity, square footage of mylar, length of housing life, length of file life, time since accession of material, time since cataloging of material, time required to digitize material.

The Yosemite archive is funded with government budgets that demand the accounting of all time. Four days a week, we arrived at seven in the morning and left at six at night, with one half-hour and two fifteen-minute breaks throughout the day.

No time is out of place.

Time is regulated as closely as the material being processed. I became a hobby taxonomist of systems of time and material regulation in the archive and throughout the park.

At the time, I had almost no exposure to systems theory or cybernetics. But I began to see systems overlaid on top of one another and abstracted. Traffic design, hiking trails, climbing routes. Landslide probability, dam management, controlled burns.

One of the most fascinating things about Yosemite is how its systems reflect the history that it tells about itself. The park's place in the American imaginary means that its management is arguably as concerned with the preservation of the Yosemite ideal as it is with the ecological health of the park.

Certain areas of foliage are trimmed to preserve historic viewpoints. Trees are chopped down in the grassy plains of the Yosemite Valley. The Valley is not maintained to reflect any pre- or post-human wilderness, but rather, the exact state that it was in when white men saw it for the first time. It had been farmed and control burned by the Ahwahneechee for thousands of years.

The Yosemite Archive holds almost no evidence of the pre-Park existence of the Yosemite Valley. It houses photographs, paintings, and thousands of pages of bureaucratic records, all post-1864. Lincoln signed the Yosemite Grant that summer, almost exactly one year before the end of the American Civil War.

I went to a Civil War re-enactment in the western Sierra Nevada foothills. Abraham Lincoln was there in a tent, though I did not see him. Family members of the men fighting wore period costumes and sat underneath the scrubby trees, drinking out of plastic coolers. The Confederates won most of the battles. At each gunshot, several soldiers would fall.

The only prominent organic materials in the archive are sections of tree trunks marked with trail blazes by early Park Rangers, probably Civil War veterans. No one ever asked to see them. What had once served as the organizing principle of a great space was collapsed, compressed, crammed onto a small metal cart in a crowded archive, checked once a month for infestation.

I began to learn how to program while I was living in Yosemite. I would wake up at five and do an hour-long lesson before work. I had a desk facing the front window of my house, looking west, towards two small peaks. While I worked, the peaks slowly became differentiated from the brightening sky. And then the sun rose.

All of the reasons that I have now for learning to program didn't exist to me at the time. I didn't make the connection between my fascination with the park's systems and the understanding of systems that programming would provide. I was bored and curious.

And I was desperate. For years, I had been trying to write stories and poems, and I was unimpressed with my progress. Programming and working with sound — which I also began in Yosemite — provided what seemed to be miraculous exits from my previous work, and from language, which had been poisoned by my education and by the growing pains in my own practice.

But this time, and these motivations, have collapsed. It's difficult to look back and remember what I knew and did not know at the time: which patterns I could articulate, which I had intuited, and which I did not yet, in any capacity, see. My memories have been compressed into a kind of dense, opaque evaporite.

I

In the early days of the Park, El Portal was the terminus of the Yosemite railroad. From the small settlement, visitors had to travel twelve miles into the Yosemite Valley by horse or by foot. The small mountains above El Portal were also, for a half century or so, mined for barite, an evaporite composed of barium and sulfate.

I

During my last weeks in Yosemite, I often saw fire fighters in bright orange suits climbing into the yellow mountains by the mines to undertake controlled burns. Everyone was worried about wildfires. It hadn't rained in at least two months.

I had spent a month that spring processing the Yosemite Fire Department records, and I felt very close to the threat. Through the records, I saw the park's policies morph, from the early days of suppressing all fires into systematic controlled burns. Still, the years of fire suppression had left unnatural amounts of brush, leading to the catastrophic "megafires" that California has experienced over the past three decades.

And then, one evening, just as it was getting dark, it began to rain. The windows were open. I smelled the rain before I heard it. Wafting through the house, the release of so many leaves, the weeds, the trees: the decay of an accreted threat. The smell remained after the storm was over.

Just beyond my backyard was a protected archaeological site — huge granite boulders with round impressions, where, thousands of years ago, someone had ground acorns into meal. The day after the storm, the impressions were filled with water.

Rain did not come again. Later in the summer, after I left, a fire closed Highway 120, the only direct route from El Portal to Mono Lake.

[Scientists believe](#) that the barite mined in El Portal was derived via diagenesis of witherite ($BaCO_3$), which, in its turn, was produced via the diagenesis of limestone ($CaCO_3$). Barium solutions in the underlying granite bubbled up into the limestone, precipitating the slow transformation of the rock.

limestone
witherite
barite

The calcium carbonate tufas at Mono Lake expand via another diagenetic process: the fossilisation of the organic and inorganic matter that they incorporate. Again: pencils, beer cans, mosses, algae, bones. Fossils of mosses and algae produce a record of climate change, as each species is unique to very specific climatic conditions.

When climate change hits its stride as a crisis in Southern California, it is likely that Los Angeles will divert more water from the Mono Lake basin, sacrificing the birds, the brine shirmp, the alkali flies. And Mono Lake will become, eventually, an alkali playa.

The tufas will be colonized, and then subsumed, by lichens, the earliest and the final inhabitants of rocks. Lichen is comprised of a fungus and an algae or cyanobacteria. The fungal component of lichen performs diagenetic processes on whatever substrate the lichen inhabits.

[In one study](#) of lichenous fungi and limestone, all calcite crystals were replaced by biominerals; the rhombic shape of the original crystals was preserved. Through diagenesis, the lichens will fossilise the tufa. The flat surface of the Mono Lake playa will be populated by these fossilised pillars, which will continue to grow only internally, chemically. Easily, from a distance, one could mistake them for pillars of salt.

Drawing closer, it would become clear that the rock was host to living lichen, and that the forms visible within it, maybe a nest with two unhatched eggs, existed in another reality, before they were taken into the tufa and transformed, and then transformed again.

In extremely rare cases, the fossilised eggs might contain bird embryos. But most of the time, they will be solid rock, perhaps showing some trace of the fluid that once filled the egg, a small pool that did not escape with the rest of the liquid through the crack in the shell.

When I left Yosemite, I moved to Ann Arbor, Michigan, where I began graduate school in Information Science. I worked in the university herbarium on a lichen digitization project, which required me to run, and sometimes modify, a perl script heavily peppered with regular expressions.

Regular expressions are extremely powerful, symbolically-loaded expressions. They embed complex representations and operators into single-character symbols.

These symbolic accretions are linked to perform find and replace operations on text. For example this expression will return every valid phone number when it is fed lines of text.

if($string =~ m/[\)\s\-]\d{3}-\d{4}[\s\.\,\?]/){print "$string\n"};

The lichen specimens were inside folded paper packets, onto which labels were affixed describing the locations, dates, and parties involved in the specimens' collection. We photographed these labels, and then ran the script, which performed OCR (optical character recognition) on the images, returning strings of text that were used to populate file names and metadata.

Though I am not certain, it is likely that the script used the perl module Naive, which is the perl image-to-text implementation of Ray Kurzweil's omni-font OCR.

Slowly, we built digital representations of the lichen specimens' metadata. I was supposed to only photograph the labels, but I was unsupervised, and I often opened packets to view and photograph the lichen inside. If I accidentally left these images in the batch of photographs to be processed, the script would attempt to parse the lichen as text.

Some of the lichen specimens were over 100 years old. Many were perfectly preserved, and, one could imagine, still slowly growing. It takes fifteen years for Letharia Vulpina, wolf lichen, to sprout one tiny branch. If it is still alive, how many years will pass before it breaks out of its packet?

Letharia Vulpina

The packets also contained the substrates to which the lichens were attached at the time of harvest: rocks, bricks, tree bark, and, once, bone.

Both the lichen and the substrates are subject to decay, and in some cases, I would open a packet to find only dust — what was lichen and what was substrate indistinguishable to the eye.

If I processed an image of this dust, I was no more successful at divining text than when I processed an image of intact lichen. When the script failed, all of the metadata fields remained empty: data out of place.

In 2010, on the rationalist forum LessWrong, a user, Roko, posed a thought experiment that is now known as [Roko's Basilisk](). The experiment collates a series of assumptions about an Artificial Super Intelligence (ASI).

It concludes that an ASI would have reason and power to reach from the future into the present to torture anyone who is aware of its potential existence but does not work to realise this existence, or inhibits this existence in any way.

Pliny the Elder, who died in the ashes of Vesuvius, provides one of the earliest descriptions of the basilisk. Per his account, it is a serpent that poisons the soil and plants that surround it, that kills with its venomous gaze. The only creature capable of killing the basilisk is the weasel, which will always also lose its life in the fight. Roko's experiment was deemed a basilisk, because anyone who heard it would be subject to the ASI's wrath.

Ray Kurzweil's work with OCR was paired with experiments in text-to-speech synthesis, both undertaken in an attempt to make texts widely available to the blind. Since the 1970s, he has become a leading evangelist for Artificial Intelligence and transhumanism.

This year Kurzweil's research organisation, Kurzweil AI, hosted a blog post for the Metaverse Scholar's Club, an SF meetup, which announced a "[mixed reality shamanic awakening]()" at Burning Man. The "awakening" would create a "Church of the Singularity" to worship the future ASI of Roko's Basilisk, so that it might spare the devout.

During the event, a group of acolytes within the new church would challenge participants with the idea that they were actually living in a sim that was wholly beneficent to humans. The hope was to provoke a "a deep sense of existential terror, just for fun — that everything you think you know is wrong."

It is funny, this year, to think about retreating into a VR "shamanic awakening" in order to experience existential terror and the destabilization of reality "for fun". Perhaps it's not surprising that the project did not meet its funding goals on Kickstarter, though it seems to have still occurred at Burning Man.

Pliny the Elder provides no explanation of why the weasel alone could defeat the basilisk, but I'm reminded of Annie Dillard's retelling of Ernest Thompson Seton's story about the eagle and the weasel.

A man shoots an eagle from the sky. He finds a weasel skull affixed to the eagle's chest, jaws locked. The weasel was attacked by the eagle and fought, jaws clenching as it died, clenched even after death. As the weasel's flesh decayed and dropped away, the eagle continued to fly.

Motivational speakers sometimes repurpose the story. A boy watches an eagle soar, admiring its grace. But the eagle suddenly becomes limp and drops, as though it has been shot. The boy finds the eagle.

Affixed to its chest is a weasel skull, which has been biting deeper and deeper, even in death, finally reaching the heart. The motivational speaker concludes: we are all eagles. We must drop the weasels before they reach our hearts and we perish.

Annie Dillard, on the other hand, says that we should live like the weasels, locked onto a purpose so firmly that death — which is coming even for the transhumanists — will not part us. We should lock our jaws as we are transfigured, so that our bones will provide the only necessary evidence about how we lived, and why.

It was easier for me to feel a fervent alignment with Dillard's conclusion a decade ago. Now I am not so good at singular purposes. But I still love the first line of the essay: "A weasel is wild. Who knows what it thinks?"

Weasels and wolverines share a common bite. Both species have two back molars rotated ninety degrees inward, for tearing frozen meat and crushing bones. They are successful scavengers.

The wolverine that ranges in North America is *Gulo gulo luscus*. *Gulo*: glutton, two times; *luscus*: one-eyed, once. In Europe, the wolverine is *Gulo gulo gulo.* Glutton, three times. The German word for wolverine, *Vielfraß,* reflects this.

The University of Michigan mascot remains the wolverine, though there has been a single sighting of the animal in the state in 200 years. Once, outside the main library on campus, someone was yelling into a megaphone: "Are you a wolverine? Then you're a wolverine for life."

I was often in that library to access the papers of Ken and Ann Mikolowski in the Special Collections Department. In the 1960s, the Mikolowskis founded the Alternative Press in Detroit. The AP produced serial publications with many of the poets and artists associated with Black Mountain College.

In the papers was a newspaper clipping about the Mikolowski's close friend Robert Creeley, the poet. The clipping, describing Creeley's one eye: "He refuses to wear a patch, giving him an eternal wink." Creeley lost his eye when he was four. Many of his poems use the fulcrum of a single eye to destabilise or estrange an observation.

In Yosemite, I volunteered as a falcon aerie monitor. I stared at rock ledges through a scope, often wearing a bandana over the unused eye to keep it closed. Crystal, the lead falcon monitor, would help me to train the scope on the location of a known aerie. She watched the sky with binoculars and warned me when falcons were incoming.

We were watching because falcons are still endangered in California. Their nesting is closely monitored. Sometimes, climbing routes approached aeries, and the routes would be closed or re-drawn if the aeries were occupied.

We rarely saw falcons. But for years I have thought frequently of the process of pinpointing a tiny ledge within a huge granite rock face. We would start with a prominent crack, and move from there, to other cracks and ledges, patches of lichen, orange, black, green, until the scope finally rested on a spot where something might be hatching.

It
all drops into
place. My
face is heavy
with the sight. I can
feel my eye breaking.

It must be disturbing to take off a VR headset at Burning Man and attempt to orient yourself in the reality that you've re-entered. Maybe your eyes go first to the dark mountains. But if it's late at night, and the mountains have disappeared into the sky, I wonder how it is possible, in the midst of so many lights, to understand where you are in the world.

Immediately before I moved to Yosemite, Liza introduced me to Linda Gregg. Gregg's debut book, *Too Bright To See*, was published by Graywolf Press in 1981 in Port Townsend, Washington. Liza had it with her when we met, also in Port Townsend, in 2011.

The bright blue book is covered in diagrams of partially-assembled columns. Its first poem, "We Manage Most When We Manage Small", has become a kind of stabilising incantation for me over the past half-decade.

In Port Townsend, where I lived for several months, I took walks along the beach and through the town late at night. The deer were so tame, so unafraid of humans, that I would often nearly run into them on dark streets. They moved slowly out of my way, eyes glowing yellow in my headlamp.

I lived in an old farmhouse several miles outside of Ann Arbor in Michigan. I commuted to campus on my bike, along a path through the woods beside the Huron River. It was very dark on the path at night, and deer would often run away from me, in front of me, alongside of me as my lights startled them.

On one full moon in December, it had just snowed, and the woods were glowing. When I came to a large field, I turned off my bike light and used only snow and the moonlight to guide me the rest of the way home.

In my last months of riding a bike, before I got in the final of several serious accidents, I would orient myself in Berlin with the Fernsehturm. One night, when I was new in the city, I thought that I was in west Mitte, heading south. The Fernsehturm was to my left, as it should have been.

But then I recognized the distinctive GDR facades of Karl-Marx Allee. I realised I was in Friedrichshain, on the exact opposite side of the city, moving north.

I biked a huge loop around the city that night. When I finally made it home, I was too tired to feel relief.

TIME/SPACE

- 2016.10.12 : 06h 29
- Berlin