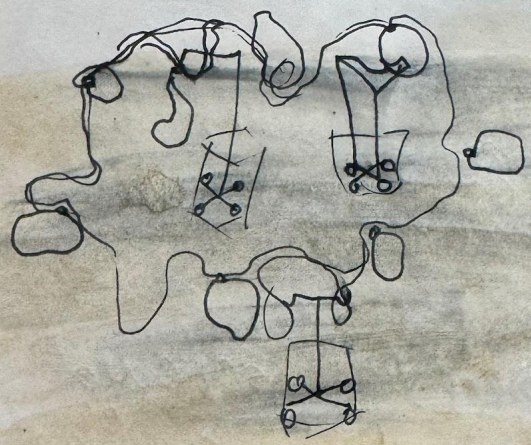


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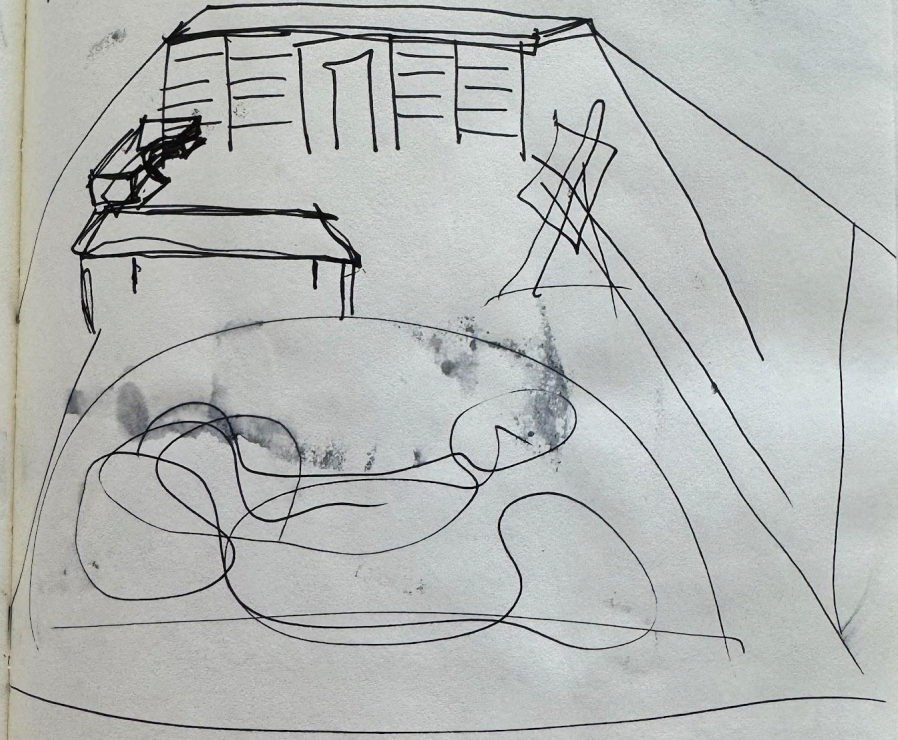
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- memories, copper, projection, laptop, arduino
- sound
- sauna
- heart beat project
- shelves around coffee nook

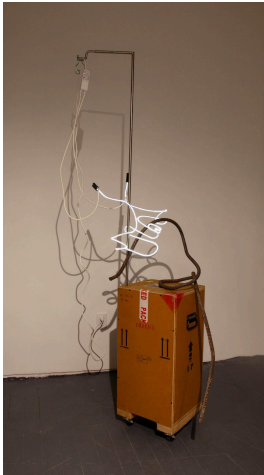
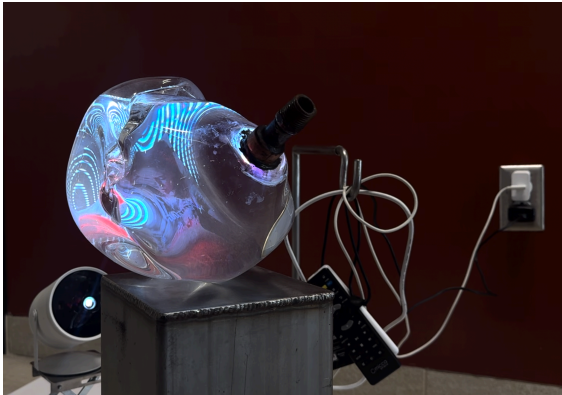


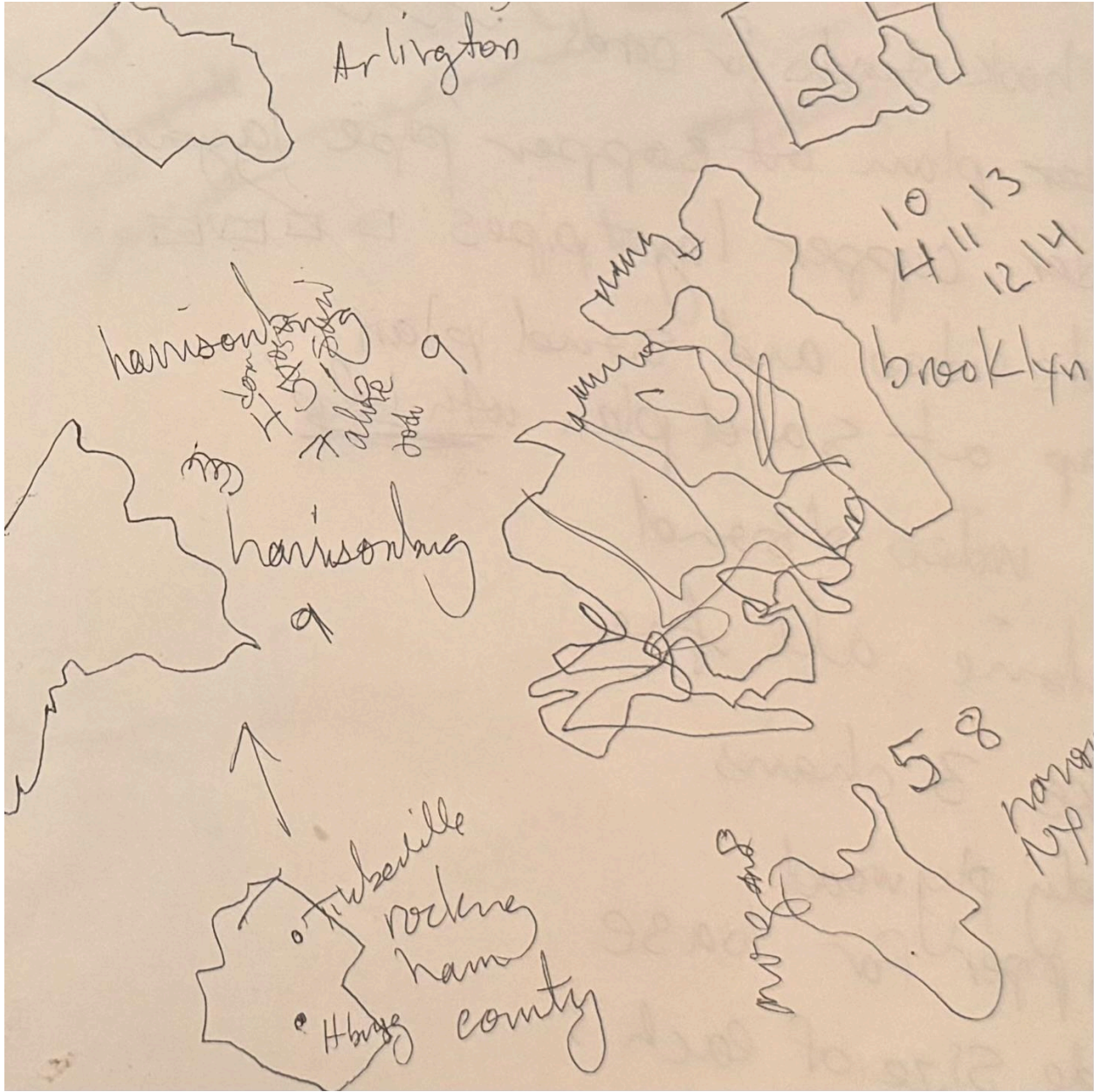
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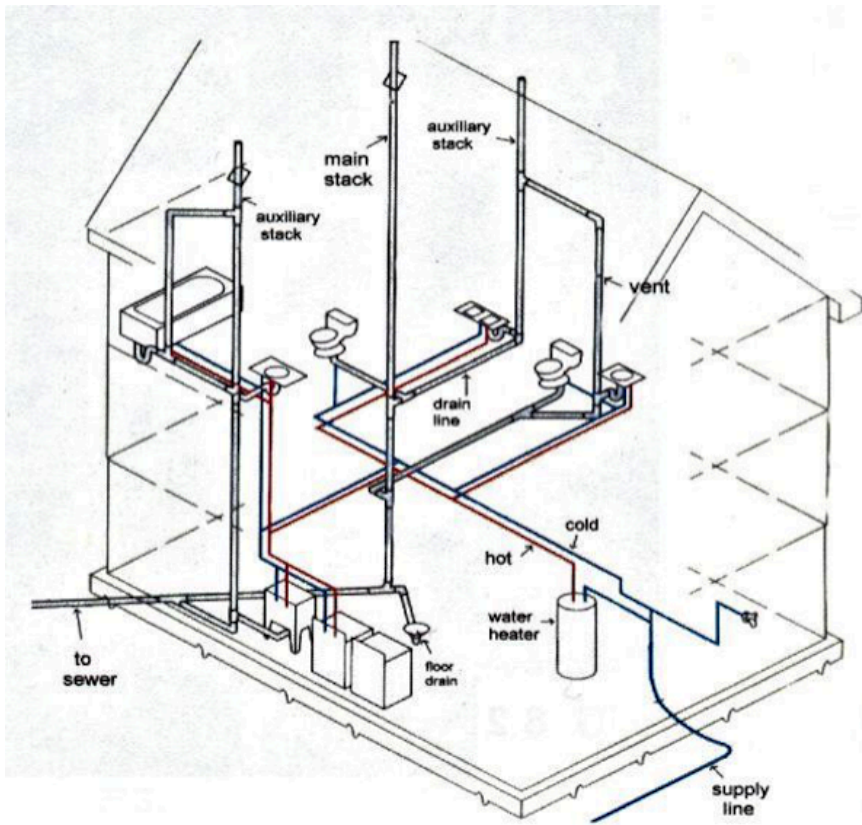
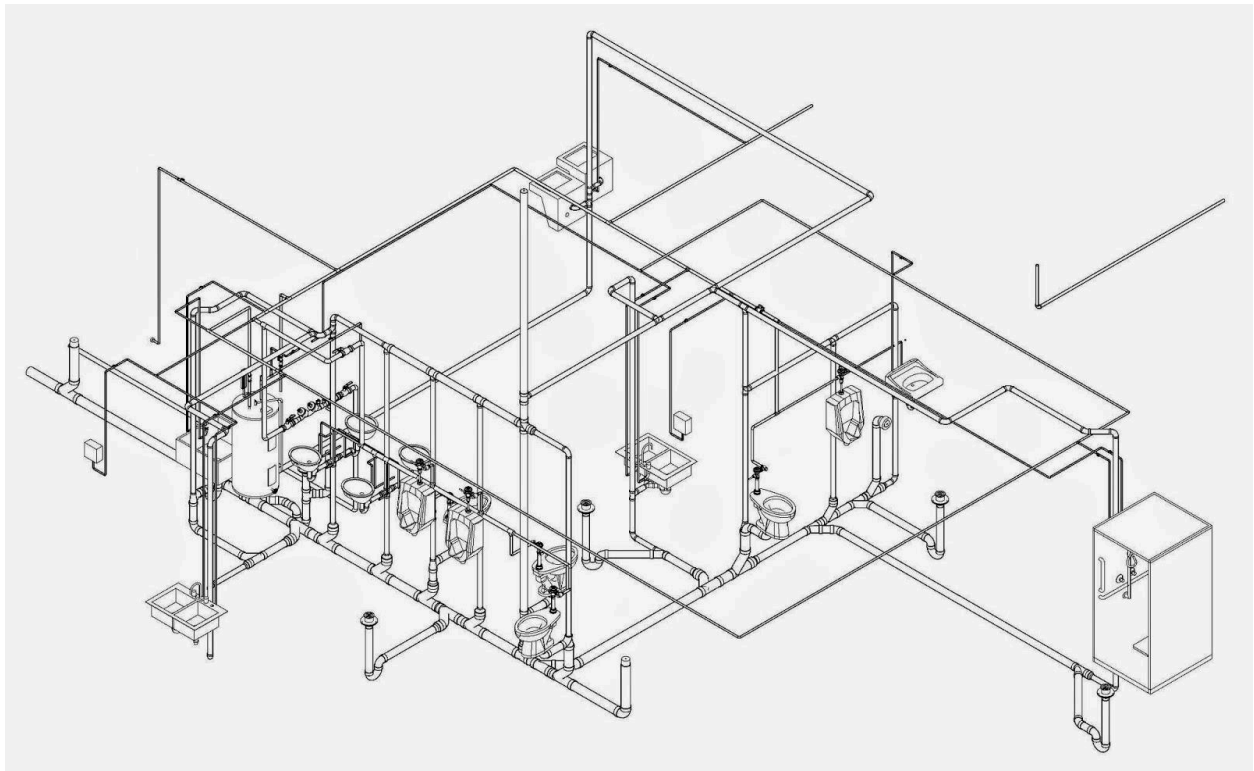
- clean studio  
- copper pipe  
- put away stuff  
- shelves around door?



The velum pages have abstract or zoomed in prints like this:





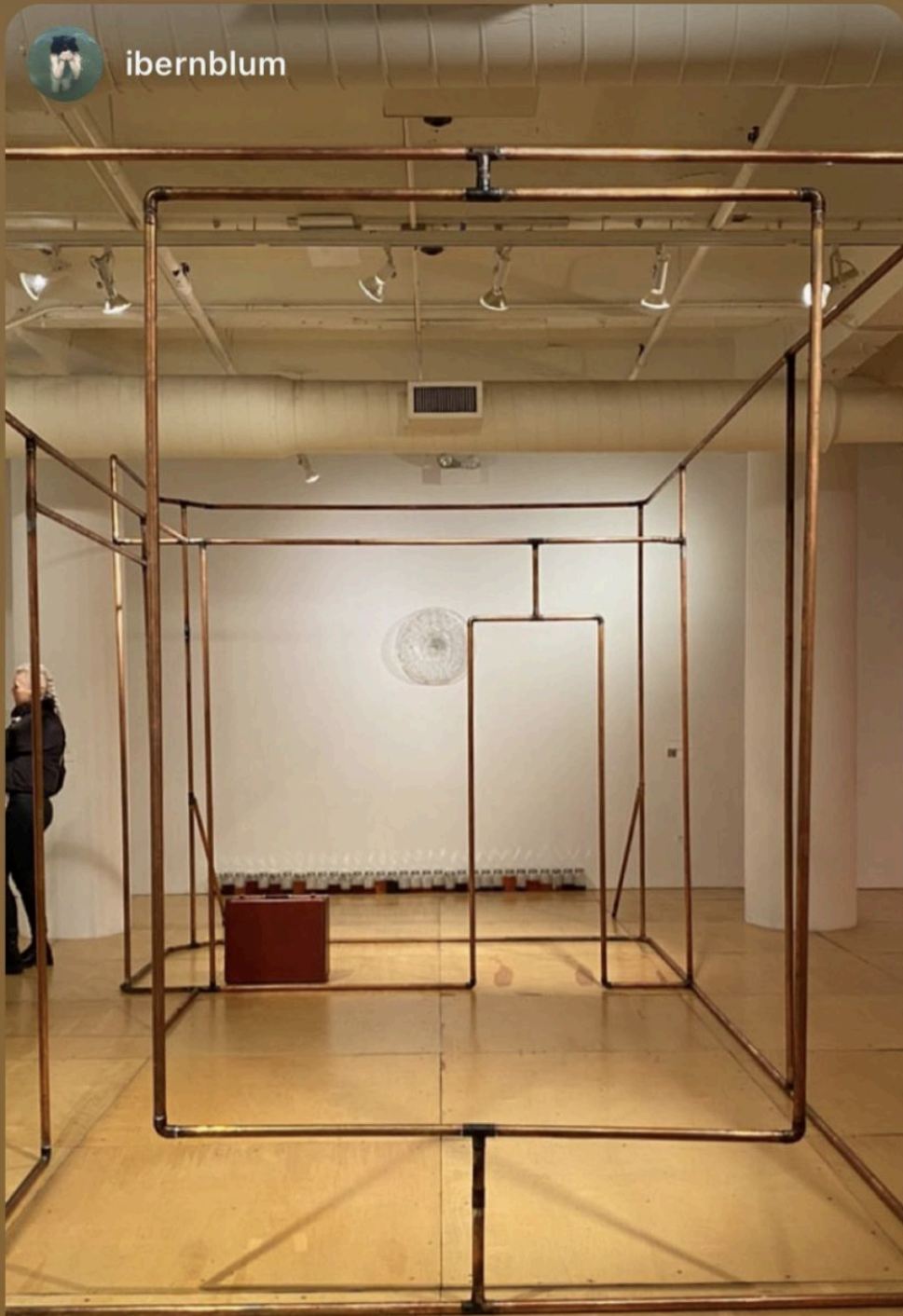




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moresweetbeef 2h



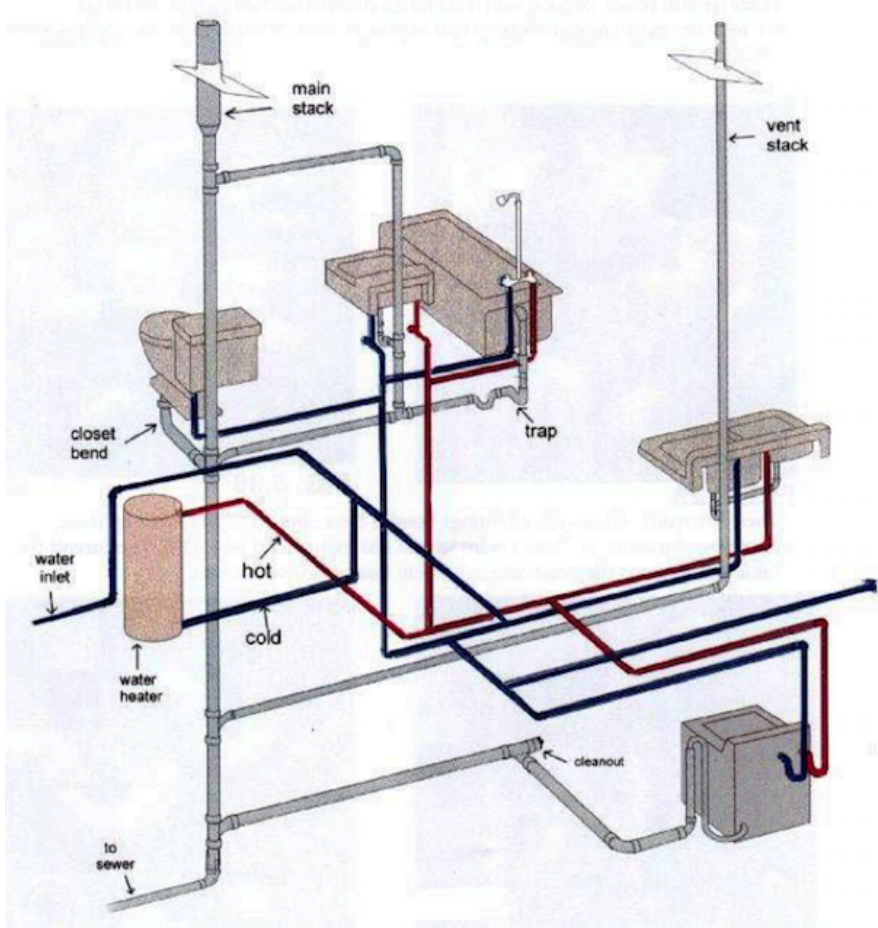
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@moresweetbeef @gallery400

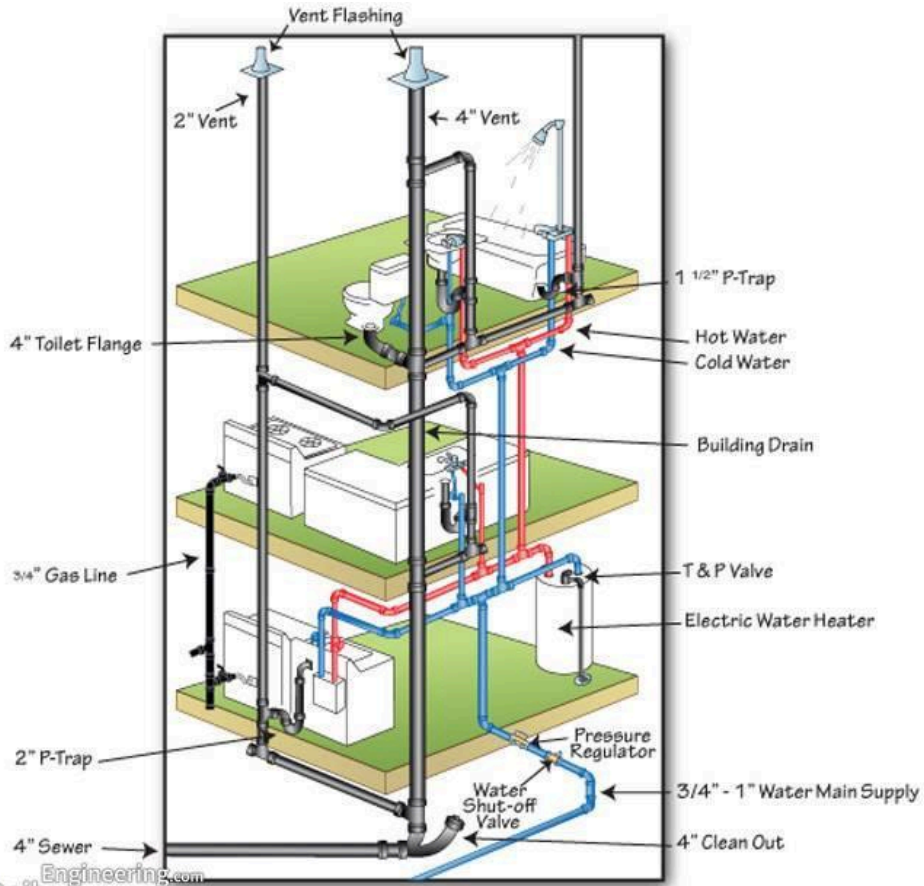












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*under construction*

Rhode Island School of Design  
Sculpture Department Thesis  
2024  
julia helen murray

Janet, Martha, Margaret, Benjy,  
and the family...

julia helen murray  
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# Table of contents

1. abstract
2. introduction
3. four stories
4. conclusion

## **Abstract**

Our memories are unreliable and our pain is more complex than we know.

## **Introduction**

This thesis consists of four tails or fables to ponder while looking at the sculpture that represents them. A book of science journals focused on my readings in the last 2 years is included as well as a ghostly Lathe cut of family secrets. If you would like to hear the secrets you may need to bring your own record player or fabricate one with a pencil and some cardboard.

## The Story of Two Nails

A construction worker steps on a nail. They cry out in agony seeing the nail go through the sole of their boot and out the top right where their toes are. They go to the hospital screaming and in pain, and are given morphine to calm down. When the nurse takes the nail out of the boot and the boot off the worker, they find there is no damage to the foot. The nail went between their toes and the pain was an imagined pain, a response to their own psychological and social interpretation of what happened.

The second nail in this story comes from a nail gun. Someone using a nail gun shoots the gun and it misfires, but they see a nail fly across the room so they think nothing of it and continue working. Later that week, they have a toothache and when they go to the dentist to have an X-ray taken, the dentist sees a four-inch-long nail embedded in the jawline. Again, we see that, psychologically and socially, they have believed there is no pain to feel, and so they feel no pain.

These two examples are no substitute for scientific studies to explore the complexities of pain, yet they are a fairly quick and easy way to demonstrate a point. All human pain has a biological, psychological, and social component to it. The three elements intertwine and cross through each other like a web of dendrites in our brain, or a twisting maze of wiring and plumbing in the walls of a house. Addressing a physical injury without attention to the psychological and social influences is like replacing a light bulb while the roof is leaking onto the wires.

## **Wolves in the Attic**

My mother has a story that is not believed, called 'Wolves in the Attic'. I write it here and translate it to a secret script because nobody wants to believe it's true. Even me.

When my mother was a little girl living in Georgia, she had a 12 year-old cousin who came to babysit her and her sisters. They girls liked their cousin, but she was being mean to the girls, pretending there was a Boogey man chasing her. She would leave the girls, ages 3, 4, and 5, home alone and then when they got scared she would run in the front door yelling "the Boogey man is chasing me!!" The girls were in a state of constant fright.

This cousin would also tell them about wolves hiding in the attic, above the kitchen table.

She said they had sharp teeth and drooling jowls. She said that the wolves would get the girls when they went to sleep.

No one knew why the cousin was so mean until many years later. My mom's cousin told my mother that my grandfather had been molesting her in the attic. It was bad. He molested her until she menstruated. I tell this story for the same reason my mother told me. She believed secrets should be told so we know the whole picture of why people may act the way they do.

In her telling of the story, my mother was not shaming her father or her cousin. She felt empathetic to what he must have gone through.

## **The Porcupines' Dilemma**

A prickle of porcupines is nestled in an abandoned burrow to keep from freezing one cold winter night. The creatures snuggle close together to stay warm, but just as they are close enough to feel ok, they end up poking each other with their quills. In order to stop the pain, they spread out, losing the advantage of co-mingling, and begin to shiver. They move back in search of each other getting poked and the cycle repeats as they struggle to find a comfortable distance between entanglement and freezing.

Eventually they are able to snuggle up just enough to sleep through the night, compromising a bit of pain for the warmth they need to survive.

This is us, we need each other to survive, yet we poke each other when we get close.

## **Tea with Mara**

The story of Tea with Mara begins with the Buddha on a quest for enlightenment. The Buddha is meditating and learning and the demon, Mara, is sitting nearby mocking and beckoning. Mara brings up envy and guilty pleasures and berates the Buddha. Instead of ignoring Mara or driving them away, the Buddha eventually acknowledged their presence, saying, "I see you, Mara, let's have tea." Once Mara was fully allowed into the picture they would stay for a while, have tea, and then go. As Mara came and went the Buddha remained free and undisturbed.

Allowing our demons to be present brings the familiarity needed to live peacefully with our shadow self.

## Conclusion

This thesis was an act of remembering and re-examining. The process was long, drawn out and multilayered. Towards the end of building and remembering I became very tired, seemingly very easily. I would solder and build the neighborhood I grew up in, going over streets and hills and parks in my mind. I would remember dog sitting, and baby sitting, and stealing little trinkets from 'Granny's Attic', a small antique store next to the 7-eleven and a local barber.

There is so much I have left out here that seems important. During this time I was able to work with my therapist three times a week and dive into a type of 'psychoanalysis' (which I put in quotes since it is such a changed therapy now in 2024). I was able to work with her because she is also a student. I felt inspired by Louise Bourgeois, knowing she had not been afraid to dive deep and share her our psychoanalytic story in her strange spidery way. Watching my hard earned Union money used in these ways, for school and for psychology, feels ok to me. As many years as spend wanting to believe I will live past my mother's death at the age of 45, it still haunts me. I am 41 now.

I consider this thesis to be a haunting of sorts. I am listening to a song called Suijen by Pauline Olivereros, Stuart Dempster and Panaiotis. I wish you could hear the sound of the songs perfect eeriness and understand that what I am sharing is important in this way that might shift our future narratives for good.

But as some may say, "that ^^ could be asking too much of the art"



## Credits

1. The story of two nails comes from an interview with the pain psychiatrist Rachel Zoffness and Ezra Klien of the new York Times
2. Wolves in the attic was told by my mother in writing but only in Russian. She included it in the recording of her life history as told in October in 1996, about six month before her death. This history is included on the clear record included in this compilation.
3. The porcupine's dilemma was iterated around 1852 in a story by Shopenhauer and Freud in a work called *Parerge und Paralipomena (Appendices and Omissions)*. It is also known as the hedgehog metaphor.
4. The Buddha is said to have achieved some sort of enlightenment in the 6th century BCE (between 528-445 BCE)

# Glossary

**Biopsychosocial:** the biological, psychological and social ways pain is manifest in a human

**Dreams:** called 'sleep mentation' in neuroscience today, nightly images shown to affect memories. Evidence that newly encoded memories are reactivated and consolidated in the sleeping brain, and that this process is directly reflected in the content of concomitant sleep mentation, providing insight into the mnemonic functions of sleep.

**Dendrite:** little tendrils that come out of the 'root' of the neuron

**Elastic brain:** a proven theory that our brains can regrow and repair with time and exercise

**Gestalt** *ge·stalt/gə'SHtält, gə'stält/* : an organized whole that is perceived as more than the sum of its parts.

**Hippocampus:** located in the brain's temporal lobe, is where episodic memories are formed and indexed for later access. Episodic memories are autobiographical memories from specific events in our lives

**Memory:** a random elusive idea of what you think might have happened before this moment. The expanded definition since the early 2000s, includes memory as a function of the brain and the *mind*. In the extended definition, memory is the capacity to store and retrieve information. This new definition is elaborated on in the notes section of this thesis.

**Neuron:** nerve cells that send messages all over your body to allow you to do everything from breathing to talking, eating, walking, and thinking.

**Pain:** emotional and physical discomfort that grows stronger when avoided

## Footnotes:

I see my role as a sculptor to be one of beautifying, designing, simplifying concepts so that the experience of understanding medicine and healing is one of calm and enjoyment. The artist and the scientist share commonalities, yet, most of the time they tend to see the other as opposites.

An example of scientists and artists collaborating is the creation of the Laser. An artist needed to do something and so they helped the scientist show that it can find tiny holes in tires for airplanes.

The Tea with Mara story relates to the need we have to connect to each other and ourselves.

As quoted from “Sauna culture in Finland is an integral part of the lives of the majority of the Finnish population. Sauna culture, which can take place in homes or public places, involves much more than simply washing oneself. In a sauna, people cleanse their bodies and minds and embrace a sense of inner peace. Traditionally, the sauna has been considered as a sacred space – a ‘church of nature’. At the heart of the experience lies löyly, the spirit or steam released by casting water onto a stack of heated stones. Saunas come in many forms – electric, wood-heated, smoke and infra-red. Approaches vary too, with no hierarchy among them. Sauna traditions are commonly passed down in families and though universities and sauna clubs also help share knowledge. With 3.3 million saunas in a country of 5.5 million inhabitants, the element is readily accessible to all.”



Spring 2023  
The Pain Paradox  
Neuro 101 Fall 2023

An essay from Brown University Neuro 101

There is an important project I am working on that hopes to help advance pain science. A pain psychologist Dr. Rachel Zoffness explains, all pain is bio-psycho-social (1); we tend to feel it briefly and then run from it. My art explores pain in a way that addresses the notion of the bio-psycho-social and translates it into sculptural forms and engaged community experiences for the general public. Having had physical and mental injuries, and having explored different healing modalities, I now feel a self-awareness to the point I can be helpful in this way while working in my favorite medium.

My path to self-understanding came through a series of events. My mother died when I was 14, and I avoided the pain of that grief through work, driving fast, and partying. I decided to study art, as it required my full mind and body attention in a way that was manageable and acceptable at the time. Later, in college, welding revealed itself as an all-consuming task; every second demanded total focus when I operated machines melting metal. In my quest to become a better welder, I joined the Ironworkers Union after graduation and moving to NYC. As I pushed myself to work

alongside strong men a lower back injury curbed me just as a three-year stint of working full-time while attending school after work came to an end. An additional stress, at that time, was that my injury came in the midst of a bad breakup. Possibly, the pain was hanging on because I was still emotionally tied into the sadness. I was also three years sober, having quit substances and other addictive behaviors in order to stay in the Union. (In retrospect, I realize Union life and the excitement of the dangers of hard labor were replacements for the drugs I gave up ).

At a certain point I read *Healing Back Pain* by John Sarno (2), and I was surprised by how Sarno connected physical pain to our emotional repressions. This book inspired me to invest in talk therapy. Sarno's argument is that emotional events coupled with physical injury can commingle, causing lasting pain. Our physical pain won't subside until we reckon with our psychological troubles.

Through weekly meetings with professionals, I started unhashing past traumas and addictions, and I did indeed heal physically. I wanted to more deeply understand this connection and its relation to human suffering. My involvement has continued, and I currently see someone several times a week. My curiosity also led me to investigate Neurology and how our brain processes loss and anxiety. Attachment theory (3,4,5,6) books were only helpful to a point, but a book concerning oxytocin and dopamine levels in relation to our phones and communications with our partners were the most revealing (7). I learned about my chemical imbalance, and incorporated SSRIs into my daily routine. I experienced an uplift, a downturn, and after eventually moving onto a new type of job I went to an overnight 'family psychodrama retreat' in Pennsylvania (8). The retreat brought me to an epiphany: order to be happy, I had to find ways to be unashamed of what I needed.

Pain and memory are among the fundamental runminations of my art practice, followed closely by conceptions of labor and material worth. I view the years within a culture with contorted beliefs surrounding pain as foundational research for the work I hope to pursue in the future. I felt like an embedded journalist or anthropologist among the ironworkers — an other-worlder as an artist, a woman, a person willing to have emotions. Days were so harsh working on the Brooklyn and George Washington Bridge — as much from the bitter cold as from the beratement and harassment of my coworkers — I would find solace only in finding my welding point, starting the arc, and as ridiculous as it feel to write, crying in my welding helmet relieved me as I pulled the welding torch along the molten metal. Outside of work, that pain combined with my increasingly informed material sensibility was transformed into sculpture, writing, and sketches. My creative and meditation practices helped me use the pain of ironwork as a psychological tool, a lancet to reopen emotional wounds from the past and let actual

healing take place. My greatest aspiration for my art is that it might provide a similar type of opening-of-wounds healing for others, albeit in (hopefully) a more enjoyable way than toxic twelve-hour days welding hundreds of feet above the East River.

I am using Providence RI as a beginning point for the first public art, and building a sculpture that is also a sauna where a person sits to contemplate pain. In saunas, there is a balance between allowing oneself to be at a certain level of pain before the therapeutic benefits are reached and yet knowing when to leave so that our bodies do not feel out of control (9,10). The neurology of what is happening when we sit in the heat is of interest to me and what might be changing as we feel the pain, allow ourselves to sit with it, and then leave the pain behind. We might feel a new shock of a cold water plunge or the cold wind on our face as we leave the heat, and I wonder what the difference is neurologically between pain where we feel we can't escape it or when we know we can. I feel that knowing what neural mechanisms are at work during the experience would allow a separation between the emotionality of enduring and the pure facts of science occurring in real time (11).

Exploring Neurology has allowed me to look at the biological mechanisms of neurons, and what makes them work. The visual aids showing the nucleus, axons and dendrites have helped in a sculpture I am currently building. I have created a vaguely brain-shaped base. The base will be made of copper as a conductive base for the wiring and electronics involved. This base, when it is filled with mineral oil (that allows wiring to safely pass through) will act as the Cerebrospinal fluid that will continually circulate through the brain's ventricles or the spaces left between the sculpture's parts. In the brain, I have created glass orbs acting vaguely like neurons as well as memories. The orbs have a nucleus protected by water and glass. The Copper pipes allow connections between the orbs and a screw-on attachment, showing there is no merging like a synapse. The screw-on parts can be seen as gap junction points or axodendritic, axosomatic, and axoaxonic synapses. The orbs are laid out in a mapping of the places where I have lived and the many locations I have moved to within each location. Currently, there are 29 homes, 18 jobs, and 5 main neighborhoods or locales. Each home has an orb with a memory, and some homes have a connecting job site and art studio.

While memories are not a single neuron, this sculpture considers that they are, and that they are all interconnected. A video is projected onto the orbs using a small projector and the same video will play in all the places. The overlapping sound of the video and the obscuring of the image through the warped glass and water cause all to be lost in a sense. The brain is now a jumble of abstract colors and noises showing how flawed and disjointed our memories are. The videos and actual electrical wiring relate to

the electrical impulses of our brains. It is important to realize the idea that memory comes up with all its deepest attachments during painful or emotional experiences. Maybe we can see how this remains locked into our thalamus forever.

The nature of memories and the science we understand around our brain's memory process is constantly changing. As we now know, our brain is 'elastic' and in this work I have labeled it 'under construction'. As my mother was dying, our house was under construction, our family was being de-constructed, and the way my brain operates now is a result of some early wiring glitches. I would relate the disruption in my family to constructing a house during a storm. The actual building and construction of this sculpture 25 years later has helped rewire those neurons from the past and I have felt my mindset shift from the work I am doing.



In the studio



AI interpretations:



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Memory: An Extended Definition [Gregorio Zlotnik](#)<sup>1,\*</sup> and [Aaron Vansintjan](#)<sup>2,\*</sup>

## EDUCATION

- 2024 MFA Sculpture, Rhode Island School of Design, Providence, RI
- 2023 Neurology 101, Brown University, Providence, RI
- 2006 BFA Sculpture, James Madison University, Harrisonburg, VA

## SOLO EXHIBITIONS

- 2024 *Alchemy of Fragments*, Duke Hall Gallery, Harrisonburg, VA
- 2022 *Midnight Screening: (S/C)ensored*, 111 Barnell, Brooklyn, NY
- 2009 *Armchair Artist*, Delaware Valley Arts Alliance, Narrowsburg, NY
- 2005 *Instinct*, Zirkle House, Harrisonburg, VA

## GROUP EXHIBITIONS

- 2024 NADA New York NY
- 2024 Book Show at Fleet library RISD
- 2024 *Art and Chronic Pain*, Brown University Biomedical Center, Providence RI
- 2024 *Psyche of Space*, New Image Gallery, Harrisonburg, VA
- 2023 RISD Sculpture Triennial, Woods Gerry Gallery, Providence, RI
- 2023 Int'l Fibers Festival, Han-garam Design Museum, Seoul, Korea
- 2022 *RISD Sculpture Biennial*, Sol Koffler Gallery, Providence, RI
- 2021 *Dunnage*, with Carol Bove, 111 Barnell, Brooklyn, NY
- 2020 *Formerly*, Duke Hall Gallery, Harrisonburg, VA
- 2017 *Catchlight* Chashama, Brooklyn, NY
- 2017 *The Bog*, with Monique Milleson, Scranton, PA
- 2016 *Ataraxia : trifecta*, 174 Orchard, Manhattan, NY
- 2013 *MassMoCA : One Minute Film Festival*, North Adams, MA
- 2006 *The Generous Experiment*, Zirkle House, Harrisonburg, VA

## **RESIDENCIES AND PROFESSIONAL DEVELOPMENT**

2023 Yale Sculpture Dept, Iron pour with Desmond Lewis, New Haven, CT  
2023 The Steel Yard, Blacksmithing, Providence, RI  
2016-2023 Brooklyn Glass, Neon Workshops, Brooklyn, NY  
2013-2022 Brooklyn Metal Works, Jewelry Classes, Brooklyn, NY  
2019 Figurative Sculpture, New York Studio School, NY, NY  
2018 Grand Central Atelier, Long Island City, NY  
2012-2017 Spring Street Studio, Figure Drawing, Spring St. NYC  
2008-2009 Cabinetmaker's Apprenticeship with Larry Braverman, Beach Lake, PA  
2006-2008 Mildred's Lane, Beach Lake, PA

## **PRESS**

Idra Novey Interviewed by Van der Vliet Oloomi, BOMB magazine  
Ian Coats, *We Call them Cowboys of the Sky*  
Elori Kramer, *Iron Woman*, Slate

## **CERTIFICATIONS AND AWARDS**

Currents New Media Santa Fe NM  
Grad Commons Grant 2023  
RISD Fellowship 2022  
Attilio and Emma Della Bianca Term Scholarship 2022  
Construction Management,  
General Society of Mechanics and Tradesmen, Manhattan, NY  
Certified Welding Educator,  
American Welding Society, Manhattan, NY  
Journeyman Ironworker,  
Joint Apprentice Committee Union Ironwork, Queens, NY  
OSHA 30 certified 2016

## **WORK EXPERIENCE**

**Art Instructor**, Rhode Island School of Design, Providence RI

**Welding Instructor**, Brooklyn, NY, Julia Murray Welding LLC 2014-current

### **Management 2019-2021**

Senior Structural Weld Fabricator leading a team of 25, Carol Bove Studio, New York, NY

### **Construction 2010-2019**

Ironworkers Union, Journeyman Ironworker, Local 40 New York, NY

### **Owner/Fabricator 2014-current**

Julia Murray Welding LLC, Brooklyn, NY–Providence, RI

More notes:

Saunas have a deep impact on our neurological workings. Many studies show the benefits relating to heat adaptation and the heat shock proteins that are created. The class lectures about how neurons work with proteins gave me a grounding for this information. I learned about plaques, dementia and Alzheimer's, finding out how they are lessened in saunas, and how meditation is part of the process

Tattoos create a place for pain to exist in a chosen forum. You think and choose a design knowing that the placement and size will involve more pain for a longer time. There is a long lead up to knowing you will be in pain for this. There is knowledge that you will be in pain with another person during the tattoo.

The needles used in acupuncture have us going to a needle to heal and have been around for a very long time...

Music creates emotions that can bring up pain. A breakup song, a song reminding us of a happy time when we are sad. Random songs with no meaning or even being a good song will connect us to moments. I was in the car listening to the Puff Daddy song 'I'll be Missing You,' written for the rapper's best friend, and it came out the same month and year my mother died. I can sometimes sob on cue when that song comes on the radio, which is luckily not often.

EMDR going through old traumatic memories while having electrical vibration stimulation is known to lessen the feelings of extreme pain.

Memories coming from emotional linkings. The lecture about how we remember because of an emotion is key.

Pain staying around because of emotional linkings. The brain's way of healing and healing back pain discussing what happens when we get hurt while being in an emotionally dysregulated state.

Memory being one of the only things making us who we are. So few areas are unique to us aside from knowing our dreams and having our memories. Each of us has a separate memory while the same event happens. US History for example. My father, my brother and I during the death of my mother.

Memory being malleable and fluid like the neuroplasticity we are learning more about. Changing the way we remember things by flashing images while we dream in 'why we sleep'

Memory being an area of Neuroscience that is still not understood. I am still brought to this subject through my understanding of how pain works and how to bring my interpretations of how to deal with chronic pain through meditation and art. But I am now led to how neurons fire around our memory processing as a complicated link to speculation in my thesis work. I would like a health and science investigation through the sauna used to lead to some traveling and further looking but I am enjoying simply playing around creating my own memory banks for the glass piece.

Bibliography:

The Body keeps the score

Pain in music

Pain as torture

Music as torture

Brain 101

Brains way of healing

Deep Nutrition

The 70s hippy stuff- Auras, vibes, the Celestine Prophecy

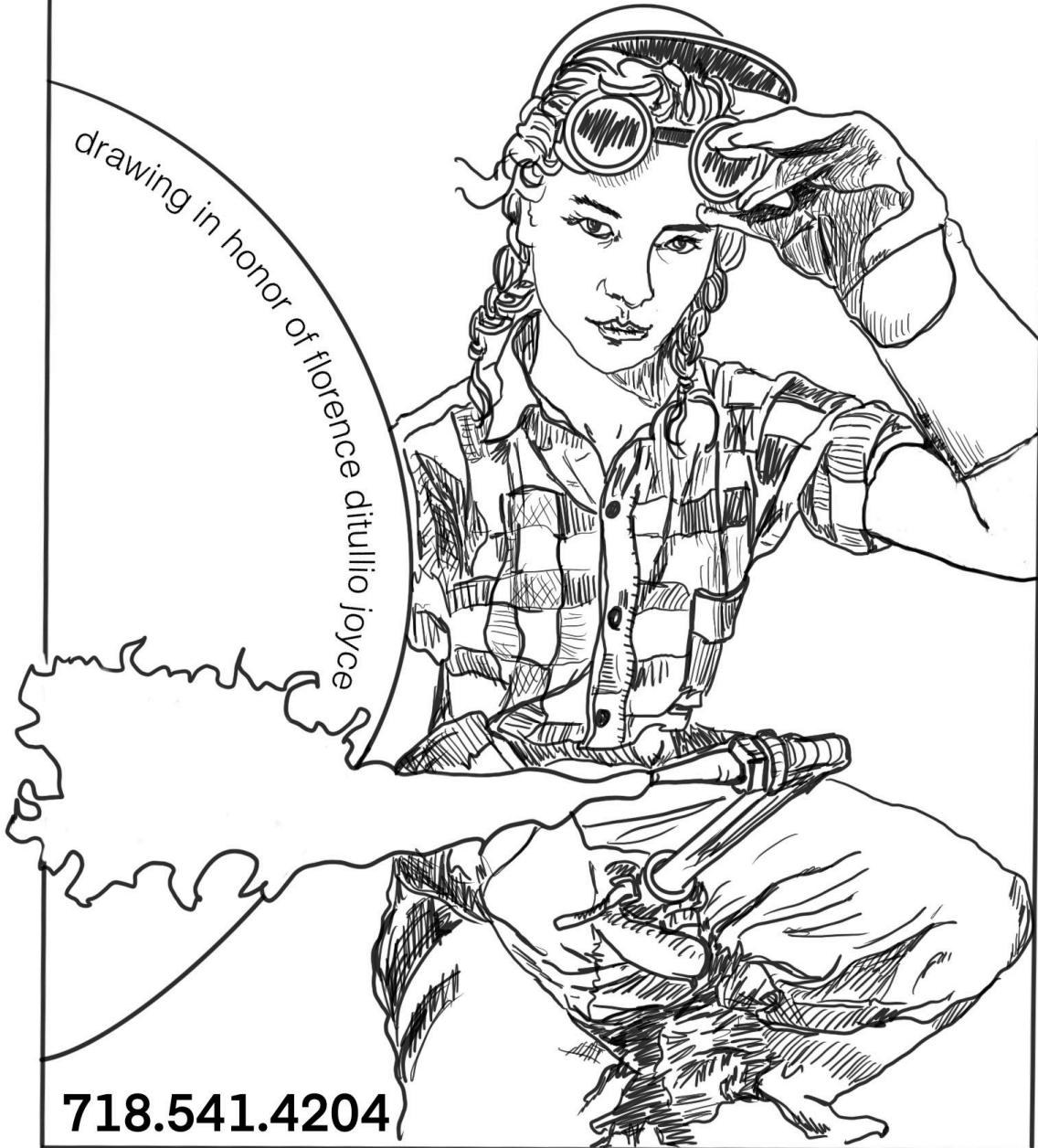
appendices/visual portfolio (record)

Other sculptures

# WELDING

julia murray welding LLC

drawing in honor of florence ditullio joyce



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