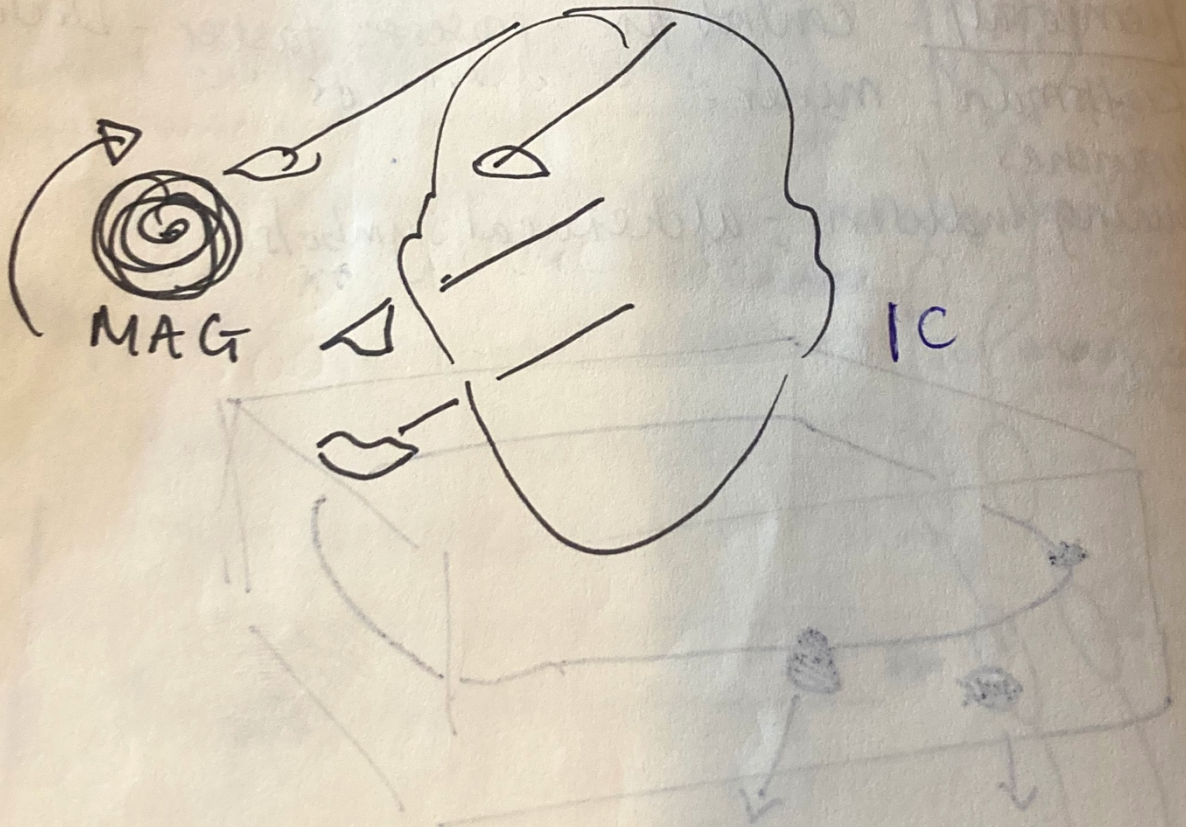


Notes to Lady Lodestone



Alice Davies

MFA in Medium- and Material Based Art
Department of Art and Craft

Oslo National Academy of the Arts

2024

01.05.24

← MAGNETIC MAP →



Artist statement.....Page 3

Introduction.....Pages 3-4

Chapter 1: Grounding
Magnetic life.....Pages 4-10

Chapter 2: From Stone to Phone: it's all about power
Magnetic relations.....Pages 11-35

Chapter 3: Inspirations.....Pages 35-43

Chapter 4: ConclusionPages 44-48

Artist Statement

My practice explores ceramics in relation to other materials. I draw inspiration from material reactions, medieval histories, mysticism and science to create a layering of visual messages from different time scales. Through these narratives I attempt to rethink what constitutes a being and how I relate to other beings. What is the quality of these relations, what enables me to relate and how are we related? This reimaging opens space to play with our accepted categories of space, time, and species, led by imagination and curiosity. Embracing feminist expressions of posthumanism in a hope for alternative futures and realities.

In this text I will refer to historical, geological, artistic, and philosophical influences and inspirations, adding in personal reflections and experiences throughout and relating it to works I have made.

Introduction

Alongside this text being a means of reflecting on my current practice, I plan to use it as a way of collecting the different avenues my masters project has led me through making and researching, to connect pathways in-between. In an attempt to step back and take some critical distance, I will reflect on some of the theory we have looked towards in the past two years of our master's course, which has inspired me but also brought up conflicting thoughts I wish to voice in the text.

The focus of my master's project is magnetism. And through this text I will consider why I was drawn to it and its relation to my ceramic practice. Chapter one will begin with some brief thoughts of how I came to care about magnetism, what initially captivated me, my processes with magnetic clay and examples of this through videos of experiments and sculptural enactments.

Chapter two will consider my conversation with geologist Henrik Svenson, scientific and geological considerations of magnetism and philosophical inspirations, looking towards new materialism, object orientated ontology and ecological thinking through Brian Hisao Onishi, Ian Bogost and Timothy Morton. I will consider the similarities and differences between these tools for thinking and critically reflect on them, can they help us to really depict reality? Or is this just an attempt to further pin down an understanding of the world? I will consider ancient magnetic technologies to explore these questions, relating these magnetic landscapes to alchemical modes of perceiving magnetism, and how this has inspired my own work.

Chapter three will consider my artistic influences throughout the process, such as Athanasius Kircher's experiments, Justin Fitzpatrick, Ane Graff, Deborah Stratman and Rose Schieber.

Chapter four will conclude this text, discussing what I am attempting to do through this project and the final decisions I have come to with my piece in Seilduken 2 for the graduation show.

CHAPTER 1: Grounding point – why magnetism?

So how did I come across this? I've always been interested in material experimentation, especially to lead a process or project, testing ceramic materials in different firing ranges, atmospheres, adding varying quantities of different materials and observing the results. It brings me joy. I suppose an alchemical approach to material, learning through testing and practice, prone to experimenting with how I can transform the material in ways I didn't expect to.

I had begun my MA with joining the metal department for a semester with the BA1's, and I noticed this metal dust which was on the floor of the workshop. This is when I began to collect it. I have been collecting waste metal dust from the floor of workshop ever since, this (steel/copper/brass/aluminum/anythingthingelse) dust is debris that flies off metal through processes such as sanding, welding, and forging. The action of collecting up sparkling dust is meditative and enjoyable, imagining the day's activities through remanences and traces left behind. Once collected I have been adding it to ceramic materials to form a hybrid material which I call magnetic clay.



Fig. 1 Dust I collected from the floor of KHiO's metal workshop

I observed material reactions between metal and clay, assessing the unexpected results which came about from this. Such as, gases released, meshing, binding, shrinking, colouration, attraction, and repulsion (aesthetically and magnetically). I began testing out its magnetic and conductive potential, and the relations between these visible and non-visible materials. As someone who is very curious in the secret 'life' to materials, and who works often with ceramics it's hard not to be absorbed by this curiosity, I work with the material closely, and am lucky I get to see this liveliness magnified, activating qualities we may not see without close inspection.

Clay is a material where its liveliness is very evident before the firing stage, as cliché as it always sounds from anyone working with material (particularly ceramics), there is a massive feedback loop. And maybe cliché is ok, maybe things are cliché for a reason?

So. This is where magnetism sparked my interest. What could depict this animism more than magnetism? The simple act of playing around with a small magnet in my studio depicts this life to me, but also the ungraspable and inaccessible nature of it through its invisibility. It gets me thinking of the magnetic fields constantly surrounding us, creating movement which goes unnoticed. How can I visualise these, listen to these or sense these? It is an entity which I think encapsulates an in-between space of the magical and the practical, its mystery is still innate despite modern science's attempts to tie it down since the beginning of the scientific age.

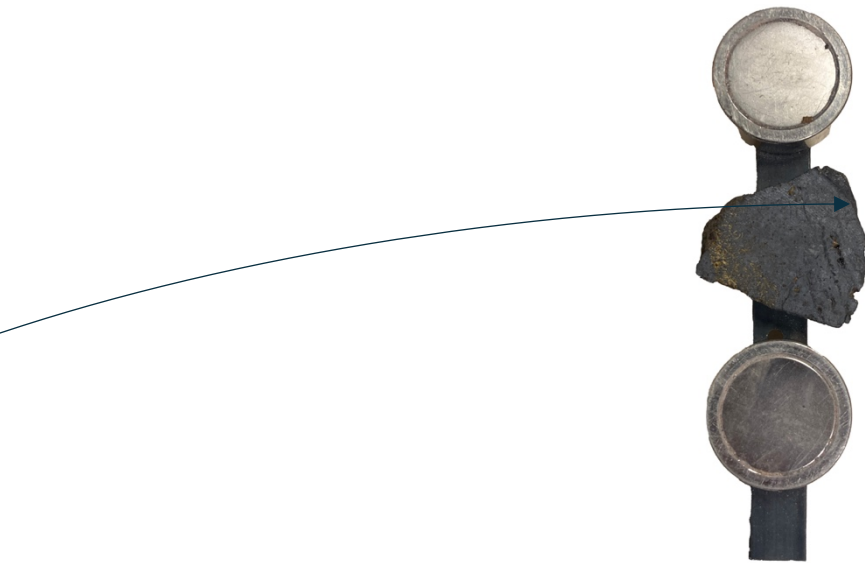
Sensually it stimulates my imagination through the act of physically feeling this invisible force when I place metal near a magnet. It gets my mind wandering, there are many parts of it unknown, unseeable, or inaccessible to our perceptions which again stimulates my imagination, through this attempt to visualise it. Cows, whales, and eels can sense the magnetic field of the earth, using it to navigate. Maybe once upon a time humans had a magnetoreception¹, and we gradually lost it through this separation to nature project humankind have been committed to for centuries. My imagination runs away again when I think of things like magnetic reversals. Magnetic reversals are events where the magnetic north and the magnetic south become interchanged. They still cause the science community a headache today through its inexplicability. These examples demonstrate the way magnetism inspires and expands my thoughts in many altering ways.

It's through these thought processes and material experiments I try to connect myself to the world around me, form reconnections with beings that feel distant to me, i.e. magnetism. Can I push my imagination further, to glimpse what is on this other side? Through working with this magnetic clay and the process of bringing these two things together, two things that I had seen as separate before, I have entered a process of learning about the interconnectivities between them. Which is what my practice is about. Through this merging, I can observe new

¹ Magnetoreception definition: the ability, exhibited by certain organisms, to perceive and respond to magnetic fields. Source: <https://www.collinsdictionary.com/dictionary/english/magnetoreception>

reactions and become aware of the interdependences between them. And the interdependences between them and with me.

Material experimentation allows me to explore this in a very concrete way yet acknowledging that it is still through the lens of my own subjectivity, experience, and assumptions. I am the one instigating these experiments, which I think it important to acknowledge when investigating the liveliness of materials or non-humans. I animate the material through motors and magnets, moving the sculptures in ways that humans recognise, human motion moving in human time. And the tension and contradiction between these points has followed me in my practice for the last 8 years. Therefore, it has become an important quality to my work itself.



When making these small magnetic rocks, I become aware of the gigantic magnetic rock we inhabit. With a north and south pole. This gigantic rock which communicates with other gigantic rocks in our solar system, communicating to each other through forces, waves, and light.

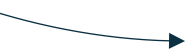


Fig. 2-3. Collection of some of my metal/clay material experiments. Oxidation and reduction atmospheres and a range of temperatures from 900-1260 degrees





Fig. 4. Examples of material experimentation at different stages before shaping and firing





Fig. 5. Seed energy, experiment shown in 'Drawing Blood from a Stone', Dec 2023

Sunflower seeds, magnetic clay, wires, 12V converter

CHAPTER 2: FROM STONE TO PHONE: everything is about power

Learning about magnetism through materials I became curious. Questions arose such as how did humans discover magnetism? When did we become aware of it? Who became aware of it? This is a similar curiosity that others experienced throughout history towards magnetic fields and its magical visualisations. These questions first led to me the lodestone. Lodestone is made of magnetite, a globally common mineral/rock, which ‘is naturally magnetic because its particles respond to the pull of the earth’s magnetic field’², it is the material that is used within compasses to be able to navigate and locate the poles of the earth. A lodestone is a block of magnetite which becomes a natural magnet, through the effects of lightning jolting through its particles.

The lodestone was our guide for discovering some of the forces which govern the earth. This really intrigued me, where would humans be today without the lodestone? How would the world look? Questions always lead to more questions, and I began to think further back, to its supposed ‘origin’. The lodestone is what allowed us to discover magnetism, but where and how is the lodestone formed itself?



Fig. 6. Magnetite piece showing off its magnetic ability in my studio

² Verschuur, Gerrit L. 1996. *Hidden Attraction: The History and Mystery of Magnetism*. New York: Oxford University Press pp.165

I began speaking with geologist Henrik Svensen, professor at UiO. We met at his office in the University of Oslo to discuss these matters, and our conversations sparked a lot of curiosity and wonder for me. He showed me many different magnetite samples from around Norway (fig.4) and gave me names of magnetite ores across Norway to visit.



Fig. 7. Magnetite samples from Henrik Svenson's office at UiO

We spoke about time in a way that my brain could barely wrap around, I will attempt to put it into words.

Henrik told me magnetite originates from iron and iron makes up most of the earth (35 percent), he spoke of how three billion years ago the earth was made up mostly of banded iron formations. During this time, the oceans were predominantly made of soluble iron, and there was no oxygen on the earth; life was self-organising.

Something Henrik termed as the ‘Great Oxidation Event’ occurred over 200-300 million years, where slowly bacteria (GS-15) gradually increased, and the bacteria started producing oxygen through photosynthesis. The iron oxidised turning entire oceans into rust – illuminating a fantastical image in my head.

The bacteria (GS-15) consume the iron (common ferric oxide) and transforms it into magnetite, Gerrit L Verschuur speaks of the history of this bacteria in ‘*Hidden Attraction, the mystery and history of magnetism*’, stating ‘2 billion years ago magnetitic bacteria might have been the most prevalent species on the earth. Today they are still widespread and have been found in certain soils. (eg. Bavaria)³ The bacteria have tiny compasses inside of its cells/bodies, which allows them to locate the iron that they then convert into magnetite in their cells.

Humans have been able to discover these events through the observation and exploration of rocks, looking at their unique structures, traces, colours, textures, cracks, and fossils. Geologists can observe the magnetic pull of the earth at different points of history from when a particular magnetite deposit was formed, using a device called a magnetometer. It has a magnetic memory per se, opening us to worlds and histories which were once unknowable to us. These discoveries allow us to shift our understandings, we can begin to recognise the tiny spec of time humans are in these rocks being. The earth has already experienced so many events and conditions over such a vast amount of time that we cannot comprehend, our existence is one miniscule happening. Rocks demonstrate this to us, a lively and historical agency.

In Henrik’s office there were samples of rocks everywhere, large rocks, small rocks, heaps of rock dust, all to be inspected underneath his microscope. He spoke of how he walks around with a needle on the end of a pen during his field trips, to detect the magnetic potentials of different rocks through the movement of his iron needle. His office didn’t seem too dissimilar to my studio with all my tests splayed around, or my thoughts of skiing around with magnets on the end of some ski sticks to detect the metal in rocks. I wanted to consider the differences/similarities/connections. My magnetic clay rocks are ‘manmade’, made from industrialised minerals in the ceramic’s lab or metal dust from the floor of the workshop and Henrik’s are collected from his study trips. Ceramic is mineral, ceramics is rock, but ceramics is also a practice so heavily reliant on industrialisation and extraction. It’s all these things at all at once. Natural/unnatural. Artificial/organic. I think ceramics plays with this binary very openly, as a lump of clay dug from the ground looks very similar to the clay we buy in a bag. Whereas materials such as metal or wood lose some of this original form when processed and sold. When I buy wood its already in a sheet for me, it’s very far from its trunk-like manner. Or if I buy metal it’s been formed into a rod or a tube. Clay is something you can find in your back garden and begin working with fairly quickly.

This led me to reconsider the magnetic material I was making, through this project I am taking a closer look at the burred space in-between nature/human, harnessing in on the

³ Verschuur, Gerrit L. 1996. *Hidden Attraction : The History and Mystery of Magnetism*. New York: Oxford University Press pp. 171

interdependences between them. This led me to changing the material mix I made from workshop metal dust: ceramic materials, to magnetite: ceramic materials. A rock that I fire, take a hammer and place in the stone crusher to become a powder, then add to industrialised ceramic materials to form my magnetic clay. Nature doesn't feel so 'over there' for a sudden, which is what I explore through the entanglements, and now I felt that the material symbolised this better.

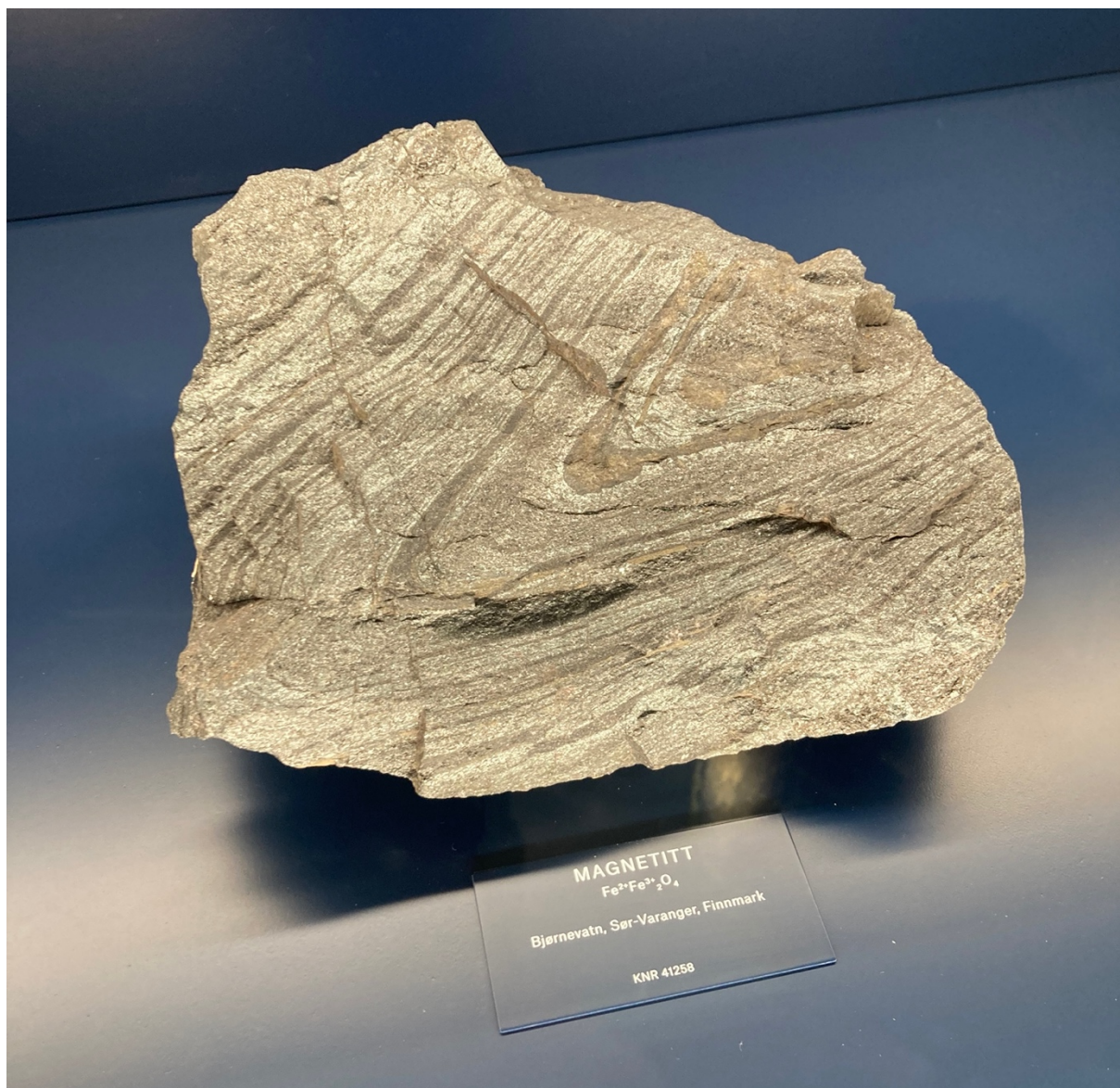


Fig. 8. A picture of a magnetite sample from the Natural History Museum, Oslo

We can observe these worlds through geology and science, but also within archaeology. Which has been a massive inspiration point to this project. Prescientific revolution, premediaeval, ancient knowledge of magnetism is evident from the relics which have been left behind.

Examples of this are evident in different historical sites in the book '*Seed of Knowledge, Stone of Plenty*'⁴ by John Burke, demonstrating ancient magnetic technologies such as pre-Columbian rock chambers in Putnam County and the Pot Bellie sculptures in Guatemala.



Fig. 9. Stone Chamber, Kent Cliffs, US

Stone chambers in Putnam County are demonstrated all over the northeast of the US – more than 100 were erected between the NY towns of Brewster, Mahopac and Kent Cliffs. These stone structures are electromagnetic, the air inside is electrically charged and continually radiating. Seeds were placed inside the chambers, and the electromagnetic charge effected the biology of the seed – increasing its germination by distinctive amounts. This magnetic engineering was built when the area was inhabited by Native American Wappinger and Mohegan tribes. Demonstrating a deep knowledge of magnetism between ancient builders.

⁴ Burke, John A, and Kaj Halberg. 2005. *Seed of Knowledge, Stone of Plenty*. Council Oak Books.

Within some of these, ‘organic remains have been discovered inside the chambers, the oldest dating back to about 200 AD.’⁵



Fig. 10. Pot Bellie, Olmec, Monte-Alto, Guatemala

Other evidence of this magnetic knowledge is the Pot Bellies, in Guatemala. Burke goes on to talk of them, ‘In western Guatemala, similar basalt sculptures demonstrate a clear ability of the Olmec⁶ to determine the north and south poles of magnetic fields. If a whole body was depicted, the magnetic poles straddled the navel. In the seven large basalt heads, there were detectable north poles located at the right temples of the heads. These were not inserts in the heads; rather, the poles were present in the original rock. This positioning is obviously not by accident and suggests the carvers may well have used an Olmec lodestone compass to detect magnetic polarities in the basalt and then carved the sculpture accordingly’⁷

⁵ Burke, John A, and Kaj Halberg. 2005. *Seed of Knowledge, Stone of Plenty*. Council Oak Books pp. 70

⁶ Definition: The Olmec are the earliest known Mesoamerican civilisation, dating from 1200 BCE to 400BCE. Cartwright, M. (2018). *Olmec Civilization*. [online] World History Encyclopedia

⁷ Malmstrom, Vincent H. (1976) “Knowledge of Magnetism in Pre-Columbian Mesoamerica.” *Nature* 259 (5542): 390–91

These two examples are vivid examples of interactions between materials. The liveliness between them and beings are so poignant in a literal and historical way, between seeds, magnetic minerals, atmospheres, and humans. The interdependences between all these elements, the visible and invisible. The seed produce in the stone chambers grew 3 times as much in some cases⁸, massively impacting agriculture and the livelihood of people.

Having researched a lot about the discovery of magnetism, it's predominantly taught from the scientific age of the between the 1500-1900's, with the book 'De Magnete'⁹ by William Gilbert in the 1600's being the centre point, and most other references are from Europe.¹⁰ This was a time when magnetism thought to be 'explained' or we could 'understand' and rationalise it. "De Magnete" opened the era of modern physics and astronomy and started a century marked by the great achievements of Galileo, Kepler, Newton and others.¹¹ On the other hand, this ancient knowledge is only recently being explored, Burke highlights this with the stone structures, 'these chambers have been largely ignored by American archaeologists. In fact, academics seem to have gone out of their way not to study them. The excuses have been varied, including a dismissal of the chambers as root cellars or storage sheds of colonial farmers.¹² So why has this been largely left out? I assume because they are non-western knowledge systems, and the west enjoy the ability to claim this knowledge as its own, magnets are now used extensively within western agriculture. I wonder whether I am reappropriating these knowledge systems by further framing them from my western position again. I suppose what I hope to do is to look back to the premodern in whatever ways I can to reflect on our post-modern condition, why certain modes of thinking, being and experience are elevated over others. There is something ironic to it for sure, this attempt to leave no stone unturned in my own search for knowledge. Look at this discovery I made; the discovery that hasn't been so discovered!

Considering how this human-centric essentialist attitude came about, it is always tied to western ideology, capitalism and the scientific revolution, these quests for knowledge, individualism, and power. So, this process of shaking up my perspective and leading with curiosity involves looking towards alternative knowledge systems, outside of the dominant one. Such as the stone chambers, or the Pot Bellies sculptures and contemplating how these relations and approaches compares to modern day.

⁸ Burke, John A, and Kaj Halberg. 2005. Seed of Knowledge, Stone of Plenty. Council Oak Books. pp. 58

⁹ Gilbert, William, and P Fleury Mottelay. 1958. *De Magnete*. New York, Ny: Dover.

¹⁰ "History of Magnetism and Electricity." 2019. Magcraft.com. Magcraft. 2019.

¹¹ Ibid.

¹² Burke, John A, and Kaj Halberg. 2005. Seed of Knowledge, Stone of Plenty. Council Oak Books pp. 70

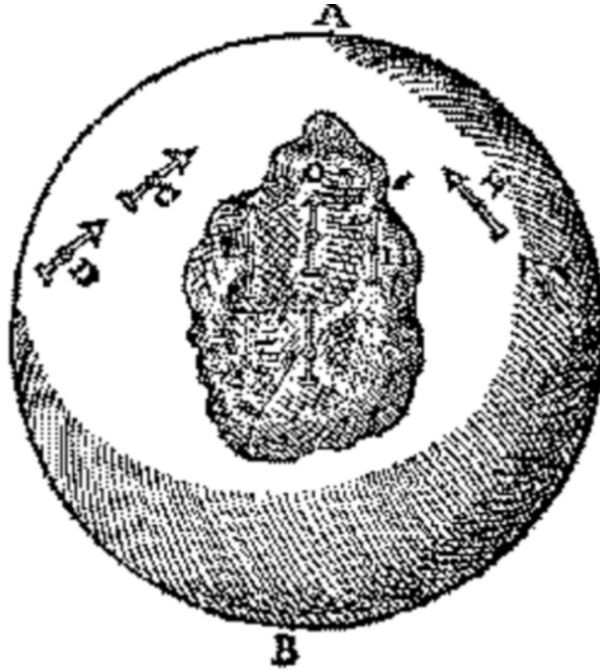


Fig. 11. Diagram from *'De Magnete'* showing a Lodestone within a spherical earth demonstrating magnetic variation

So how do they compare to today? The stone chambers demonstrate a blended space of the spiritual and the practical which I find fascinating, as this is a binary modern day has worked hard to separate. A coming together of these opposites through the land. A blended space, which magnetism I think occupies too. Because of its omnipresence, we depend on it to exist, but is completely ungraspable through our own senses. The chambers demonstrate a magic that feels grounded in the mundane, in everyday necessities and objects. Through rocks, buildings and the needs of sustaining people and their survival. Ritual was connected to the everyday..

The electromagnetic atmospheres impact the growth of the seeds, which impact people's health and well-being. Our present-day lens has translated these ancient sites into spaces of aura, ritual, and the esotericism. One side of the coin. The ancients didn't have the same divisions, they 'would not separate the physical from the non-physical, the soul from the land.'¹³ I can't help but thinking about the consequences of these divisions, does this disassociation to the land allow us to act aggressively to the earth, seeing it is inert dead matter we can constantly take from?

Taking this into consideration for this project, I think I what I'm trying to do is almost reimagine magnetism through a more 'spiritual' lens. To bring these two binaries onto more of an equal footing through my own visual language. Sat at the same height. Things that surround

¹³ Burke, John A, and Kaj Halberg. 2005. Seed of Knowledge, Stone of Plenty. Council Oak Books pp. 144

us all the time are full of magic: rocks are portals into other worlds, earth's magnetic field constantly pulsating and protecting us from solar winds, when I wire up a circuit, and it powers a motor, there is still part of that process that feels a bit wild and a bit magic. We have been fed the science lens on magnetism. But the spiritual lens I am looking to revisit, which is what takes me to the pre-scientific. This is demonstrated through the 'Pot Bellies' sculptures.

In the pot bellies, we see magnetism being used symbolically. It's argued that the sculptures, 'represented the dead but still revered ancestors. Sculptures which repelled magnetised objects would have been seen as demonstrating the presence and authority of dead ancestors, special powers in certain body parts'¹⁴, this example shines magnetism through a channel of symbolic liveliness, as the memory and power of their ancestors is carried through. The sculptures would have acquired great respect and care, as they radiated energies to each other and their surroundings. Two giant sculptural magnets communicating with each other in invisible ways.

These examples offer a location for the imagination to connect to times and people beyond our own. And through looking to ancient magnetic technology, I highlight stories about the world that might not have been told as much in the western dominant narrative. It allows me to question reality and consider the relations between dominant ideologies and our treatment of our surroundings today. As we are now within the capitalocene¹⁵, I think these conceptual considerations are quite important.

Taking into consideration those thoughts on ancient magnetic technology, let's take it to present day. Without this GS15 bacteria, we wouldn't have television or phones today.¹⁶ Through natural occurrences of the lodestone and its forces of attraction and repulsion, it allowed humans to begin experimenting with electricity, and is argued what gave birth to the scientific age. It is a stone which led to the discovery of electromagnetivity and electronics, through the harnessing of its forces.

¹⁴ Manaugh, A.G. (2019). Magnetic Landscape Architecture. [online] BLDGBLOG.

¹⁵ Capitalocene definition: a term that locates climate change within the history of capitalism and colonialism. Arons, Wendy. 2023. "We Should Be Talking about the Capitalocene." TDR 67 (1): 35–40.

¹⁶ Verschuur, Gerrit L. 1996. Hidden Attraction: The History and Mystery of Magnetism. New York: Oxford University Press.



NEW MATERIALISM, OOO, ECOLOGICAL THINKING AND MY WORK

What I am trying to do through this text is demonstrate the interconnectedness and coexistences magnetism has with us and other beings, in ways that I was unaware of, to question the dualisms of object/subject, self/world, active/passive and bring attention to the mesh like structure that reality holds. I look towards new materialist movements, which advocate for the diverse interactions involved in processes in hope to encourage a joint and coexistent future, including human and non-human. Through this researching and writing I am practicing a process of becoming fully aware that human beings are connected to other beings: mineral, vegetable or atmospheric. I think this can be a form of care within itself. Additionally, I think diving into the material histories and philosophy is an important part of this process in conjunction with artistic practice/making. Yet alongside this, it's very important to consider the situatedness of the sources I take from, 'all scholarship is partial and bias.'¹⁷, Fred Morton brings awareness to this in his books as he analyses, 'the racism inherit in philosophy since Kant.'¹⁸ Discussing 'the very shaping of our European ideas of what it means to know, to think, to value.'¹⁹

I am aware in this text I am ordering and measuring geological and historical events in a very definitive and linear nature. An illustrative nature, and there is something slightly off for me about that. I know this thinking is touching on is how meaning comes out of the way things relate. But it feels like I've taken it in a very literal way, emphasising a mechanistic viewpoint too, which evidently, I find really, really hard to shake off. During this time, I was working toward a duo-show with artist Liberty Mann. Looking back, I think this rigidness translated to my visual practice around the same time. The show was in December at Seilduken Gallery, titled '*Drawing Blood from a Stone*'.

The piece shown below was a result of this time of research, and like I said I think it shows. By revealing the cog and magnetic propeller a mechanistic message is communicated, this element touches this and therefore effects this, the cause and effect we expect. And through this demonstration of my work, I realise it has lost a lot of the mystery and wonder that the process encapsulates for me, and I want that part to stand strong within the sculptures themselves.

¹⁷ Barreiro, Jacqueline, and Melisse Vroegindewei. 2020. "New Materialist Becomings and Futurities: A Panel Intra-View." *Matter: Journal of New Materialist Research* 1 (1).

¹⁸ Ibid. pg. 148

¹⁹ Ibid. pg. 149

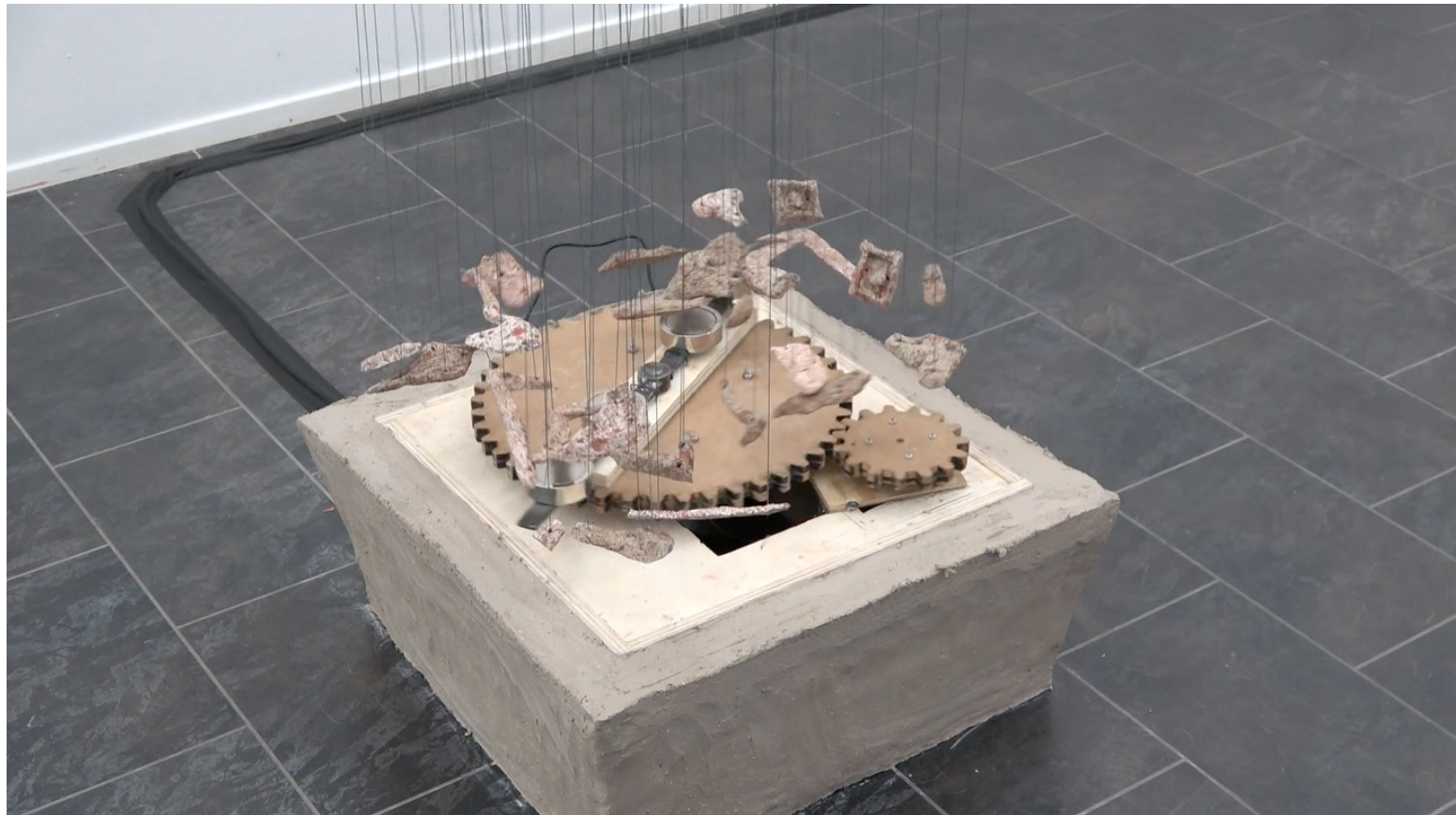


Fig 12. Still from the video for the group show 'Then, leap', RAM Galleri, 2024

Magnetic clay, fishing wire, cogs, magnet propeller, welded cage, clay, motor



Fig 13. Still from video for *'Drawing Blood from a Stone'*, Seilduken Galleri, 2023

And what captivated me most about this work was not the movement of the magnetic ceramics, but the shadow of the movement of the metal cage that was suspending the pieces. This has an essence that this piece itself was missing.

Video of my work *'Drawing Blood from a stone'* in the group exhibition *'Then, Leap'*, RAM Galleri: <https://vimeo.com/917924301?share=copy>

Video of my work in the duo show with Liberty Mann, *'Drawing Blood from Stone'*: <https://vimeo.com/915552437?share=copy>



Fig 14. Sculpture from the National Museet : picture of me sat in the chair from the library with globe

Despite opening myself to these relations and qualities of magnetism (like to bacteria and ancient builders), it feels like I could be reducing it to these affects, qualities, and relations, especially in this chronological way, which is further concretized through this means of writing. So, my question is, through this reduction do I delete some of the mystery and enchantment that is inherit to magnetism?

However, I do I think learning about magnetism through alternative knowledge systems: through my senses, philosophy, material experiments, under-researched archaeology and following down paths my curiosity takes me a new type of mystery unfolds. Things I thought I knew warp and shake and become less recognisable. When I try get to know magnetism more intimately, I open myself to the vastness of its connections and nuances. Ironically, it almost becomes more and more surreal, more alien through this process. Through learning about these connections, its bonding yet uncanny.

Around this time, I had another show with Linda Flo, from my ceramics class. We named it '*A Practical Magic of Some Sorts*', and my focus for this was testing out different ways of displaying the magnetic ceramics. So, I designed a table which hide my magnetic propellers

underneath and left the pieces on top of the table instead. The source of movement was less identifiable.



Fig 15. 'A Practical Magic of Some Sorts', duo show with Linda Flo, Akademirommet, Kunstneres Hus, 2024

Magnetic clay, ceramic, wooden table, magnet propellers, ice block, catering bucket, fishing string

Video Link to 'A Practical Magic of some sorts': <https://vimeo.com/926771357?share=copy>



Fig. 16. 'A Practical Magic of Some Sorts' detail image, 2024



Fig. 17. Video still from 'A Practical Magic of Some Sorts', 2024

This was more in the right direction. The response I got was more engaged and curious, mirroring my own feelings in the process. However, the table was saying too much in this instance, it still felt quite contained and distracting. I added some more elements as this is what I felt it was missing before, forms which had fewer known origins, crabs hinted towards bodybuilders and small needles looked like archaeological finds, the mystery was creeping back in. To inspire the forms, I had done ink blot tests, so that the forms could emerge from a less predetermined source. This was inspired by way artist Justinus Kerner who believed that he ‘had found in this aleatory art a medium that would bring him into closer contact with the spirit world.’²⁰, this was what inspired psychotherapy and in turn the famous ‘Rorschach test’. This is a historical example where the spiritual and scientific is interwoven.



Fig. 18. The two favourite ink blot tests I made, inspiring forms for ‘*A Practical Magic of Some Sorts*’

²⁰ Roob, Alexander, and Shaun Whiteside. 2019. *Alchemy & Mysticism: The Hermeticic Museum*. Köln: Taschen pp. 486

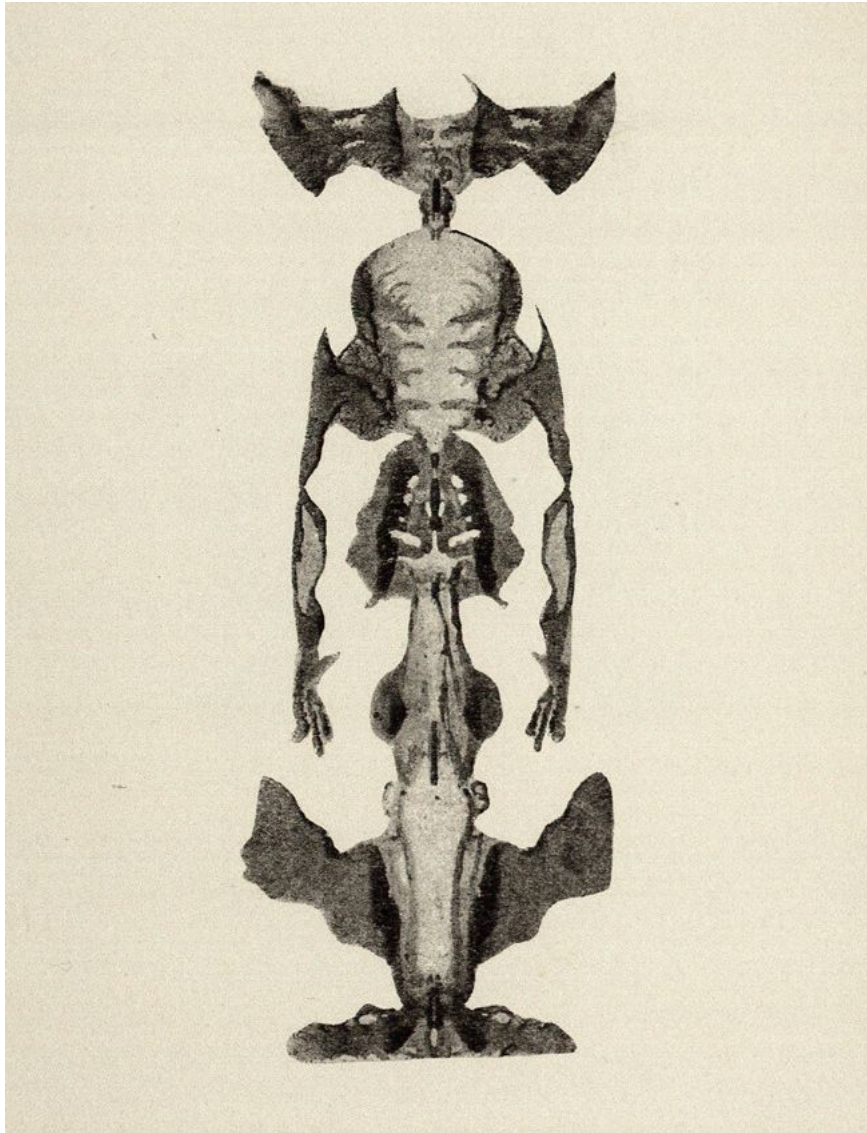


Fig. 19. Justin Kerner illustrations from the 'Kleksographien'

This sends me back to my show *Hour Watching* in Seilduken 2 in April 2023, where I think this feeling, I'm looking for is evoked more successfully. What is this piece missing to me that the '*Hour Watching*' has? Is it the size, is through the strange pairing of colours and materials, colours of bright blue acrylic plastic (like something from an electrical circuit) with raw earthy fired clay, through the morphing forms: faces which sprout out of funnels which are more figurative or more humorous, or through the audio of dripping water elevated by the bizarre acoustics of seilduken 2?



Fig. 20. 'Hour Watching', picture from solo show Galleri Seilduken 2, 2023

Ceramic, acrylic plastic and water

Video of the installation *Hour Watching*: <https://vimeo.com/819209595?share=copy>



Fig. 21. Detail from my show 'Hour Watching', Galleri Seilduken 2, 2023

Ceramic, acrylic plastic and water

During this time, I began to revisit object orientated ontology (OOO). I began to wonder why do I translate these thoughts into objects/sculptures? Why not keep them as text, or drawings. Simply, I love to make objects and activate them in a space, through lighting, smell mechanics, motion. I love to make objects from clay or metal and hand make them. But why. I don't know if you can really explain why, but I am a believer in objects having power and potency particularly in an exhibition space, which is where OOO spikes my interest.

My understanding of OOO is that things are never exactly what we think they are. Objects influence each other in a way that are familiar in a gallery. The aesthetic dimension, causality between objects themselves is aesthetic, and art directly messes with the ideas of cause and effect. This relates to earlier in the text when I mention the linearity between cause and effect feeling too strong in my first attempts at RAM Galleri and Seilduken 1. Brian speaks of this when he states, ‘art is capable of dramatizing the entanglement and aesthetic qualities of causality. Art highlights the narrative aspects of causality and allows us the opportunity to retune our attention.’²¹ Things influence each other in all sorts of ways, not just through appearances and function. Western people find this unknowability or instability very disturbing, with the paranormal being squashed during the scientific age. There is a profound gap to what I am and what I appear to be, a gap which we are unable locate. OOO opens a space which accepts this mystery is hardwired into the way reality is. And it is impossible to delete. Trying to delete it creates violence, violence towards humans, nonhumans and non-living. We shave the weird appearances off things and get down to the palatable stuff, that humans can manipulate how we want to.

I think what OOO is lacking is a relation to the body, there is something slightly withdrawing about this theory that I find difficult, like a mystery that we can’t access so let’s just leave it there and let it be. The same issues I find with Anna Tsing’s writings on non-human to non-human relations in ‘When the things we study respond to each other: tools for unpacking the material’²², there is an attempt to remove the human which makes it hard to engage with. ‘There is a taste of scientific coldness to it. The Earth is not an experiment. We can’t just sit back and observe, relax and let evolution do its thing.’²³

Going back to New Materialism, as thought provoking as this way of relating is, when everything is connected through each other, when and where does it ever end? How do you address or concentrate on specific issues in depth that require complex thinking and action? An example is demonstrated in New Materialist Becoming’s and futurities, a panel intra-view, ‘this can make it seem like certain issues facing minorities, such as achievement gaps, cannot be adequately addressed by New Materialism because of the particular history of the genocide of indigenous people is not taken to matter enough.’²⁴

Despite these criticisms, I do think there is much to take from these philosophies, there are many connecting points between them, Brian states, ‘at the heart of object orientated ontology and new materialism is the desire to rid philosophy of the binary logics that have dominated western thought, since plato’²⁵ and challenge the cartesian category of the individual,

²¹ Brian Hisao Onishi. 2023. *Weird Wonder in Merleau-Ponty, Object-Oriented Ontology, and New Materialism*. Springer Nature pp. 4

²² Anna, Tsing, “*When the Things we Study Respond to each other, Tool for Unpacking the ‘material’*” edited by Harvey, P., Krohn-Hansen, C. and Nustad, K.G. (2019). Durham: Duke University Press. pp. 221-244

²³ Morton, Timothy. 2012. *The Ecological Thought*. Cambridge; London: Harvard University Press pp.120

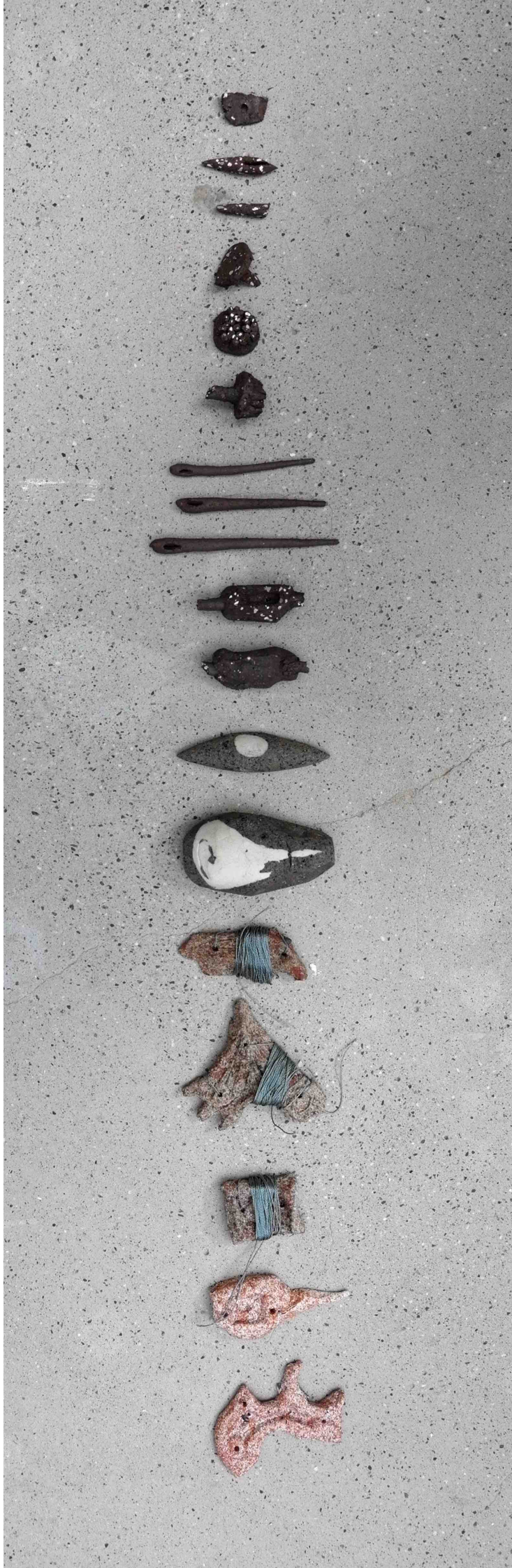
²⁴ Barreiro, Jacqueline, and Melisse Vroegindewej. 2020. “New Materialist Becomings and Futurities: A Panel Intra-View.” *Matter: Journal of New Materialist Research* 1 (1). pp. 148

²⁵ Brian Hisao Onishi (2023). *Weird Wonder in Merleau-Ponty, Object-Oriented Ontology, and New Materialism*. Springer Nature. pp. 25

considering agency for non-humans and objects. I use OOO and new materialism as tools to inject curiosity, awe, uncertainty, and contemplation back into my ways of seeing and being.

There is some contradiction to this. Because at the same time I feel a bit opposite. I am aware I try to delete the confusion myself, through these methods of explaining my practice and looking towards theory and philosophy. I don't mean this in a negative sense as such. I think the confusion and the contradiction is where acceptance is needed and I'm trying to get comfortable with it through practice. I think this constant back and forth in the text is mirrored in my practice and these emotions have inspired me in some of the forms for my degree show piece. After trying out maybe different shapes for the moving magnetic clay pieces (needles, rocks, dice, more ambiguous shapes, figures) somewhere along the track tongues came into my field. Severed ceramic tongues, which shake and roll around. I enjoy the metaphor of this, imagine the sensation of talking with a ceramic tongue. Pointing to when I speak about my work and I trip up on my words, in an attempt to access things outside of my own subjectivity, sitting in these contradictions and finding it difficult to navigate. Talking about pinning things down, and making sense of things, well on my way in my own search for knowledge. These are all things I also said I wanted to move away from. I suppose this is why I make sculptures, because of language not being able to accommodate the things I feel.







Above. *Fig. 22.* Arrange of forms made in magnetic clay, varying quantities of waste copper oxide from the enamel process, fishing string

Fig.23. Magnetic ceramic tongues in progress for degree exhibition

Magnetic clay, magnetite slices and ceramic

CHAPTER 3: INSPIRATIONS

Athanasius Kircher

A big point of inspiration for me has been Athanasius Kircher, born in the 1600's in Rome. He could be referred to as a philosopher, experimenter, magician, scientist, geologist, and entertainer, and had strong belief in the unity between all things, or as Joscelyn Godwin says in '*Athanasius Kircher's theatre of the world*' the 'correspondences of all levels of being did allow for influences to travel from higher to lower levels e.g. from planet to plants to the human body.'²⁶ I came across his illustrations within the book, '*Monster in the Machine, Magic, medicine and the marvellous in the time of the scientific revolution*'²⁷ and was particularly absorbed by them in an aesthetic sense, but also in a practical, or methodical sense. They really spoke to this notion of practical magic that has been lingering around my head.

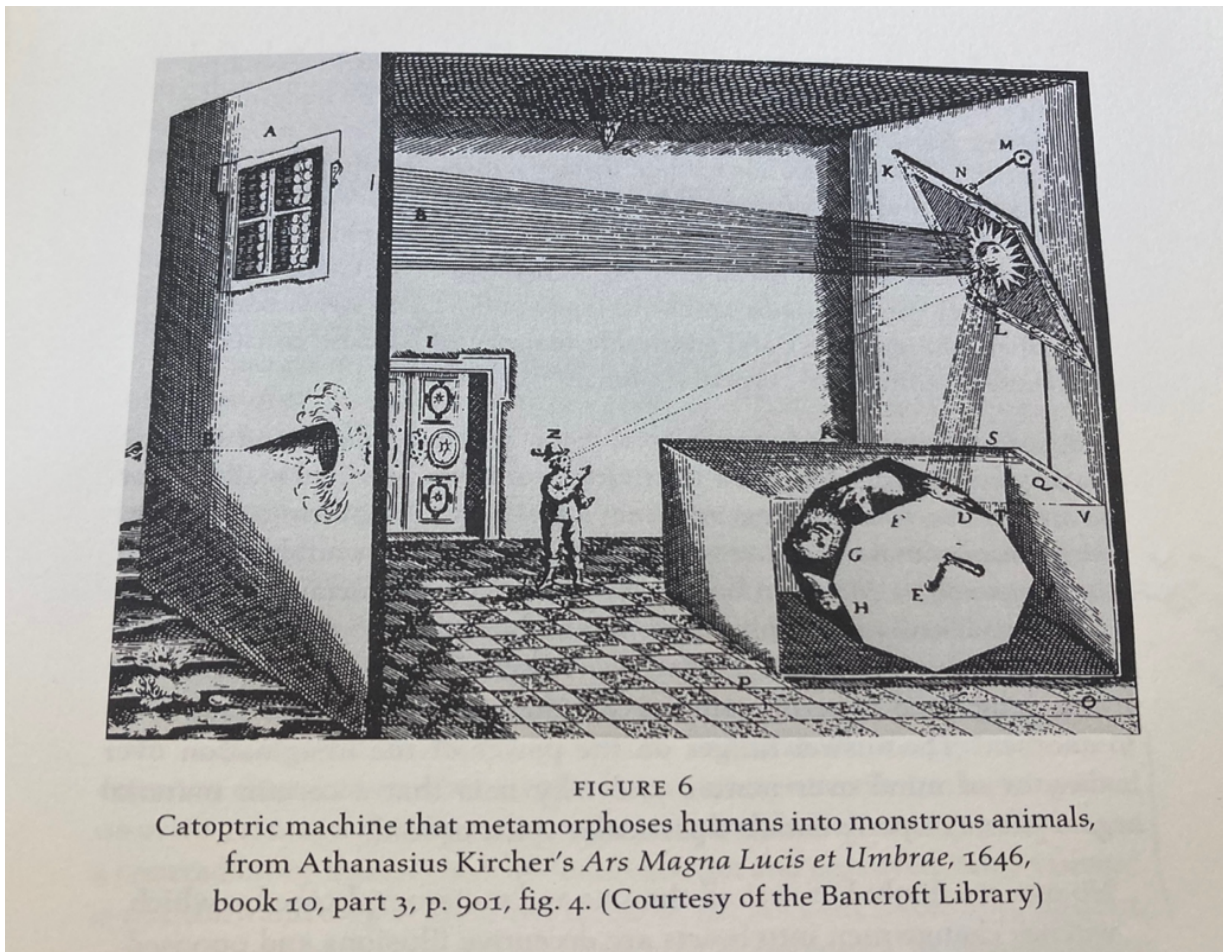


Fig. 24. Catropic Machine, Athanasius Kircher's illustration

He made many different machines in the roman college chemistry lab, with many being magnetic and optical. There is this sense of trickery or deception to them, through moving

²⁶ Joscelyn Godwin (2015). *Athanasius Kircher's theatre of the world*. London: Thames And Hudson pp. 20

²⁷ Hanafi, Zakiya. 2000. *The Monster in the Machine*. Duke University Press

objects with unknown sources, refractions and illusions using light, sound, and smoke. While also teetering along the lines of fantasy and the decorative.

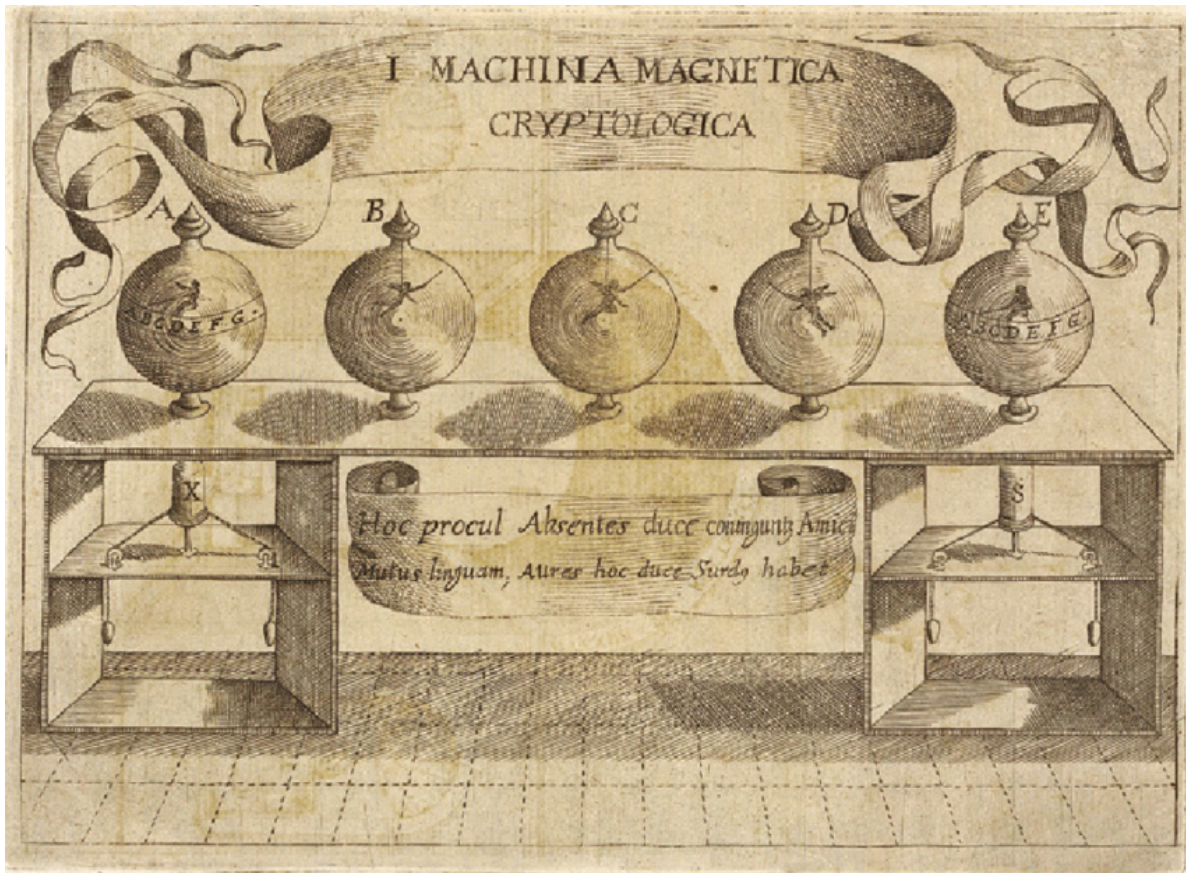


Fig. 25. 'Cryptological magnetic machine' designed by Athanasuis Kircher

This illustration above shows numerous rotatable vessels lined up on a table-like structure, encasing a hidden magnet and each vessel holds a small figure with a stick. Letters are to be written on the outer layer of the vessels' figures point to these letters. Revealing a 'magnetic message'.

Maybe I'm stating the obvious, but experiments allow us to find out things unknown, not as a way of confirming a world view already fixed. And is a method I use to try to disturb my own views, or perspectives I've inherited whether that's about science, rationale, or what ceramics can be.

Justin Fitzpatrick

An artist I always refer to is the painter and sculptor Justin Fitzpatrick from Ireland, his work has been an inspiration point for many years. It's this combination of surrealism, the ornamental, symbolism, craftsmanship and humour which gives it such an enticing energy. These strange relationships between things that are supposedly separate: spiders and doilies, men dressed as shrimps and blushing waiters. This fluidity between shapes/entities/objects suggests a complexity in their relations and a not so separateness. The connections or symbolic value between things, push my imagination in ways it may not have before, as my brain uses this imaginative energy to connect them. This decorative nature to them that adds to their irrationality, against this modernist ideal of serious ideas, straight lines, and order. They encompass humour, joy and perversity.



Fig. 26. Justin Fitzpatrick recent sculpture 'Endroscene Tables' from the show, 'Ballotta', La Ferme du buisson', France, 2024



Fig. 27. Justin Fitzpatrick recent painting from the show, 'Alpha Salad', The Tetley, Leeds, 2022

Ane Graff

I'm inspired by Ane Graff's treatment of material, this process orientated approach to matter which sometimes evolves and interacts throughout the duration of the show. She investigates health and ecological issues by looking towards humans as part of a huge network of relations, that cannot be reduced to a single source. Graff's materials list is a concoction of toxic and strange ingredients which make up the recipe, ranging from food products, minerals, bacteria, and antidepressants. A radioactive cocktail from the past, present and future.



Fig. 28. *'The Brain Cardiovascular Axis (The Heart Brain Pain)*, Ane Graff, 2022

- ¹ The dawn to dusk ochre transform into a purplish shade if heated in aluminium, the trace aluminium in the pigment activated.
- ² 150 year old charcoal from the West Coast of USA's earliest steel mill in Washington (ultimately they failed), which have bits of iron in them and still smell like deep smoke.
- ³ Vanilla was cultivated as a flavouring by pre-Columbian Mesoamerican people; at the time of their conquest by Hernán Cortés, the Aztecs it as flavouring for chocolate. Synthetic vanillin became significantly more available in the 1930s, when lignin waste produced by a sulphite pulping process from preparing wood pulp for the paper industry was used in the production of vanillin.
- ⁴ Salt lakes, or saline lakes, are terminal lakes. As the fertilizers and salts concentrate, and the Sea dries, a dry crust, called playa, is exposed, which then is them turned to dust by strong southern winds blowing during summer months.
- ⁵ Collected in Oslo, NOR, 2019, containing diisocyanates, manganese, sulphuric acid, nickel, chlorine, chromium, trimethylbenzene, hydrochloric acid, molybdenum trioxide, lead, cobalt and glycol ethers.
- ⁶ Calcium acetate is the calcium salt of acetic acid. It is used, commonly as a hydrate, to treat excess phosphate in the blood. An older name is acetate of lime.
- ⁷ An antibiotic used to treat bacterial infections of the urinary tract, side effects include skin rash or itching, difficulty breathing and a general feeling of discomfort.
- ⁸ Urea, also called carbamide, the diamide of carbonic acid. Important use as fertilizer and feed supplement, as well as starting material for the manufacture of plastics and drugs.

Fig 29. Ane Graff's material list from 'The Brain Cardiovascular Axis (The Heart Brain Pain)', Ane Graff, 2022

I really appreciate her material lists. it's as if she is acknowledging the materials 'homes'. This is interesting to me and something I try to do in my own work. Exploring the context of a given material, without this I can only consider my own perceptions and associations I have inherited. I've always been confused about how you include these parts of the work to the viewer, or even whether I should. I think Graff's method is really smart and unique. It includes this material research and history, yet in a poetic and concise way. Each material is full of movement, with words such as 'activated, cultivated, blowing', the descriptions are vivid through its use of verbs, giving information about where things have been collected, how old they may be, and how they smell. My senses and mind feel engaged at once, as Graff feeds me information unknown about salt lakes, Mesoamerican people and antibiotics, all in the same list.

Rose Schrieber and Deborah Stratman

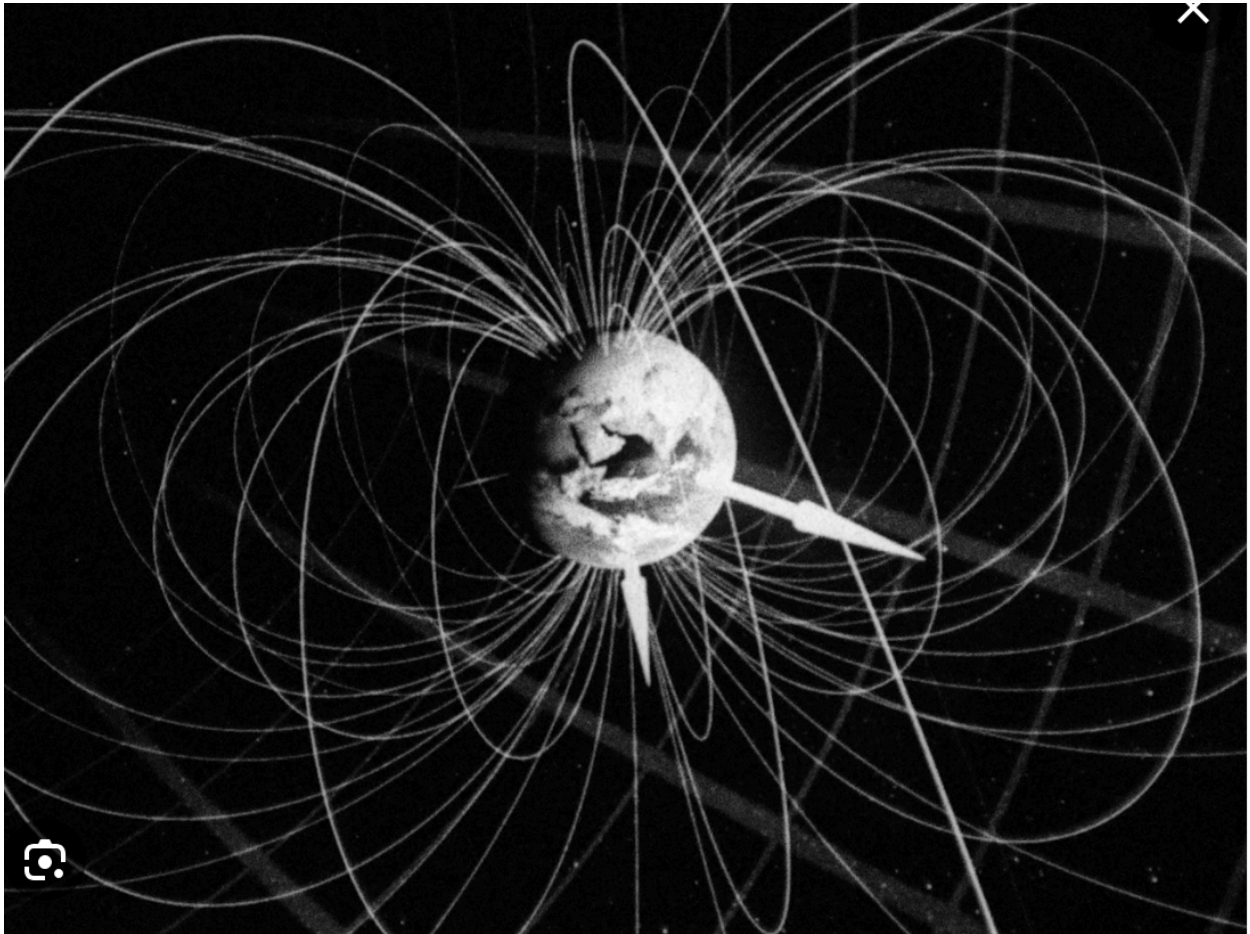


Fig 30. Film Still from *'Last Things'* Deborah Stratman

xi. Trailer : https://www.youtube.com/watch?v=flbjVkeN_pk



Fig. 31. Rose Schreiber, image from the show *'Nature to the Dogs'*

These two artists inspire from a geological angle. Deborah Statman film *'Last things'* (2023) attempts to visualize deep time in minerals. I really enjoyed her depiction, the audio alongside the images is eerie as sounds of violins play in an abrupt and dramatic way, giving this almost sinister, but deeply emotive feel.

Deep time is a very important aspect to my own project. I think one of the main connecting points between ceramics and magnetism is these links between time and mineralogy. Lodestone is magnetite, and magnetite is black iron oxide. These magnetic rocks form an extension of my mind beyond its limits of time and space, which I think my ceramic practice tries to nod to.

When talking to Henrik about my process, his speculation was maybe the magnetic clay remagnetises during the cooling process in the kiln. (metal loses its magnetism above 90 degrees) This suggests that the material remagnetises with the current magnetic field of the earth of this present day as the kiln cools. It's as if the magnetite is regaining some power from the earth. This collapsing of time is so interesting to me, considering how many times had that material undergone these processes from its point of creation billions of years ago.

Ceramics is bizarre because it speeds up all these processes that the earth or minerals naturally goes through such as 'melting, densification and mineralisation'²⁸, a process that could have taken millions of years can happen in just 2 days. Rose Schreiber speaks of this in her ceramic

²⁸ Schreiber, Rose . n.d. "WORDS." ROSE SCHREIBER. Accessed May 1, 2024. <https://www.roseschreiber.com/words>

practice, and her writings on this have been thought provoking to my own practice. On her website she speaks of processes of the earth, ‘Rocks form: amalgamates of fused, undifferentiated material, their slow transformation a result of millions of years of weathering, heat, compaction.’²⁹ This is why exploring minerals through ceramics is exciting, it provides unique access into seeing these processes intimately at an accelerated rate.

²⁹Schreiber , Rose . n.d. “WORDS.” ROSE SCHREIBER. Accessed May 1, 2024. <https://www.roseschreiber.com/words>.

CHAPTER FOUR: Conclusion

For my final display I will show the piece below (fig. 29) on a plinth in Seilduken 2. This square like ceramic sculpture contains the cog with the magnet propeller in (demonstrated in fig. 9), so that it is hidden inside. The source of the movement is less detectable. The ceramic sculpture itself accentuates a prism-like form, which is a shape I keep coming back to. The pedestal I have made for it is also this pyramid shape but inverted, which I think has been influenced by looking towards ancient structures.



Fig. 32. Final piece in progress, set up for my practice exam, April 2024

This box has eight hooks on it, 2 on each side, which I will hang 8 large needles from. These needles are continued from the small ones I made for the show *'A practical magic of some sorts'*, after this show I became invacuated with the shape, I enjoy the way they shivered and rolled in an uncanny manner and how they are sharp and soft at the same time.

I'm drawn to the way they feel when I hold one, they speak to the reference of the compass needle. Blown up to this larger size, they have this strange essence, it's a recognisable symbol for people, but this new irrational setting that brings up questions. They hint to associations of craft, tools and alchemical symbols. An amalgamation of the practical and the magical.

Alchemy is a theme that runs through all my projects. In this treatment of material transformations, but also this way of thinking. The earthly connections between all things, the up and down, the moon and sun, the micro, and the macro. A premodern form of new materialism. It is a rich world of images, rather than words, imbued with a special hieroglyphic aura, and steeped in imagination. Alexander Roob speaks of this in 'Mysticism and Alchemy', 'anyone who inadvertently enters this linguistic arena will suddenly find himself in a chaotic system of references, a network of constantly changing code- name and symbols for arcane substances, in which everything can apparently mean everything else.'³⁰

Alchemy opens pathways for me to create my own language centred around magnetite and clay, which is led by the visual and material experimentation. The unity of opposites defines the alchemical understanding of the possibility of transformation, I consider magical thinking to be about the correspondences in-between. The early alchemists developed a library of symbols to convey these correspondences, which I think my needles suggests towards.

³⁰ Roob, Alexander, and Shaun Whiteside. 2019. *Alchemy & Mysticism : The Hermetic Museum*. Köln: Taschen pp. 11



Fig. 33. Needles which will hang off of the hooks on ceramic sculpture

Stoneware ceramic before glazing

I have made my own symbol as a method for communication, but hopefully a symbol which feels more accessible. The alchemists were known to gate keep through their coded language, weary about who could access it. I don't want to replicate this; therefore my material lists will give clues and forms will bring recognisable associations. Less mystified and inaccessible, and more based on using metaphor and symbolism as part of understanding the correspondences themselves. Metaphor is a tool which allows us to extend our limited language, as things are constantly relating, creating new affects unknown to us, this is where the importance of metaphor becomes evident, language cannot keep up.

There's something about these hooks that I'm drawn to. I like the ornamental nature of them, but I also enjoy this action of hooking things onto them. Like the way that I/we hook meaning onto things, for instance like right this second. Its meaning that's kind of hanging off of it. But it's not it.

By building the sculpture is different parts it opens a performative dimension to my process. When assembling these pieces, I place the needles one by one, arranging the magnetite tongues and turning on the mechanism. It's like I'm booting up this ancient device, in this hope it sends out signals to a different dimension, hoping for a connection.



The basis of the whole project is to raise awareness in the current shift in the relationship between human and nature. Making becomes a tool to experience the interconnection between the natural world and material culture. Making is my method of telling material tales.

Magnetism is an interesting subject to take on these thoughts, as an invisible force that emulates around bodies and from the earth into our own bodies, dissolves the limits or isolation between things in a way we cannot see. These pieces imagine the body's limits extending into the space, or the earth's limits extending into us, and try to materialise the complex area that is the mediator between a human and its understanding of the environment.

I use magic as a kind of technology, which grows from its capability to break down systems of thinking. Instead formulating a conceptual space for considering new futures, grounded in the

esoteric principles and material research. One that resists boundaries, linearity, and neat narratives. I address some of the personal emotions or experiences I feel amongst the current separation and dissatisfaction I feel to the world, what we deem as real or unreal, passive and active, through exploring the mesh of interconnections. Exploring them with intimacy, intrigue, and wonder. And in those explorations the feelings that come up such as curiosity, humour, peculiarity, hope, contradiction, irony, sadness, and joy.

For me, my ceramics practice, new materialist, and ecological thinking opens me up to an enchantment towards the world. It is another way of telling narratives about the world, but in a way that I think encourages care, empathy, responsibility, and questioning. I hope that this enchantment can be translated into my sculptures, containing some sort of utopian energy. These fictional objects produce a reality in themselves, that taps the viewer on the shoulder. My practice is always in the hope for alternative futures away from neoliberalism and binarism, and towards a shared future for humans and magnetospheres a-like.

The lodestone sent out a signal to us, an attempt at a connection through its invisible visibility and movement of metals. This is my attempt at a signal in return.

Other artists of inspiration:

Tim Spooner, Ithell Colquhoun, Emma Hart, Paul Thek, Keith Harrison, Tai Shani, Marte Johnlinson, Josephine Baker, Lea Porsanger,, Nils Alix-Tabeling, Thibault-Picazo

Thank you to:

Trine Wester, Nikhil Vettukattil, Liberty Mann, Sasan Sahafi, Keith Harrison, Nanna Astrup, Marte Johnlinson, Knut Natvik, Elin Hedberg, Thomas Hellstenius, Liberty Mann, Susuanne Winterling

BIBLIOGRAPHY

Books/articles:

1. Barreiro, Jacqueline, and Melisse Vroegindeweij. 2020. "New Materialist Becomings and Futurities: A Panel Intra-View." *Matter: Journal of New Materialist Research* 1 (1). <https://doi.org/10.1344/jnmr.v1i1.30132>.
2. Bourriaud, Nicolas. 2021. *INCLUSIONS : Aesthetics of the Capitalocene*. S.L.: Sternberg Pr.
3. Brian Hisao Onishi. 2023. *Weird Wonder in Merleau-Ponty, Object-Oriented Ontology, and New Materialism*. Springer Nature.
4. Burke, John A, and Kaj Halberg. 2005. *Seed of Knowledge, Stone of Plenty*. Council Oak Books.
5. Hanafi, Zakiya. 2000. *The Monster in the Machine*. Duke University Press.
6. Jonson, Ben. 1910. *The Complete Play of Ben Johnson*. The Temple Press Letchworth for J.M Dent & Sons Ltd. London
7. Joscelyn Godwin. 2015. *Athanasius Kircher's Theatre of the World*. London: Thames And Hudson.
8. Malmstrom, Vincent H. 1976. "Knowledge of Magnetism in Pre-Columbian Mesoamerica." *Nature* 259 (5542): 390–91. <https://doi.org/10.1038/259390a0>
9. Morton, Timothy. 2012. *The Ecological Thought*. Cambridge ; London: Harvard University Press.
10. Roob, Alexander, and Shaun Whiteside. 2019. *Alchemy & Mysticism : The Hermetic Museum*. Köln: Taschen.
11. Sander, Christoph. 2022. "How to Send a Secret Message from Rome to Paris in the Early Modern Period: Telegraphy between Magnetism, Sympathy, and Charlatanry." *Early Science and Medicine* 27 (5): 426–59. <https://doi.org/10.1163/15733823-20220056>

12. Seymour, Nicole. 2018. *Bad Environmentalism : Irony and Irreverence in the Ecological Age*. Minneapolis: University of Minnesota Press.
13. Tsing, Anna ‘When the Things we Study Respond to each other, Tool for Unpacking the material’ *and the material*. Durham: Duke University Press. edited by Harvey, P., Krohn-Hansen, C. and Nustad, K.G. (2019). *Anthropos and the Material*
14. Verschuur, Gerrit L. 1996. *Hidden Attraction : The History and Mystery of Magnetism*. New York: Oxford University Press.

Websites:

1. “100 Years of Unease - 50 Watts.” n.d. 50watts.com. Accessed May 1, 2024. <https://50watts.com/100-Years-of-Unease>
2. Arons, Wendy. 2023. “We Should Be Talking about the Capitalocene.” *TDR* 67 (1): 35–40. <https://doi.org/10.1017/S1054204322000697>
3. “Ancient Sculptors Made Magnetic Figures from Rocks Hit by Lightning | Science News.” 2019. April 22, 2019. <https://www.sciencenews.org/article/ancient-sculptures-guatemala-magnetic-rocks-struck-lightning>
4. Cartwright, Mark. 2018. “Olmec Civilization.” *World History Encyclopedia*. April 4, 2018. https://www.worldhistory.org/Olmec_Civilization
5. Fox, Michael. 2023. “‘Last Things’ Explores Earth’s Geological Roots at SF Cinematheque’s Crossroads | KQED.” *Www.kqed.org*. September 8, 2023. <https://www.kqed.org/arts/13934519/last-things-sf-cinematheques-crossroads>
6. “History of Magnetism and Electricity.” 2019. *Magcraft.com*. Magcraft. 2019. <https://www.magcraft.com/history-of-magnetism-and-electricity>
7. “Home | Ane Graff.” n.d. *Anegraff.com*. Accessed May 1, 2024. <https://anegraff.com/>
8. “Instagram.” n.d. *Www.instagram.com*. Accessed May 1, 2024. https://www.instagram.com/p/C5Vwc-wISCu/?hl=en&img_index=1
9. “Justin Fitzpatrick.” n.d. *Seventeen*. Accessed May 1, 2024. <https://www.seventeengallery.com/artists/justin-fitzpatrick>
10. “Magnetoreception Definition and Meaning | Collins English Dictionary.” n.d. *Www.collinsdictionary.com*. <https://www.collinsdictionary.com/dictionary/english/magnetoreception>
11. Manaugh, Author Geoff. 2019. “Magnetic Landscape Architecture.” *BLDGBLOG*. April 25, 2019. <https://bldgblog.com/2019/04/magnetic-landscape-architecture>
12. “NATURE to the DOGS, EXHIBITION.” n.d. ROSE SCHREIBER. Accessed May 1, 2024. <https://www.roseschreiber.com/images/nature-to-the-dogs>
13. “Review of ‘de Magnete.’” n.d. *Www.iki.rssi.ru*. Accessed May 1, 2024. <http://www.iki.rssi.ru/mirrors/stern/earthmag/DMGRev2.htm>
14. Schreiber , Rose . n.d. “WORDS.” ROSE SCHREIBER. Accessed May 1, 2024. <https://www.roseschreiber.com/words>

Image list:

Fig. 7. Stone Chamber, Kent Cliffs, US.

Image source: John Burke and Kai Halberg, authors of Burke, John A, and Kaj Halberg. 2005. *Seed of Knowledge, Stone of Plenty*. Council Oak Books.

Fig 10. Olmec, Monte-Alto, Guatemala

“Ancient Sculptors Made Magnetic Figures from Rocks Hit by Lightning | Science News.” 2019. April 22, 2019. <https://www.sciencenews.org/article/ancient-sculptures-guatemala-magnetic-rocks-struck-lightning>.

Fig. 11. Diagram from ‘*De Magnete*’ showing a Lodestone within a spherical earth demonstrating magnetic variation

“Review of ‘*de Magnete*.’” n.d. Wwww.iki.rssi.ru. Accessed May 1, 2024. <http://www.iki.rssi.ru/mirrors/stern/earthmag/DMGRev2.htm>

Fig. 19. Justin Kerner, illustrations from the ‘*Kleksographien*’ (1786-1862),

Justinus Kerner and Montiel, L. (2004). *Klecksographien*. Barcelona Mra.

“100 Years of Unease - 50 Watts.” n.d. 50watts.com. Accessed May 1, 2024. <https://50watts.com/100-Years-of-Unease>

Fig. 24. Catropic Machine, Athanasius Kircher’s illustration

Hanafi, Zakiya. 2000. *The Monster in the Machine*. Duke University Press.

Fig. 25. ‘Cryptological magnetic machine’ designed by Athanasuis Kircher

Sander, Christoph. 2022. “*How to Send a Secret Message from Rome to Paris in the Early Modern Period: Telegraphy between Magnetism, Sympathy, and Charlatanry.*” *Early Science and Medicine* 27 (5): 426–59. <https://doi.org/10.1163/15733823-20220056>.

https://www.researchgate.net/publication/366036213_How_to_Send_a_Secret_Message_from_Rome_to_Paris_in_the_Early_Modern_Period_Telegraphy_between_Magnetism_Sympathy_and_Charlatanry

Fig. 26. Justin Fitzpatrick recent sculpture ‘*Endroscene Tables*’ from the show, ‘*Ballotta*’, La Ferme du buisson’, France

“Instagram.” n.d. www.instagram.com. Accessed May 1, 2024.

https://www.instagram.com/p/C5Vwc-wISCu/?hl=en&img_index=1

Fig. 27. Justin Fitzpatrick recent painting from the show, ‘*Alpha Salad*’, The Tetley, Leeds

“Justin Fitzpatrick.” n.d. Seventeen. Accessed May 1, 2024.

<https://www.seventeengallery.com/artists/justin-fitzpatrick/>

Fig. 28. ‘*The Brain Cardiovascular Axis (The Heart Brain Pain)*’, Ane Graff, 2022

“Home | Ane Graff.” n.d. Anegraff.com. Accessed May 1, 2024. <https://anegraff.com>

Fig 29. Ane Graff’s material list from ‘*The Brain Cardiovascular Axis (The Heart Brain Pain)*’, Ane Graff, 2022³¹

³¹ Picture source: Ane Graff’s portfolio: <https://anegraff.com/sites/default/files/2023-11/Portfolio%20Ane%20Graff%20-%20May%202023.pdf> pg 1 chapter ‘*The Brain Cardiovascular Axis (The Heart Brain Pain)*’

“Home | Ane Graff.” n.d. Anegraff.com. Accessed May 1, 2024. <https://anegraff.com>

Fig 30. Film Still from ‘*Last Things*’ Deborah Stratman
Fox, Michael. 2023. “‘Last Things’ Explores Earth’s Geological Roots at SF Cinematheque’s Crossroads | KQED.” Wwww.kqed.org. September 8, 2023.
<https://www.kqed.org/arts/13934519/last-things-sf-cinematheques-crossroads>

Fig. 31. Rose Schreiber, image from the show ‘*Nature to the Dogs*’
“NATURE to the DOGS, EXHIBITION.” n.d. ROSE SCHREIBER. Accessed May 1, 2024.
<https://www.roseschreiber.com/images/nature-to-the-dogs>

Video List:

xi. “Last Things - Official Trailer.” n.d. www.youtube.com. Accessed May 1, 2024.
https://www.youtube.com/watch?v=fIbjVkeN_pk

My videos (also shown in text):

Video of my installation ‘Hour Watching’, Seilduken 2:
<https://vimeo.com/819209595?share=copy>

Video of my work ‘Drawing Blood from a stone’ in the group exhibition ‘*Then, Leap*’, RAM
Galleri: <https://vimeo.com/917924301?share=copy>

Video of my work in the duo show with Liberty Mann, ‘*Drawing Blood from Stone*’
Seilduken Galleri 2: <https://vimeo.com/915552437?share=copy>

Video of my work in the duo show with Linda Flo, ‘*A Practical Magic of some sorts*’,
Akademirommet, Kunstneres Hus: <https://vimeo.com/926771357?share=copy>