



Ster Borgman

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As if you were trying to hold sand in your hands, time slips through our fingers. You can't grasp it and it's changing all the time. You might think that you have a lot of it, but the next moment there is nothing left. Over time, rocks turn into sand, ice into water and iron into rust. Rust in particular makes me feel like we as humans have been on this planet for an eyeblink. Rust comes from iron, that burst out of the earth and when it gets in contact with rain and oxygen it starts rusting. The rust grows, crumbles and drips off the iron. Then it might collect itself, drip back deep into the earth, and over time, a long, long time, become iron again by the heat. This is an event taking place in deep time. Think of such a movement as one of a plant. Every time you walk past it, it grew a little further. It moved, but you can only see it after some days. Deep time is even slower. Anorganic materials often move in a much slower perspective. It is something we might notice after a lifetime. I have this playful relation to glass that when I look at it, it acts like it is standing still but the moment I look away, the glass starts to move. It very slowly starts melting, leaking and dripping out of shape. When I look back, the glass has a different shape. I use the word 'melting' as a way to describe a rather queer action, something magical. 'Melting' is among other things a transformative quality of water. I see Melting as something connected to alchemy, magical science. Melting feels very queer to me, and shows me the non-linearity of the world around us. Melting is a hybrid action and it makes anything able to slip through structure. Western science has the urge to categorize, but some things might melt and drip through this structure. The structure of this science is patriarchal and appropriative and the structures of nature might not fit within the logic of the structure of this science. I think a queered approach to science is necessary to understand the interconnectedness of all things. But the trouble lies in organizing this science: the moment we start to build categories and give names to phenomena, there is a risk that, some things might not fit in any of the categories. How can we get a perspective on the interconnectedness of all things? By "queer" I mean something hybrid, something that does not fit in a certain category. Something that might not be possible to explain. I propose that instead of categorizing and naming things in a traditional way, a system of queer science should be used, which is a web full of intra-actions instead of separate systems. We need to re-invent, re-imagine, re-tell the story of the foundations of western science. That way we will melt ourselves out of its patriarchal and appropriative structure.

As an artist I am interested where science and fantasy come together. I turn natural processes into a fairytale and make the viewer believe something surreal is true. I've been creating stories and surreal objects to define the magical theories I have. I try to create a curiosity about the structure of science and to make people think of possibilities to create a new approach to science by storytelling. I see the art that I make as a response to the structure of western science.

The day after a scientist explained me a lot about the colors of rust, I could finally open the glass oven where I melted rust between two big glass plates for my graduation work. Funny enough the scientist had told me there were three colors of rust: brown, yellow and red. But the color between the two glass plates was green. What really happened in the oven is still a mystery, but we already knew that rust would drip through the structure of science. That is the story I tell.

Introduction	2
Table Of Contents	3
Stills Of Deep Time	4
Greenhouse	6
Pentagon Hives	8
River Seeds	9
Natural Dyes	10
Magical Scientist Persona	11



- Stills Of Deep Time -
2023

For my graduation at Fine Art in Arnhem 2023 I worked with rust and glass. Rust is something hybrid, something that grows and can overgrow. When I look at glass it pretends not to move, but when I look away it starts to drip and flow everywhere: it is slow, but unstoppable. In my artpractice I have worked a lot with rust. It all started with my fascination for colors and pigments. For six years I have been making my own pigments from plants that I pick in my own garden or wild plants.



Plate 3/3 - 90x140

I often dye organic fabrics with the pigments or use it as paint on paper. I also like to work with ceramics and glass, but unfortunately I was never able to process the pigments that I get from plants in my ceramics or glass, because those kilns reach temperatures between 800°C and 1240°C which make all the vegetable pigments totally roasted and black. Rust is an inorganic material that can't get roasted in a glass oven, instead it actually transforms. So it turned out to be applicable to ceramics and glass.

I look for rusty items along the riverside and put them in a jar filled with water to make them rust even more. The longer I leave the rusty finds in water, the more black the rust becomes. This is what I use as pigment. The pigment I have now has been in water for five years. I fixed this pigment between two glass plates in an oven at around 800°C. There, the glass finally fuses together and fixates the rust, which boils, and tries to escape. Eventually, the rust changes color from black to various shades of red due to the heat. These glass plates are stills of a moment in deep time. But maybe the glass breaks after a year, 9 years or even 9 million years, crumbles into sand and the rust is free again.

Rust tells a story of deep time; how it erupts from the earth in the form of iron, then oxidizes through the rain and finally seeps back into the earth to melt back into iron. The longer I leave the rusty finds in water, the blacker the rust pigment. The pigment I have now has been in water for five years. I fixed this pigment between two glass plates in an oven at around 800°C.



Plate 3/3 - 90x140



Plate 3/3 - 90x140

I started with smaller glassplates, but when I made the bigger ones, something strange happened. The day before I opened the big glass oven, a scientist explained me there are three colors of rust: brown, yellow and red. But the next day I opened the oven and a new color appeared: green. What happened? I think rust proved me it is hybrid.

- Greenhouse -
2023

I see myself as a magical scientist. I have been working with rust in glass as a natural pigment for my graduation in Fine Art at ArtEZ. I built a greenhouse out of pigmented glass that makes the overgrowing quality of rust visible. I grew up in Aalsmeer, an area with old greenhouses. Some of them are abandoned and overgrown, making you wonder what grows inside. Rust is a growing crystal that slowly overgrows.

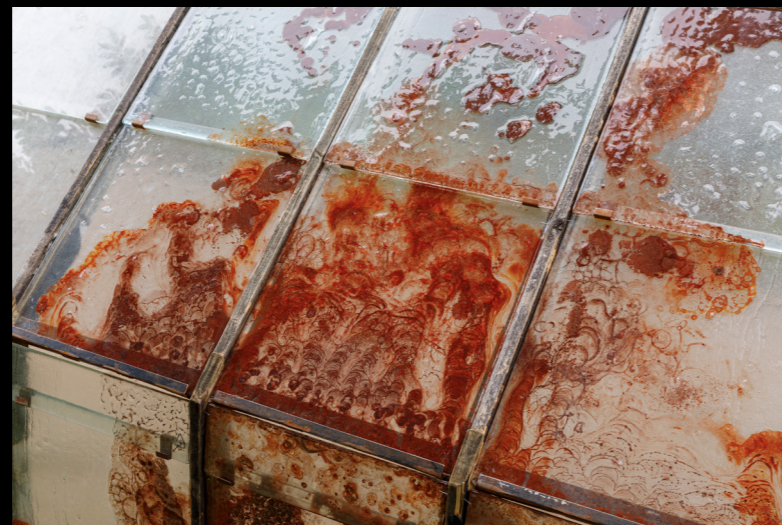


380 x 230 x 275

Rust acts like it is not moving, but when you look away it starts dripping and leaking everywhere. I have been researching rust and glass as a queer way to leak out of the structure of Western science.

By making a greenhouse I attempt to make the overgrowing quality of rust visible.

For building the greenhouse I used the authentic wooden structure of old greenhouses from Aalsmeer. I also used glass from old greenhouses to melt into these pigmented glasses. The unstained glass in between is not melted in my glass oven. It is unaltered old greenhouse glass with some traces of plants or moss; the previous conquerers of the greenhouse.



each glassplate is 45x40 cm

Rust moves in a very slow time frame: it bursts out of the earth in the form of iron, oxidizes with rain, crystalizes and eventually it might again drip into the heat of the earth to melt back into iron. I make black rust pigment and melt it in between pairs of glass plates in an oven at around 800°C. The glass melts together and fixates the rust, which starts to boil and drip. Eventually, the rust changes colour by the heat - from black to different shades of red.

These glass plates are stills, showing a fraction in the long life of rust in deep time. But perhaps after a year, eight years or eight hundred years, the glass breaks, crumbles back to sand and the rust will be free again.



380 x 230 x 275



elke plaat is 45x40 cm

- Pentagon Hive -
2022

This project I made a beehive with a pentagonal structure. Beehives always have hexagonal structures. I made a silicone mold of a 3D printed pentagon shaped pattern. I melted organic-dynamic beeswax in to that mold. The fun part: it looks, smells, feels exactly like a beehive, but instead of the real hexagrams you see now pentagons. Something that would definately be impossible.

Im interested where science and fantasy come together. I turned a natural proces into a fairytale to let the viewer believe something surreal is true. I've been creating stories and surreal objects to define the magical theories I have. If I try to convince my audience that my scientific fairytales are true, I make them wander what is true. Doubting what they thought they knew about the world around them. I want them to feel like that, because I try to create a curiosity about the structure of science and to make people think of possibilities to create a new approach to science by storytelling.



Hive with pentagonal shaped combs - 70x40

The hive in the wild.



The Story:

Hive building insects have been making hexagons for over 50 million years. This method uses less wax than structures of squares or triangles that they build 100 million years ago. So why did these wild bees decide to build pentagrams? Since most flowers that represent the number 6 in their centers are becoming extinct more and more, bees get influenced by the still existing and steady thriving flowers of for instance most fruits that represent the number 5 in their centers, like apples. They ajust their hives to their environment.

- River Seeds -
2022



The Story:

I found these riverseeds along the riverside. They form in wild whirl pools overtime and seem to be very rare. The center of the whirl gets so much pressure of the whirling water around it that it slowly solidifies. Not by temperature but by pressure. This is how a river seed gets formed. If it is planted, a little puddle appears that starts slowly growing bigger and bigger. A water source wil grow out of it and when it is given enough time to grow, a new river will form itself.

The transformation of water into ice is similar to the transformation of sand into glass. With the enchanted approach I have towards science , I try to figure out if I can melt sand to ice and freeze water to glass. filled the glass with water and sand from the river 'De Rijn' in Arnhem. I carefully drilled a hole in the glass and closed it after I filled it up.



A River Seed 14cm Ø



Sand Containers 10cm Ø

The doughnut shaped glass objects are hand-blown but sadly glassblowing is a craft yet for me to learn. I did however glassblow the objects on the left myself. These contain different types of sands from different places along the river the Chervo in Italy. I made these glass objects during an artist-in-residence program at Fondazione Pistoletto.

- Natural Dyes -
2018

For years now I have been dying recycled or organic fabric with different plants from my own garden and its surrounding area. During the dying process of these colors, I wanted to have more and more. I became greedy, and it felt as if I could taste the colors. As if I wanted to eat the colors. As humans we can see quite a lot of colors. This makes us see if fruit and other plants are ripe. It can also warn us for toxic plants or stingy insects. Some colors are linked to fruit, to sugar and energy, while others might be linked to poisonous mushrooms. Presently I have a collection of over 150 colors. I brew vats of plants like nettle or golden-rod flowers. I let it shimmer for one hour in a vat. I need to prepare the fabric with alum and green soap to open the fibres up for the color. After another hour of shimmering, but this time together with the fabric, the color is dyed into the fabric. After it is washed and dried again, I can change the existing color on the fabric by dipping it in rust, soda or vinegar. Sometimes a bright yellow color from, for instance golden-rod, can drastically turn into a deep green by only dipping it into a bath of rust and water.



Selections of my color archive.



- Magical Scientist Persona -
2022



I created this magical scientist persona, who researches surreal things, like the surreal objects I make. This persona is a very nice way for me as an artist to communicate with my audience. I can make them believe something surreal is true and therefore make them doubt what they actually know. Previously to Fine Art I studied only the first year of moving theatre at the Mime academy



in Amsterdam. I eventually choose for Fine Art, since I felt not free enough to make my surreal objects, who are a big part of the whole story. Next to the studies at ArtEZ I have been professionally performing in a theatre production and asked for several performances.

