Kin

Sissel Thastum
MFA Critical Reflection 2020
Trondheim Academy of Fine Art
Faculty of Architecture and Design
University of Science and Technology

Content

Abstract
Introduction
Kinship & kin bodies
Algaes, bacterias, lichen and moss
Nettle
Cod fish
Human (blood)
Mother daughter
Biocrystallisation
Conclusion
Bibliography

Abstract

The project *Kin* explores our connection to other beings (sentient and otherwise) with the emphasis on the vibrance and agency of all matter. The objective of the project is to expand our perception of self by studying our entangled being-in-the-world using the poetic and artistic to collaborate with and expand on the scientific methods of biocrystallisation. The method is used to create crystallised images of a selection of bodies (cyanobacteria, lichen, moss, nettle, codfish and human blood) in an attempt to connect to and comprehend deep time and our evolutionary connections. A few of the chosen bodies are furthermore present in other shapes and forms in the wider project underlining our direct use or dependence of these species. Alongside these elements a collection of poems and poetic writings circulating the chosen bodies are presented. Besides the biocrystallisations themselves, the project also includes a video of the growth of a biocrystallisation, various close-up photographs of the biocrystallisation and some of the bodies, a nettle braid robe alongside invited moss rocks and a moss-, lichen- tree stump. Additionally a written poetic timeline is running through the project weaving the elements of evolution, time and bodies together.

Introduction

In the following text, specific themes relevant to the project *Kin* will be explored and discussed. These themes are all elements that have come to the surface during the development of the project alongside the expansion of my artistic practice. Most of the themes have existed latently or half revealed in my previous works, and although they are now starting to manifest, only so much can be touched upon at this point, and the text and project would have capacity for fuller expansion within a different framework and support.

In this text I have chosen to dive deeper into the core of the thoughts and theories behind the project as a way of continuing a contextualisation and critical reflection upon it.

Kin looks into the notion of (bodily) kinship, belonging and interdependence between species; both sentient and non-sentient beings. It is an attempt to materialise and translate ¹ a posthuman feminist worldview where Nature (and the nature of things) is seen as dynamic and vitalised rather than fixed and de-spiritualised matter (Bennett 2009).

Six bodies: cyanobacteria, moss, lichen, codfish, nettle and human (blood) have been chosen to, through the use and interpretation of the holistic and scientific method of biocrystallisation (also called sensitive crystallisation or 'the picture forming method'), explore the vitality of matter and our entanglement being-in-the-world. The biocrystallisations are made by adding dihydrate CuCl2 (copper chloride) to (any) organic substance in a 10 cm diameter petri dish evidently (through a

¹ Translation is here understood in accordance with Walter Benjamin's idea of translation, which Hito Steyerl (2006) describes as: "languages of practice: the language of law, technology, art, the language of music and sculpture".

lengthy humidity and light controlled process) resulting in the formation of dendritic structures which slowly over the course of 10 - 20 hours develops in a full crystallisation.

The project attempts to evoke notions of deep time and evolutionary connections through which the understanding of humans and matter as vibrant and vital materiality becomes easier to acknowledge and relate to (Bennett 2009).

Furthermore, the project expands on the notion of kinship by exploring the bond between mother and daughter. This intergenerational kinship is expressed in the process and development of the project through common research, artistic considerations and conversations, as well as in the poetic language of my mother's writing, which serves as a bloodline running through the center of the project reflecting our own kinship, as well as that which we share with our more-than-human kin.

The methodology and approach of the project has naturally pushed the focus from "result" to process. Understanding ourselves and our more-than-human kin as entangled and interwoven is a process of self discovery through the (artistic) language of translation. This entails an openness towards sharing the process before it might be considered finished in the traditional sense of a "finished product ready for presentation". The following text should be seen and read as an invitation into this process and the (re) discovery of kinship.

Kinship and Kin bodies

The division of Nature and culture has cost us dearly and created the prerequisites for the global ecological crisis we are experiencing today. By removing spirit from matter and demonising animism the value of Nature has been diminished into a "thing" to which humans are omnipotent and can do with as they please - often to serve their (economic) interests (Franke, 2011).

It is this mistaken division of Nature and culture that has fueled the inception of the project. It is the anxiety towards the sense of "otherness" we feel in regard to Nature (the unconscious, the animalistic, the sensuous) (Franke, 2011), that the project attempts to address and influence. Hence the process throughout the project has been a search for connectedness and an exploration of kinship; a kinship we share with ancient organisms and prehistoric creatures, which are in our bodies inherited from the Earth itself:

"This is our inheritance from the day, untold millions of years ago, when a remote ancestor, having progressed from the one-celled to the many-celled stage, first developed a circulatory system in which the fluid was merely the water of the sea. In the same way, our lime-hardened skeletons are a heritage from the calcium-rich ocean of Cambrian time. Even the protoplasm that streams within each cell of our bodies has the chemical structure impressed upon all living matter when the first simple creatures were brought forth in the ancient sea." (Carson p. 13-14, 1951)

Through the biocrystallisation of six carefully selected bodies alongside the biocrystallisation of our own blood the project seeks, through a perspective of deep time² to recall our kinship and connection, and bring together that which has been parted.

The following writing describing these bodies will be presented in a freer and more poetic language, supporting the idea that language in itself has an influence on our senses and perception, and thereby affect how we perceive the matter we talk about. It is also in line with the use of language and poetry in the project. In this way our entanglement and the interwoven connections already starts here in this text.

Bacterias, algaes, moss and lichen

Bacterias and algaes were (as far as we know today) some of the very early living organisms. Cyanobacteria, cyan coloured creatures, single celled, without a kernel. "The first". At once simple and brilliant, captured the color, the pigment, the green, the blue, the turquoise. Catching the light in the pigment inventing photosynthesis, creating oxygen, creating nourishment. Creating the first embryo for more composed organisms and greater complexity.

In the sea, in lakes, on damp rocks, cyanobacteria have existed for 3.5 billion years, in their original form as the oldest. And in the chloroplasts of the plants you still find their unique DNA.

They can create deadly toxins when blooming in the lakes and oceans saturated with man-made nutrients; phosphorus, nitrate.

They can contain life-giving concentrated protein, iron, magnesium, B12 and the ability to purify heavy metals and pollution.

² The concept of deep time refers to the concept of geological time proving that the Earth is perpetually formed. The term was first described by geologist James Hutton in 1788 as he determined that the Earth was much older than previously thought (it was believed at the time that the Earth was around 6000 years old according to a reading of the bible by Archbishop James Ussher of Ireland). Hutton was able to demonstrate that there had been a sequence of formations in the development of the rocks and that the process of these formations were perpetual, thereby proving the coupling of destruction and renewal (also called the "great geological cycle,") (Mathez, 2000). The concept of Deep time did not only shape the idea of geology and the creation of the Earth, it provided the framework for thinkers such as Darwin to develop and support his theory of biological evolution proving our direct ancestral kinship to the natural world.



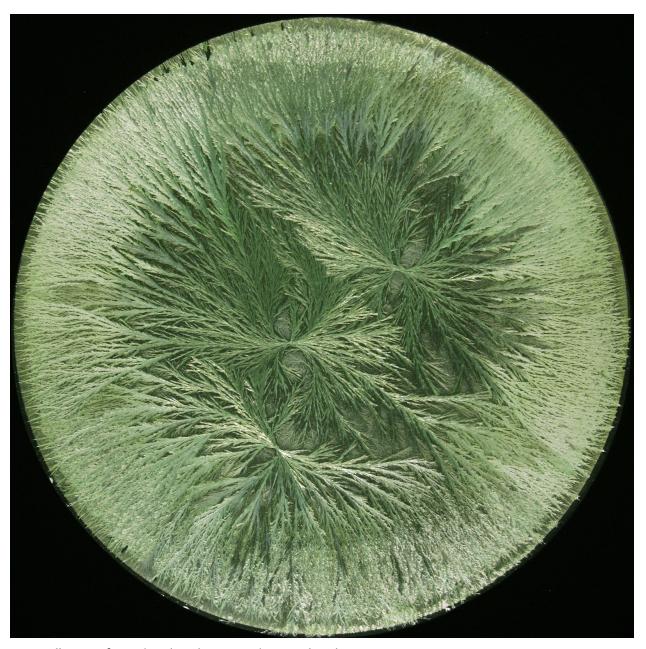
Biocrystallisation of Cyanobacteria on 10 cm diameter glass plate

The cyanobacteria were followed by the moss said to wander from the sea onto land. Mosses too are ancient organisms and some of the first beings contributing in large to the oxygenation of the Earth enabling all other life to form on land. The Earth was barren. Only rocks, only stones, only gravel, sand, wind, rain, light and dark. But the mosses found a foothold on the surface, in hollows, furrows and ridges. They had no roots, for there was no soil, their nourishment was light and water and minerals. For millions of years, they created organic matter and oxygen, paving the way for other creatures, the roots of plants and the lungs of animals. Despite its minimalist form, the moss has developed a reproductive system almost identical to the far more complex organisms that mammals

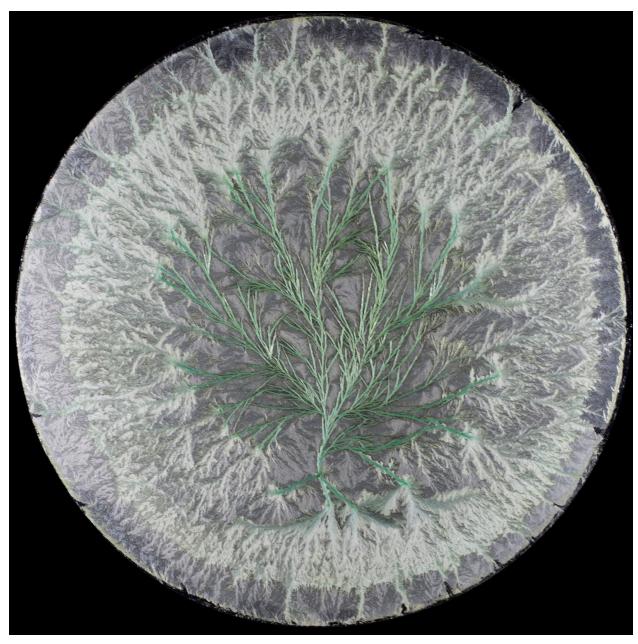
and humans are. With vase-shaped archonies each with one egg cell and with mobile sperm cells in sac-shaped antheridia.

Lichen is a double organism: A fungus that has enclosed an algae or cyanobacteria converting nitrogen and light to nourish a symbiotic coexistence between fungus and algae.

It is an infinitely slow, almost immortal being with individuals up to 5,000 years old. Neither plant nor animal. A creature that can live on the edge, in cold and heat, on rocks, in deserts and extreme heights. Only man's great discharge of nutrients, the rate at which we change the world and the space we occupy, it cannot survive.



Biocrystallisation of Bryophyta (moss) on 10 cm diameter glass plate



Biocrystallisation of Lichen on 10 cm diameter glass plate

The Cyanobacteria (also known as blue-green algae), Usnea Dasypoga and Gadus morhua (lichen) and Bryophyta (moss) - All of these bodies have been chosen to be part of the project linking to the origin of all living organisms descending from the sea. They represent our connection to deep time and the evolution of all organisms on Earth.

Cod fish

Cod fish has followed humans for millennia - an even more complex being - a close connection to us. A nutritious gift from the sea since the Iron Age. Cod - an original word for clipfish, we called this being, this gift, and saw it as prey. A beautiful and enduring water creature migrating in shoals in the seas for up to 1000 km to breed. A fierce cannibalistic predator that eats all smaller fish and even its own kin. A beautifully adapted body in complex food chains and reciprocity for millennia. A vulnerable creature whose eggs can only hatch in water with a special concentration of oxygen, salt and temperature. Vulnerable because man's extreme, brutal overfishing has caused the population to collapse. Vulnerable because temperatures change and oceans are acidified.

With the ability to grow together with human tissue, this being is used as fish skin graft. Healing severe trauma and burn wounds its cells embroil themselves together with our human flesh. Protecting with a bacterial barrier for up to 72 hours. Weaving and growing, new skin, new tissue, new life. What is left over of the fish skin, no more of use, withers and dies, peals of. Its vital properties of oils, collagen and vitality have now been transferred to us.



Biocrystallisation of Gadus morhua (cod fish) on 10 cm diameter glass plate

Nettle

Mineralisation, the transformation of organic material into inorganic matter, is the process that constructs bone. This process, which enabled the evolution of invertebrates, connects us once more to the Earth, or rather the Sea. It is the complex and rich combination of minerals given to us by the Sea that has enabled our mobility. The key minerals; iron, potassium, manganese and calcium can be found in our own internal sea, the blood. The nettle (Urtica dioica or stinging nettle) is rich in these minerals.

The large nettle - Urtica dioica - Netla - the old Nordic word for sewing or weaving.

Urtica dioica, woven together with man, has been here for more than 3000 years. It has followed in our footsteps and absorbed the nutrients we waste and disperse while living our human lives.

It has followed us and offered to give the energy back to us in the forms of minerals, vitamins and the protein Urtica dioica contains.

Iron, magnesium, potassium, calcium, phosphorus, silicic acid, manganese and sulfur, vitamin A, B2, D, K, C and especially calcium.

The herb of life contains poison in the stinging hair, histamine and acetylcholine, and antidote in the juice of the stem and leaves.

It has followed us and offered its fibers to weave canvas and rope, and its leaves to dye wool, and to make extracts fertilising the soil and fighting organisms that damage our crops.

A herb for kidney, bladder, urinary and joint problems, fluid and blood strengthening. So generous is Urtica dioica. Offers relief for uric acid rheumatism, podagra, eczema, heartburn and acidic stomachs, strengthens the immune system, brittle nails and glossy hair and restores mineral balance.

It has followed us, but also gave life and protection to other creatures: Only on the Urtica dioica can the eaves' wings, the peacock's eye and admiral, lay eggs and their larvae hatch.

It has followed us and thrives on absorbing our waste of nutrients, trying to balance by reassuming them in its cycle.



Biocrystallisation of Urtica dioica (Stinging nettle) on $10\,\mathrm{cm}$ diameter glass plate

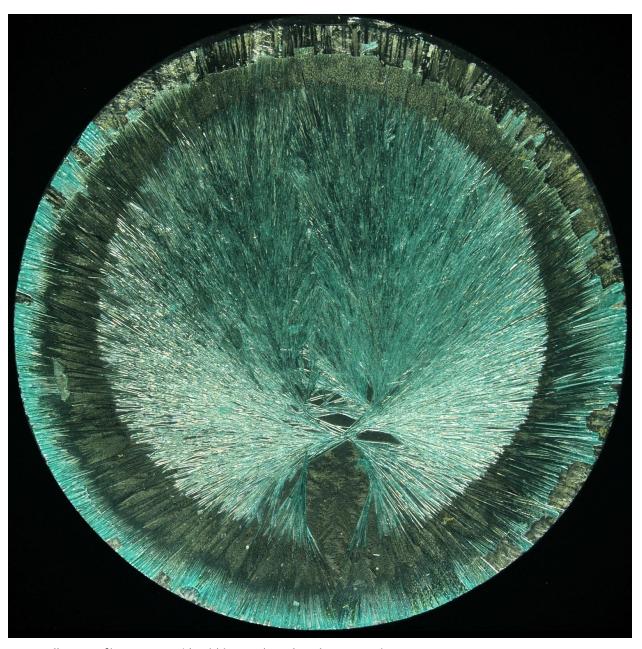


Biocrystallisation of Urtica dioica (Stinging nettle seeds) on 10 cm diameter glass plate

Human (blood)

The sea flushes through our veins like plasma, salt-saturated like the ocean. Connects us with algae, cyanobacteria, moss, lichens, nettles and cod - and with each other. Carrying 25,000 billion erythrocytes, red blood cells, 30 billion leukocytes, white blood cells and 1,000 billion platelets, platelets along with proteins, minerals and trace elements, hormones, vitamins, nutrients, waste, and sugars. The blood is the most complex body among the crystallisations.

We have included our blood in the community of bodies to see ourselves (human beings) as a subset of a larger context that we seek to rediscover. This notion connects to embodied critical thinking deriving from the philosophy of Maurice Merleau-Ponty. It is the philosophy of felt knowledge and a "return to that world which precedes knowledge, of which knowledge always speaks" (Merleau-Ponty, p.9-10, 1945). As Merleau-Ponty speaks of a return to the thing itself (ibid), Jane Bennet calls this "Thing-power" (Bennett, 2009). It is the "Thing-power" which enables both animate and inanimate things to influence and affect us and the Earth. Therefore it is in these chosen bodies there an agency to which we must pay more attention.



Biocrystallisation of homo sapiens blood (the artist) on glass plate, 10 cm diameter

Mother daughter

Alongside the exploration of the vitality of and kinship with the different animal and plant bodies, the kinship between mother and daughter also plays a role in the project. The process of developing the project has gradually moved from being one of shared interest in the topic into joint research, artistic considerations and philosophical conversations.

We have attempted to use our own kinship and relationship with one another in a process to change our own anthropocentric approach (which all of us have through our culture, upbringing, language, etc.) to a more ecologically focused feminist posthuman and holistic approach to our fellow beings. We try to use our intuitions, empathy and respect for each other in the work of approaching the more-than-human bodies. We try to include these relationships when we are in Nature, when we search for, and physically feel, smell and sense the other bodies that we have used in the project. We try to use the deep mutual understanding we have as a mother and daughter in our intellectual quest for knowledge of other bodies that allows us to be humble, in awe, respectful and move from being separated to being included, together.

My mothers writing has been at the core of this process and collaboration and has become a poetic narrative exploring the means of language to bridge between the rational and the sensuous. Perhaps one can even talk about the poetic and artistic language as a continuation or translation of the "sensuous correspondences, the body as a medium, and the medium of language" (Franke, 2011), which Walter Benjamin claims to be the language of things.

The poems and poetic writings in the project serve as an intuitive narrative that can guide the viewer into the world of entangled coexistence. The poem can, according to Jane Bennet (p. 19, 2009) "direct sensory, linguistic and imaginative attention towards a material vitality", which is precisely the objective of the project.

Poem

Jeg låner min rygrad af havet Hvirvel for hvirvel har det omsluttet og formet den

Mens jeg blev til.

Lombal-, Thorakal-, Cervikalhvirvler

24 måner i vandspejlet

Jeg har lånt rygraden af jorden Langsomt har den opbygget hver knogle, hvert torntap, sidetap og korpus Hentet mineraler i bjerge og lavland i smeltevandsdale

Før jeg blev født.

Calcium, Magnesium, Zink, Mangan, Selen

En søjle af vingede hvirvellegemer

Jeg skylder planterne knoglevævet, det kompakte og det spongiøse De som bærer næringsstofferne og solen i grønne blade

Jeg skylder mikroorganismerne knoglehinder, hyalinbrusk og kollagen De som omdanner, flytter, anstifter

Jeg skylder vandet bevægelsen, forandringen, metamorfosen Det som forbinder, omslutter; mineraler, næringsstoffer, mikrober

Vævet i knoglerne der fødes og dør Hinderne omkring knoglerne der fødes og dør Alt er i bevægelse, sammenføjes, opbygges og nedbrydes

Mens jeg lever.

Men langsomt forvitrer hvirvel for hvirvel knogletrådene, trabecula, bliver tynde, hulrummene større Nedbrydningen øges, opbygningen stagnere balancen forskydes

Langsomt nedbrydes min rygsøjle som havet og jorden nedbrydes og forarmes

Rekviem for de 7 cervikalhvirvler, 12 thorakalhvirvler og 5 lombalhvirvler

for Rødlig perlemorsommerfugl, Blåfinnet tun, Punkstokket vokshat og Hedehøg

Balancen er forrykket

Mens jeg ældes.

Langsomt udfælder min krop rygsøjlen til omgivelserne, til havet og jorden, som resten af kroppen vil blive optaget som en trøst, som aflad

Når den tid kommer.

By Line Thastum, 2019

Biocrystallisation³

The chosen elements crystallised for this project (the cyanobacteria, lichen, moss, nettle, cod fish and the blood of my mother and my own), do not only show the vulnerability, vitality and animated properties in the different bodies, it shows the correspondences between human body tissues, organic (sentient) and inorganic (non-sentient) matter. It furthermore shows the connection to ancestral kinship through biological evolution and deep time, that gives the possibility to fathom the complexity of matter and to move closer to a new understanding of self incorporated into an ecologically focused feminist posthuman philosophy. It is this breaking-down of boundaries between subject and object that can elevate the perception of a shared materiality between all bodies of matter (Bennett, 2009).

³ The biocrystallisation method is based on the crystallographic phenomenon that, when adding specific ionic substances, and generally all organic substances, to an aqueous solution of dihydrate CuCl2, biocrystallograms with reproducible dendritic structures are formed during crystallisation. This crystallisation is the organic substances reaction to the poisonous CuCl2. The more vitality the substance has the more structured and complex morphological features (the crystallisation).

The Method is currently used in biodynamic research in collaboration with universities in Austria and the Netherlands. The method differs from other scientific methodologies in the way that the assessment of the morphological features are presented in an image. The methodology is also known as a "picture forming method". The "picture forming method" is intriguing, as it gets closer to the artistic world, as well as showing other "results"/having other focus areas than common natural science.

It is also through the work with the biocrystallisations that my background in photography becomes apparent. The biocrystallisations are inadvertently connected to photography: Besides the practical process through chemical connections, mixing of liquids, transferred to glass plates, transforming from liquid to crystal images in the dark, the biocrystallisations have an aesthetic and visual quality resembling that of photography. Being both a "picture forming method" and a physical object, they suggest a materialisation of the conceptual properties of the photograph.

Furthermore the philosophy and kernel of photography as a medium are in many ways apparent in the biocrystallisations which can be seen as a merging of the living and the "dead".

In the meeting between the two forms, something appears that is a fusion of two states, which in turn generates a unique crystal image. The "dead" (and for living creatures toxic) copper chloride catalysing in interaction with the living organic liquids is the unique expression of the individual bodies in a correspondence arising in the fusion and blurring of the "dead" and the living: The animate and inanimate has merged and become one in a crystallised image.

Very similarly to this process Roland Barthes describes in Camera Lucida what the photograph represents:

"In terms of image-repertoire, the Photograph (the one I intend) represents that very subtle moment when, to tell the truth, I am neither subject nor object but a subject who is becoming an object: I then experience a micro-version of death (of parenthesis): I am truly becoming a specter" (Barthes, p. 13 - 14, 1981).

Another parallel to this "subconscious-state-of- (a) being" is the belief of the soul according to 19th century rationalist science. The soul had a strong resemblance to the image, having among other qualities the power to live on after being separate from the body it had inhabited and thereby moving through time and space (Franke, 2011). The relationship between death and photography brings to mind both Susan Sontag's thoughts on mortality and Barthes witnessing of death in the photographic medium. In this realm the biocrystallisation and its picture forming methods finds a place too.

It is this kind of self-organising, as Jane Bennett described it, that gives us a sense of the capability, vitality and creativity of both organic and inorganic matter (p. 7, 2009).

Similarly the "reading" of the crystal images bears a clear resemblance to how we read images. The inclusion of the sensing, feeling understanding of the "I" is a direct parallel to the subjective and aesthetic experience of photography.

⁴ Here the living is understood as the organic liquids; the subject and the animate.

⁵ The "dead" should be understood as the copper chloride which is a non-transmissive existence: The inorganic, the object and the inanimate

⁶ The word Soul in latin is *Anima*, from which the word *animism* stems.

The crystallisations remind us of our bodily vulnerability, which we share with all creatures and organic organisms. But being mortal also entails being alive, existing and making an imprint. And although living is a fleeting moment, especially seen in relation to deep time, all organisms share this particularity, which is exactly what the crystallisations show; It is all of our entangled being-in-the-world and our being-alive that is manifested in delicate images, patterns and crystallisations. Seen in this light the crystallisations become ontological studies in themselves, asking questions about what our bodies are and what matter is beyond our physical forms and shapes.

The biocrystallisations were created in collaboration with the scientists Paul Doesburg (NL) and Jens-Otto Andersen (DK) - both with an extensive background in developing and working with the biocrystallisation method. Besides being a technical collaboration, the philosophical considerations behind the project and the biocrystallisation method were discussed amongst us. Opening up the expression and use of the method by crystallising completely different bodies than that normally used in the common research contributed in large to considerations about how it is possible to combine scientific and dualistic methods alongside more holistic, intuitive and creative approaches, and what the benefit of this could be, especially expressed through art. The objectives behind the project lie very close to big parts of the anthroposophic ⁷ concept of Nature and biodynamic ⁸ agriculture, which made the collaboration all the more relevant and interesting for both parties.

Conclusion

During the development of the project there has been an expantion of my artistic practice inspired in large by the philosophies of posthuman feminist, onotological and new materialist thinkers. This expansion of my practice alongside the evolution of the project has in itself been an exploration of embodied critical thinking through the engagement with Nature and the different bodies and mediums, as well as the close relationship and kinship I share with my mother. Furthermore, the project has been a research into certain aspects of science to which I felt drawn, more specifically the biocrystallisation method; the process and resemblance to photography and the combination of

⁷ Anthroposophy is a philosophy and a view of life and Nature formed by the Austro-German philosopher Rudolf Steiner in the early 1900s based on studies of Goethe and of German idealism, especially Hegel and J.G. Fichte. In the anthroposophical view, humans consist of body, soul and spirit and are closely related to Nature, which also is considered spirit. "Anthroposophy is seen as a path of recognition that will lead the spirit in man to the spiritual in the world universe." (Gyldendal, 2020). The word anthroposophy comes from Greek Anthropos 'man' and Sofia 'cleverness'.

⁸ Biodynamics is a doctrine on the active "vital" characteristics of all organisms. The concept is most often associated with biodynamic agriculture, which is a method of cultivation based on the anthroposophical view of Nature that claims that the universe in addition to the known physical forces, also is governed by cosmic forces. These forces affect the life processes of plants, animals and humans. Biodynamic agriculture deliberately seeks to collaborate with these forces - To nurture the living and diversity of agriculture. Biodynamic research is based on the same principles and examines through biocrystallsation and other methods the "vital" characteristics of crops and thus quality on a more holistic level than other scientific research.

scientific methods and holistic beliefs. As a result of these elements the methodology of the project has moved and evolved into a creative partnership between the poetic (the artistic/creative) and the scientific. Through this partnership the objective of the project is to show our evolutionary connections, expanding our sense of self in shallow time to a deep time perspective where we explore the "related stories of embodied indebtedness, where past and future bodies swim through our own" (Neimanis, p. 4, 2019) as Neimanis puts it.

An art project that focuses on a new perception of self and broader understanding of "we": the kinship between beings, the vitality and agency of all matter and our entangled co-dependent existence is a matter of process and embodied knowledge. It is a question of art as a mediator, translator and most of all a creator of new imaginatinings and concepts - both for the artist through the process as well as the viewer. This has come through in the project in the interweaving of the scientific (ways of working) and the artistic (and creative way of working). The combination of the two touches on our need for rational comprehension as well as our instinctive and unconscious recognitions, that can lead to deeper realisations. In the project this has been visible in the process where the holistic perspective (both in the objectives of the project and the philosophy behind the biocrystallisation method) made it possible to collaborate with the scientists around the production of the crystallisations. It is also shown in the different outcomes of the project; the poetic texts use both the factual and the poetic and similarly the biocrystallisations are made through the "regular" scientific method, but with a conceptual and artistic objective using the bodies chosen for the project, none of which have been crystallised before, let alone shown in an art exhibition or an artistic context.

This kind of collaboration and bridging between different expressions and perceptions illustrates the positive and constructive coexistence and codependence that is present, and to which we have access if we subscribe to a collective intention prioritising the community (of all vibrant matter) above the individual (human being). This is in line with the posthumanist feminist philosophy of vital materiality, equality and our never ending entageled-being-in-the-world on which the project stands.

The new imaginings and concepts that the project can create and mediate gives the possibility to activate our senses to be able to relate differently to our more-than-human kin, which is the first step and the baseline for a more equal and sustainable coexistence and co-living. To think in this manner is about understanding that we are all "implicated in other animals, vegetables, and planetary bodies that materially course through us, and draw upon our bodies as their well" (Neimanis, p. 3, 2017). This means that how we treat matter matters! It affects us - The us which includes the more-than-human - and the effect will be negative if we do not pay attention to the agency of matter. The proof is visible now more than ever with the growing global ecological crisis: extinction of species, the plastic in our oceans, global warming and the recent covid-19 virus to mention a few examples.

It is within this scope that the project is continuously growing. Not only to include a variety of other bodies, but also in terms of the possibility of further collaborations (scientific and artistic), as well as

the inclusion of other artistic expressions and forms. One form which is intended is the book. The book is by far one of the most intimate experiences one can have with art and is at the same time easily made accessible far beyond the exhibition. The poetic writing and the visual quality of the project is fitting for the form of a book. Furthermore, the heritage of natural science and its artistic expressions which lie dormant in the project, is relevant to express in book form too. The project currently includes illustrations of each body (which has been commissioned specifically for the project), but can easily be expanded upon as the community of bodies might grow.

Another focus that could be interesting to explore further are those mediums which enhance the sensory experience and language in the exhibition space. This could mean an exploration of both smell and air (humidity and flow for instance), as well as the importance and impact of sound.

It is the aim to create and expand on a sensed experience that speaks to the unconscious as well as the intellectual (as it is the unconscious that informs the intellect, which in turn affects our actions). It is these sensed experiences which might intrigue curiousness to ask questions such as how we are akin, connected, entangled or dependent on each other. And it is through these questions new concepts of coexistence might occur. Concepts that might be used as "tools of thinking" which in its own way is "an embodied act" (Neimanis, p. 41, 2019) that we can use to expand our ethical parameter to influence our actions and political decisions.

Bibliography

Books

Abram, D 2011, *Becoming Animal: An Earthly Cosmology*, Knopf Doubleday Publishing GroupAndersen, J.O. 2017, *Vitalitet - fra muld til mave*, KahriusBennet, J 2009, *Vibrant Matter*, Duke University Press Books

Carson, R 1951, The Sea Around Us, Oxford University Press

Franke, A 2010, Animism, Sternberg Press

Haraway, D, Preciado, P B. & Andkjær Olsen, U. 2018, At skabe slægtskab I det Chthulucæne: Reproducer flerartet retfærdighed af Donna Haraway, Laboratorium for Æstetik og Økologi

Kimmerer, R W 2003, Gathering Moss: A Natural and Cultural History of Mosses, Oregon State University Press

Neimanis, A 2017, Body of Water - posthuman Feminist Phenomenology, Bloomsbury Academic

Dictionaries

Hansen Borgman, O 2020 'antroposofi', *Den Store Danske*, Gyldendal. Available at: http://denstoredanske.dk/index.php?sideId=38917 (Accessed: 7. april 2020)

Online Journals

Gendlin, E.T. 1992, *The primacy of the body, not the primacy of perception.* Man and World 25: 341–353

Jóhannesdóttir, G R, Thorgeirsdottir, S, 2016, *Reclaiming Nature by Reclaiming the Body*, Balkan Journal of Philosophy 8 (1):39-48

Online Newspapers

Pollan, M (2013), 'The Intelligent Plant - Scientists debate a new way of understanding flora', The

New Yorker, December 23rd & 30th. Available at:

https://www.newyorker.com/magazine/2013/12/23/the-intelligent-plant

(Accessed: 13th March 2020)

Farrier, D & Aeon (2016), 'How the Concept of Deep Time Is Changing -

The idea that humans are ephemeral compared to the workings of nature isn't as persuasive as it once was.', The Atlantic, October 31st. Available at:

https://www.theatlantic.com/science/archive/2016/10/aeon-deep-time/505922/ (Viewed: 2nd April 2020)

Websites

Busch, K, 2016, The Language of Things and the Magic of Language - On Walter Benjamin's Concept of Latent Potency, Busch, K. Viewed: 27th March 2020 (https://transversal.at/transversal/0107/busch/en)

NCSE The National Center for Science Education, Oakland, 2016, Deep Time Primer, NCNE (Accessed: 14th April 2020) https://ncse.ngo/deep-time-primer

Mathez E.A. 2000, *James Hutton: The Founder of Modern Geology -* Part of the Earth Inside and Out Curriculum Collection, American Museum of Natural History, New York

(Viewed: 10ht April 2020)

https://www.amnh.org/learn-teach/curriculum-collections/earth-inside-and-out/james-hutton

Steyerl, H, 2006, The language of things, Steyerl, H. Viewed: 27th March 2020

(https://transversal.at/transversal/0606/steyerl/en)