

C e c i l i a J o n s s o n

B. 1980, Stockholm SE

Cecilia Jonsson is an interdisciplinary artist living in Bergen in Norway. Informed by methods used in the natural sciences, Jonsson explores tensions between the mineral domain and living entities as both a method for observation and as a medium. Her holistic modes of thinking are infused in the works often as site-related, artistic interpretations of empirical material phenomena. Jonssons projects are developed as investigations of physical and ideological properties of the raw materials that are fundamental to human existence, from their origins deep in the ground, to the extraction, transformation and global exploitation. Central to Jonsson's practice is the drawing out of the poetic from the connections between sciences, environmental politics, technology, materials and aesthetics.

www.ceciliajonsson.com

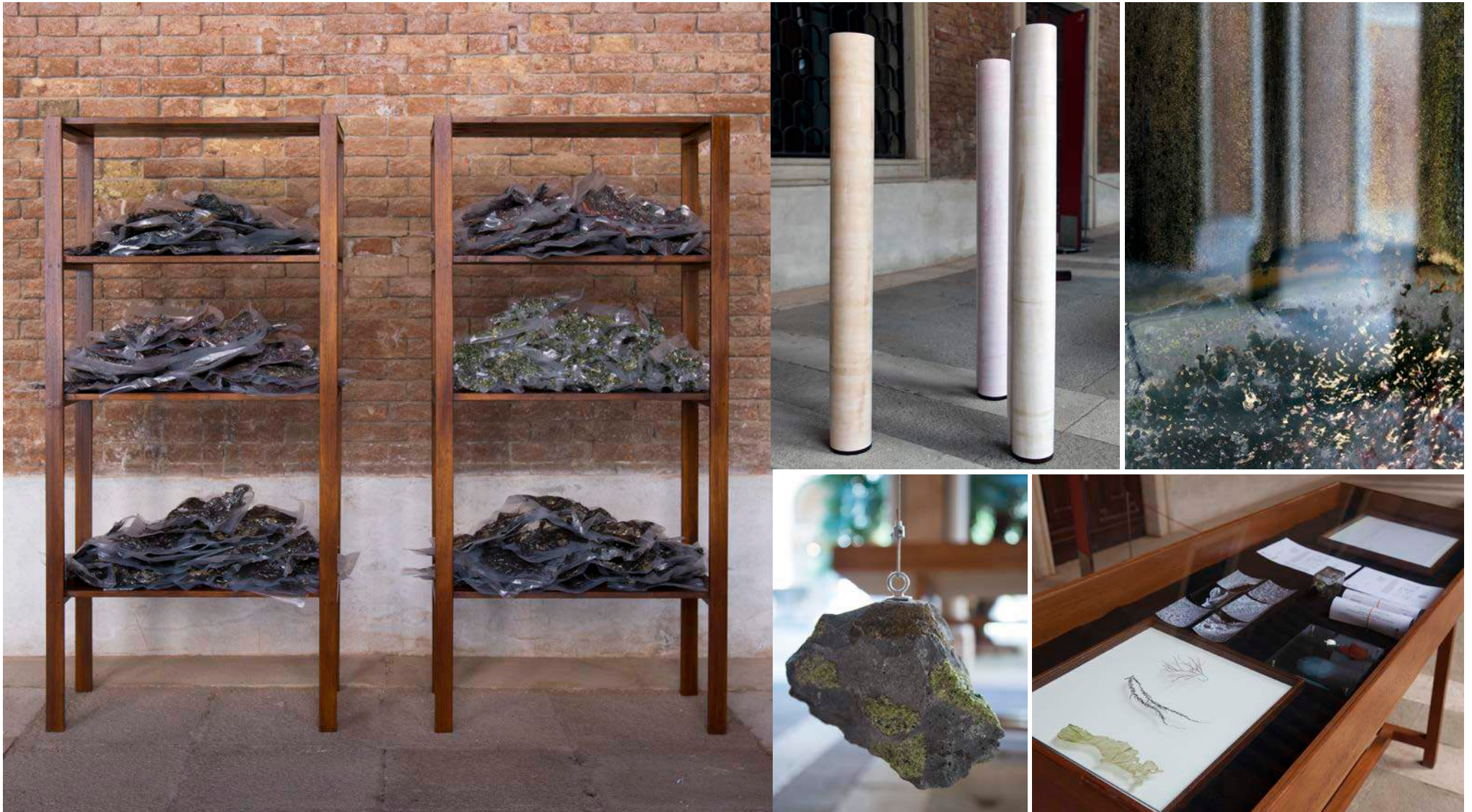


Paradoxes of a Diamond

2015

Mixed media installation including Carbon Capture and Storage Proposal for an Indefinite Period, Still life - Venice (Winogradsky column), apRed I / apBrown I / apGreen I, Trap, Cabinet

Dimensions variable



Paradoxes of a Diamond

Wooden shelves with 154 vacuum packed bricks of stored dried alga (*Gracilaria*, *Sargassum*, *Ulva*) from the Venice lagoon, a steel-framed organic painting of Class C contaminated sediment, algal pigment extracts on alga paper, a peridotite stone and display cabinet with a herbarium, drawing and illustrations, SEM photographs and test results and prints of scans

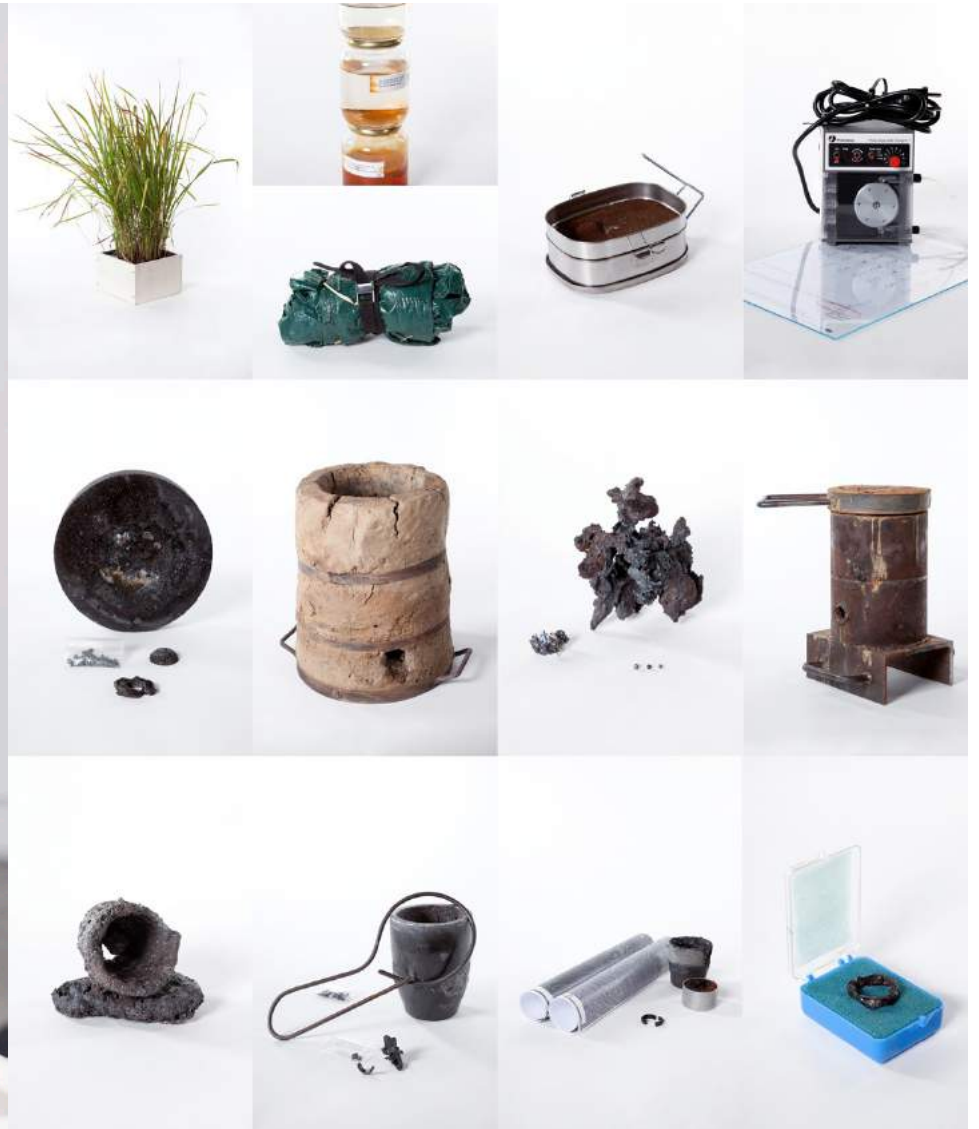
Paradoxes of a Diamond

The Venice lagoon is a delicately balanced ecosystem where erosion, sedimentation, tidal currents, and salinity combine to produce one of the largest wetlands in the Mediterranean, where land and water mingle. It is both an urban Lagoon and a natural part of Venice as Marcel Proust once captured this paradoxical relation. Its central parts have undergone major changes during the twentieth century, mainly due to anthropogenic impacts from the industrial area, surrounding communities, agricultural practices and from the digging of its two deep canals. These severe hydrodynamic changes have brought with them some serious impacts on the sediments' recycling of nutrients and pollutants, and have led tolerant populations of macro-algae to gradually replace less suitable flora. In recent years the abnormal biomass of the most abundant algae has made necessary their annual removal from the lagoon to prevent the severe de-oxygenation of the water.

Paradoxes of a Diamond is an interdisciplinary and site-specific art project, which explores the history of Venice's lagoon leading to a contemporary ecological perspective, and uses the algae as a legitimate biological indicator of the lagoon's environmental state. It investigates the heavy metal contamination level of three algae species (*Gracilaria gracilis*, *Sargassum muticum* and *Ulva rigida*) in the lagoon environment, their accumulation of carbon dioxide and their "utility" as a reservoir of carbon. Inspired by the Diamond - Water Paradox formulated by Adam Smith in 1776, in *The Wealth of Nations*, the project reflects on the economic concepts of use and exchange values, as well as on the marginal utility of an ecosystem. Paradoxes of a Diamond evokes the production of a diamond out of the carbon stored within the algae collected from classified C contaminated sediment in the central parts of the lagoon. After measuring the levels of carbon and heavy metals of a small sample of algae, 150kg of extra algae were collected to obtain the required quantity of carbon for the creation of a diamond, which unique coloration would be defined by the metal composition of the collected algae. The diamond, however, was not completely synthesized, but it is instead symbolically represented as a "reservoir" of carbon through an installation consisting of sealed, vacuum packed bricks of dried algae. The chemical process of the synthesis of the diamond is thus maintained in a state of incompleteness and potentiality: the diamond is, if you will, a diamond in the making rather than a completed diamond. Its value, then, is more akin to some symbolic use value than to its usual exchange value: it is the paradoxical means of a renewed ecological awareness.

Paradoxes of a Diamond is exhibited as a multiple installation composed of various bricks of stored dried algae, a steel-framed organic painting of Class C sediments from the lagoon in a reinterpretation of the Winogradsky column, a device for culturing a wide diversity of microorganisms, various illustrations on Shiro Alga Paper made of seaweed, herbarium, test results and prints of scans performed in the laboratory, and a Peridotite stone. The exhibition thus features several artifacts and a series of illustrations and models that both engage with and resist to the exchange value of the diamond's great brilliance. The carbon "reservoir" engages the viewer to examine the relationship between the organic and the mineral domains, while the illustrations raise questions about what lies in between them.

Paradoxes of a Diamond was developed with support of Office for Contemporary Art Norway (OCA) and Fondazione Bevilacqua La Masa in Venice, Italy. The project was conducted in collaboration with Adriano Sfriso and Alessandro Buosi, at the Department of Environmental Sciences, Informatics and Statistics at the University Ca' Foscari in Venice, and Paola Del Negro and Francesca Malfatti of the National Institute of Oceanography and Experimental Geophysics in Trieste. Thanks to the EM facility at the University of Studies of Trieste and Favini Srl for their support.



The Iron Ring

2013

Mixed media installation including *Imperata cylindrica*, iron artifacts from the evolution steps, HD video, glass, wood, steel

Dimensions variable (130 x 560 x 40 cm)



The Iron Ring (still images from video)

Video: ceciliajonsson.com/index.php?/inside/the-iron-ring-project-video/
E-book: v2.nl/publishing/the-iron-ring

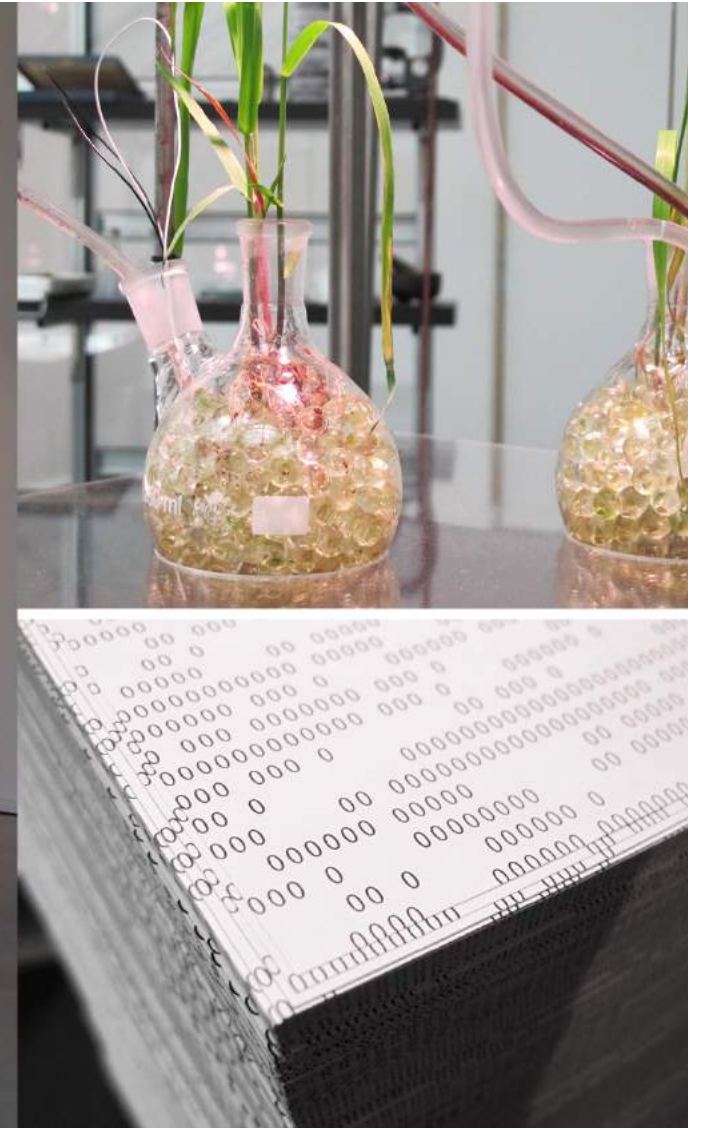
The Iron Ring

While “green mining” aims for a more ecological approach to mining metals, The Iron Ring explores how contaminated mining grounds may benefit from the mining of metals. For The Iron Ring, 24kg of iron-tainted grass was removed from contaminated mining grounds and transformed into a ring of 2g metallic iron.

Iron is considered very important to life in general and has a lower toxicity than other metals. Extensive or abandoned metal mines and industrial activities have, however, caused metal releases into the ecosystem to accelerate and reach toxic levels. So-called iron hyperaccumulating plants are tolerant to inorganic iron and can grow on these degraded grounds. There they extract the metal from the soil to store it in very high concentrations inside their roots, stems and leaves. The means of "cleaning" the polluted soil however, is a periodical commitment that relies on human interaction: harvest. The plants' metal enriched biomass (in other words, their contaminated biological materials) needs to be removed from the ground before the plants by season wilt and the extracted metal reverts back to the soil. So that after the harvest is removed, new sprouts can grow to continue the decontamination process. The project elaborates on the possibilities to utilize the cleansing process of the naturalized, wild growing grass: *Imperata cylindrica*. An invasive vile weed, which overlooked tolerance and ability to hyper accumulate iron inside its roots, stems and leaves are left unutilized. The Iron Ring proposes to harvest the grass for the purpose of extracting the ore that is inside them. The result is a scenario for iron mining that, instead of furthering destruction, could actually contribute to the environmental rehabilitation of abandoned metal mines. The Iron Ring installation takes a visitor through the project's trials and failures, in a process of close collaboration with smiths, scientists, technicians and farmers met along the way. The installation consists of artefacts and video documentation that reports on the seven chronological steps that were required to create an iron ring out of 24kg of grass harvested from the acidic river banks of a landscape in Spain severely transformed by opencast mining.

The Iron Ring was made possible through the support of Production Network for Electronic Art, V2_ Institute for the Unstable Media and the Arts Council Norway. Special thanks to Linda Tuldahl, Silvia Czaia and Antonio Serrano, Raymond Abell and Brian Studd at Laboratory Services International, Eric Hulsman, Thijs van de Manakker, Marnix de Nijs, Eva Brita Åkerlund and Odd B. Gaustad at Rolls-Royce, Bergen Engines Foundry and Toni Bogdanoff and Esbjörn Ollas at the School of Engineering, Jönköping University.

The Iron Ring was awarded Second Prize in VIDA 16.0 Fundación Telefónicas Art & Artificial Life International Awards 2014.

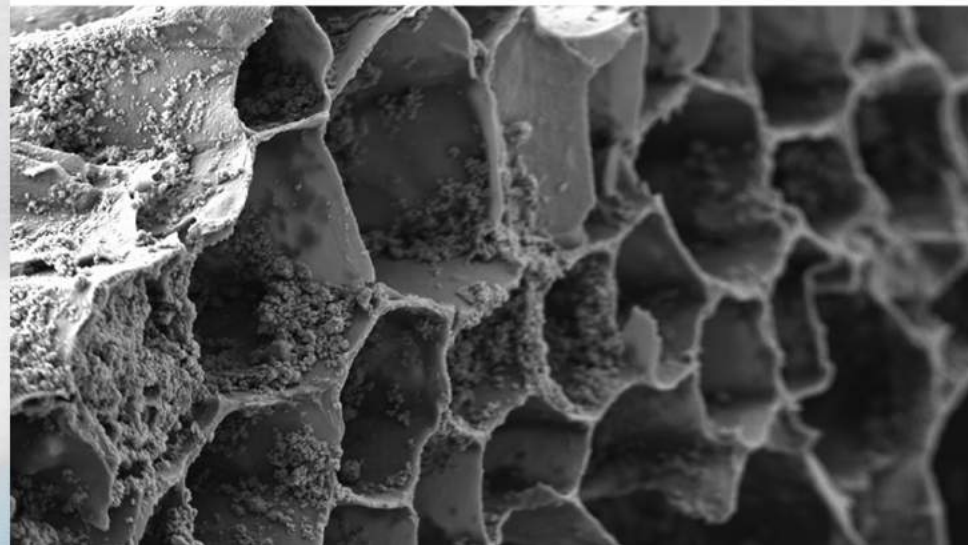


The Original Arrangement was for a Solo Violin and a String Orchestra

2012

Mixed media installation including Imperata cylindrica, reel-to-reel tape Vivaldi's Four Seasons, Nagra IV, video, SEM photographs, prints, drawings, objects, micro controller, greenhouse, steel, wood, growing lamps

210 x 260 x 260 cm



The Original Arrangement was for a Solo Violin and a String Orchestra

Video: ceciliajonsson.com/index.php?/inside/the-four-seasons/

Audio: ceciliajonsson.com/index.php?/inside/the-original-arrangement-sound/

The Original Arrangement was for a Solo Violin and a String Orchestra

The work consists of several objects and images of very different origin. The natural plant is placed next to a dismantled tape recorder, on shelves are the tools and objects of research on display, a pile of paper with digital codes is placed under a growing lamp. The public is invited to take part in a live process: the sound of a tape containing Vivaldi's Four Seasons, changes and deteriorates every day due to the iron particles falling down while running through the machine. A plant grows, extremely slowly under a growing lamp, a person carefully takes off the layer of a magnetic tape. All these actions are not stunning or spectacular in themselves, they seem to be part of a daily routine of a scientific research. But the aim of the research is not a clear result or message. This research creates a doubt which raises in the mind of the public: why does a plant need metal to grow? Why does the music disappear?

In the installation The Original Arrangement was for a Solo Violin and a String Orchestra an iron hyperaccumulating plant is grown in the magnetized iron from a tape containing Vivaldi's Four Seasons. The plants extract and store the magnetic information from the tape and in this way give their own interpretation of the music. The process is incorporated in a larger installation in which a green house sets the scene for various related activities.

Special thanks to NRK Hordaland and Irene Heggstad and Egil Erichsen at the University of Bergen, Laboratory for Electron Microscopy.



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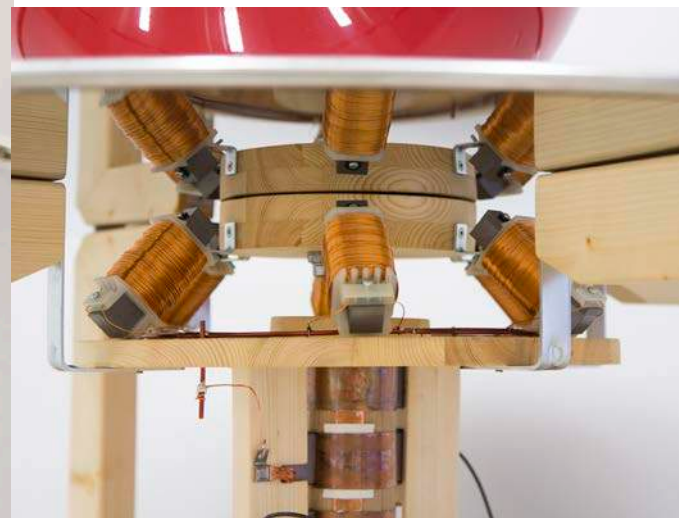
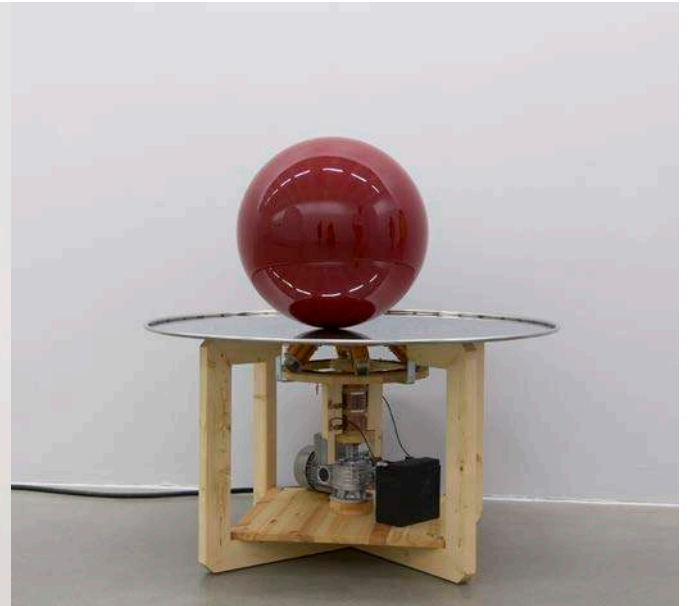
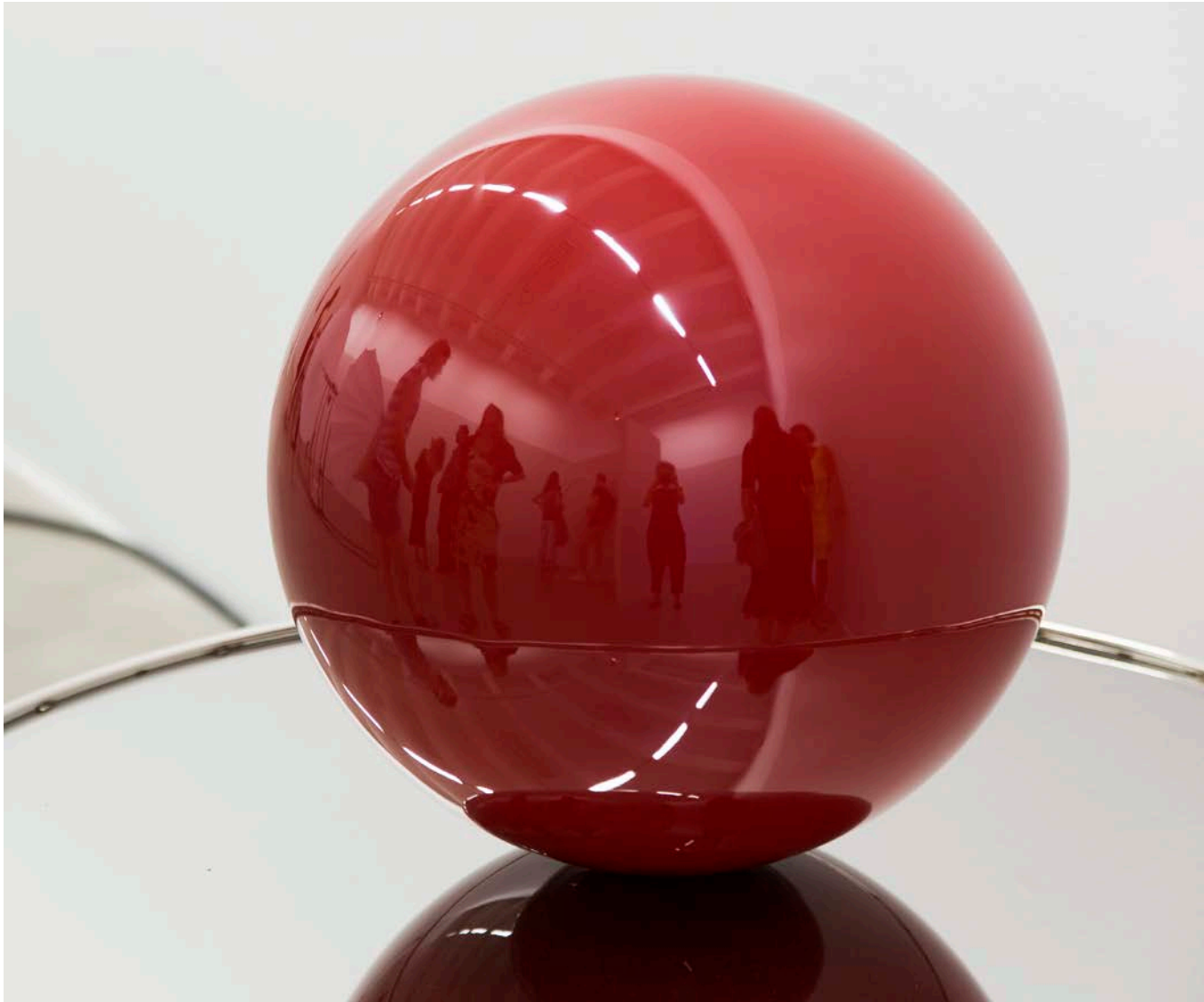


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13.

Tree - Burial
2015
Site-specific work and a photographic series in 13 parts
Dimensions variable



Passage of the Red Queen
2015

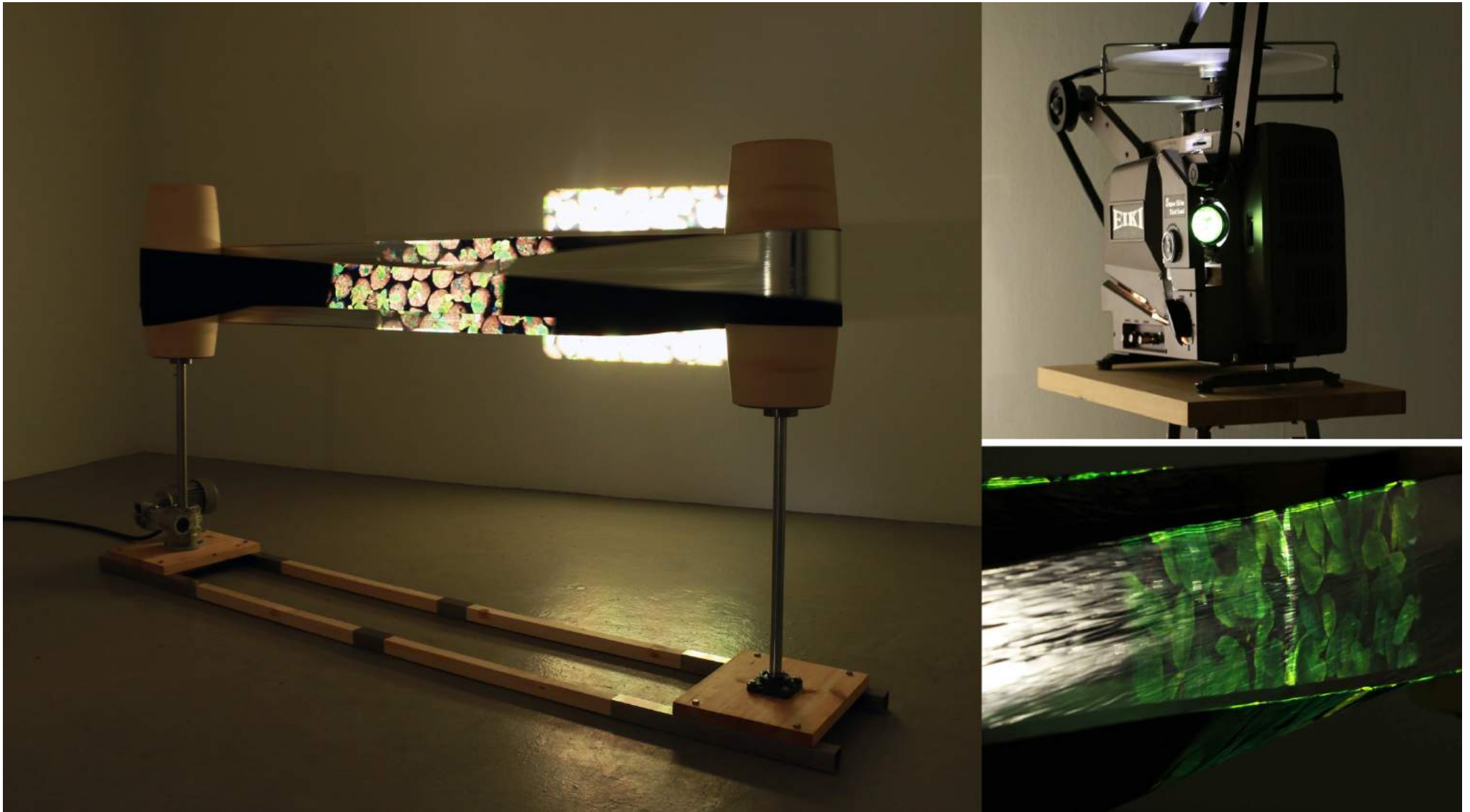
Kinetic sculpture including steel, pine wood, electromagnetic coils, frequency converter, Hp motor, battery
110 x 100 x 100 cm, steel sphere 50 cm d.

Passage of the Red Queen

"Well, in our country," said Alice, still panting a little, "you'd generally get to somewhere else - if you run very fast for a long time, as we've been doing." "A slow sort of country!" said the Queen. "Now, here, you see, it takes all the running you can do, to keep in the same place. If you want to get somewhere else, you must run at least twice as fast as that!"

Passage of the Red Queen delves in to the dialogue between Alice and the Red Queen in the novel *Through the Looking-Glass and What Alice Found There*, by Lewis Carroll. Where Alice ran yet remained in the same place which gave its name to the Red Queen hypothesis, a theory that describes the evolutionary race that occurs between opposing species. The work plays on Nikola Tesla's revolutionary industrial discovery of rotating magnetic fields and his device Egg of Columbus. Instead of the phenomenon of the balancing copper egg spinning at tremendous speed, a steel egg has expanded into a self-supporting spherical shape that shimmers in highly polished red lacquer. The magnetic source's periodic shift of the power field, causes the ball to move in a slow and almost hesitant rotation, giving the impression of a cautious search around the shiny steel plate on which it balances and reflects. The pedestal of pine stands in contrast and leaves the viewer with an impression midway between the natural and the industrial.

Passage of the Red Queen was made possible through the support of Bergen Kommune and the Arts Council Norway in collaboration with SEKO Elektroteknikk.



Epeirogenic Movement

2014

Kinetic sculpture including Hp motor, wool felt, survival blanket, wood, steel, 16mm silent film, projector, looper

Dimensions variable (150 x 310 x 60 cm)

Video: ceciliajonsson.com/index.php?/inside/epeirogenic-movement/