

EXHIBITION COMCIÊNCIA

Jardim Mineral

Creative Residency
and Authorial Work
Exhibition

programacomciencia.org.br

DIGITAL NATIVE

SUBTITLE

Author: Mari Nagem

Title: Infinitum

Mari Nagem and Thiago Hersan

Size: 1920 x ∞ pixels

Technique: Interactive Scrolling Web

Year: 2021

Infinitum starts from the anthropocentric conception integrated into our relationship with social media, which interprets earth resources, and more and more the cosmological resources, as infinite, exploring them immeasurably. A cement stone outlines a mountain, while underneath the ground the different minerals become layers of time in an infinite scroll. In a search for immediate satisfaction, despite all mundane texture, we excavate with our fingers a database of smooth and endless atmosphere.

MINI-BIO

Mari Nagem and Thiago Hersan are transmedia artists interested in reshaping human experiences through an interdisciplinary and sensitive approach to technology. By using distinct practices, methodologies, and abilities, they develop projects based on material and technological experimentations supported by philosophical questions and a continuous reinterpretation of the boundaries among the natural, the artificial, and the common.

Born respectively in Belo Horizonte and Sao Paulo, they interpret and perceive the world in a hybrid and sensorial way, crossing seas and developing projects both in Brazil and abroad.

As a strategy of opposition to the social and political disarticulation, due to the accelerated means of communication and the logics of production and consumption within the current system of capitalist surveillance, they work in such a way as to make the machines allies in the reconfiguration of scientific and techno-affective exchanges and desires, developing images, interactions, and critical thoughts facing what we call “technological progress”.

SUBTITLE

Author: Ivonne Villamil

Title: Missing Earth

Technique: Video

Year: 2021

Let us think about an anachronic conversation among body, memory, and the Earth. What is the time scale among them and for each of them? What is the place, the instant in which they originate, exist, and interact? Each one is a record, construction of and on the time of the events that originated them, the forces that acted on them. Missing Earth combines those physical and

metaphysical layers. It starts from the fascination for geodiversity, the geological process, and nature. It is an invitation for us to think about the time scales, the existence, the changing processes of the Earth's crust, and about us, humans, as agents and temporal subjects of those transformations.

The work is built on the sum of the sensitive and formal experience with the minerals and the landscape of Serra do Curral, the approximation between the Earth Sciences and the immersion in the Museum collection, with special attention to iron minerals, their property, geological environments, and their role on human development. The experience with microphones and listening devices of elements and Earth phenomena proposes the perception and the body as roads to consider memories, both geological and human, in the construction of other possibilities of understanding and relationship with nature. A compilation of fragments of various texts about science, esoterism, and literature reinforces that narrative, multiplying the paths of exchanges and dialogues in the exchange with the audience.

MINI-BIO

Ivonne Villamil is an artist and researcher. Currently, she researches listening devices and practices in the close relationship among matter, memory, and territory in Latin America, starting from one of the elements of Acoustic Ecology: the geophony, or the Earth's sounds. Her projects include different media such as installation, sculpture, drawing, sound art, audiovisual, or performance, creating multiple narratives, ranging from geopolitics to poetics and the technology on the relationship between body and nature. Doctoral student on the program La Realidad Asediada. Concepto, Proceso y Experimentación Artística at the University of Barcelona, under the supervision of the sound artist and sculptor Josep Cerdà. Member of the GIIP - Grupo Internacional e Interinstitucional de Pesquisa em Arte, Ciência e Tecnologia at UNESP. Her work and research have gained several acknowledgments such as Residência HANGAR - Centro de Produção e Pesquisa em Artes Visuais, Barcelona; Prize Artistas de Trayectoria Intermedia from Ministry of Culture of Colombia; Scholarship for Foreign Doctoral Studies from Ministry of Science, Technology, and Innovation of Brazil; Residence at Cité Internationale Universitaire de Paris. She took part in events like the Simpósio Internacional de Inovação em Mídias Interativas, UPV; Sónar Barcelona; Hemispheric Institute of Performance and Politics, NYU; ArtBo - International Art Fair of Bogotá; Supermarket Art Fair, Stockholm, and others.

SUBTITLE

Author: Keila Z.

Title: *Notes on aluminum behavior*

Year: 2021

Technique: *Sound piece*

In a narrative that interconnects collective memories, scientific



data, and poetic, the sound piece Notes on aluminum behavior recounts the meeting between an unidentified organism and the chemical element aluminum that takes place at the center of the Earth, moving through its layers and culminating at the surface of the current Anthropocene. In a non-linear temporality, the episodes merge creating sounds and memories of the crossroads among the element aluminum and human bodies, animals, vegetables, and minerals.

MINI-BIO

Keila Z. (1984) moves between science and arts fields. She is a biologist, researcher, and art scientist who researches the production, use, and evolution of sound landscapes and the sound of elements and organisms. She also develops projects in the areas of memory preservation and cultural heritage, popularization of scientific knowledge, and the use of inclusive and open source technologies. Currently, she is a Doctoral student in Ecology and Evolution at UERJ. She believes in the importance of all kinds of knowledge, permeating traditional, scientific, and accumulated knowledge throughout life, as well as in transdisciplinarity as one of the paths to the construction of social equity, in which ideas and plural knowledge are valued and shared.

SUBTITLE

Author: Samuel Van Ransbeeck

Title: The minerals choir

Year: 2021

During recent decades, terranauts boarded an expedition to explore the third planet. Objective: find the minerals and discover the mysteries of the globe. As those expeditions unfolded, the terranauts found a huge variety of minerals and metals with many shapes and colors. Today, many of them are exhibited at MM Gerdau - Museu das Minas e do Metal. Even if we know a lot about their history, origin, physical and chemical features, recently our extraterrestrial Tetê has shown us that some minerals can sing, but only he can hear them. Now, with new technologies, we have found a way for you to listen to those songs too. Through a website, it is possible listening to 10 minerals exhibited at the museum singing their songs. Visitors can get together with friends and create a choir of minerals. Sometimes it will sound good, sometimes it may sound odd.

MINI-BIO

Samuel Van Ransbeeck (1984) is a sound artist and researcher. He holds a Ph.D. in Interactive Art from the Catholic University of Portugal. His work focuses on three fields: sonification (the translation of data into sound), soundscapes, and digital humanities, in which the artist seeks new ways to explore collections with aesthetic experiences.



SUBTITLE

Authors: Anastácio e Vamoss

Title: Kulúnda

Medium: Digital screen

Technique: Three.js and p5.js creative coding

Contribution: Capitã Pedrina de Lourdes and Victor Dias

Image collection: bndigital.bn.gov.br/acervodigital

Year: 2021

Kulúnda is a digital mineral. In its structure are sedimented some visual and sound data that recovers memory fragments from the enslavement process of the Bantu people during the beginning of the mining in Colonial Brazil. That mineral can crystalize our memory based on the implication and the relationship that we established with our history. Kulúnda reflects images from that historical period and produces resonance to songs - known as "Vissungos" - that enslaved black people on diamonds minings in Serro and Diamantina regions used to sing. In order to make the digital mineral grow, it is necessary to touch the screen at the same rhythm as the Vissungo song that is been played. As you spin Kulúnda and explore the images recorded in the mineral, it is possible to feel the reflexes and resonances lived by the Bantu people at that period.

MINI-BIO

Anastácio

Anastácio is a plastic artist and researcher with a Master in Visual Arts (PPGAV-EBA). He develops his work in the areas of hybrid technologies, video art, creative coding, interactive devices, sound art, sonification, and sociopolitical mediation, exhibiting works in spaces such as MAM Bahia, Museu do Amanhã, British Academy, Oi Futuro, Casa Rio, CMAHO, Festival de Cultura Digital, Casa França Brasil, Circo Voador, and others. His work process usually uses technology applied to certain contexts to provoke reflections on the "imbricate of social relations dynamics" with the inhabited environment.

Vamoss

Carlos Oliveira (Vamoss) is a creative coding artist and Director of Technology in SuperUber since 2011. He integrates content, hardware, software, design, and architecture to develop unique projects. Graduated in Design and Master of Creative Economy at ESPM-Rio, he works with interactive media since 2004, developing projects for physical spaces, mobile, and web. He is in Doctoral studies in Arts at UFRJ. In his master's degree, he got involved with a community of creative coding in Brazil to create EncontrosDigitais.com.br, a collaborative platform to share knowledge between creative coders and society.



SUBTITLE

Author: Pedro Hurpia

Title: Those that are not

Year: 2021

Technique: Video

Size: 1920 x 1080px

Length: Loop

Sound: Stereo

During his artistic residency at MM Gerdau - Museu das Minas e do Metal, Pedro Hurpia focused on the samples kept on the shelves and cabinets of the Technical Reserve. By bringing to light this rich collection that is inaccessible to the public, the artist explores fictional narratives, which speculate an inversion of perspective in the relationship between human and non-human beings, attributing thought and perception skills to these various minerals, which are preserved in the Museum. The artist approaches themes such as the deep time of geology, belief in healing stones, displacement of rocks, the structural composition of ores, among others, in a poetic and subjective way, in order to draw touching points between art and science.

MINI-BIO

Pedro Hurpia (1976) is a visual artist and researcher. He has a Master in Visual Arts at Unicamp, guest artist at TSOEG - Temporal School of Experimental Geography (United Kingdom), and collaborator at SEA Tilburg Foundation (Netherlands). In his artistic praxis, he works on relationships between science and popular beliefs. Using speculative creation strategies, he proposes fictional narratives which investigate the origin and processes of natural phenomena and geophysical anomalies. He is especially interested in questioning binary opposites, which broadens the analysis of his work, leaving it open to the convictions of what is real or fictitious.

SITE-SPECIFIC

SUBTITLE

Title: Image Matter

Author: Mari Fraga

Year: 2021

The installation proposes relations between image and matter and raises reflections on the collapse of scales between the micro and the macro, the Earth's memory, human memory, and human actions in nature through science and systematic exploration of mineral resources. Obsolete technologies invite you to travel in time and evoke the human journey in search of translating matter into image and image into matter. The optical principle of photography takes shape in a handcrafted device, which produces images from light sources, 35mm slides, lenses, and minerals. The laminated composition of the muscovite appears in different ways,

as fragments of condensed time that space peels off. Geological time, historical-technological time, and the time of affective memory are mixed up in this fictional laboratory that, like a Möbius strip, bends in spatiotemporal vertigo, recovering images, and materials at each stage of the process: rocks that become screens for image projection; images formed by minerals; silver halide photographic paper; rock slices under the microscope; surfaces at different scales; aerial images; maps; projectors from different eras; optical lenses; samples from the collection; painting and other experiments. This work was supported by the CPRM for filming under the optical microscope and the UFRJ Geodiversity Museum, which made part of its photographic collection available. Special thanks to Aline Castro, Ismar de Carvalho, Marco Aurélio Pinheiro, Júlio Murilo Pinho, Joana Amora, Ana Costa, Lis Kogan, and the entire MM Gerda team. Video editing and assistance: Carine Caz.

MINI-BIO

Mari Fraga is an artist, researcher, and professor of Visual Arts - Sculpture at Escola de Belas-Artes, UFRJ. Ph.D. in Contemporary Artistic Processes (UERJ, 2016), she is the creator and editor of Revista Carbono (www.revistacarbono.com) - an online publication that proposes dialogues between artistic and scientific research. She was a visiting doctoral student at Konstfack University of Arts, Crafts and Design (Sweden), funded by Capes PDSE scholarship. She works in various media such as sculpture, photography, video, painting, and installations. Among the main individual exhibitions are Minério-Hemorragia (Espaço Cultural Sérgio Porto, 2018), Tempo Fóssil, (Galeria Ibeu, 2016) and On Oil (SU Gallery Konstfack, Stockholm, 2015). She investigates the human agent intervention in nature, the dichotomy between natural and artificial, the Anthropocene and Climate Change, mining and the uses of the Earth, experimenting with analogies between the body and the Earth, inspired by Ecofeminism. She is a member of the Cooperativa de Mulheres Artistas and the research group GAE Arte: Ecologias, where she coordinates the research projects “GeoAstro-poéticas” and “Agente Húmus: práticas cooperativas em arte, agroecologia e ecofeminismo”.

SUBTITLE

Title: Mineral entropy

Authors: Lucas Bambozzi and Fernando Velázquez

Operetta

Technique: minerals, engines, controllers, laser lantern, monitor, camera, speakers, and custom algorithm.

Year: 2021

Contributions: Herbert Baioco and Gustavo Milward

This work is an installation created from a system in a test phase that involves representation, properties measurement, pattern recognition, and tension between elements. The project consists of a set of experiments in repeated movements that amplify the discrete behavior related to natural things. In the work, the



piezoelectric, magnetic, conductive, insulating, transparency, or reflective properties of magnetite, calcite, fluorite, mica, and quartz start to be felt in visual, sound, and spatial conditions. On a quantum scale, in which everything seems to be reduced to movement, the sound is the element that gives shape to events, submitted to the hypothetical conditions of a tiny tectonic. We are interested in the idea of a continuous motion that contrasts geological time with human-scale time, stimulating narratives that evoke scientific, technological, and epistemological paradigms.

Keywords: system, test, attractor, synergy, entropy, geomancy.

MINI-BIO

Fernando Velázquez

Fernando Velázquez is an artist and curator. His works include videos, installations and interactive objects, audiovisual performances, and images generated with algorithmic resources. He holds a Master in Fashion, Art and Culture at Senac-SP, postgraduate in Video and On and Offline Technologies at Mecad in Barcelona, taking part in exhibitions in Brazil and abroad, highlighting: Emoção Art.ficial Bienal de Arte e Tecnologia (Brazil, 2012), Mercosul Biennial (2009), Mapping Festival (Switzerland, 2011), WRO Biennale (Poland 2011) and the Pocket Film Festival at the Pompidou Center (Paris, 2007). He received, among others, the Prêmio Sergio Motta de Arte e Tecnologia (Brazil, 2009), Mídias Locativas Arte.mov (Brazil, 2008), and the Vida Artificial (Spain, 2008). He is a professor at the postgraduation department, Cultural Management studies at Itaú Cultural/Singularidades.

Lucas Bambozzi

Lucas is an artist and researcher in digital media. He works with media such as video, film, installation, site-specific works, audiovisual performances, and interactive projects. His works have been shown in over 40 countries. He was curator of Sónar SP (2004), Life Goes Mobile (2004-2005), ON_OFF (Itaú Cultural 2012-2019), the Multitude project (2014), and Visualismo, Arte, Tecnologia e Cidade (2015). He is one of the creators of Arte.mov art festival in mobile media (2006-2012), Labmovel (2012-2016), Prenúncios + Catástrofes (Sesc Pompeia, 2018), and AVXLab (2017). He was an artist-in-residence at the Caiia-Star Center/i-Dat and completed his Mphil at the University of Plymouth, England. He holds a Ph.D. in Sciences at FAUUSP and he is a professor in Visual Arts studies at FAAP.

SUBTITLE

Title: Astrobleme

Author: Elias Maroso

Technique: Site-specific installation. Sculptural pieces in polystyrene with digital printing, LED lamp, self-adhesive vinyl, and photocorroded copper pieces.

Year: 2021

Astrobleme is an artistic installation designed specifically for the entrance hall of MM Gerdau - Museu das Minas e do Metal, in which the trigger subject is the impact structures caused by meteorites on the Earth's surface. Based on geological studies dedicated to the morphology of these impressive craters, Elias Maroso builds a set of geometric volumes, which suggest the collision of an alien fragment with the museum interior. Astrobleme integrates the poetics of its author when articulating paradoxes like to build compositions of a destructed aspect - drawing, in this case, a parallel between geology knowledge and natural events that exceed the human dimension.

MINI-BIO

Elias Maroso is an artist and researcher. He is a Ph.D. in Visual Arts at UFRGS, with an emphasis on Languages and Contexts of Creation. He is dedicated to object construction, spatial interventions, and energy devices, relating different means and study references. Founding member of the Sala Dobradiça project, whom he represented in the 7th and 8th Bienal do Mercosul, producing, together with this initiative, exhibitions with artists from Brazil and abroad. In his recent work, he has worked at the Druckwerkstatt, Kunst Quartier Bethanien (Berlin/Germany), via the Goethe-Institut, and for the Prêmio Aliança Francesa de Arte Contemporânea, apart from being nominated for the Prêmio PIPA de Arte Contemporânea (Year 11), reaching finals at Prêmio PIPA Online 2020. In 2021, he developed works for the Programa CoMciência at MM Gerdau - Museu das Minas e do metal (Belo Horizonte, State of Minas Gerais) and became one of the artists at the 13th Bienal do Mercosul. Some of his works are in the Instituto PIPA collection, Rio de Janeiro, State of Rio de Janeiro (Deslocamentos collection).

CURATORIAL STATEMENTS

Conversations with Matter

Gabriel Menotti

In his famous elaboration of the heterotopia concept, created by the French philosopher Michel Foucault, he evokes the garden as the oldest example of the principle of overlapping several incompatible places in the same real space. The careful vegetation composition in Persian gardens, as he claims, was intended to form a microcosm that corresponded, physically and spiritually, to the entire world. Similarly, the laboratory and the museum become sites for the heroic synthesis between the whole of reality and its parts that we are able to manage - an experiment, a specimen, a work.

But the diversity inherent in gardens, laboratories, and museums also embodies the multiplicity of human and non-human actors

who laboriously and silently make those places what they are.

Throughout the Mineral Garden residency program, there were many opportunities to explore this constitutive diversity, through an intense program of exchanges between artists, with invited interlocutors and employees from virtually all sectors of the MM Gerdau - Museu das Minas e do Metal.

This hybrid dialogue culminates here in conversations with matter itself. It is emblematic that the projects developed for the site-specific category, in particular, are so marked by the poetics of contact: whether is the crossing of light through lenses, slices, and slides, articulated in Image Matter, by Mari Fraga; the caresses on the rock that Mineral Entropy, by Lucas Bambozzi and Fernando Velázquez, amplifies audiovisually; or the shock that Astrobleme, by Elias Maroso, performs against the museum's entrance hall. Exchanges among us, yes, but also among eras, scales, and representation orders. Many places in one.

Mineral - Digital native

Barbara Castro

A garden is a meeting place, a multi-sensory space of exchange between different organisms that establish relationships on diverse temporal scales. It presents both natural dispositions and human compositions. Make no mistake about the apparent inertia of minerals, they contain many stories. The collection of MM Gerdau - Museu das Minas e do Metal is made of small samples of an extensive geological history that transcends the human dimensions of time and space. Despite these sublime proportions, it is also possible to find poetics present in the small scale in each splinter, reflection, texture. A garden, an attentive gaze, a present body, an awakened mind can reveal preciousness in the immovable matter.

That was the challenge for the selected artists for the CoMciência artistic residency 2021-2022. Museum experts presented the Geosciences collection and the interlocutions in art, science and technology nourished the garden of aesthetic possibilities. The emerging artistic propositions of the Digital native category alternate and combine historical and fictional approaches, composing a rich exhibition of art and science. Keila Z and Samuel Van Ransbeeck extract sound from ores in projects that fuse fiction and data. The two duos Mari Nagem and Thiago Hersan, and Anastácio and Vamoss use creative coding and computing to perform provocations on social issues and mining. Ivonne Villamil and Pedro Hurpia create audiovisual narratives in the convergence between the collection and the landscape. Each proposition adds reflections and sensations to the virtual experience of the mineral garden.

Jardim
Mineral

CREATIVE RESIDENCY
AND AUTHORIAL WORK
EXHIBITION

EXHIBITION CREDITS

Sponsor: Gerdau

Support: CBMM

Director: Márcia Guimarães

Financial Director: Pedro Andrade

Project Assistant: Luiza Macedo

Assistant Director: Renata Matos

Geosciences Curatorship: Andrea Ferreira

Geology Assistant: Simone Silva

Research Analyst: David Silva

Museology Coordination: Carlos Jotta

Museography Technicians: Adson Junior and Leonardo Lopes

Museology Assistant: Samara Azevedo

Communication Coordination: Paola Oliveira

Communication Assistant: Lucas D'Ambrosio

Educational Coordination: Suely Monteiro

ICT Coordination: Alexandre Livino

ICT Analyst: Eric Defane Borges

Cultural Programming Coordination: Luciano Emerich

CoMciência Program Coordination: Marina Andrade

Accessibility and Inclusion Coordination: Luciana Miglio

Accessibility and Inclusion Assistant: Luana Trindade

Maintenance Coordination: Luciana Santos

Creation and Design Management: Sal Estúdio Criativo

Digital Advice: Sal Estúdio Criativo

Press Office: A Dupla Informação

Website development: Adapta Online

Curatorship: Barbara Castro and Gabriel Menotti

Tutors: Isabela Prado and Lúcia Fantinel

Writing

Tatiele de Souza Silva

Digital Native Artists

Mari Nagem and Thiago Hersan

Peter Hurpia

Keila Z

Samuel Van Ransbeeck

Ivonne Villamil

André Anastácio and Carlos Oliveira - Anastácio and Vamoss

Site-Specific Artists

Elias Maroso

Mari Fraga

Lucas Bambozzi and Fernando Velázquez

Jardim
Mineral

INSTITUTIONAL STATEMENT

The CoMciência Program reaches its third year in 2021. This year, under the subject “Mineral Garden”, the proposal of this occupation in art, science, and technology is us to immerse in the museum collection of mineralogy. With a new face, the Call for Artists CoMciência brought 10 artists to the MM Gerdau - Museu das Minas e do Metal, who were assigned to works among Digital Native, Site-Specific, and writing a scientific paper.

The innovative factor of this edition was that, through the Artistic Residency, the artists were completely immersed in the collection and in the museum routine. This exhibition process allowed us to follow the artists’ creative process and the work’s development, which provide the public with their poetic and scientific discussion.

The Site-Specific works, produced exclusively for the museum spaces, are installed along the exhibition itinerary to instigate us to discover new discourses and new approaches to our collection and its mineral diversity, using sensory resources. It is possible to find installations in unusual environments, which provoke us to consider the science behind minerals.

On the Mines floor, we invite visitors to participate in a digital experience through the Digital Native artists’ works, that presents creations developed in a digital environment accessible at the project site. The artists of this modality created artistic, historical, and fictional experiences that involve sound generation through artifacts coupled to minerals, creating and encoding of data, as well as coding and computer graphics that provoke senses and arouse visitors curiosity. It can happen also coming across audiovisual narratives that associate collection and landscape.

We made available on our digital platforms a scientific paper resulting from the writing, mapping, and documentation of this entire artistic process, which provided the Museum its results. That way, our purpose was to transcend our collections, looking beyond science and art, providing discussions and a broad production of knowledge.

We invite you to explore our exhibition tour and (re)discover our paths through the Mineral Garden that we brought to you.

Enjoy the tour!

Márcia Guimarães
(*Director of MM Gerdau - Museu das Minas e do Metal*)





GESTÃO



PATROCÍNIO



APOIO



PARCERIA



REALIZAÇÃO

