



Extreme Habitats and Art

Bauhaus Universität-Weimar // Winter Semester 2022 // Patterns and Techniques of a Shared Habitat,
Prof. Ursula Damm // Presentation: Betül Peker

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0- Introduction of Extreme Habitats and Some Examples

1- Alexandra Daisy Ginsberg "The Wilding of Mars" 2019

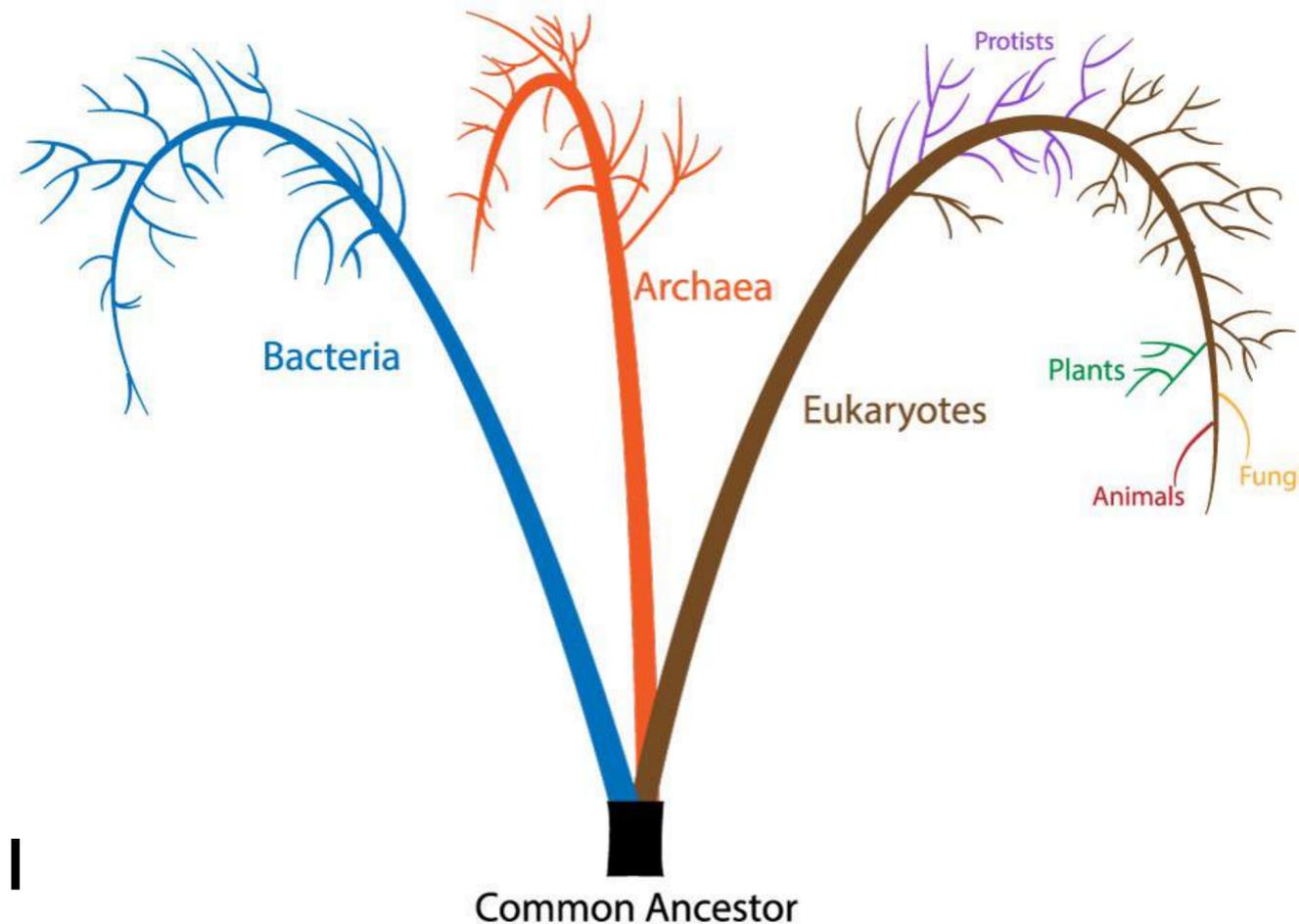
2- Agnes Meyer-Brandis "The Moon Goose Analogue" 2011

3- Jenna Sutela "nimiia vibiié" 2018

4- Azuma Makoto Frozen Flowers 2018

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Tree of Life



The term extreme environment refers to a habitat with extreme conditions such as **temperature, accessibility to various sources, or even high pressure, which makes it very difficult for human and animal to survive in.**

Extreme environments include the geographical poles, deserts, volcanoes, deep ocean, the upper atmosphere and outer space, and every planet except Earth (partly).

There are numerous species, some of which are well known and some of which are unknown. No matter how many generations have passed, either these species have adapted over time to these extreme environments or they have lived there their entire life.

The following list contains only a few species that live in extreme environments.

Examples

- [Giant kangaroo rat](#)
- Certain species of frogs
- Thermotolerant worms (*Alvinella pompejana*)
- Devil worms, [Halicephalobus mephisto](#)
- [Greenland shark](#)
- [Marine microorganism](#)
- [Bdelloidea](#)
- [Tardigrade](#) (waterbear)
- Himalayan jumping spider, *Euophrys omnisuperstes*
- [Cockroach](#)



Dr. [Alexandra Daisy Ginsberg](#) is an artist examining fraught relationships with nature and technology. Through artworks, writing, and curatorial projects, Daisy's work explores subjects as diverse as [artificial intelligence, exobiology, synthetic biology, conservation, biodiversity, and evolution](#), as she investigates the human impulse to "better" the world.

"If you think the world is terrible, it still means you think it could be otherwise."

[Alexandra Daisy Ginsberg, Artist](#) https://vimeo.com/332410867?embedded=true&source=video_title&owner=459840

<https://pollinator.art>. — If pollinators designed gardens, what would humans see?

A simulated Martian landscape featuring a reddish-brown, sandy terrain with ripples. In the background, a rocky cliff face is visible. Various alien plants are scattered across the scene, including clusters of pink flowers, yellow and orange stalks, green moss-like growths, and spiky black plants. The overall atmosphere is that of a controlled, experimental environment.

"THE WILDING OF MARS" 2019

SEEDING 3

PLANT CAM 2

YEAR 640000

LAT 55.2

LONG 41.7

TEMP 8 C

WATER 5%

NUTRIENTS 8%

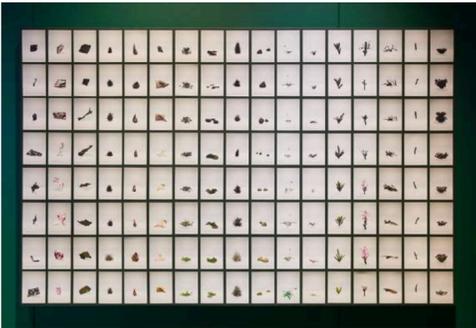


Could we imagine Mars colonised only by plants, flourishing without us?

The Wilding of Mars simulates the growth of a planetary wilderness, seeded with Earth life forms.

In exhibition, a wild garden on Mars thrives over millennia, its growth visible over human hours. In the installation, multiple simulations run in parallel; endless possible worlds emerge, **challenging the assumption that the outcome of space colonisation must be human benefit.**

The Wilding of Mars instead prioritises a **non-human perspective with plants visibly growing and colonising the terrain**, while voyeuristic camera angles heighten the sense of human intrusion.

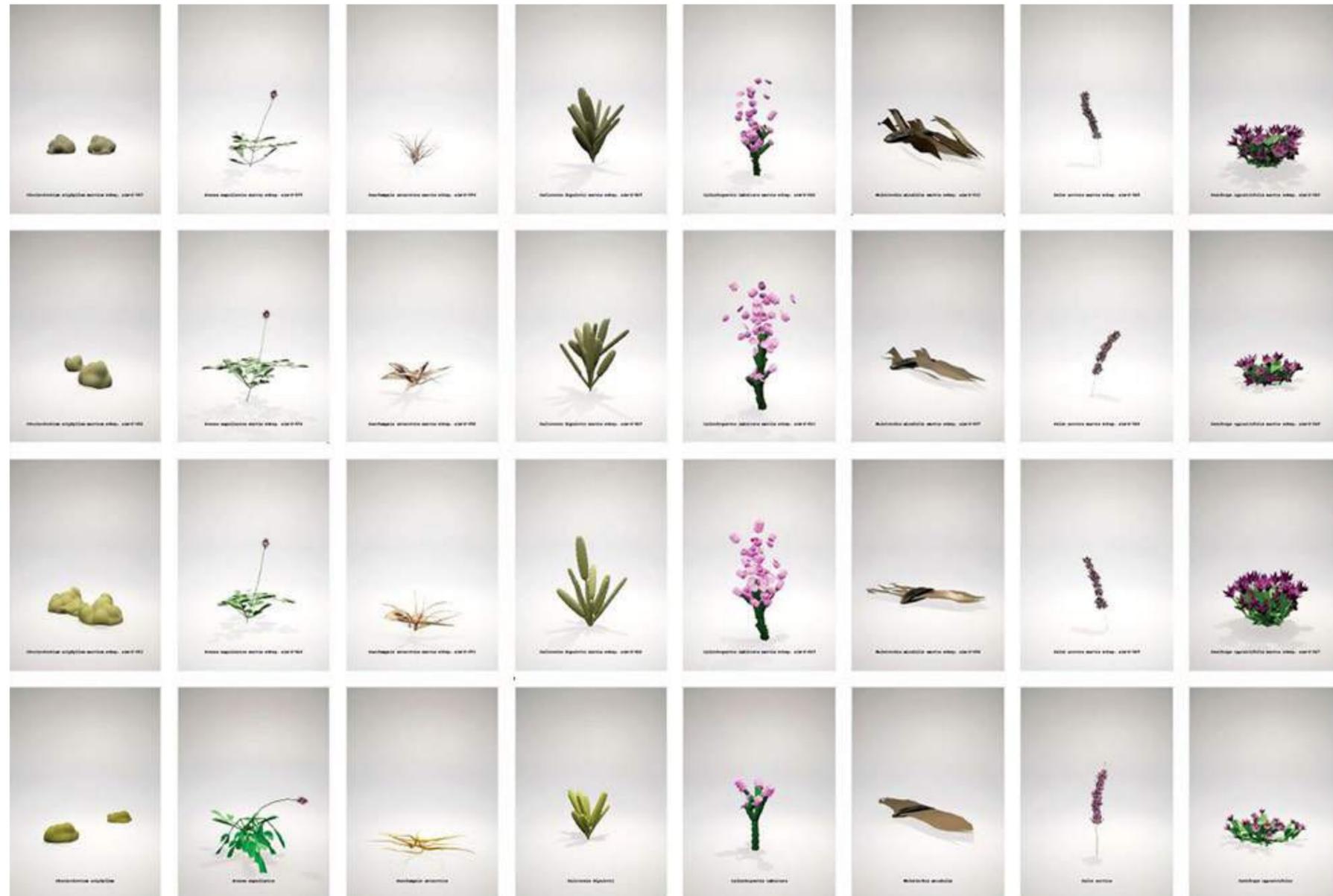


"We're not saying Mars will be better if we colonise it just with plants and never go there. It's just a different way of thinking about it and through that difference it's a way to look back on earth and on ourselves."

In this piece, the goal is not to terraform Mars. Instead, it is to serve as a repository for the mechanism of life. Plant life takes Mars in a different direction and Mars may take life elsewhere. **There are other paths life could take. Is it possible for humans to leave the planet to other life forms in an unnatural manner? Can we imagine Mars except as a place for ourselves?**

Alexandra Daisy Ginsberg / The Wilding of Mars / Vitra Design Museum, 2019

https://vimeo.com/350723399?embedded=true&source=video_title&owner=459840



To think about the radically different idea of populating the red planet with a wild garden instead of the human species. The crux of her idea lies not in the recreation of the chronology of human survival on Earth but, in letting the plants flourish on their own, untouched by our presence. By prioritising a non-human perspective, viewers watch the plants **“colonizing”** and wilding the planet through voyeuristic angles that heighten the feeling of human invasion.

Alexandra Daisy Ginsberg / The Wilding of Mars / Vitra Design Museum, 2019

<https://www.daisyginsberg.com/work/the-wilding-of-mars>



"THE MOON GOOSE COLONY" 2011/12:

Lunar Migration Bird Facility #private_space_travel



Agnes Meyer-Brandis, born 1973 in Aachen, DE, studied mineralogy for a year then transferred to the Art Academy in Maastricht, the Düsseldorf Art Academy and the Cologne Media Art Academy. She comes from a background of both **sculpture and new media art**. Her work, exhibited worldwide and awarded, is at the experimental edge of **art and science, exploring the zone between fact and fiction**. Agnes Meyer-Brandis is the founder of the "Forschungsfloss FFUR / Research Raft for Subterranean Reefology", a small institute whose chief aim is to explore and confirm **subterranean phenomena and unknown lifeforms**.

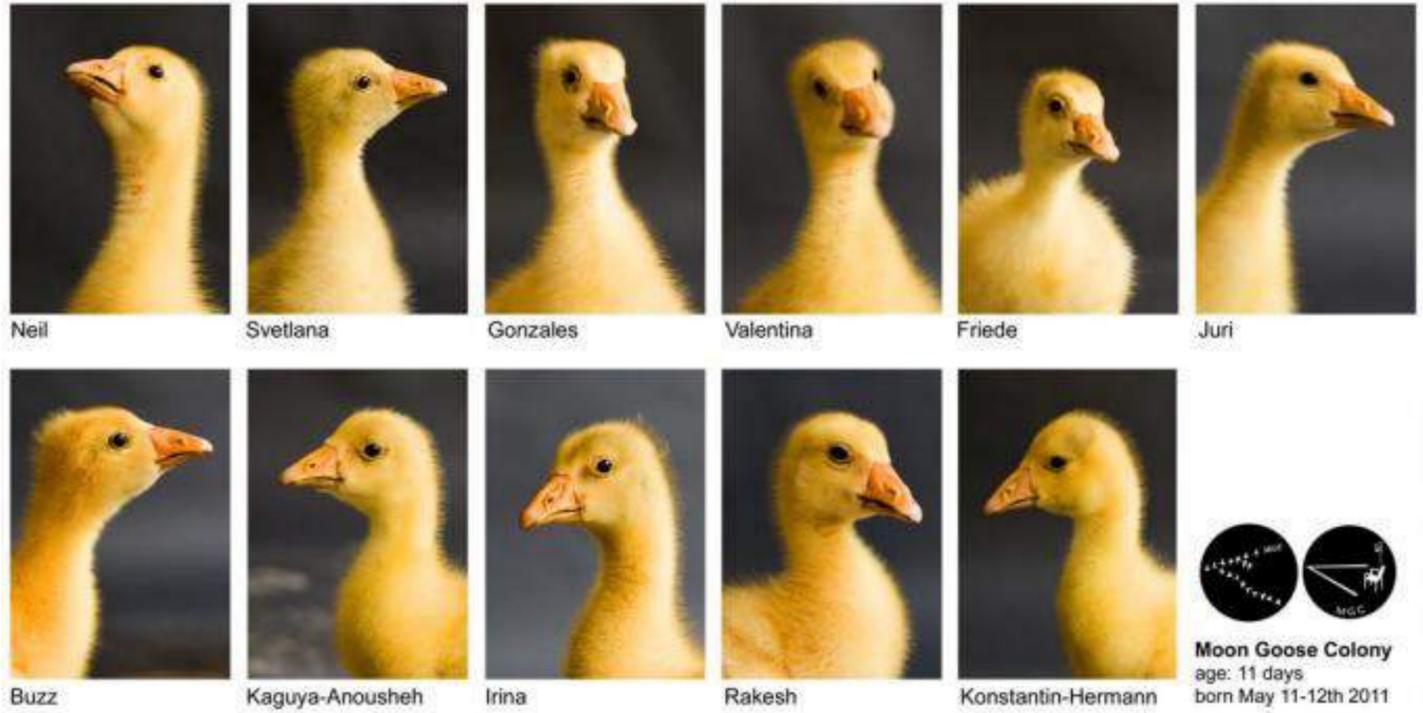
Agnes Mayer Brandis

<http://www.blubblubb.net>

<http://www.agnes-meyer-brandis.de>

<https://www.artscatalyst.org/artist/agnes-meyer-brandis>

<https://www.youtube.com/watch?v=piTbLoi5s1k>. — 4:50



https://www.instagram.com/p/Bsy7_3gHoDB/

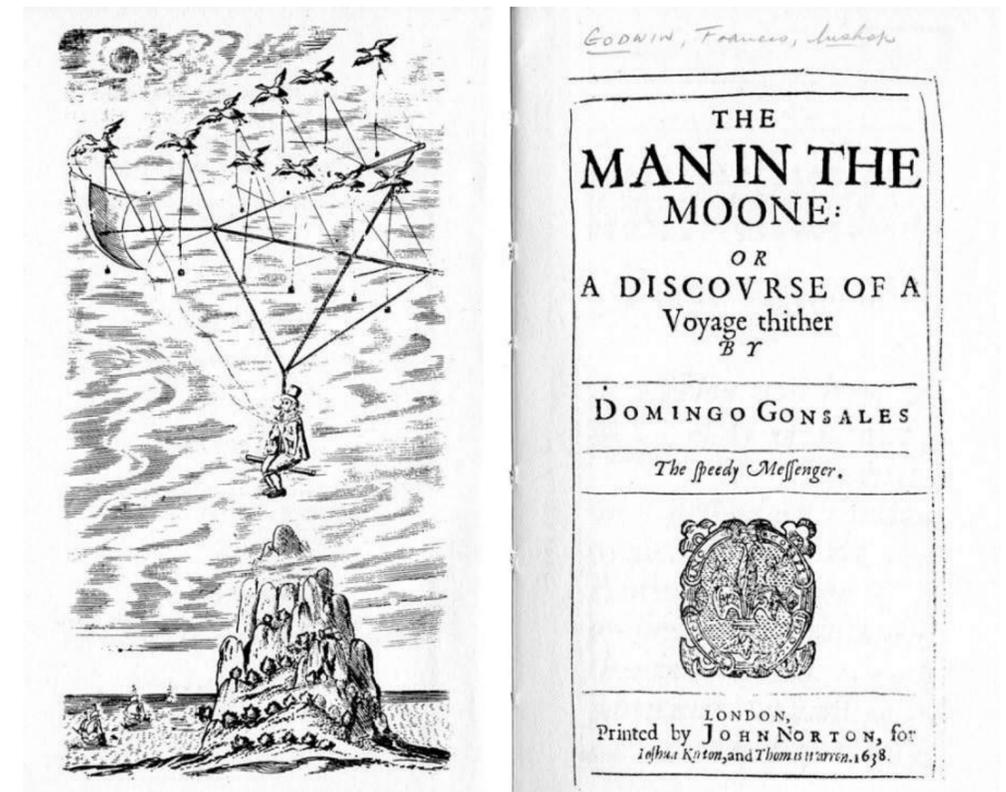
Agnes Mayer Brandis

<https://www.youtube.com/watch?v=piTbLoi5s1k>. — 4:50
https://vimeo.com/38986659?embedded=true&source=video_title&owner=5995311

In the documentary film **The Moon Goose Colony**, artist Agnes Meyer-Brandis (former geologist) develops an ongoing narrative based on the book *The Man in the Moone*, written by the English bishop Francis Godwin in 1638, in which the protagonist flies to the Moon in a chariot towed by moon geese.

“The Moon Goose Analogue: Lunar Migration Bird Facility”. For this project, Meyer-Brandis was inspired by the book “The Man in the Moone” written by the English bishop Francis Godwin in 1603, in which the protagonist flies to the Moon in a chariot towed by “moon geese”. To make the “moon geese” concept a reality, the artist raised eleven moon geese from birth in Pollinaria, Italy.

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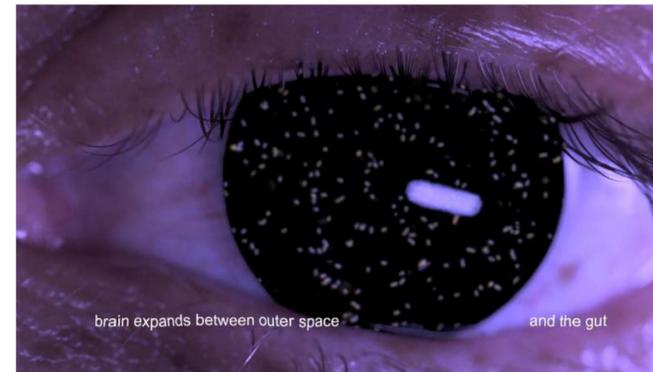
Agnes Mayer Brandis

https://www.huffpost.com/entry/republic-of-moon_n_4577402

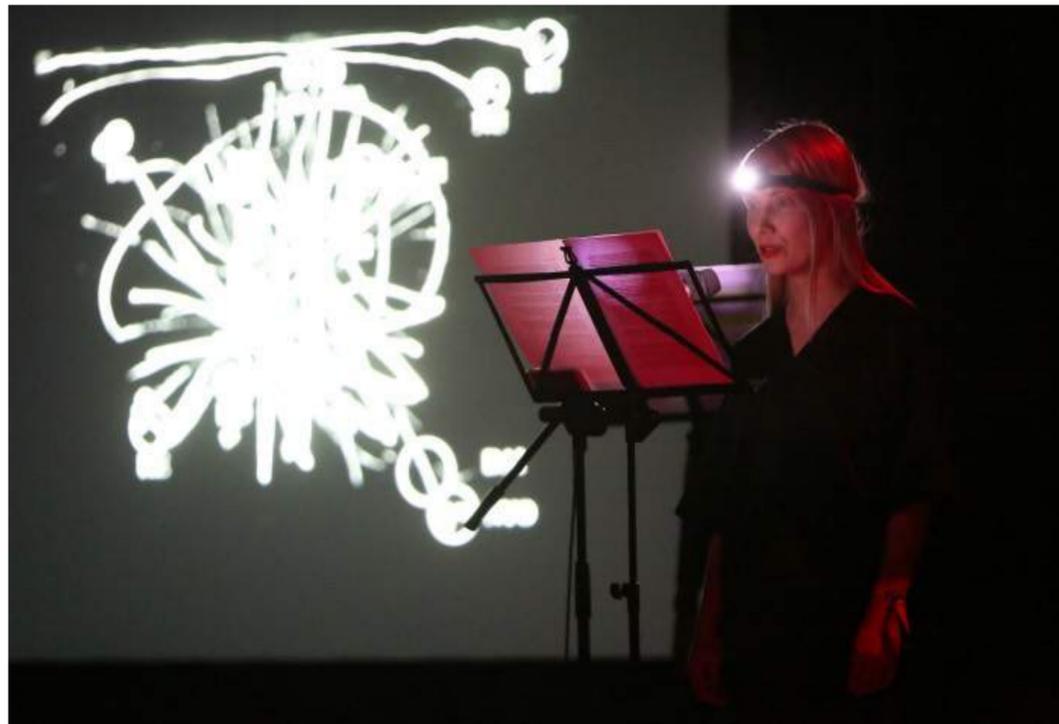


"nimia vibie" 2018

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<https://momentum9.no/contributor/jenna-sutela/>



Jenna Sutela (b. 1983, Turku, Finland) lives and works in Berlin. She works with words, sounds, and other living materials, such as *Bacillus subtilis* -nattō- bacteria and the “many-headed” slime mold *Physarum polycephalum*.

Her audiovisual pieces, sculptures, and performances seek to identify and react to precarious social and material moments, often in relation to technology.

Jenna Sutela , Artist & Musician

<https://momentum9.no/contributor/jenna-sutela/> <https://www.youtube.com/watch?v=mtUtZ2eDsbq>

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#neural network, audio recordings of early Martian language, and microscopic footage of extremophilic space bacteria #machine learning

"**nimiaa cétiï**" is the audiovisual manifestation of Jenna Sutela's experiments with **machine learning** in search of a **language beyond the one we know**(interspecies communication).

Based on the automatic writing and **oral transmissions** of **Hélène Smith**, who described them as communications with Martians, this recording manifests a language that goes beyond human comprehension.

The computer is a medium that channels messages from entities that can't normally speak.

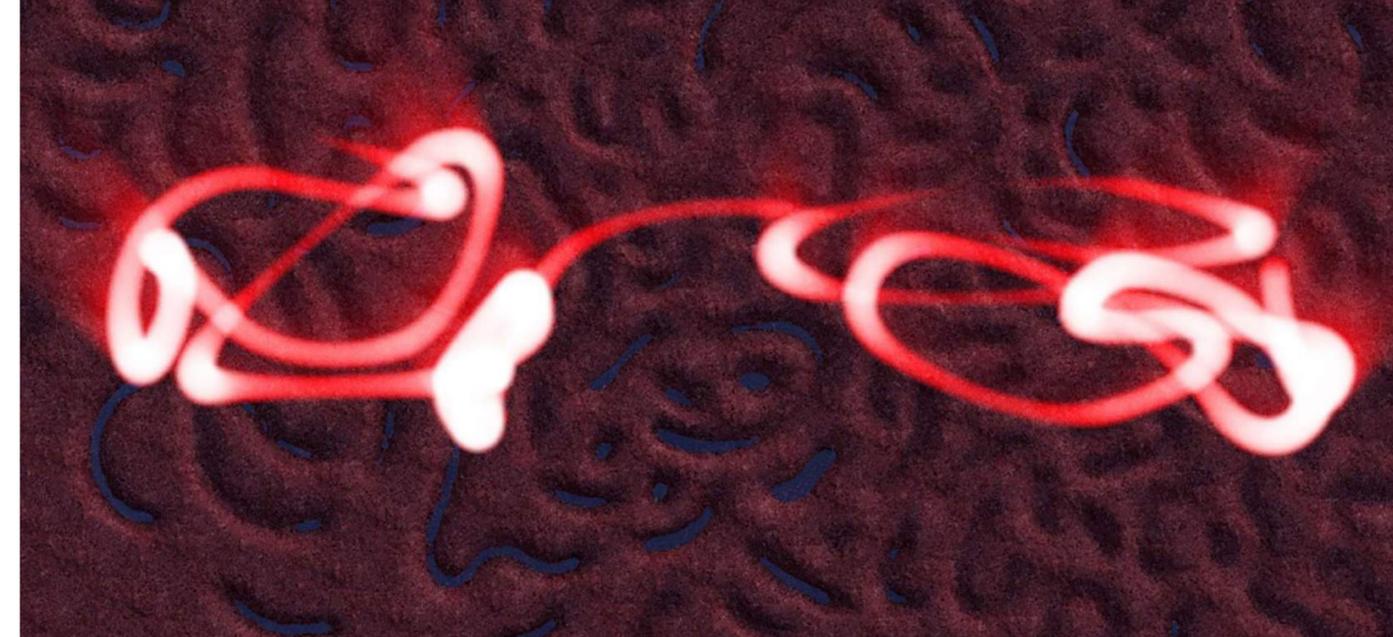
This language is based on the computer's interpretation of a Martian tongue from the late 1800s, originally channeled by the French medium Hélène Smith and now voiced by Sutela, as well as the movement of *Bacillus subtilis*, according to recent spaceflight experimentation, **can survive on Mars**. The bacterium is also present in **nattō**, or fermented soybeans, a probiotic food **considered as a secret to long life**. Beyond Bacterial-Martian culture, or Martian gut bacteria, **the project attempts to express the non-human condition of computers that work as our interlocutors and infrastructure**. (The bacteria are commonly taken on space flights to Mars to test the limits of life in a place from which, as Sutela speculates, they could possibly originate.)

https://en.wikipedia.org/wiki/Hélène_Smith = **Hélène Smith**

[Jenna Sutela / nimiaa cétiï, 2018](#)

<https://www.youtube.com/watch?v=8MC8VWrultg&t=76s>

<https://vimeo.com/398199435>





Makoto Azuma (東 信, Azuma Makoto, born July 24, 1976) is a Japanese flower artist, botanical sculptor, and co-founder of JARDINS des FLEURS.

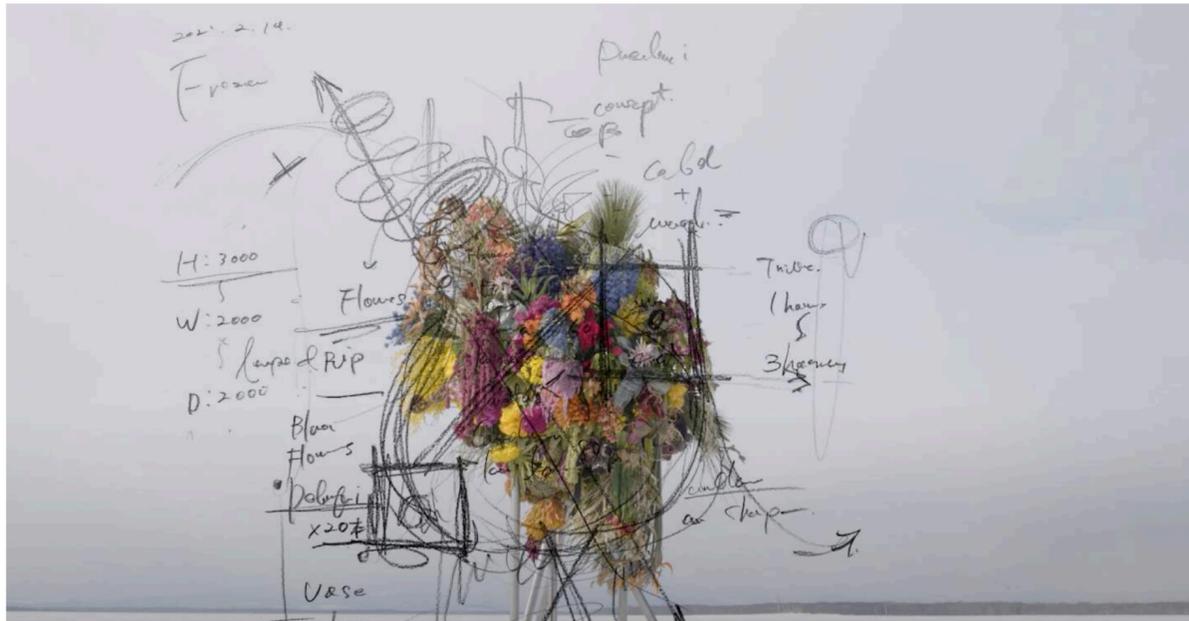
<https://azumamakoto.com>

Azuma Makoto

<https://azumamakoto.com/4013/>



"FROZEN FLOWERS" 2018



Many of his projects can only be experienced through photos

[Azuma Makoto /](#)

<https://www.youtube.com/watch?v=-NG40HaYbjE&t=121s>

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Makoto speaks with Atmos on how the climate crisis (indirectly) inspires his work, his thoughts on finding beauty in death and decay, and the power of flowers.

"In Japan, you can find fossils of flowers in ancient Jōmon-period tombs that date back 10,000 years. People back then treated plants as something holy. It's not something that can be explained by reason but more like a feeling hidden inside us. In my work, I try to tie humans and flowers together. I'm trying to bring back that sense of reverence for nature in contemporary life."

"I don't want my work to speak to environmental or sustainability issues directly; I want people to figure things out by themselves. But it's definitely there."

Azuma Makoto

<https://www.youtube.com/watch?v=-NG40HaYbjE&t=121s>



It's all about showcasing the miracle of nature

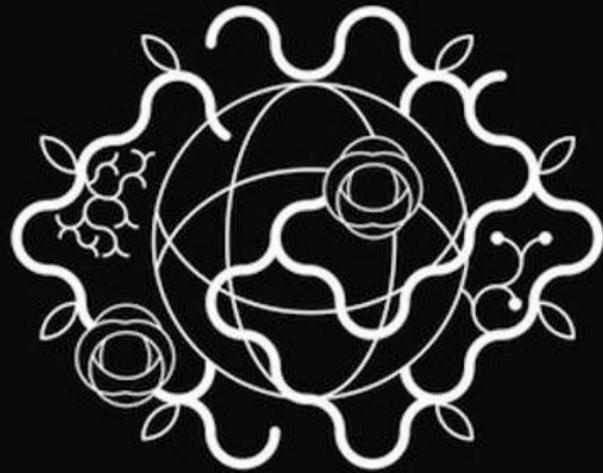
"I never studied ikebana or any other styles of flower art I learned flowers by myself, alongside playing music in bands. I realized that there are many things music and flowers have in common—for example, both are fleeting. Just like every rose has different characters, a sound differs depending on the player's state of mind and the environment where that sound lives. Combining all these elements together to express something is basically the same process in both music and flower art. That's one of the reasons why I became completely absorbed with this practice."

<https://azumamakoto.com/4013/>

A vibrant bouquet of various plants and flowers is shown floating in space. The bouquet includes a large, light-colored bromeliad-like plant with long, pointed leaves, several pink and purple flowers, and various green and brown foliage. The bouquet is suspended in the void of space, with the Earth's horizon and atmosphere visible in the background. The sun is shining brightly in the upper left corner, creating a lens flare effect. Some individual flower petals are seen floating away from the bouquet.

"BOTANICAL SPACE FLIGHT" 2017

EXOBIOTANICA SPECIAL TEAM / AMKK +
SIX / ARTWORKS: AZUMA MAKOTO /
PHOTOGRAPHER: SHUNSUKE SHIINOKI /
PROJECT MANAGER: ERI NARITA /
SUPPORTER: MASUMI SASAKI



EXOBIOTANICA
BOTANICAL
SPACE FLIGHT

CREATIVE DIRECTOR+COPYWRITER: TSUBASA OYAGI /
ART DIRECTOR+LOGO DESIGN: NAONORI YAGO /
SPACE ENGINEER: JOHN POWELL / MOVIE
DIRECTOR: HIDEHARU UEKI / WEB DIRECTOR: KAMPEI
BABA / PHOTOGRAPHER: NAOYUKI NODA / SOUND
DESIGN: EVALA / PRODUCER: YOSUKE SHIGEMURA,
MOTOKI TOMATSU / PRODUCTION MANAGER:
TATSURO WARIKATA / PRODUCTION COMPANY:
HAKUHODO PRODUCT'S

SPECIAL THANKS TO: JP AEROSPACE, FUJIFILM
CORPORATION, GOPRO, 3D SURVEY PLUS LLC,
KADINCHE

"In Bloom" is an experimental series in which flowers are arranged in naturally impossible situations. In the first installment of this series, "EXOBIOTANICA" plant life was launched up into the stratosphere.

In the second installment, "DAGAT & BULAKLAK", a large mass of flowers was placed in the middle of the ocean. In the third installment "Deep Sea," the plant life was placed within the deep ocean. For this installment, the subject – the flowers – will be significantly larger and heavier than in our first installment. Weighing approximately 6kg with a diameter of approximately 1.5m, we will launch this huge "bouquet" from the Love Lock Desert of Nevada, US. The bouquet will then be arranged around the structure of the Earth.

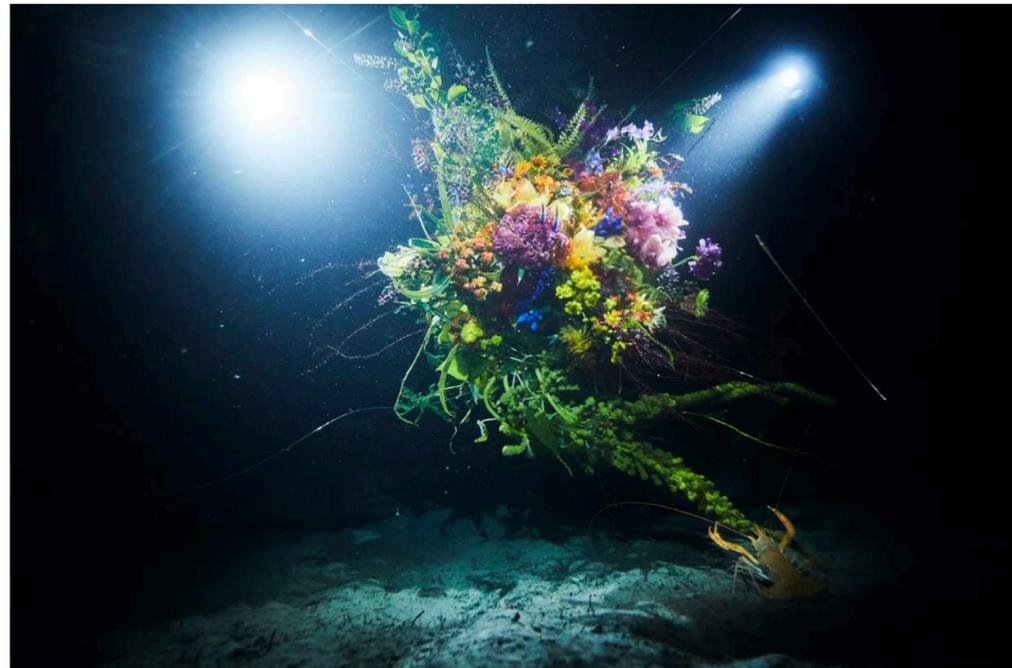
[Azuma Makoto](#)

<https://www.youtube.com/watch?v=-NG40HaYbjE&t=121s>

An underwater scene featuring a large, vibrant bouquet of flowers in the center. The bouquet includes various types of flowers, including lilies, orchids, and ferns, in shades of pink, red, yellow, and green. A shark is swimming in the foreground, its body partially visible as it moves from left to right. The background is dark blue, illuminated by a bright light source from the top left and a smaller light source from the top right, creating a dramatic, moody atmosphere. The text "DIVING IN TO THE UNKNOWN" 2017 is overlaid in white, bold, sans-serif font across the middle of the image.

"DIVING IN TO THE UNKNOWN" 2017

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Azuma Makoto, *In Bloom #3: SEPHIROTHIC FLOWER: Diving into the Unknown, in Suruga Bay, 2017*. Photo by Shiinoki Shunsuke. Courtesy of the artist and AMKK.

"In Bloom project, which is about bringing flowers to environments where they don't normally survive, like space or deep sea, is what I'd call "conscious" art. People can think about nature and the environment though that work. It's always my wish for people to imagine using their five senses."

[Azuma Makoto](#)

<https://www.youtube.com/watch?v=Xwhamj5jyF0&t=14s>. — 3:00

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t h a n k y o u

