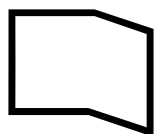


# FOOD DATA DIGESTION

Curated by

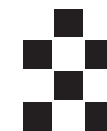


Sineglossa

In collaboration with



Supported by



Fondazione  
Compagnia  
di San Paolo

# Info & Credits

Title: **Metabolo**

Category: **Performative art and artificial intelligence**

Project ideation and curation: **Sineglossa**

Artist: **Valerie Tameu**

Year of the project: **2023**

Within: **FOOD DATA DIGESTION**

In collaboration with: **Play with Food, Free University of Bozen, Lavanderia a vapore**

Supported by:



Fondazione  
Compagnia  
di San Paolo

within the fund call  
“ART-WAVES. For creativity,  
from the idea to the stage”

Creative developer: **Michele Cremaschi**

Contribution to costumes: **Augusta Tibaldeschi**

Contribution to music: **Michele Mandrelli**

Marine biology consultant: **Agnese Riccardi**

Dramaturg: **Federica Patti**

# Why

*What is less than human and what I would like to consider more than human is not a passive and unconscious object, but applies active and real forms of resistance.*

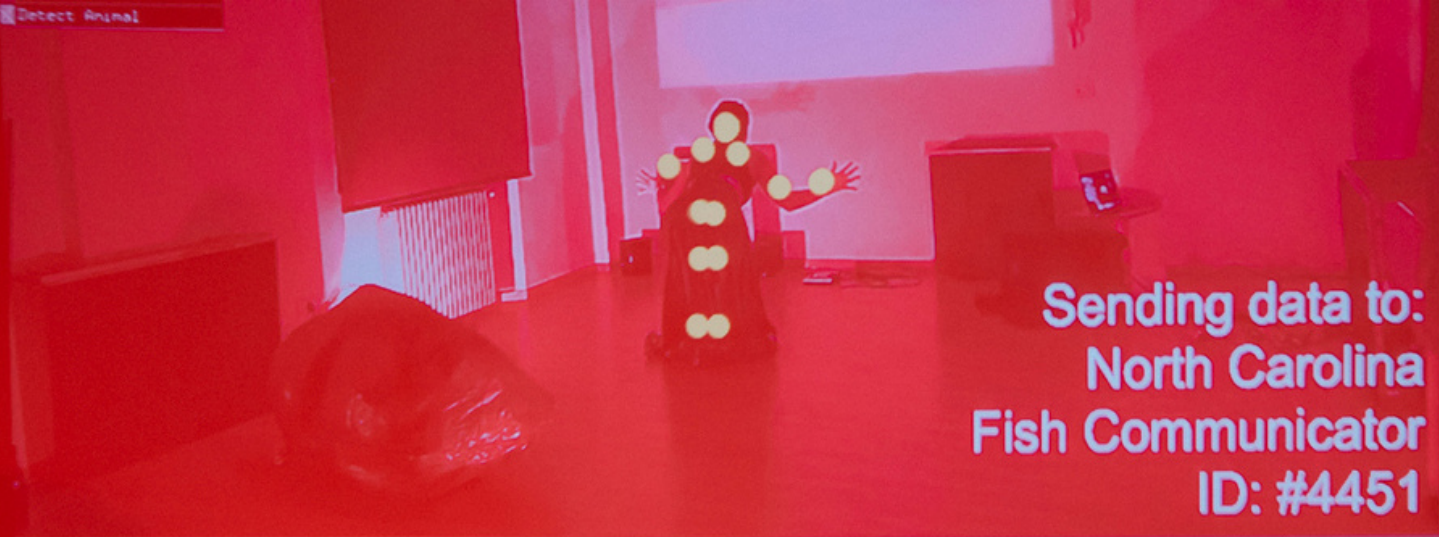
[Valerie Tameu, artist]

Co-existing with AIs is one of the most complex challenges we have to face in the future: albeit being constantly present in our day-to-day life, AI keeps on being designed, developed and deployed by big tech companies, with the aim of maximizing profits.

Artistic practices and cultural activism can create **alternative scenarios** and show **how to partner with intelligent machines** in a more-than-just-human future.



Detect Animal



Sending data to:  
North Carolina  
Fish Communicator  
ID: #4451



Valerie Tameu, *Metabolo*, first exhibition, Sineglossa, 2023



Valerie Tameu, *Metabolo*, first exhibition, Sineglossa, 2023



Receiving data from:  
North Carolina  
Fish Communicator  
ID: 4451



YT

Sending OSC

Send BLACK Training OSC

# The performance

*Metabolo* creates an **ecosystem of mutual influence** between the **human body, artificial machines, and marine ecosystems**, in a relationship of multispecies coexistence. With *Metabolo*, the artist questions the possibility of **using technology to promote other forms of intelligence and culture**, not only those that are Western or anthropocentric, through the selection of datasets created by certain fish species and the reinterpretation of indigenous practices.

This relationship is made explicit in the first place through the connection between artificial intelligence and one of the marine ecosystems on our planet, the one that is located below the Frying Pan Tower, 34 miles off the coast of Cape Fear, North Carolina. There an underwater webcam placed by volunteers for research purposes streams live images on YouTube and is freely accessible. Unlike most other underwater webcams on the same online platform, this webcam does not show animals held in captivity, but in their natural habitat.

The artificial intelligence connected to this robotic eye processes the texture and unique movements of Cape Fear's oceanic world through machine learning and translates them into data that modify the soundtrack on which the artist creates the performance, in Europe, in real time. This **human, machine and more-than-human interaction** becomes the starting point for the creative elaboration of the performance.

This relationship also includes the spiritual world, represented by the myth of Mami Wata, an aquatic deity worshipped in several West and Equatorial African countries, who is half human and half fish, a hybrid and an alien being at the same time. The artist draws inspiration from this Goddess to create a **techno-spiritual ritual**, once again learned by artificial intelligence through motion-tracking software on the scene.

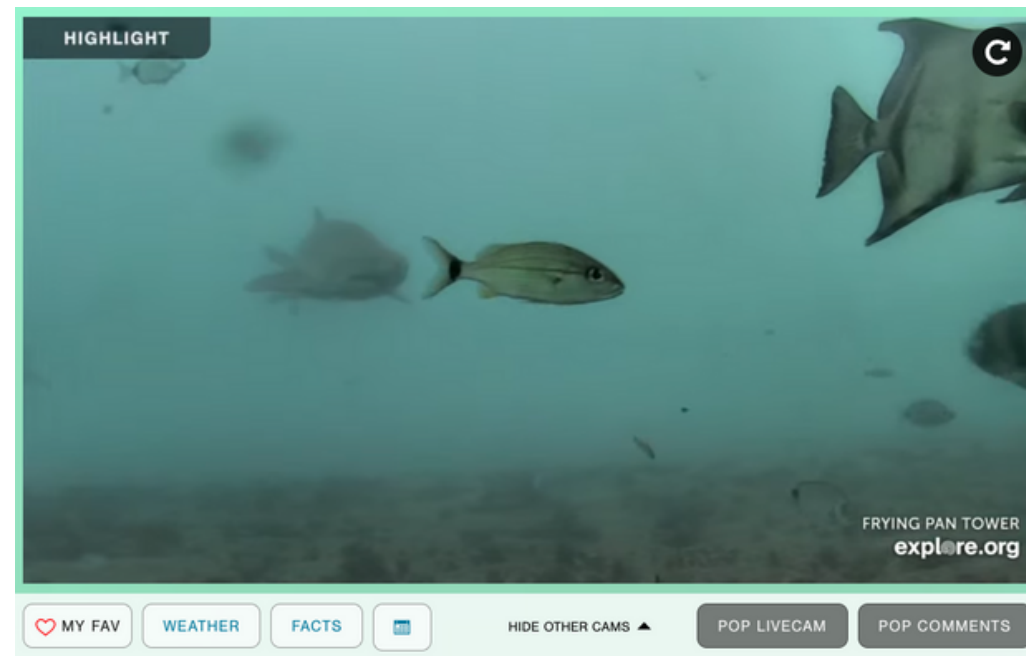
Like a deity, the manifestation of such a ritual is meant to be symbolically an unexpected appearance, which is translated into a visual created in real time and sent to an online platform that is only available when the performance is happening. The same visual will be projected at the performance site.



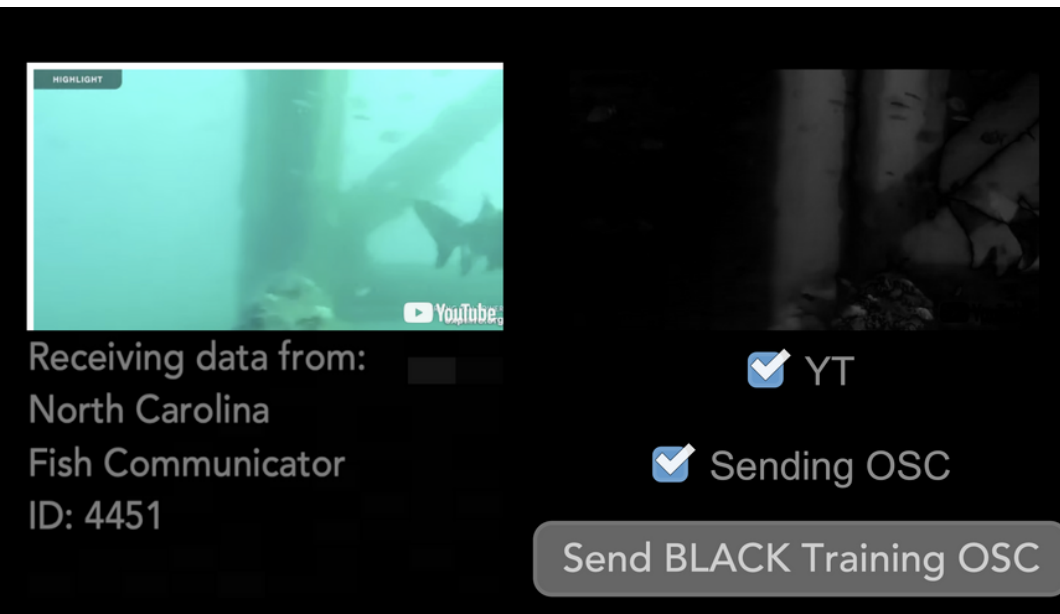
**Metabolo presents a relational approach to the topic of Artificial Intelligence, not an extractive one.**

The developed AI does not store and process personal data with the aim of profiling users, but wants to observe, understand and learn the marine ecosystem in order to encourage mutual learning between the human world and the more-than-human ones.

In terms of technology, the work applies **machine learning models driven by data generated from the video streams of an underwater webcam** located in Cape Fear, North Carolina. These models are functional to the real-time generation of the soundtrack of the performance. In addition, *Metabolo* uses **machine learning software in order to let artificial intelligence recognize non-Western-centric movements.**



Valerie Tameu, *Metabolo*, frame from the live underwater webcam of sharks located in Cape Fear, North Carolina



Valerie Tameu, *Metabolo*, details from software background, Sineglossa, 2023

To do this, data are sent to Wekinator, an open-source software designed by Rebecca Fierbrink to create interactive visual environments and audio and gesture analysis systems using machine learning. By sorting data through Osculator software, these are received by Ableton, a sound design software, to edit a music track in real time. In the second part of the work, *Metabolo* uses VisionOSC software which, through machine learning, can create patterns from the movements artist Valerie Tameu makes. These are captured by a webcam placed at the performance site. These models then return a visual output, either on stage or on an online platform.

# The project

*Metabolo* is the second artistic production of the Food Data Digestion project, a two-year research and production process curated by Sineglossa in collaboration with the Torino festival Play With Food, with the support of Fondazione Compagnia di San Paolo.

Within the Food Data Digestion framework, aimed at combining art and artificial intelligence from an ecosystemic and not anthropocenic perspective, artist Valerie Tameu is working on speculative performance *Metabolo*.

*Metabolo* is the result of a masterclass focusing on body, art and artificial intelligence, held by Sineglossa together with the visual artist Roberto Fassone in Turin in June 2022. Valerie Tameu was selected for the call to explore the possible ways of production which emerge from the collaboration between human creativity and artificial intelligence.

*Metabolo* is the evolution of that proposal, coming from a technical collaboration between creative developer Michele Cremaschi and the Free University of Bolzano. Through two artistic residencies held between February and March of 2023, Valerie Tameu explored the potentialities and limits of choreography interacting with cutting edge artificial intelligence tools.

# Behind the scenes

The curator

## Sineglossa

Based in Italy, Sineglossa is a cultural organization that activates sustainable development models in response to global challenges by applying contemporary art processes.

FOOD DATA DIGESTION is scalable and replicable model enabling a CRITICAL USE OF ARTIFICIAL INTELLIGENCE and increasing the AWARENESS OF AUDIENCES, implementing and disseminating a NEW METHODOLOGY OF ARTISTIC PRODUCTION.

To achieve this goal, we conceived and designed a generative process around four key actions:

- a transdisciplinary artistic residency designed to shape new production models;
- a capacity-building workshop for eight performers to train them in the use of new technologies;
- specific talks, aimed at raising public awareness;
- exhibits and distribution.



The artist

## Valerie Tameu

Valerie Tameu is an author and performer. A graduate in dance studies from the Faculty of Cinema, Performing Arts, Music and Media in Turin, she trained with various teachers from the Italian and international scene and attended Modern courses at the choreographic centre Scenario Pubblico. She has collaborated with Tecnologia Filosofica, Balletto Teatro di Torino, Laurent Pellisier, Paolo Armao, Masbedo, Alessio Maria Romano, Daniele Ninarello, Bob Kil. Her research concerns the relationship between performance and identity and the difference between memories and history, while her artistic practice creatively con-fuses bodies, ideas, theories and hallucinations.



The artsience designer

## Federico Bomba

(Ancona, 1980). Artistic director of Sineglossa. After a bachelor's degree in analytic philosophy and a master's degree in performing arts, he directed shows performed in festivals around the world until 2014, when he founded Sineglossa - a research center and cultural enterprise - of which he is president. He works to create physical and digital ecosystems in which artists, scientists, entrepreneurs and public administrations collaborate to produce economic and social development. Multimedia designer included in the ADI Design Index, director of art+b=love(?) Festival and the Nonturismo/Ediciclo publisher series - Itas Award/ Best Mountain Guide 2020, scientific coordinator of AI4Future and consultant art&science of museum institutions and private organizations. Contributor for several online and offline publications on contemporary art, urban regeneration and the economy of culture.



The dramaturg

## Federica Patti

Federica Patti is an independent curator and lecturer whose research focuses on transmedia practices, with a particular interest in digital performance, posthuman issues and the metaverse. Winner of the 9th Italian Council in 2020, she is currently a PhD student at the University of Turin with research on liveness and extended experience in virtual environments. She collaborates with various realities (among which: CUBO - Centro Unipol Bologna and Romaeuropa Festival), curating exhibitions and educational activities related to art, science and digital humanities. She is an active member of the collective LaRete Art Projects and of IKT - International Association of Curators of Contemporary Art. Since 2020 she is tutor of the project "Residenze Digitali" and juror of several international awards for media art (most recently: STARTS Piemonte Award, RE: Humanism 2021). Since 2013 she has been a frequent contributor to Creativeapplication.net. Every full moon she composes LUNARIO - segnali dal Metaverso.



The creative developer

## Michele Cremaschi

Michele is an artist and PhD student at the Computer Science faculty of Free University of Bolzano. His research focuses on the themes of Critical Design, Responsible AI, Critical Technical Practices, Creative AI, Art Research. He is responsible for training artists of various disciplines on the themes and techniques of Machine Learning, with the contribution of reflections on the impact of AI technologies on society. He takes inspiration from these training experiences to identify themes, desires and fears that artists express in this regard; starting from these intuitions, he builds critical design objects in order to highlight them and provoke discussion. Formerly a theater actor, still stages interactive digital performances that explore participatory activism, environmental challenges and power dynamics through live cinema format.  
[michelecremaschi.it](http://michelecremaschi.it)