Riccardo Giacconi

*Animal*
Rational and Irrational Numbers
2022

Technical specifications: video, sound, color, 21'

Commissioned and produced in the framework of EPFL CDH Artist in Residence Program 2022, 'Enter the
Hyper-Scientific', Swiss Federal Institute of Technology Lausanne (EPFL).

In collaboration with:

- EPFL, Reconfigurable Robotics Lab (RRL), Jamie Paik
- EPFL, Biorobotics Laboratory (BioRob), Auke Ijspeert
- EPFL, Learning Algorithms and Systems Laboratory (LASA), Aude Billard
- Compagnia Marionettistica Carlo Colla & Figli, Milan

Inspired by conversations with: Jamie Paik, Auke Ijspeert, Anastasia Bolotnikova, Alessandro Crespi,
David Gonon, Kevin Holdcroft, Lukas Huber, Xiangxiao Liu, Mete Mustafa, Fabio Zuliani

Bio:

*Riccardo Giacconi (IT)* is an artist and documentarian based in Boston. His practice investigates narrative
forms through an evidential paradigm, drawing from micro-factual details and clues. Giacconi studied fine
arts at the IUAV University of Venezia. His work has been exhibited in various institutions, such as Grazer
Kunstverein (Graz), ar/ge kunst (Bolzano), MAC (Belfast), WUK Kunsthalle Exnergasse (Vienna), FRAC
Champagne-Ardenne (Reims), tranzitdisplay (Prague), and Fondazione Sandretto Re Rebaudengo (Turin). He
has been artist-in-residence at the Centre international d'art et du paysage (Vassiviére, France), lugar a dudas
(Cali, Colombia), and MACRO Museum of Contemporary Art of Rome and Künstlerhaus Büchsenhausen
(Innsbruck, Austria). He has presented his films at several festivals, including the New York Film Festival,
Venice International Film Festival, International Film Festival Rotterdam, Visions du Réel Réel (Nyon), and
FIDMarseille, where he won the international competition grand prize in 2015. He cofounded the collective
listening festival Helicotrema and the audio storytelling studio Botafuego. He is professor of practice at the
School of the Museum of Fine Arts at Tufts University, Boston.

[http://riccardogiacconi.com](http://riccardogiacconi.com)

**ENTER THE HYPER-SCIENTIFIC**

Curator & Head of Program: Giulia Bini
Program Assistant: Christine Farget
There is no being-in-communication that is not also a form of animation.

Animism becomes the point of departure, the most common thing in the world – a world in which there is nothing outside of the relations that constitute it.

Where there is communication, there is animation.

- Anselm Franke, Animism. Notes on an Exhibition, 2012

The inaugural work of the EPFL-CDH AiR Program Enter the Hyper-Scientific, Riccardo Giacconi’s Animal, is the result of intensive research around artistic and scientific questions at the boundary between human and machine, carried out in EPFL’s robotics laboratories.

Part of Giacconi’s project Rational and Irrational Numbers, the video explores the concept of animation. Creating a parallel between the “uncanny valley” (Masahiro Mori, 1970) of the ancient tradition of puppetry and recent technological developments in robotics and artificial intelligence, it is inspired by a series of conversations with scientists and researchers from Jamie Paik’s Reconfigurable Robotics Lab (RRL), Auke Ijspeert’s BioRobotics Lab (BioRob), and Aude Billard’s Learning Algorithms and Systems Laboratory (LASA). Footage from the EPFL alternates with images from the longstanding Carlo Colla & Figli Marionette Company in Milan and other sources from the artist’s archive.

The work has grown out of two simultaneous endeavors: an analysis of the idea of the uncanny and an exploration of institutions dedicated to manipulating, animating, and giving life to objects—namely the Carlo Colla & Figli Marionette Company and the EPFL laboratories—including a series of conversations with researchers in areas of artificial intelligence and robotics that are closely related to the artist’s interest in animation through puppetry.

Animal is based on a story written by Giacconi, partly fiction and partly inspired by real encounters, conversations with scientists, and events in Lausanne and elsewhere. Among the references guiding the artist in his writing are Italian writer Daniele Del Giudice’s books Lo stadio di Wimbledon and Lines of Light, the latter set at CERN in Geneva.

The title Animal evokes the theme of animation, the appearance of life and movement in an object, and the work’s composition as an inventory of moving images. Animals, both robotic and real, recur in the work. The beginning of the video suggests a city that is not necessarily Lausanne, and a protagonist who travels there. The structure resembles both an inventory of images and an audiobook, as the images are accompanied by the voice of a narrator speaking English with a recognizably Italian accent, similar to the hybrid English of the EPFL international community. In her exploration the narrator is guided by Laila, a figure who exists between reality and fiction.

The work takes the experimental form of a meta-narrative in which the medium of film allows the artist to develop a story that is simple yet rich in references and analogies. Through combining the metallic, aseptic atmospheres of the scientific universe with the ancient dimension of puppetry, weaving together these images and pauses and punctuating them with black frames and a meticulous soundscape, Giacconi has given life to an exquisitely sophisticated tale.
The original title of the project, *Rational and Irrational Numbers*, refers to what Giacconi calls the spark of magic central to the act of animating a puppet or robot. He is particularly interested in the relationship between the animator and the animated, which in the context of puppetry he defines as a two-way dance. “Every puppeteer needs to leave an empty space in their practice, to indulge the marionette’s autonomy,” Giacconi explains. “Even for the researchers I talked to, who know every circuit in their machines and the properties behind them, seeing their robot suddenly come to life can still spark surprise.”

Robotics and puppetry, the artist shows us, share a study of humans, of the idea of animation and the living, as much as a study of machines; the function of animation is externalized in puppets and, conversely, integrated into the intelligence of machines. Artists and scientists both create visions of the contemporary and the future. As Jamie Paik states in one of the conversations Giacconi conducted at EPFL: “I always believe ourselves as science-fiction makers. We make what the future is going to be. So, even if we work with reality, we always have a vision of the future. That’s how we write our science fiction, how we see it being made.”

*Animal* blends several registers and tackles issues such as technological singularity through the archetypal figures of robotics and puppetry, charging them with symbolic and science-fiction imagery, leading the viewer or reader into the metaphor of irrational numbers at the origin of the project. It enables a leap of faith, a suspension of disbelief, as it reconciles the hyper-contemporary with the ancient and arcane in an enigmatic sequence, generating in the resonance and distance between the two worlds a broader reflection on technology and its scientific and philosophical implications.

Giulia Bini

**ENTER THE HYPER-SCIENTIFIC**

Initiated by the EPFL College of Humanities (CDH), amplified by EPFL Pavilions, and now inaugurating a partnership with the City of Lausanne, the EPFL-CDH Artist-in-Residence (AiR) Program “Enter the Hyper-Scientific” reflects the CDH mission of fostering transdisciplinary encounters and collaborations between artists and EPFL’s scientific community. The program invites professional Swiss and international artists, for three-month residencies to realize innovative and visionary projects at the intersection of art, science, and advanced technologies.