



*Our own role in evolution is transient and expendable in the context of the rich layer of interliving beings forming the planet's surface. we may pollute the air and waters for our grandchildren and hasten pur own demise, but this will exert no effect on the continuation of the microcosm. (...) after we die we return to our forgotten stomping ground. The life forms that recycle the substance of our bodies are primarily bacteria. The microcosm is still evolving around us and within us. The microcosm is evolving as us. — Margulis, Lynn and Sagan, Dorion. *Microcosmos. Four billion years of Microbial evolution*, University of California Press, 1997*

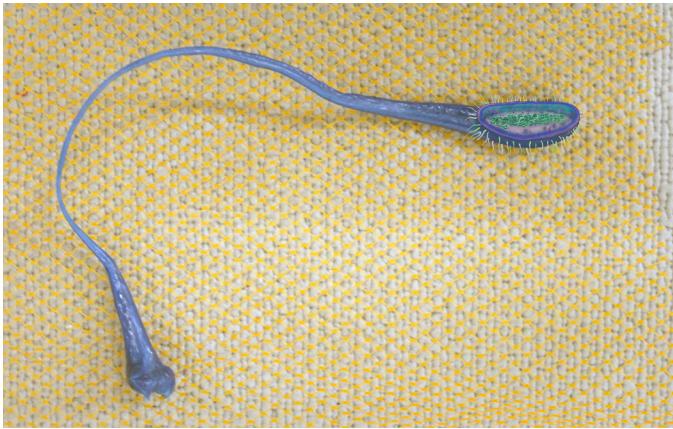
*Inorganic life is the movement at the membrane of the organism, where it begins to quiver with virtuality, decomposes, and is recombined again. — Pheng Cheah, *Non-Dialectical Materialism*, in *New Materialisms*, p. 88*

*Mammals were made by viruses. Viruses are not always fatal - they can enter the host genome to do other things. Here they become cricial mutualists, contributinh profoundly to perform new tricks - as when one evryday retrovirus added its transformational genomics to a particular line of multicellular organisms during the Late Triassic. In this fateful transformation, the virions's capacity to break cell walls eventually enabled the formation of a placental syncytium in that host, yielding us mammals. The syncytium (syn + cyte = "together cell") is a layer produced as dissolved cell membranes fuse to form an undifferentiated mass. — Caroline Jones, *Virions: Thinking through the scale of aggregation*, in *Artforum*, May-June, 2020*

This work is a contribution to a bigger project, **ICONOPLAST**, that was planned to debut this fall, but cancelled because of the Covid outbreak. The pandemic had an impact on the script development, in particular specific readings, which inspired a cli-fi mockumentary. The idea that **sym-biosis**, the living together and sometimes merging of different species of organisms, is crucial to the evolution of life forms on Earth, is the underpinning concept of this work.

The bigger project in which the work is inscribed is related to plastic, its transformative reuse and more broadly its acritical pervasive consumption, as pollutant that is omnipresent in our lives. I created every set and props with domestic upcycled **commodity plastics** I gathered, creating a sort of inventory, per types of polymers (PET, PP, HDPE, PP etc.) but also according to more artistic categories, mainly texture, patterns, versatility and colors.



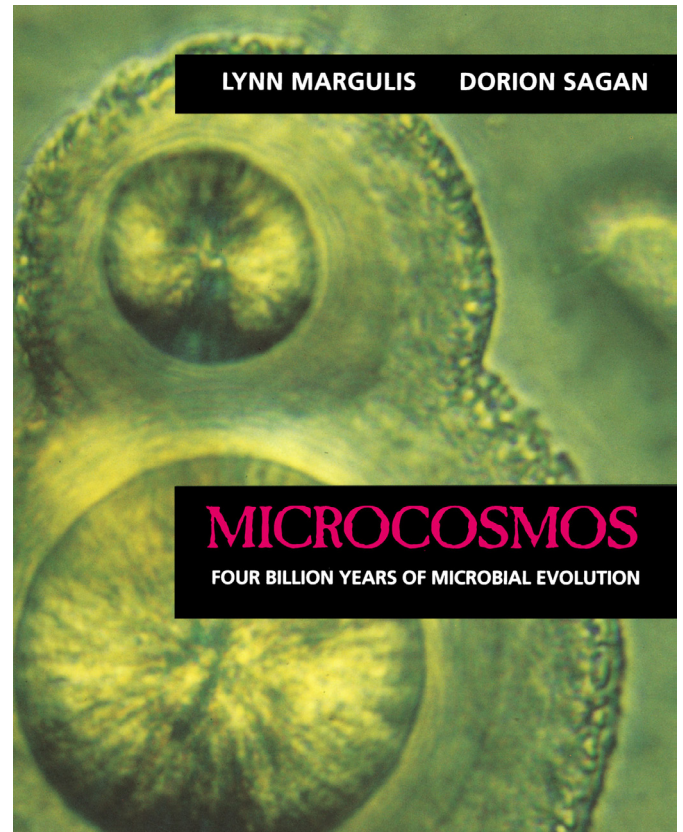


One of the readings, *The Earth after us*, by Jan Zalasiewicz, inspired to set the script in a posthuman dimension where plastic debris will become petroleum again, broken down by bacteria, that will digest it and grow in symbiosis with it.

I created a world of **bacteria** melting plastic and molding it with a DIY injector. I drew sections of their cell, inspired by scientific models, but transfiguring them in hybrid organisms, between fiction and reality.

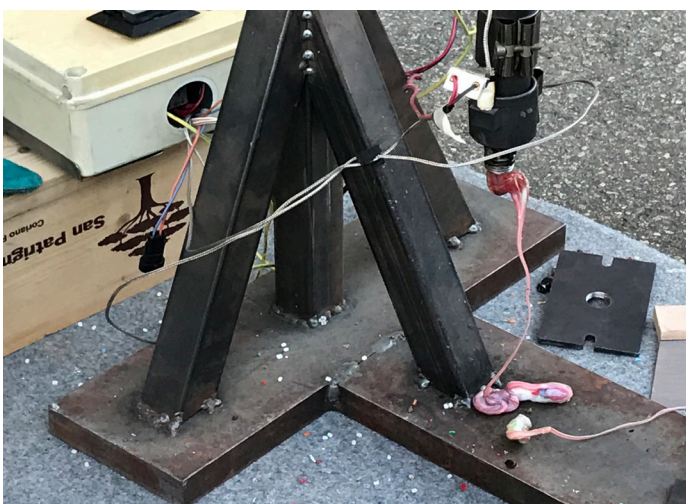
I often play with time dimensions and for this work I intertwined past and future through a detournement of a scientific publication, a book of deep ecology focusing on the contribution of the microbial world on the evolution of life, *Microcosmos*, by Margulis and Sagan, who called into question the foundations of Darwinism with their version of the past four billions year of non-linear microbial evolution. I chose a few extracts for the voiceover but setting them in the future, simply by changing the verb, from past to future tense. With this chiasm, this misplacement, I want to talk about mutualism and symbiosis, in a transformational watery environment, but at the same time describing a **plastisphere** of technofossils and plastic particles, of petrified remains of a lost civilisation.

To bypass the rhetoric of anti-anthropocentrism, I try to avoid binary narratives, pursuing an ethical endeavor that involves others, nonhuman beings, to talk to and about humans.



I often collaborate with experimental musicians, for this work I am collaborating with an Italian electronic composer, Gianmarco Leprozo aka Presente, who created the ambient **soundscape** and supported me with some sound effects.

The title might change. I am currently reworking some parts of the script, which is divided in chapters: **intro, symbiogenesis, cyanobacteria, membrane, technofossils, jellyfishes.**



A metatext is related to the audiovisual medium itself, in particular animation techniques. The incipit is an hand drawn rotoSCOPE, one of the oldest one; we gradually encounter other techniques, stop motion, 2D digital frame by frame, eventually 3D digital animation towards the end.

Furthermore, in collaboration with two CGI creators, I wanted to make a 3D scanning of some of the props I created with melted plastics and diy injector, to further animate them, sculpting, rendering, rigging with softwares like Cinema 4D and Blender. I collaborated already with two of them, Julio Clavijo and Olia Svetlana, for some tests.



Courtesy: Julio Clavijo, test for plastic coral animation



VOICE OVER - Transcription

Imagine alien visitors arriving on Earth in the remote future, long after the human race became extinct. Imagine plastics widespread in deep water, buried, fossilized. Some plastics changed into bitumen and oil.

(inspired by Zalasiewicz, Jan. *The Earth after us, What legacy will human leave in the rocks*, OUP Oxford, 2009)

Bitumen is an extreme and hostile environment but imagine that some bacteria [will] survive it, degrading petroleum with their enzymes and producing methane gas as waste.

Mosher, Dave. "Asphalt-Munching Bacteria discovered", *LiveScience*, 2007, <https://www.livescience.com/1515-asphalt-munching-bacteria-discovered.html>

At the bottom of the sea where no light penetrates new species of bacteria with unusual properties [will] grow. [These] bacteria [will] derive their energy from the sulfide and hydrogen rich gases emanating from the Earth hot-waters. This group of bacteria [will] breathe sulfate. In this process they [will] retain light, in a sort of photosynthetic process. They [will] be fast-moving bacteria. A flagellum [will] be attached to the base of each bacterium, propelled by changes of electric charge.

Microbial mats and muds [will] dominate the low-lying watery landscape. Imagine a flat and damp landscape, brilliantly colored pools, mysterious [reddish] greenish and brownish patches of scum floating on the waters, tinting the damp soils.

Shrunk to microscopic perspective, a fantastic landscape of bobbing purple, aquamarine, red and yellow spheres would come into view. Multicellular filaments and textile like crowds of bacterial cells would wave with the currents, coating pebbles with brilliant shades of red, pink yellow and green. Showers of spores would splash and crash against the vast frontier of low-lying muds and waters.

(Margulis, Lynn and Sagan, Dorion. *Microcosmos. Four billion years of Microbial evolution*, University of California Press, 1997)

A bacterium is a team player. It never function as a single individual. Teams of several kinds of bacteria [will] live together.

Bacteria constantly exchange bits of their genetic material among one another.

Humans had difficulty separating the concept of sex from reproduction, but sex is simply the recombination of genes.

Humans traded genes vertically through the generations, whereas bacteria trade them horizontally directly to their neighbors in the same generation. Genetically fluid bacteria are immortal. In eukaryotes sex [was] linked with death.

Some mutant sulfur bacteria will absorb light to extract hydrogen from water releasing oxygen. Bacteria reproduce asexually replicating their strand of DNA they may encase the DNA in a spore which can survive long periods of adverse conditions, germinating again when conditions become wetter.

These photosynthetic cyanobacteria [will] live atop one another and beneath the top layer there [will] be thriving populations of anaerobic purple photosynthesizers sulfur depositors.

Symbiosis, the merging of organisms into new collectives, is a major power of change.

Life [will] begin at the interface of liquid surfaces where there is energy flux. New membranes [will] form, translucent packages of lifelike matter, semipermeable boundaries between inside and outside, between self and non self.

The individual is something abstract, a category, a conception. And nature has a tendency to evolve that which is beyond any narrow category or conception.

All strains of bacteria can potentially share all bacterial genes, there are no true species in the bacterial world.

The sea [was] the final resting place for human litter, plastics the most striking component. Accumulations of plastic debris formed. Low density micro plastics sunk to the ocean floor. Plastics may host microbial communities [...] some [will] be found as fossils [...] a permanent record of human presence on Earth.

(Zalasiewicz, Jan. "The geological cycle of plastics and their use as a stratigraphic indicator of the Anthropocene", *Anthropocene*, vol. 13, 2016, pp. 4-17)

It is a species of small biologically immortal jellyfish capable of reverting completely to a sexually immature, colonial stage after having reached sexual maturity as a solitary individual. It does this through the cell development process of transdifferentiation, which alters the differentiated state of the cells and transforms them into new types of cells. Theoretically, this process can go on forever.

(https://en.wikipedia.org/wiki/Turritopsis_dohrnii)

In a sense the essence of living is a sort of memory, the physical preservation of the past in the present [...] into the future as fascinatingly non human as the past.

(Margulis, Lynn and Sagan, Dorion. *Microcosmos. Four billion years of Microbial evolution*, University of California Press, 1997)

to preview the video work
in progress:



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