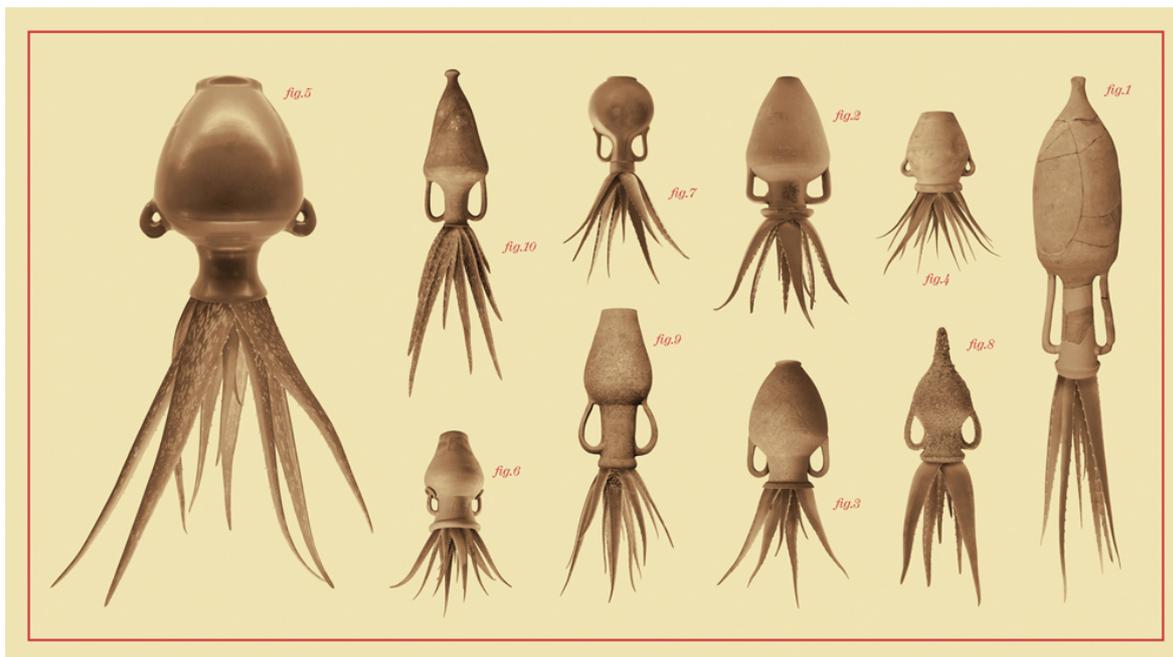


SCIENCE FRICTION. LIFE AMONG COMPANION SPECIES



Exhibition at the CCCB – from 12 June to 28 November 2021

Inaugural doors open weekend on Saturday 12 and Sunday 13 June

Free admission subject to prior reservation on [the website of the CCCB](#)

Press conference: Friday 11 June, at 11:00, in the main foyer of the CCCB + Streaming via the [CCCB's YouTube channel](#)

“If, as Haraway and Margulis argue, the whole Earth is alive, it is time to abandon the myth of supremacy and reconnect with our many earthly companions.”
Maria Ptqk

The exhibition ***Science Friction. Life among Companion Species***, curated by [Maria Ptqk](#), can be seen in Gallery 3 of the CCCB from 12 June to 28 November 2021. The starting point for the exhibition is the scientific evidence that all terrestrial species are linked by symbiotic, interdependent relationships. In nature there are no autonomous or independent organisms; we are all part of mutually integrated ecosystems. Species make up a network of collaborations, mutations and exchanges in which we coexist as companions.

This paradigm shift implies that the human species is not exceptional or superior. Ultimately, symbiosis questions human supremacy: the idea that the whole of nature and all living beings are at the service of our well-being.

To narrate this change in perspective, the exhibition draws on the work of two key figures in contemporary scientific culture: **Donna Haraway** and **Lynn Margulis**. The two have in common the importance they accord to symbiosis and collaboration between species, and their interest in communication and scientific narrative.

Artists, thinkers, scientists and activists

The transition from anthropocentrism (a human-centred world view) to biocentrism (the human as part of an ecosystem) runs through the exhibition. The visitor will find a selection of artworks in different media, such as immersive audiovisual and sound installations, virtual reality, painting, drawing and avant-garde cinema, as well as items of scientific dissemination.

In this exhibition, its curator, Maria Ptqk, brings together a series of creators, thinkers and scientists from around the world to explore the relationships between species: **Shoshanah Dubiner, David Domingo, Rubén Duro, John Feldman, Christie Lyons, Petra Maitz, Dominique Koch, Susana Talayero, Maria Sibylla Merian, Toni Serra/Abu-Ali, Gustafsson&Haapoja, Mary Maggic, Richard Pell / Center for Postnatural History, Saša Spačal, Terence McKenna, Peter Bergmann, Museo del Hongo, Max Reichmann, Dimas Paredes Armas, Walon Green, Cleve Backster, Marshmallow Laser Feast, Quimera Rosa, Marley Jarvis, Laurel Hiebert and Kira Treibergs, Louis Bec, Pinar Yoldas, Diana Toucedo, Donna Haraway, Vinciane Despret, Jaime Serra Palou, Paulo Tavares, Ernesto Casero, Helen Torres, Paula Bruna, Associació Zuhari, Joan Martínez-Alier, Fabiola Leyton, Mercè Piqueras, Joan Romanyà and Ricard Guerrero**, along with **fungi, lichens, bacteria and other microorganisms**.

Activities

The Science Friction project expands beyond the exhibition to include lots of other activities such as workshops, debates, screenings, itineraries and other proposals that will be announced in the coming months. The programme kicks off with two doors open days on Saturday 12 and Sunday 13 June, and a talk in the framework of the [City and Science Biennial](#) with **Vinciane Despret, Donna Haraway and Maria Ptqk** on Saturday 12 June, on the central stage in Plaça de Joan Corominas.

The exhibition that will run at the CCCB completes a broader cycle of research started in 2017 with an exhibition produced by the [virtual space of the Jeu de Paume Visual Arts Centre](#) in Paris.

The exhibition has had the collaboration and scientific advice of **Ricard Guerrero**, Professor of Microbiology at the University of Barcelona, and **Rubén Duro Pérez**, scientific communicator.

PARTS OF THE EXHIBITION

1. Symbiosis

The exhibition opens with an introduction to the figure of Lynn Margulis (1938-2011). Margulis held that our bacterial origin and the entire history of life on Earth are based on symbiosis, the main engine of evolution. As opposed to the neo-Darwinian trend, which maintains that evolutionary changes come from competition between independent organisms, she offered a narrative featuring multitudes of interdependent beings, united at all scales of life.

Works on show

- Drawings by the scientific illustrator **Christie Lyons**, original illustrations for various works of dissemination by Lynn Margulis. Loaned by Lynn Margulis to CosmoCaixa-Fundació "la Caixa".
- Animation of the work by **Shoshanah Dubiner**, *Endosymbiosis: Homage to Lynn Margulis*, created by **David Domingo**.
- Excerpts from the documentary by **John Feldman**, *Symbiotic Earth: How Lynn Margulis Rocked the Boat and Started a Scientific Revolution*, 2019 (2 h 28 min.), tracing the scientist's life and career. The complete documentary will be screened at the CCCB in autumn 2021.
- *Holobiont Society*, 2017, video and sound installation by **Dominique Koch**, with the participation of **Scott Gilbert**, **Donna Haraway** and **Maurizio Lazzarato**.
- **Petra Maitz** presents several works, including the crochet coral installation *Lady Musgrave Reef*, started in 2002.

2. Companion species

Symbiosis literally means coexistence. In a broader sense, the term also refers to the common life of organisms that share a habitat or existence, and evolve together thanks to the bonds they form. This is why scientist **Donna Haraway** speaks of *companion species* when referring to bonds such as those created by insects with flowers, on which they feed and which they help to reproduce, or those that link human beings with some key plants and animals in the history of civilization.

Works on show

- Installation by **Susana Talayero** that evokes the work of naturalist **Maria Sibylla Merian** (1647-1717), the first entomologist to document the life cycles of insects and the dense webs of connections between insects and flowers.
- **Toni Serra/Abu-Ali**, *En el camino de las abejas* (2018, 47 min). With a meditative movement more like that of the bee itself than the ethnographer, the camera rests on roads, bushes and mountains in Morocco where artisanal beekeeping techniques are preserved.

- **Gustafsson&Haapoja**, *The Museum of the History of Cattle* (2013). History told from the point of view of cattle, who offer their view of the development of genetics.
- **Mary Maggic** presents the installation *Egstrogen Farms*, 2015.
- **Richard Pell / Center for PostNatural History** (centre devoted to the complex interaction between culture, nature and biotechnology) present the work *FVB + C57B6*, 2021.

3. Networks of biochemical consciousness

This part of the exhibition is dedicated to plants and fungi, paradigm cases of life in a network. Fungi fuse with animals, bacteria and plants, and create complex systems of exchange. Under the ground they distribute nutrients and in the undergrowth, together with insects and other microorganisms, they transform waste into a cycle of recycling. Plants capture the energy of the sun and offer it to other earth-dwellers and perceive light, humidity, gravity and electromagnetic fields, and it is estimated that they have our five senses as well as 15 more.

Works on show

- Paintings by **Dimas Paredes Armas**, of the Usko-Ayar Amazonian School of Painting, exhibited in Spain for the first time.
- *Treehugger: Wawona* is a work of virtual reality by the British collective **Marshmallow Laser Feast**. Immersive devices take visitors inside a giant sequoia in California.
- *Myconnect* by **Saša Spačal** is a bioelectronic device for communication between humans and fungi.
- The Barcelona collective **Quimera Rosa** presents *Trans*Plant: May the Chlorophyll be with/in you*, which documents the performance of transfusion of chlorophyll to a human being.
- **Terence McKenna**, a legendary figure in hallucinogenic mushroom culture, will be reciting excerpts from his text "The Mushroom Speaks", in which the mushroom takes the floor to explain its particular version of symbiosis.
- The documentary *Das Blumenwunder*, made by **Max Reichmann** in 1926 for the chemical company BASF, set out to promote new nitrogen fertilizers to an audience drawn by the cinema. The result is half expressionist work of art, half popular science artefact.
- *Les Micobiontes* of the **Museo del Hongo** is an installation featuring symbiotic fungi and lichens.

4. Histories of origins

If we accept that symbiosis questions old anthropocentric conceptions, we can also reimagine the past, present and future of the history of the Earth and its beings. This section presents projects that speculate about other possible histories of the relationships between species, with particular emphasis on the case of the octopus, one of the emerging fields in the study of non-human intelligence.

Works on show

- *Camille & Ulysse* is an audiovisual work by *Diana Toucedo*, created for the exhibition, in which Donna Haraway and Vinciane Despret talk about two fables they have written. In “Camille’s Stories”, Haraway accompanies, for five generations, the symbiogenetic communities of humans and monarch butterflies that migrate through the United States, Mexico and Canada. In “Autobiography of an Octopus”, Despret investigates the modes of existence of another symbiotic community, in this case linked to octopods on the shores of the Mediterranean.
- **Louis Bec**, *Vampyroteuthis Infernalis*, 1987. Drawings by the pioneer of speculative fiction shown for the first time. Bec was a collaborator of the philosopher Vilém Flusser, both key figures in the field of art-science.
- **Marley Jarvis, Laurel Hiebert** and **Kira Treibergs**, *Octopi Wall Street*, 2011.
- **Pinar Yoldas** presents the installation *Ecosystem of Excess*, 2014.

5. The natural contract

The exhibition concludes with a section dedicated to the rights of nature: animal and plant species, as well as rivers, mountains, valleys and ecosystems, protected for their intrinsic value, regardless of their usefulness to humans. The social contract that relegates the world to the status of an inert object must be replaced by a natural contract, open to a post-anthropocentric politics, beyond the human, that responds to the challenge of understanding life as a network of interdependencies.

Works on show

- Installation by **Jaime Serra Palou** created for the exhibition that shows the evolution of the rights of nature using a map and a timeline.
- **Paulo Tavares**’s video essay *Non-human Rights* (2012, 35 min.) presents the thesis of radical universalism between humans and non-humans based on the debates arising around the incorporation of the rights of nature in Ecuador’s Constitution.
- **Ernesto Casero** intervenes on the exhibition walls with the work *The Posthuman Protests*, 2018-2019.

Interviews

The visit to the exhibition includes a series of interviews with representatives of culture, science and activism, such as **Rubén Duro, Helen Torres, Paula Bruna, Associació Zuhari, Joan Martínez-Alier, Fabiola Leyton, Mercè Piqueras, Joan Romanyà** and **Ricard Guerrero**.

GENERAL INFORMATION

Dates and opening times

From 12 June to 28 November 2021

Open from Tuesday to Sunday and on Mondays that are public holidays: 11:00 –
20:00

Closed on Mondays (except public holidays)

Venue

Gallery 3 of the CCCB

Admission

6 € / 4 € Concessions

On Sundays from 15:00 to 20:00, visits are free of charge subject to prior reservation

[Discounts and free admissions](#)

High resolution images of the exhibition in the CCCB's digital press room

The exhibition ***Science Friction. Life among Companion Species*** is

A production of the CCCB

With the collaboration of the Barcelona Provincial Council, Barcelona City Council,
the Ministry of Science, Azkuna Zentroa, Jeu de Paume
Centre Pompidou and Prohelvetia

In the framework of the City and Science Biennial 2021

With the support of TRAM, Hotel ALMA, DAMM, Sant Aniol and City of Basel