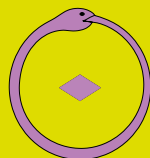


READING CYCLE

Invisible beings

2022





READING CYCLE INVISIBLE BEINGS

*Roadmap for the reading
cycle Invisible Beings*

Mediated by Anna Dantes, Cristine Takuá and Victoria Mouawad
4 weekly 2-hour meetings

Dates: February 02, 09, 16 and 23 / 2022

Guests: Ailton Krenak, Aristotle Barcelos Neto, Cynthia, Kyaw, Dorion Sagan, Hugo Aguilaniu, João Paulo Barreto, Laymert and Lua Kali

About the cycle

In the cycle around the *Book of Invisible Beings*, we will study “other forms of life without which we could not exist”. We will visit the 30 invisible beings presented by Dorion Sagan and also the forest to meet the extra-human beings that inhabit it. Interlacing the point of view of western science with indigenous cosmologies, we will expand the perspective on these beings imperceptible to the naked eye which move and transform the planet.

After two years immersed in the production of the book, we will share reflections from this process in dialogue with the *Selvagem* collection books. From the Cosmic Serpent’s DNA and mitochondria, to the invisible spiritual beings and the transformation canoe of *Before the world did not exist*, passing through the *Biosphere*, *Metamorphosis* and *Gaia’s Regenerants*, therefore providing continuity from past cycles.

02/02 - First meeting:

Introduction with Cynthia Kyaw and Hugo Aguilaniu. Conversation mediated by Anna Dantes.

Suggested Selvagem notebooks for reading: [*Propriocepção - Quando o Ambiente se torna o Corpo*](#) by Lynn Margulis, Dorion Sagan, Ricardo Guerrero and Luis Rico, [*Algumas Coisas que Aprendi com Lynn Margulis*](#) by Dorion Sagan and [*Invisibilidade e Onipresença - O Caso COVID-19*](#) by Jeremy Narby.

CYNTHIA KYAW

Since childhood, Cynthia wanted to be a scientist and in 1981 she graduated with a Bachelor's and Licensed Degree in Biology from USP. At the end of the course, she fell in love with microbiology and since then started to deal with invisible organisms to the naked eye. Although she started her professional life in São Paulo, in 1988 she went to Brasília, where she did her Master's and Doctorate, in addition to being hired as a professor at UnB. She studied bacteria for many years, but she has long studied a group of microorganisms called archaea that, despite their name, are not the ancestors of bacteria and form a broad group of living beings, classified as Archaea. Some species surprise us, as they are found in places considered impossible for survival, such as hot springs, sulfur lakes, or even in salt crystals. In addition to working, she also loves music and studies flute.

HUGO AGUILANIU

Geneticist by training. After completing his doctorate at the University of Gothenburg (Sweden), he did a post-doctorate at the Salk Institute for Biological Studies (USA). His scientific contributions were mainly in the study of the genetic basis of the aging process. He then joined the Conseil National de la Recherche Scientifique (France), where he became director of research. At the École Normale Supérieure de Lyon, he led a team from 2006 to 2016, whose research was awarded by the CNRS and ERC (European Research Council). In 2017, he became CEO of Instituto Serrapilheira. He is also a member of the FAPERJ Superior Council. It is he who signs the ear of the *Book of invisible beings*.

09/02 - Second meeting:

Conversation about the indigenous perspective with João Paulo Barreto and Aristotle mediated by Cristine Takuá.

Suggested reading: *Book of invisible beings*, pag. 10 to 74.

JOÃO PAULO BARRETO

João Paulo Lima Barreto is an indigenous anthropologist of the *Yepamahsã* (Tukano) people, born in São Domingos village, in the Alto Rio Negro Indigenous Land, at São Gabriel da Cachoeira (AM). He holds a degree in Philosophy (2010), a master's degree (2013) and a doctorate in Social Anthropology (2021) from the Federal University of Amazonas (UFAM). He is also a researcher at the Núcleo de Estudos da Amazônia Indígena (NEAI). In 2017, he founded the [Bahserikowi Indigenous Medicine Center in Manaus](#).

ARISTÓTELES BARCELOS NETO

Museologist and anthropologist, he works in the area of indigenous peoples ethnology of the Highlands and Lowlands of South America, with an emphasis on their arts, rituals and cosmologies. Associate Professor and Course Director at the Sainsbury Research Unit for the Arts of Africa, Oceania and the Americas (University of East Anglia, UK). Received the CNPq-ANPOCS Award for Best Doctoral Thesis in Social Sciences.

CRISTINE TAKUÁ

Is a philosopher, educator and indigenous artisan, living in the village of Rio Silveira. In the community of Rio Silveira, she is a teacher at the 'Txeru Ba'e Kuai' Indigenous Public School and also helps in spiritual works at the house of prayer. She is also founder and advisor of Instituto Maracá. Cristine represents the unit of indigenous education at the São Paulo Secretariat of Education and is a founding member of the Linkage Forum for Indigenous Teachers of São Paulo State (FAPISP).

16/02 - Third meeting:

Conversation between Laymert and Ailton Krenak mediated by Anna Dantes.

Suggested reading: *Book of invisible beings*, pag. 75 to 129.

LAYMERT GARCIA DOS SANTOS

Professor at the Department of Sociology/IFCH at the State University of Campinas (Brazil), he was a counselor at the CNPC of the Ministry of Culture. His work has an emphasis on the Sociology of Technology and Contemporary Art.

AILTON KRENAK

Thinker, environmentalist and one of the main voices of indigenous knowledge. Ailton has created, along with Dantes Editora, the Selva-gem, cycle of studies about life. He lives in the Krenak village, by the margins of rio Doce, in Minas Gerais. He is the author of the books *Ideas to postpone the end of the world* (House of Anansi Press, 2020), *O Amanhã Não Está à Venda* [Tomorrow is not for Sale] (Companhia das Letras, 2020) and *A vida não é útil* [Life is not useful] (Companhia das Letras, 2020).

23/02 - Fourth meeting:

Conversation with author Dorion Sagan and illustrator Lua Kali mediated by the book's translators into Portuguese Deborah Parrine and Victoria Mouawad.

Suggested reading: *Book of invisible beings*, pag. 130 to 185.

DORION SAGAN

Award-winning writer and philosopher, he also writes theories about ecology. The son of Carl Sagan and Lynn Margulis, he has authored and co-authored 25 books translated into fifteen languages, including several by his mother on planetary biology and symbiotic evolution. He also worked with Eric D. Schneider to popularize the concept of life thermodynamics. His work has been published in *Natural History*, *Smithsonian*, *Wired*, *Cabinet*, and *The New York Times Book Review*, among others. Dorion participated in the Wild in 2019.

LUA KALI

Lua does graphic research investigating imaginary living systems and intersections between arts and sciences.

VICTORIA MOUAWAD

A dreamer since childhood, she writes to keep dreams from slipping through her fingers. As a good Aquarian, she believes that we need utopia as a horizon, to give meaning to our steps. Being a cub from the frantic city of São Paulo, she envisions more permeable cities, with unearthed rivers, many green areas and more species (co)living together. In 2020, she translated the book *Metamorfoses* by Dantes Editora and is currently training for translators at Casa Guilherme de Almeida.

About the Book of Invisible Beings

“A life lesson. This is what we find, literally, as we scroll through the pages of the Book of Invisible Beings. With detailed descriptions, Dorion Sagan presents us with thirty living beings that we can not see, summarizing what we know about these “other forms of life”. It would be just an exotic book if it did not deal with the vast majority of living beings in our world. It would be nothing more than an anecdotal book if it did not talk about organisms without which we could not exist. It would only be interesting if it did not address a rich source of knowledge that we have about what life is, what form it takes, how it manifests itself and the variety with which it presents itself. It would only be a poetic work if the pandemic – the period in which it was written – had not reminded us that the balance between living beings is delicate and is under threat. This is, above all, an important book.

It is urgent that we truly look into what life is in order to finally see it, understand it, value it and preserve it. Life is too important, too mysterious, too beautiful and too fragile for its study to be the exclusive domain of biologists.

We can contemplate it more closely thanks to Lua Kali’s fascinating illustrations, which allow us to discover a profound and diverse world in its unexpected sensuality. What we see there is us: the other members of our community. The world of the living. These invisible beings are our

older brothers. They are around us, with us, within us, they live for us and against us. Without them, we would not be possible.” Hugo Aguilaniu, Instituto Serrapilheira

About the author

Award-winning author, essayist, and theorist, Dorion Sagan writes on culture, history, and philosophy of science. Son of Carl Sagan and Lynn Margulis, he has 25 books translated into fifteen languages, including several with biologist Lynn Margulis on planetary biology and symbiosis. His work is published in the *Smithsonian*, *Wired*, *Cabinet*, and *The New York Times Book Review*, among others. [He participated at Selvagem in 2019.](#)

About Lynn Margulis (1938 – 2011)

American biologist, author of the theory of endosymbiosis, the one that transformed the understanding of the evolution of cells with a nucleus. Lynn described her theory in the article *On the origin of mitosing cells*, published in the *Journal of Theoretical Biology* in 1967, and, despite having received much criticism when it was released, it is now considered one of the most important biology documents published in the *Journal of Theoretical Biology*.

Lynn’s legacy inspires, permeates and lives on every page of *The Book of Invisible Beings*.