

04. 05. 2016

Fcul, Room 8. 2. 13
10.30h – 13.30h

The Origin Of Species

Virtually all of the crops that feed the world are significantly different from the plants initially subjected to domestication. Through selective breeding several genetic mutants were selected in order to achieve greater productivity and better characteristics. In fact, the sequencing of the genome of different crops as well as the genome of their feral counterparts illustrates well the magnitude of the genetic difference that was imposed during domestication. Therefore, what we consider “natural” today is already the product of human intervention over thousands of years*. The recent development of genome editing tools, such as CRISPR-Cas9 technology, allows efficient modification of the genomic content of organisms in a highly controlled way. The Origin of Species brings CRISPR-Cas9 technology as an art media, allowing the edition of mutations selected by domestication. Such mutations are identified with bioinformatics tools, comparing the genome of modern organisms and the feral counterparts from which it was selected. This way a precise genetic intervention is used to create an organism more “natural”.

*. This work was inspired by “Breeding for Wildness” by George Gessert, consisting on the selective breeding of ornamental flowers towards their ancestral characteristics.

Authors:

Marta de Menezes

Marta de Menezes is a Portuguese artist (b. Lisbon, 1975) with a degree in Fine Arts by the University in Lisbon, a MSt in History of Art and Visual Culture by the University of Oxford, and a PhD candidate at the University of Leiden.

She has been exploring the intersection between Art and Biology, working in research laboratories demonstrating that new biological technologies can be used as new art medium.

In 1999 de Menezes created her first biological artwork (Nature?) by modifying the wing patterns of live butterflies. Since then, she has used diverse biological techniques including functional MRI of the brain to create portraits where the mind can be visualised (Functional Portraits, 2002); fluorescent DNA probes to create micro-sculptures in human cell nuclei (nucleArt, 2002); sculptures made of proteins (Proteic Portrait, 2002-2007), DNA (Innercloud, 2003; The Family, 2004) or incorporating live neurons (Tree of Knowledge, 2005) or bacteria (Decon, 2007). Her work has been presented internationally in exhibitions, articles and lectures.

She is currently the artistic director of Ectopia, an experimental art laboratory in Lisbon, and Director of Cultivamos Cultura in the South of Portugal.

Maria Antonia Gonzalez Valerio

María Antonia González Valerio (Mexico City, 1977).

PhD in Philosophy from the National Autonomous University of Mexico (UNAM) with postdoctoral studies in the area of aesthetics. Full-time professor of the Faculty of Philosophy and Literature and of the postgraduate programs in Philosophy, Philosophy of Science, Art History and Fine Arts UNAM. She works within the research line of ontology-aesthetics and the interdisciplinary line of arts, sciences and humanities, specifically in the field of art that uses bio-media. Head of the research group Arte+Ciencia (Art+Science) which gathers artists, scholars and scientists in an interdisciplinary work that produces education at an under and postgraduate level, specialized theoretical research, artistic creation and exhibitions. Leader of the research

project Complexity and natural philosophy at the intersection of art and science, linked to the Faculty of Philosophy and Literature UNAM

Author of the books:

Cabe los límites. Escritos sobre filosofía natural desde la ontología estética (México: UNAM/Herder, 2016), Un tratado de ficción (México: Herder, 2010) and El arte develado (México: Herder, 2005).

She has coordinated several collective volumes, the most recent:

Sin origen/Sin semilla (México: UNAM/Bonilla editores, 2016) and Pròs Bión: Reflexiones naturales sobre arte, ciencia y filosofía (México: UNAM, 2015). Also: Verdad ficcional no es un oxímoron. Sobre las relaciones peligrosas entre filosofía y literatura (México: UNAM/Itaca, 2011) and Gadamer y las humanidades I. Ontología, lenguaje y estética (México: UNAM, 2007).

Coordinator of the artistic collective “BIOS Ex Machina: Workshop for the fabrication of the human and the non-human” which develops projects of transgenic and biotechnological art, and has exhibited in Mexico, Portugal and Belgium.

Curator of the exhibition “Sin origen/Sin semilla (Without origin/Seedless)”, first transgenic and biotech art exhibition in Mexico, MUAC-MUCA Roma, November 2012 – January 2013, which had the support of the UNAM, INBA, CONACULTA, FONCA and Institute of Science and Technology of Mexico City. “Bioartefactos: Desgranar lentamente un maíz, (Bio-artifacts: Threshing slowly a maize)” that worked on the subject of transgenic and creole maize. MACO, Oaxaca, 2014.

Luis Teixeira

Luís Teixeira has a degree in Microbiology and Genetics from Faculty of Sciences University of Lisbon and a PhD in Biomedical Sciences from Faculty of Medicine University of Lisbon, which research was carried out at EMBL, Heidelberg, Germany. He did a postdoc at Cambridge University, UK, on *Drosophila* antiviral resistance. Luis Teixeira is head of a research group at Instituto Gulbenkian de Ciência, since 2009, focused on host-microbe interactions. His research group uses *Drosophila* as a model system to study animal innate immunity and as model for arthropod vectors of human diseases.