

DATES

09.09 —
27.09.2020

VENUE

Onassis Stegi

INFORMATION

DISCUSSION AND VIRTUAL TOUR

A virtual tour of Data Garden and a discussion with Kyriaki Goni.

Watch it live on September 9th, at 18:00.

VIRTUAL TOUR

The exhibition tour will be available online until 27.09.2020.

INTRODUCTION

Would it be possible for our digital data to be hosted in a garden, in a secret network in the center of the city? Small, invisible plants (known under the scientific name *micromeria acropolitana*) are planted exclusively on the Acropolis rock and accommodate digital memory in their DNA.

WATCH THE VIRTUAL TOUR AND THE DISCUSSION WITH
KYRIAKI GONI LIVE | 09.09.2020, 18:00

Data Garden | Exhibition Tour & Talk



Can anyone think of the future of connectivity beyond surveillance, minimizing the consequences of technological infrastructures on the natural environment? Is it possible for the bond between human and non-human worlds on this planet to be substituted? Can plants, as organisms on which life itself is depended, contribute to the creation and adoption of new practices for the mediated reality?

Kyriaki Goni's new multimedia installation investigates this set of questions by recounting a fictitious narrative that contains elements of truth. The starting point of this work is the recent scientific research on the data storage capacity of the living organisms' genetic material, as well as on the challenges and moral dilemmas concurrently posed. The artist invites the audience to envision a network of plants on the Acropolis rock, in which digital information is circulated and stored. The network is protected by a community of users who in this way maintain the self-disposal of their data. As the storage space transitions from the "cloud" to the earth, and as control passes from the companies to the users, the life circle of data follows that of a plant, fostering a relation of interdependence and care. In a peculiar garden, users become the plants' gardeners, whereas plants in their turn become gardeners of the stored information.

The story unfolds through drawings, prints, videos, sound pieces, and interviews with scientists from the respective fields, and reveals the



connections between digital memory and the climate crisis, exploring possible recourses and strategies of resistance. “Data Garden” reminds us of the indissoluble and foundational relation between culture and nature, permitting the audience to reflect on the limits of human intervention and activity in the environment.

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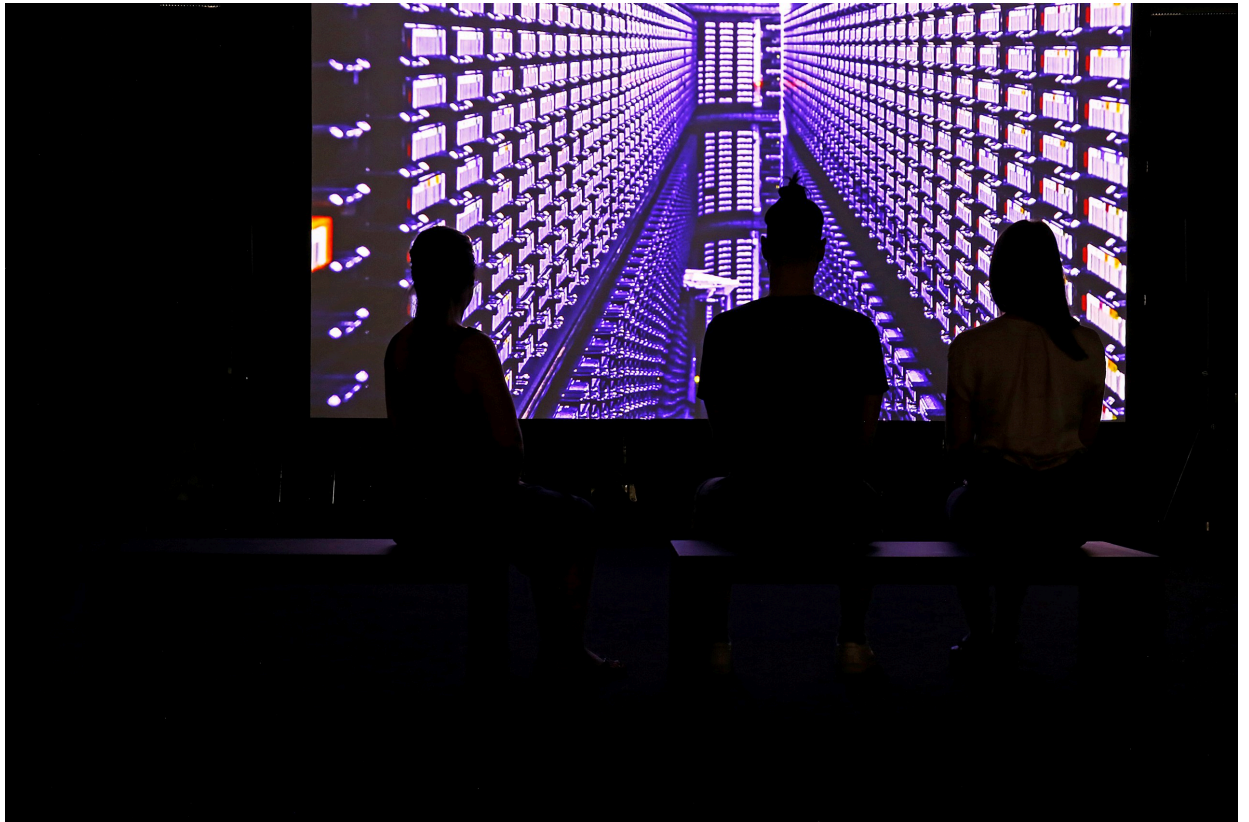


IMAGE 1 / 10

PHOTO: NIKOS KOKKAS

FROM CLOUD TO EARTH: THE CHALLENGES OF A SPECULATIVE DATA GARDEN

In the age of climate crisis, the constant production, accumulation, and storage of data raise important questions regarding their impact on the natural environment. Almost every query, movement or activity within digital networks requires the mediation of machine learning algorithms and energy consumption. The storage of data in “clouds” demands heavy technological infrastructures, emitting carbon dioxide than can hardly be reduced. In turn, the function of data centers creates the necessity for new ecologies[1], whose exclusive goal is the proper maintenance of these infrastructures,

depleting or tainting this planet's natural resources. So what happens when nature is understood as "cheap"[2], disposable, and usable for the needs of technology? Can habits and practices change in a reality that is already mediated by technology? What role can the natural environment and the 'more-than-human' worlds play in provoking this change?

The artwork "Data Garden," by Kyriaki Goni, investigates this set of questions through a fictitious narrative, which is partly based on true facts. The project's starting point is recent scientific research on the use of the DNA of living beings for the purposes of data storage. According to the premise, a community of users who are sensitized in issues of connectivity, privacy, and the natural environment, resorts to the use of the DNA of a tiny endemic plant that grows on the foothills of the Acropolis, several years after the plant's extinction. Referring to active oblivion, the community aspires to build a new relationship with technology and nature alike, studying and learning from the latter. Community members keep their personal data in the plants – as organisms that memorize information about the process of photosynthesis,[3] and thus ensure life. As the storage space changes from the "cloud" to the earth, and as control passes from the companies to the users, the life circle of data follows that of a plant, fostering a relation of interdependence and care. In a peculiar garden, users become the plants' gardeners, whereas plants respectively become the gardeners of the stored information. Under this new condition, the thoughtless accumulation of data is no longer desired, or even possible. The users not only take decisions over the disposal of their data, but they also bear responsibility of what is worth to be stored and what can or should be deleted.

The story of a secret data garden that grows in the Acropolis hill, unravels in the exhibition space through the installation's different elements. The video is narrated by the artist herself in a personal tone, as if she is addressing someone that she knows and trusts. This rock garden's network of roots is illustrated in a drawing. The intense and thick rootstock depicted alludes to forms of communication and intelligence that are found in nature, but also in horizontal distributed systems of electronic communication. The position of this rhizome on the rock, where the Parthenon can barely be distinguished in the background, seems to challenge the worldview of Western-dominated thought, which approached plants as passive, idle receptors that are found on the bottom of the world pyramid. This kind of approach is represented in





Diego de Valadés's "Great Chain of Being" (Didacus Valades's "Rhetorica Christiana"), which the artist comments with a 'gesture' suggesting a dislocation. The plant of the story, *Micromeria Acropolitana*, is revealed through an augmented reality app, reminding us of the role of human agency in species extinction. A ritual sound piece highlights the kinship between humans and plants, and points to cultures where these relationships are understood as uninterrupted. A DNA sequence where data codification is embedded, blown up into a large print, informs about a new hybrid language, one that is currently under development and where the languages of science, daily reality, and nature all meet. The project draws a full circle with a series of interviews with scientists from the fields of biotechnology, genetics, and environmental studies, bringing to the foreground the scientific research that became the basis d for the development of the work.

In her piece "Data Garden," Kyriaki Goni purposefully interweaves fictitious elements and facts. The use of a hypothetical scenario and the appropriation of elements drawn from a scientific discipline that is currently under development, invite the audience to reflect upon the possible changes triggered by the leverage of DNA as a storage space. For example, the creation of these new, transgenic organisms is by no means detached from questions of ethics. A new condition under which plants become at the same time perceivable as infrastructures holds the danger of a new kind of instrumentalization of nature. The appearance of a new category of "living" infrastructures can possibly become an apple of discord in what concerns the control and ownership over them. However, the story of the piece does not aim at naming possible issues or scaremongering. On the contrary, emphasis seems to be given to the reminder of the indissoluble relation between culture and nature, and to the activation of a dialogue on the character and the boundaries of human intervention and activity. Correlating the architectures of technical networks with networks of nature, next to correlating the intelligence and strategies of a community of users with those of a population of tiny plants, the artwork opens up a discussion on heterarchies[4], multilingualisms[5], and symbiopolitics[6]. Revealing the connections between digital memory and climate crisis, "Data Garden" refers to changes that are feasible before the further engineering of nature, while learning from it.

—Daphne Dragona

Bibliography

[1] Mél Hogan uses the term “big data ecologies” to define the systems that are configured for the maintenance of data centers and the deployment and management of natural resources, whereas she clarifies that priority is given to technology, and not to the human.

See M. Hogan, “Big Data Ecologies,” in *Ephemera Journal*, 18:3, 2018, 631–657.

[2] Jason Moore refers to “cheap nature” to describe the way in which capitalism configures nature and shapes a new world ecology, following the Cartesian Logic.

See J. W. Moore, “Capitalism in the Web of Life: Ecology and the Accumulation,” London & New York: Verso, 2015.

[3] Stanislaw Karpinski and Magdalena Szechynska-Hebda discuss how plants memorize and process information about the process of photosynthesis, providing this as an example of the intelligence they manifest as organisms.

See S. Karpinski & M. Szechynska-Hebda, “Secret Life of Plants: From Memory to Intelligence,” in *Plant Signaling & Behavior* 5:11, 2010, 1391–1394.

[4] The term “heterarchy” is used by Matthew Hall as juxtaposed to “hierarchy,” regarding the ways in which non-Western populations approach plants.

See M. Hall, “Plants as Persons: A Philosophical Botany,” New York: State University of New York Press, 2011.

[5] Patricia Vieira, Monica Gagliano and John Charles Ryan refer multiple languages of the living world in their discussion of the language of plants.

See P. Vieira, M. Gagliano & J.C. Ryan, Introduction to “The Language of Plants: Science, Philosophy, Literature,” M. Gagliano, J.C. Ryan, Patricia Vieira (eds), Minneapolis: Minnesota University Press, 2017.

[6] The term is used by Stefan Helmreich to define the governance of entangled living things.

See S. Eben Kirsey, S. Helmreich, “The Emergence of Multispecies Ethnography,” in *Cultural Anthropology*, 25:4, 2010, 545–576.



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