

ART-SCIENCE OF THE SPACE AGE: towards a platform for art-science collaborations at ESTEC

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Abstract

In 2013, in collaboration with ESTEC scientist Bernard Foing and the ArtScience Interfaculty (Royal Academy of the Arts, The Hague), Synergetica Lab (Amsterdam) developed a course, which was repeated in 2015, for bachelor's and master's students aimed at seeding interactions with ESA researchers. The participants created artworks investigating space travel, radio astronomy, microgravity, ecosynthesis as well as extraterrestrial physics and architecture [1] [2]. After their initial presentation at the Royal Academy, these artworks were shown at ESTEC, TodaysArt Festival (The Hague), and TEC ART (Rotterdam). These presentations prompted diverse future collaborations and outreach opportunities, including the European Planetary Science Congress 2014 (Cascais) and the AxS Festival (Los Angeles).

1. Introduction

Even before the space age began, already in the 1910s artists such as Kazimir Malevich envisioned art laboratories orbiting the Earth and traveling to other celestial bodies. Though such laboratories have yet to be launched, a vast variety of art experiments are being conducted in preparation for future missions and research projects. Inspired by historical and present-day orbiting laboratories such as Space Lab, MIR and the International Space Station, numerous artists are joining forces with space scientists and engineers, collectively fostering unprecedented cross- disciplinary artworks with pivotal aesthetic, philosophical and educational impact. [3]

2.1 Synergetica Lab

Founded in Amsterdam in 2007, Synergetica Lab is a platform for art-science collaborations with an emphasis on photonics, fluid dynamics, acoustics, quantum chemistry and cognitive science. In addition to facilitating the production of artworks in these domains, Synergetica serves as a curatorial and educational entity, disseminating interdisciplinary art works and art-science research. In 2011, Synergetica was selected as the Dutch representative of Studiolab, a 12-country European Commission initiative bringing together major players in scientific research with centres of excellence in the arts and experimental design including Le Laboratoire (Paris), Science Gallery (Trinity College Dublin), Royal College of Art (London), Ars Electronica (Linz) and MediaLab Prado (Madrid).

2.2 ArtScience Interfaculty and an overview of 'Space Science in the Arts' projects

As part of the ArtScience Interfaculty, the Royal Academy of Art and the Royal Conservatoire in the Hague have been offering a two-year interdisciplinary master since 2002. At the ArtScience Interfaculty students and teachers are developing new forms of interdisciplinary art, and the goal of the teaching programme of the Interfaculty is to investigate and possibly shape the intersection between artistic concepts and recent developments in science and technology.

3. Summary and Conclusions

The two year collaboration between ESTEC, the ArtScience Interfaculty (Royal Academy of the Arts,

The Hague) and Synergetica Lab have demonstrated a robust potential of art projects, art education and art-science collaborations in promoting public awareness regarding the importance of space exploration and space science.

References

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- [3]WHITE F.: *The Overview Effect. Space Exploration and Human Evolution*, American Institute of Aeronautics and Astronautics, Reston, VA, 1998