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Contemporary Arts Practice and Outer Space: A Multi-Disciplinary Approach (3)

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TECHNOPLASTICITY OF AEROSPACE TECHNOLOGY: ART PRACTICE AS SPACE  
EXPLORATION.

**Abstract**

The contemporary moment is characterized by rapid advancements in space exploration. The Artemis mission aims to establish a permanent human settlement on the lunar south pole (NASA 2020), while the 'NewSpace' climate (Martin 2015) strives to create a new space economy. For the first time in history, there is a real possibility of expanding human civilization into other regions of the solar system. Human expansion in space represents a reconfiguration of our relationship with the universe beyond Earth. Given the historical importance of this transformation, it is necessary that art be included as a form of space exploration, to produce cultural significance beyond the scope of science and technology. Drawing from a conceptual framework that combines Martin Heidegger's idea of technology (Heidegger 1954), Gilles Deleuze's concept of the device (Deleuze 1988), and Chinese philosopher Yuk Hui's notion of Cosmotronics (Hui 2017), this article seeks to establish a theoretical ground that problematizes space technology by observing its essence as a geopolitical, economic, and military fabrication. From this viewpoint, the artist seeks to highlight an issue of epistemological and social relevance by exploring the meaning of aerospace technology. The aerospace apparatus is not just a power device but also a medium through which the relationship with the universe beyond Earth is mediated. This relationship cannot be solely defined by the respective projects of countries and companies but also holds significance for our species as a whole, hence the value of art and the humanities in contributing to its formulation. The purpose of the article is to point out the need for art to configure a mode of space exploration capable of producing new ways of thinking, feeling, and inhabiting space. However, for art to engage with the new phenomena of the space environment, it must incorporate the tools, materials, and processes of space engineering. This paper introduces a new term, 'technoplasticity,' to conceptualize the plastic exploration of technologies and processes originally situated in the scientific and engineering fields. Within this context, the project aims to merge art and space technology, both materially and conceptually, to develop a hybrid methodology that integrates artistic creation with the processes of space engineering, manufacturing, and technological validation.