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Author: Mr. Ludwig Pasenau
France

EXOCLIMATIC ART PROJECT: TOWARDS A NEW PERCEPTION OF SPACE

Abstract

This article aims to outline the concept of an "exoclimatic" artwork in anticipation of the future implementation of dynamic and vivid atmospheres on board spacecraft and space stations. The coming stages of outer space exploration will involve longer journeys and will see the extension of Life support to more complex systems. New key parameters will have to be taken into account, as for example effective processes to stimulate and regenerate mind activity. New views on how to adapt and develop life in space will be required. To stimulate a crew on a creative level, this study explores the possibility to generate an "exoclimatic" artwork, transfiguring first both the physical and mental atmosphere of the spacecraft and second the relationship of the astronauts to their home planet and space surroundings. For a start, by browsing several experiments' results regarding the influence of spacecraft habitats on the mental state of astronauts, the analysis establishes a synthesis of the main variables to be considered in the conception of the artwork (light, colour, sound, airflow, fragrance, temperature, hygrometry, day/night switches, seasonal variations, metamorphoses, human interactivity). Arguing from recent research works that art could be a key point for the success of future long-range missions, the author expounds on the specificity of designing the atmosphere of a spacecraft as an artwork, introducing two decisive characteristics with the "climatic" and "exotic" aspects of it. If the first adjective refers to the physical and multisensory reception of the work - as well as to its metamorphosing nature - the second one emphasizes the pioneering and challenging movement of such a voyage, localizing therefore the space crew in a dynamic balance between its home planet and new worlds. Destined to counterbalance the lack of nature (particularly by introducing meteorological and unpredictable events), this "exoclimatic" art project proposes a subtle reconfiguration of itself during a mission, being based on a creative co-production between artists and astronauts. The results of this study establish a dynamic model of artwork, theoretically based on a philosophical tradition of fluidity (going from Gilles Deleuze to Peter Sloterdijk), integrating some elements of quantum cosmology (from Andrei Linde to Thibault Damour), showing how the perception of space and time could be transformed; how artistic interactions between distant humans could affect global space view.