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

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HOLOGRAPHY SCENOGRAPHY: BUDGET THEATRE TECH FOR SPACE

**Abstract**

Theatre design and technology represents a vast array of multidisciplinary hard and soft technologies in development for the purpose of real-time human interaction. The space industry can gain from quick, cheap and dirty crossover tech processes used frequently on stage, as well as longer-term more sophisticated developing theatre technologies. In exchange, the space industry acts as an inspirational catalyst for interdisciplinary artistic and scientific collaboration.

*Twin Earth Object* was designed and produced by Renate Pohl for ESA as a celebration of the medical, educational and support staff at the European Astronaut Centre, and as a connector from the earth-based staff to astronauts in space on the ISS. It draws upon budget theatrical props building and lighting design, while also incorporating stained glass art techniques and the scientific fields of geology and optics. Collaboration with the University of Toronto Institute for Optical Sciences (IOS) was integral to the project creation. A hologram created with the IOS represents a twin of a silver medallion brought into space.

The resulting artistic object holds a twin hologram for the purpose of celebration, morale and human connection within ESA. However, the object in its entirety has a larger twin function: to encourage the kind of interdisciplinary science-art partnerships that can result in solving long-term space exploration challenges. The creation of more sophisticated scenographic (staged) holography for the space environment may pose solutions to human-centred challenges of psychological and physiological management on long-term space missions. Creative practices, while seeming as elusive and intangible as a hologram, can find their place as a twin partner with hard technology in the space environment. The *Twin Earth Object* project represents an entry point for so-called “poor theatre” to enter the discourse on, and activity in, space exploration.