Paper ID: 74160
student

33rd IAA SYMPOSIUM ON SPACE AND SOCIETY (E5)
Contemporary Arts Practice and Outer Space: A Multi-Disciplinary Approach (3)

Author: Ms. Sahba El-Shawa
Space Generation Advisory Council (SGAC), Jordan

BRINGING SPACE DOWN TO EARTH: VIRTUAL REALITY SIMULATIONS OF THE OVERVIEW EFFECT

Abstract

This paper aims to investigate the ways in which art and technology can be used to make space more accessible. In particular, it focuses on the rise of attempts at simulating the experience of the Overview Effect (OE). This phenomenon is described by astronauts as a shift in their awareness or consciousness when they see the Earth from space, causing them to become more aware of the need for environmental and social justice on Earth. Its significant impact on fostering connection between people and planet is one that cannot be overlooked.

The OE is a life-changing experience that everyone should be able to have, however historically it has only been available to a select few, and will continue to be so for the foreseeable future. Even with the current rise of space tourism, with more people gaining access to space, this group is still severely limited. Over the years, several initiatives and organizations have been attempting to replicate the space experience on Earth, and Virtual Reality (VR) has been a crucial tool. Studies have suggested that these VR simulations can impart a sense of awe and wonder, cause an improvement in mental health, and promote sustainable shifts in behaviour. The current state of our planet shows that there is a clear need for a widespread shift in mentality and relationship with Nature, one which can potentially be achieved by experiencing the OE. The role of bridging art with technology in this capacity is essential for creating a better world and inspiring people to take better care of planet Earth.

This research is an overview of the ways in which the OE has been simulated using VR thus far, exploring the various factors involved and lessons learned, as well as the outcomes of past studies. Both scientific and philosophical factors are considered in this review, examining to what extent an experience like the OE can truly be simulated. Further work is then proposed to enable the use of VR simulations of the OE as a tool for social change.