36th IAA SYMPOSIUM ON SPACE AND SOCIETY (E5)
Contemporary Arts Practice and Outer Space: A Multi-Disciplinary Approach (3)

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ART & ENGINEERING COLLABORATION 1960-2000

Abstract

This paper examines the rhetorical backdrop of disciplinary division during the Cold War era, and how it promoted a resurgence in collaborations between artists and engineers in aerospace, communications, and space industries. It compares and contrasts the mindset and process of engineers to artists, and particularly investigates the role of "systems thinking." The paper aims to show evidence that including artists in technical teams or vice-versa created a direct effect on the innovative output of the team. It also compares a "collaborating experts" approach to training individuals in both the arts and engineering. Finally, it investigates the management environments where such collaboration thrives, with examples of resulting innovations, and offers actionable advice for today's organizations.

Specific examples discussed will include: C.P. Snow's Two Cultures lecture, reactionary attitudes from American Society for Engineering Education, Bell Lab's Experiments in Art and Technology (E.A.T) division, Raymon Lowey's fight for the Skylab window, Frank Malina's journey from engineer to artist and the Leonardo magazine, space artists Chesley Bonestell Frederick Eversley, Disney Imagineering, Apple, and more. We will be leveraging the Huntington Library Archives, as well as interviews with author-historians Patrick McCray and Peter Westwick. Additionally, we will conduct analysis on job data, word appearance, and map a timeline of relevant cultural touchstones.

You will learn that just as going to space helps us expand our mindset to tackle even bigger problems that lead to benefits on Earth, a fertile environment for collaboration between artists and engineers expands the playground for novel ideas. In general, a scientific or artistic mindset sets the realm of the possible, and the engineering mindset makes it happen. Together, they create an inspiring future that supports our humanity.