

IAF SPACE EDUCATION AND OUTREACH SYMPOSIUM (E1)
Space Culture: New Processes of Public Engagement in Space through Culture and Art (9)

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NEW SPACE NARRATIVES: CULTIVATING SPACE DESIGNERS BY DESIGN FUTURES
APPROACHES

Abstract

The advent of the new space age, highlighted by space tourism, Mars exploration, and civilian orbital flight, has explosively put forward our conception of living in space, prioritizing human survival quality and comfort. This era raises a critical question: what constitutes a desirable future for extraterrestrial life? Answering this requires the collective effort envisioned by the "New Space Narratives" initiative, which aims to harness interdisciplinary strengths and public creativity to shape the future of space living, thereby fostering space innovation and developing future-oriented space designers. The initiative employs a multidimensional educational philosophy integrating beliefs, values, capabilities, and knowledge. It promotes a universal view recognizing humanity's integral part of the cosmic community, advocating for civilization diversity, sustainable development, and social responsibility. Emphasizing ethics in space exploration, it fosters transdisciplinary integration, innovative and critical thinking to address space design complexities. It also stresses combining space science, engineering, design theory, and humanities knowledge, enriching historical and cultural understanding. Over three years, unique methodologies have led to exceptional courses and public projects in collaboration with national space research institutes and local governments. Methodologically, the Futures Cone outlines potential futures, guiding diverse space design futures through methodologies like design fiction, speculative design, and prototypes. This approach creates "creative conflicts" to trigger critical reflection, extending rational thinking into imaginative extraterrestrial scenarios, enhancing the narrative atmosphere. Educational practices include blended Mars living-themed courses, international summer schools, and interdisciplinary seminars focusing on the Mars colonization plan's initial phase. These activities, aiming to stimulate critical thinking, intentionally highlight space environment challenges, aiding students in expanding their innovation capabilities. Public engagement has been significantly boosted through the New Space Narratives interactive exhibition at the 2023 Beijing International Design Week and will continue with a project in desert areas resembling Martian terrain in China (Yinchuan) and Saudi Arabia (Riyadh). This summer cooperation project supports international students in developing new Martian driving experiences. Looking forward, the "New Space Narratives" initiative promises to democratize and diversify space narratives, contributing to a more open and diverse discourse on humanity's space future. This pioneering effort blends design futures concepts with public engagement, offering significant value for global space education and providing new perspectives for sustainable Earth development, contemplating civilization's continuity, and promoting a

shared human destiny within the broader cosmic context.