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Author: Ms. Tanya Eskander Royal College of Art, United Kingdom

CAN A NEW ARCHITECTURAL LANGUAGE BE USED TO ELICIT AN EMOTIONAL AND CULTURAL REACTION TOWARDS SPACE EXPLORATION AND CELESTIAL MINING?

Abstract

The mining of precious metals and minerals on asteroids and the moon is anticipated to become necessary if we are to ensure a future for human space exploration. However, little attention has been paid to the contribution that architecture and design can make in educating and inspiring subsequent generations to embrace a future of off-world metallurgy. The development of a new architectural language for this future 'vertical gold rush' will necessarily include a re-imagination of the relationship between the ordinary everyday and extra-ordinary space, which in the post-Cold War era has become increasingly separated. Today's CGI science fiction films simultaneously make Space exploration seem more plausible but less tangible. Now is the time to return Space to the everyday, acknowledging its very real place in our future rather than in the fantastical; science fact as opposed to science fiction. This speculative architectural project involves a scenario exploring reactions to a potential bottleneck in technology due to China's monopoly of rare earth metals and their occurrence in areas inaccessible to mining. The project focuses on subsequent developments in asteroid and moon mining as a means to meet demand and provide resources to sustain the survival of humanity. The scenario is driven by three fictional demographics - the Drivers (Techno-Futurists), the Dreamers (Retro-Futurists) and the Detectorists (Frugal-Futurists). The Drivers are UK tycoons hoping to gain an abundance of precious and rare earth metals that can be sold for profit, funding public exhibitions to encourage understanding of their venture. The Dreamers, academics and artists, consider the ethical and philosophical ramifications of celestial mining, provoking public debate through hypothetical proposals, such as the mining of a face on the moon. The Detectorists are sceptics who prefer to salvage rather than mine new territories. I am an Architecture student working at the intersection between architecture and critical design at the Royal College of Art, London, in Architecture Design Studio 4 (ADS4), which uses 'design fiction' and 'world building' to explore speculative future scenarios as contexts in which an architect may design. It became apparent with this project that through hyperstition, architecture can unconsciously facilitate public imagination, create an emotional and cultural reaction towards space exploration both visually and sensually, bringing verisimilitude to the emerging field of asteroid/moon mining. By incorporating influential human socio-cultural motifs from history into design can we create a familiar indelible stamp on the future and make the extra-terrestrial seem less 'extra'?