

SPACE EDUCATION AND OUTREACH SYMPOSIUM (E1)  
Space Culture –Public Engagement in Space through Culture (9)

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HOMO LUDENS: AN ANALYSIS OF PLAY AND PERFORMANCE DURING SPACEFLIGHT TO  
INSPIRE THE CULTURAL SECTOR TO DESIGN FOR NEW MODES OF SPACE AND SPATIALITY.

**Abstract**

We recognise Astronauts as unique Homo Ludens and initiate the first taxonomy of the kinds of play and performance that has occurred in space. We use the lens of David Harvey's matrix that relates space (absolute, relative, relational), to Henri Lefebvre's tripartite spatial definition (experienced, conceptualised, lived spaces) to establish the relational qualities of play and performance over spaceflight time (pre-flight, in-flight, post-flight), and construct an initial understanding of interactions in space and spatiality terms. It is our hypotheses that play and performance along gravity-shift nodes of the spaceflight trajectory help frame Astronautical phenomena. Arguably, once spatiotemporal perceptions of the microgravity body are recognizably ruptured (Augenblick), then experienced in relation to the universe (Overview Effect) to reside with the individual as a lived experience (Bodily Memory), these can be recalled from bodily memory and used to inform the design of material play and representational performance experiences. By analysing the play and performance of Astronauts pre-flight, in-flight and post-flight we hope to inspire designers to search for clues about how we inhabit, navigate and design in space. This paper contributes a new way to conceptualise the nature of play and performance as a technology to design opportunities for bodily play in the microgravity environment of outer space as one adaptive strategy towards space habitation.