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TO ENABLE EQUALITY OF SCIENCE IN THE SPACE SECTOR THROUGH THE CASE OF
DESIGN FOR LUNAR BASES.

Abstract

Since its historical creation, the space sector has been an extremely technical sector where engineering has always played a predominant role. For some years now, the sector has been opening up to other disciplines and has tended to make the hard sciences and soft sciences work together. However, there are some misunderstandings between these sciences and what they represent. Even though there are many initiatives that seek to create links between the humanities and the hard sciences, there are still obvious splits and tensions. This article will aim to move towards equality between the disciplines and the different sciences through the example of design in the space sector. We will see how the difference types of sciences have an interest in collaborating and making the space sector one of the first areas to consider the sciences equally with a common goal: to make life on the Moon possible and enjoyable for astronauts. The question of manned missions to the Moon involves technical challenges but also questions about our ways of living, about the very notion of habitat. In his article "Searching for Design Research Questions. A Conceptual Clarification" (2010), the theorist in design Alain Findeli says that "the purpose of design is to improve or at least maintain the 'habitability' of the world in all its dimensions". If the role of the designer is indeed to participate in the habitability of the world, both on Earth and in space, then the place of designers in manned space missions makes sense. It becomes even more interesting when we consider the ability to work on extremely different and deeply interdisciplinary projects. This article will explore the value of combining research and design methods with all the disciplines involved in human spaceflight, and how this can be of immediate benefit. To do this, we will draw on past examples, but above all on the techniques and technologies available today, in a diagnostic approach to the existing situation, and the scenarios that this can generate in a process of innovation and improvement.