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33rd IAA SYMPOSIUM ON SPACE AND SOCIETY (E5) Is Space R&D Truly Fostering A Better World For Our Future? (2)

Author: Mr. Jesper Jorgensen Denmark

Mr. Andreas Vogler Architecture and Vision, Germany Dr. Gabriel G. De la Torre University of Cádiz, Spain

THE NOT SO FUNNY PARALLEL: HUMAN SPACE EXPLORERS AND DISASTER-DISPLACED PEOPLE

Abstract

The scientic practical research and the adventurism of dedicated space explorers makes highly educated people spend weeks and month in the desert, testing extreme environment conditions and grow crops and food with minimal water in super lightweight greenhouses. They live in up to six people in tiny cylinders, which use minimum local energy (sun and wind) to create a half way comfortable climate. All in the name to understand the psychological conditions and technological requirement of having humans live on Mars. Already the passage to Mars, will be extremely risky and possibly life threatening.

On the other hand global warming is increasingly aecting desertification of the Middle East and North Africa. People living in near desert environment since ages, are faced within a generation with a too hot to live environment, which makes them to take the risky way over the Mediterranean sea to nd a better future in Europe.

The paper will look at the different psychological and economic motivations of these very different groups of people, one searching the extreme environment in the name of science, the other escaping the newly generated extreme environment in the name of surviving. It explores the potential of how the technologies developed by the space explorers and their psychological strategies (like the power of the mission, or to to something pioneering for Human kind etc), could inform the disaster-displaced people to better survive in their home region and develop strategies through local cultivation to countermeasure the eects of global warming. The paper will present a synoptic overview of similarities in the two situations and suggest models for technology transfer from space science to development of sustainable technology on Earth and probably vice-versa (construction materials, local focus), supporting populations in extreme environment created by climate change

Keywords: Space architecture space psychology Climate change climate refugees technology transfer countermeasures survival in desserts