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Planetary Defense from Asteroids and Comets (1)

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UNDERSTANDING THE SOCIAL-ANTHROPOLOGICAL ASPECTS OF AN ASTEROID IMPACT
THREAT RESPONSE FROM TRANSDISCIPLINARY LESSONS LEARNED IN NATURAL
DISASTER MANAGEMENT

Abstract

To design adaptative disaster response protocols to protect populations of an asteroid impact threat is to understand the various risks these populations will have to face. The meaning and definition of these “risks” will however depend on who defines them as there are as many perceptions as there are cultures, social practices and individuals. They will also depend on the set of social circumstances and judgments considered, as well as how such risks will be communicated to a set population. Thus, space risk acceptability will greatly vary in range, depending on the population possibly impacted. Consequently, to design proper disaster response methods, one must take into account the nature and needs of the impacted populations. To do so, it is essential to learn from other natural disaster management plans and how they adapted to the populations they served.

This presentation will explore the lessons learned from socio-anthropology of natural disaster management and how they can be applied to the newly developed field of Planetary Defense Management. Two main axes will be presented : 1) Understanding the societal aspects of an Asteroid Impact Threat and the lessons learned from natural disaster response teams and 2) Making sense of disasters, catastrophes and perceptions through socio-anthropology. The goal will ultimately be to explain how social sciences such as socio-anthropology can inform scientific space threat management structures such as those of Planetary Defense by shedding light on key specificities to take into account in order to best support the populations they aim to protect during a disaster response.