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LEGAL AND ETHICAL FRAMEWORK FOR ROBOTS AND AI - USING SPACE SETTLEMENTS AS  
A CASE STUDY

**Abstract**

Will robots and AI ever be capable of having rights? What will the liability regime for machines look like? Those questions remain unanswered today despite the recent surge of international interest. While robots can be defined as programmable machines that interact with their environment either autonomously or semi-autonomously; AI on the other hand does not benefit yet from a global common definition. This absence leaves much latitude for people to either fall into either a dystopian or utopian vision of what robots and AI imply for their future.

Taking that into account, this paper aims to take a different approach to what has already been written on the topic: instead of starting from Earth, the space colonies will be taken as a case-study to see exactly how robots, AI and humans interact with each other. This space-based perspective has the advantage of taking place in a constantly monitored environment which is a non negligible quality considering the unpredictability of machines. It also allows to create an international cooperation on AI and the law thanks to the very nature of space colonies, which would lead to the build the most objective and inclusive legal and ethical framework possible for Earth. Finally, this unusual approach provides an opportunity to create an outreach program on AI for the general public thanks to the expected mediatization of the colonies.

Hence, the main objective of this paper is to provide two simple, yet critical, recommendations to enable a legal and ethical awakening: 1. Education and knowledge: currently robots and AI are at the heart of all fantasies whether they are positive or negative, but only a few people actually know and understand fully this topic. The rest is speculation and science-fiction. A real educational program on robots and AI would enable the public to better apprehend their actual impact on society. 2. International cooperation: AI does not care about borders and without a cooperation there is a risk of a multispeed legal and ethical regime around the world. A mission such as the space colonies could be the perfect occasion for major actors to collaborate on AI and find a common ground.

It is not too late to create a regime for robots and AI. In fact, the timing might be perfect to start actively working on implementing it, but the policy-makers and the legislators must act now, or they might miss the boat.