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Strategies for Rapid Implementation of Interstellar Missions: Precursors and Beyond (4)

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TECHNOLOGIES EVOLUTION FOR INTERSTELLAR TRAVEL CAPABILITY

Abstract

Interstellar Travel is generally connected to important breakthroughs in propulsion systems to allow fraction of light speed requirements needed for the trips being the main subject. In reality all human Technologies will be highly affected , from conventional ones such as health care to food production, power generation, manufacturing, to new space related ones such as asteroid deflection and mining, mineral processing in space, new materials utilization, space architecture and others. Interstellar Travel is not only about the travel itself but mostly about what may happen afterwards, about creating new worlds for humanity in far away exoplanets some hostile for us, how to deal with potential alien societies , how to create viable economies with all new technologies and concepts. Interstellar Travel will generate a technological singularity due to its several and unpredictable implications in our Society. In accordance with the Sapientia (knowledge) scale , also presented here, a progress classification system based on knowledge that consider four parameters: human body, territory, environment and technology, by the time of IT capability,the development of other technologies could change the entire picture. Maybe due to progress in technology and human body we could even avoid sending humans but mind uploaded artificial machines even advanced AI files at light speed. Future humans would be quite different from us, with implanted systems, connection to the web, disease free with much longer lifespans, gene engineered for near perfection , superinteligents due to reverse mind uploading and other features . Knowledge about interstellar space will be widespread, dark energy and matter would be utilized for their properties milky way and galaxy mapping would tell us about other potential worlds similar to Earth or other with potential alien life, planetary engineering would be a college subject. Our advanced Society will have to deal with such events, create a code of ethics in dealing with aliens and interfering in exoplanetary bodies. In this paper we want to explore such future culture and environment with the goal of its relationship with Interstellar Travel capabilities and its implications.