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UNIVERSITÀ
DEGLI STUDI
DI URBINO
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Area Umanistica
Dipartimento
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Storia, Culture, Lingue, Letterature, Arti, Media (DISCU)



THE MARS SOCIETY

Exporting Economy on the Red Planet: or, the Anthropocene Reloaded

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Università degli Studi di Urbino



THE «3 Es»

- 1 – Ethics
- 2 – Ecology
- 3 – Economy



TERRAFORMING

(Literally, "Earth-shaping") of a planet, moon, or other body is the hypothetical process of deliberately modifying its atmosphere, temperature, surface topography or ecology to be similar to the environment of Earth to make it habitable by Earth-like life.

[wikipedia.org](https://www.wikipedia.org)

Terraforming is the process whereby a hostile environment (i.e. a planet that is too cold, too hot, and/or has an unbreathable atmosphere) is altered in order to be suitable for human life. This could involve modifying the temperature, atmosphere, surface topography, ecology – or all of the above – in order to make a planet or moon more “Earth-like” [...] The term was coined by Jack Williamson, an American science fiction writer [...] in 1943.

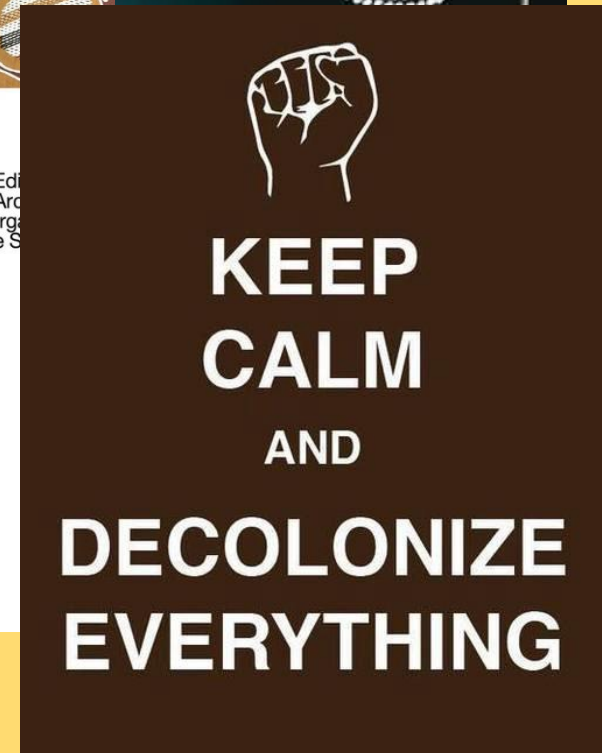
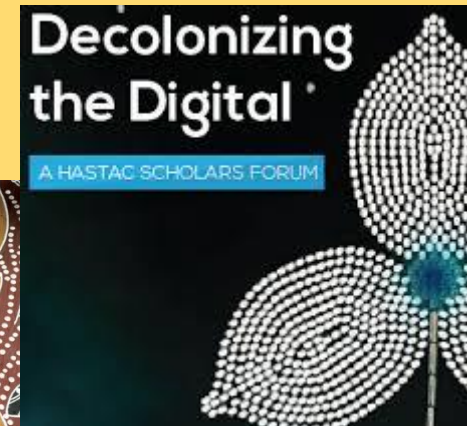
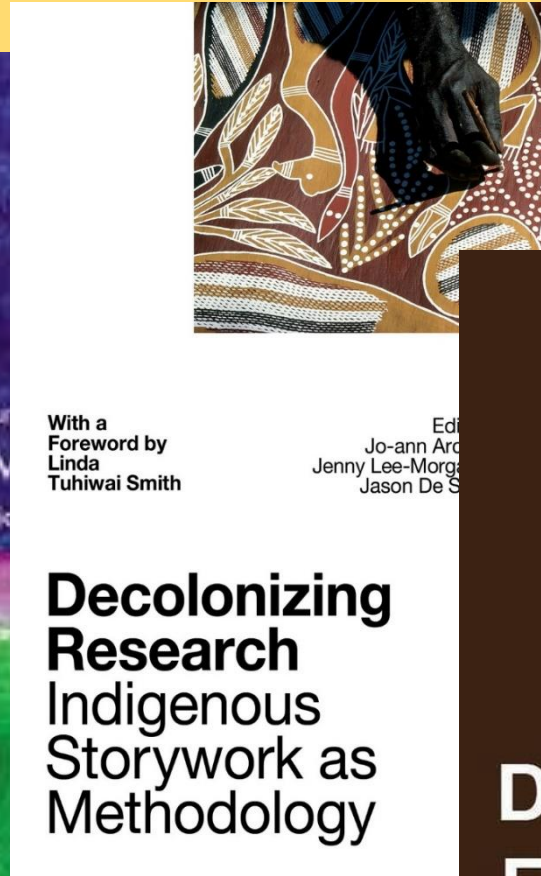
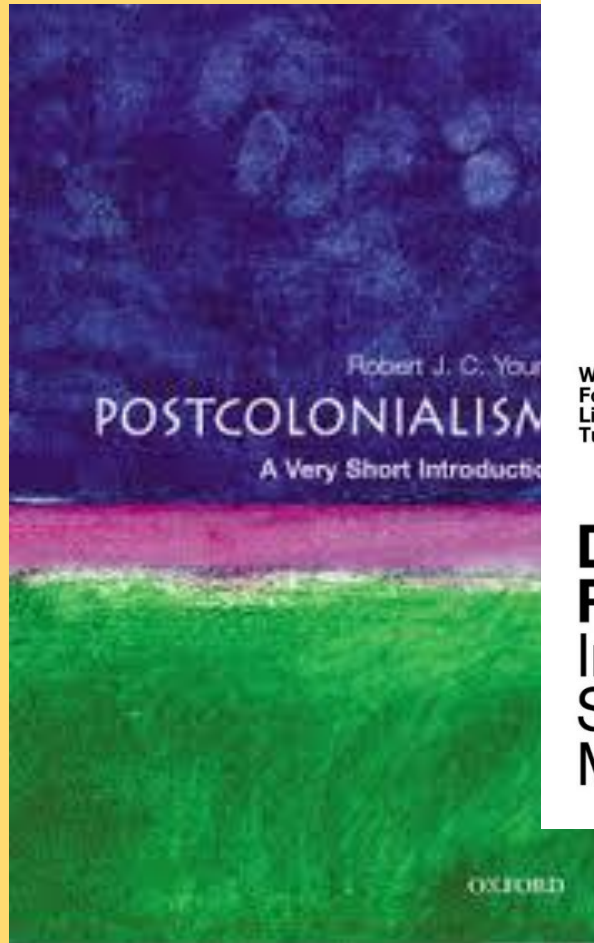
<https://www.universetoday.com/127311/guide-to-terraforming/>

TRANSPLANTATION

They brought along with them their national genius [...] whence came all these people? they are a mixture of English, Scotch, Irish, French, Dutch, Germans, and Swedes. From this promiscuous breed, that race now called Americans have arisen. [...] urged by a variety of motives, here they came. Every thing has tended to regenerate them; new laws, a new mode of living, a new social system; here they are become men: in Europe they were as so many useless plants, wanting vegetative mould, and refreshing showers; they withered, and were mowed down by want, hunger, and war; but now by the power of transplantation, like all other plants they have taken root and flourished! [...] What then is the American, this new man? [...] He is an American, who, leaving behind him all his ancient prejudices and manners, receives new ones from the new mode of life he has embraced, the new government he obeys, and the new rank he holds. He becomes an American by being received in the broad lap of our great Alma Mater. Here individuals of all nations are melted into a new race of men [...]

Hector St. John de Crèvecoeur, “Letter III”, in *Letters from an American Farmer*, 1782, https://avalon.law.yale.edu/18th_century/letter_03.asp

COLONIZATION ... POST-COLONIALISM... DE-COLONIZATION...



Colonization = the grandest of all narratives (Said)

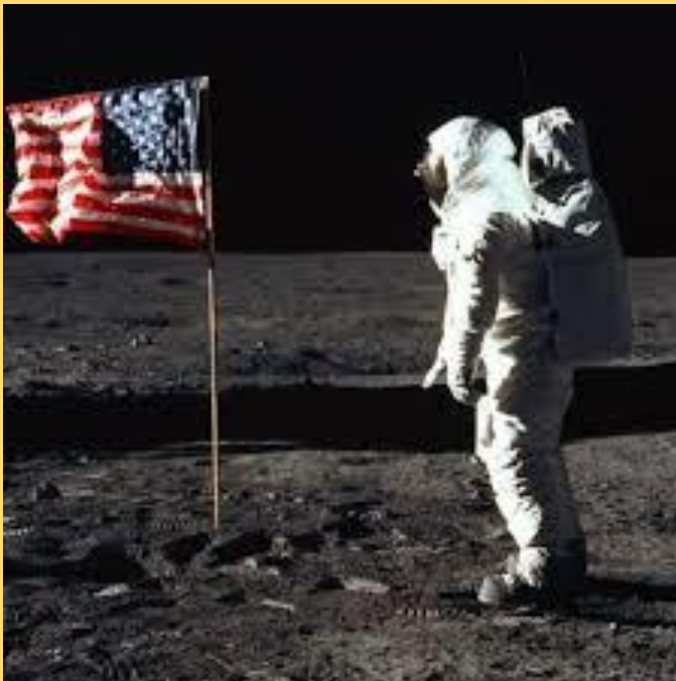
As Stephen Ganyard said on May 30, 2020, the SpaceX Falcon 9 launch of that day underlines the importance for “the US to be back in space” and “in a broader context, what it means for human kind to be able to go out and **truly colonize** ...to bring in this golden age of space exploration these guys are laying the foundations for”.

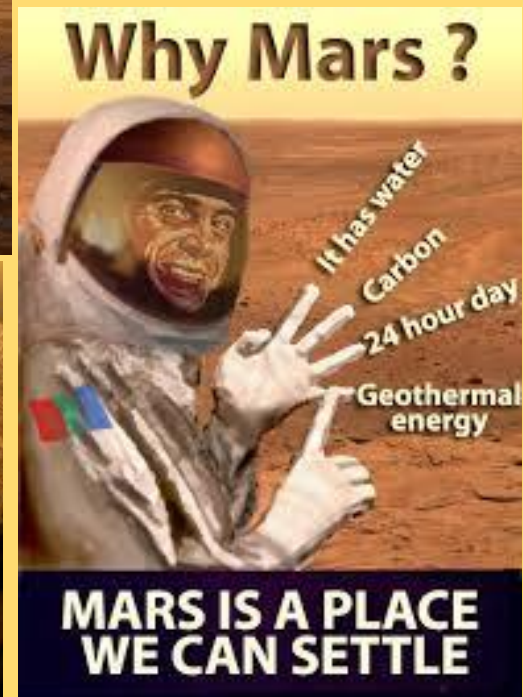
<https://www.sciencedirect.com/science/article/abs/pii/S016073831930129X>

June 15, 1960 - NEW FRONTIER SPEECH

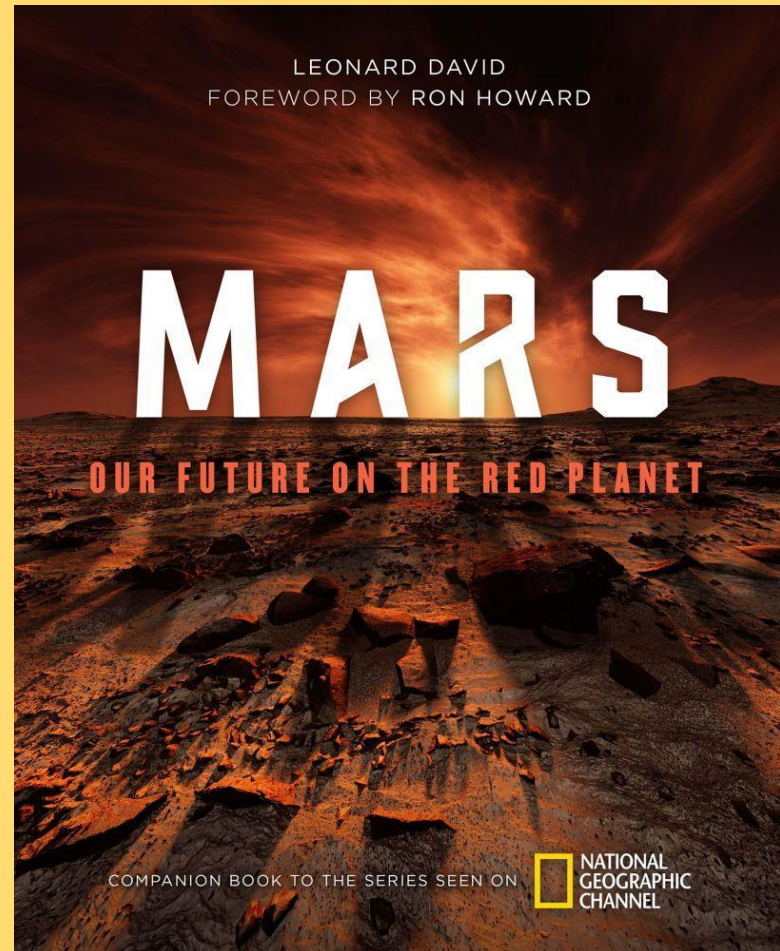
July 20, 1969 – MOON LANDING

New millennium – RUSH TO MARS BEGINS





... A TV SERIES OR
A PROJECT?

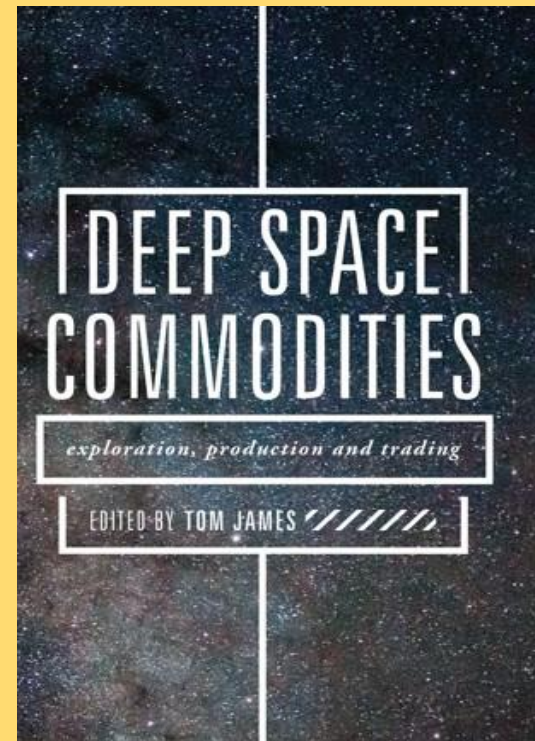
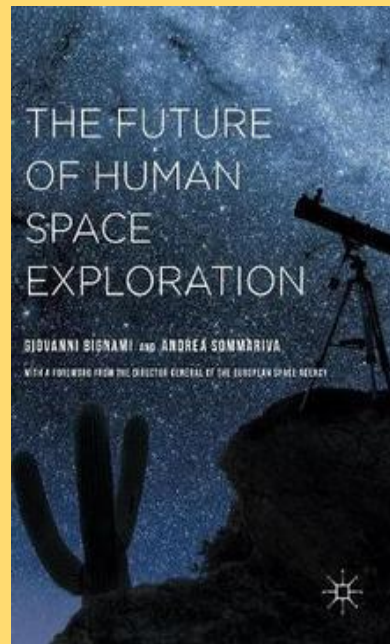
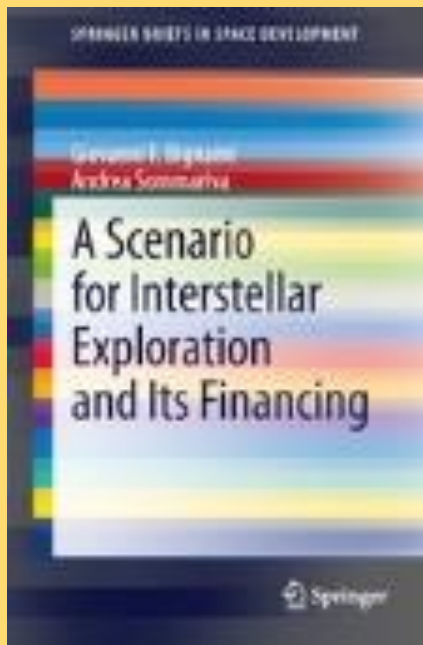




Elon Musk

Outer Space Treaty - 1967
(Treaty on Principles Governing the Activities of
States in the Exploration and Use of Outer Space,
including the Moon and Other Celestial Bodies)

*... the outer space is not subject
to national appropriation by claim
of sovereignty, by means of use or
occupation, or by any other
means...*

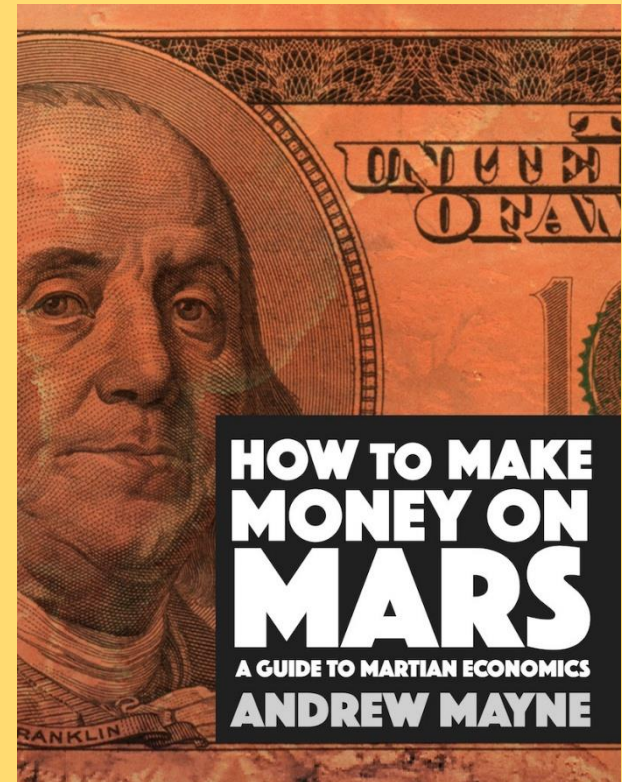


Bignami and
Sommariva
2013, 2016 &
2015

Robert Zubrin 2018



2017



2016

“Making Green on the Red Planet: How Might We Build an Economy on Mars?”

by Matthew S. Williams 2019

“In the coming decades, space agencies and private ventures want to begin sending humans to Mars. Some of these organizations are actively planning on establishing the first human settlement there.

With all this planning, it's fair to say that the idea of colonizing Mars may be moving from the realm of science fiction into the realm of true possibility. However, this also raises all kinds of issues, which go far beyond the usual technical hurdles and cost assessments.

There are also valid questions about whether or not humans could survive on Mars in the long-term. And there are ethical questions concerning how humans might transform Mars' environment - not just through full-scale terraforming, but through any and all alterations to the Martian landscape. [...]

Putting aside the many ugly aspects of that phase in our history (i.e., conquest, genocide, and slavery), which are in any case **not likely** to be replicated on Mars, there is a clear logic to this approach.” [...]

“As for this city's **economy**, Musk has had some thoughts on that as well. He agrees that mining and an **export economy** would not be viable within the immediate future. As such, a **Martian economy** would be largely based around the purchase of the real estate.

The key to this is to **make moving to Mars attractive**.

(Williams 2019)

.....Essentially, the challenge of living on Mars, combined with the freedom of opportunity, would turn a Martian colony into ‘a pressure cooker for invention’..

.....We should be looking to build an economy “from the ground up”.

(Williams 2019)

In a 2018 study by Matthew Weinzierl, a professor at Harvard Business School, titled “Space, the Final Economic Frontier”, we read that colonists should be able “**to build a local economy and political/social systems from scratch** [...] After all, it will be our best chance in human history to create and study economic societies from a (nearly) blank slate”...

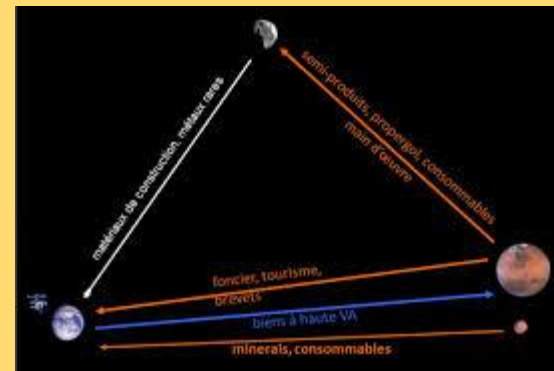
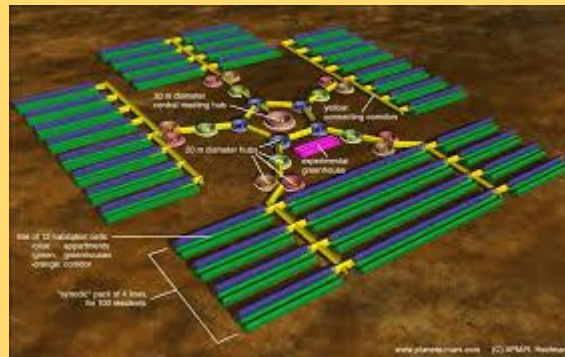
.....This would likely lead to the development of a true interplanetary economy and the end of scarcity as we know it.
(Williams 2019)

.....“Mars shows man the final frontier of circular economy”.
(Milne 2019)



THE MARS SOCIETY

www.marsociety.org



www.planete-mars.com

An economic model for a Martian colony

**“An Economic Analysis of Mars Exploration and
Colonization Clayton”** by Clayton Knappenberger
(DePauw University 2015)

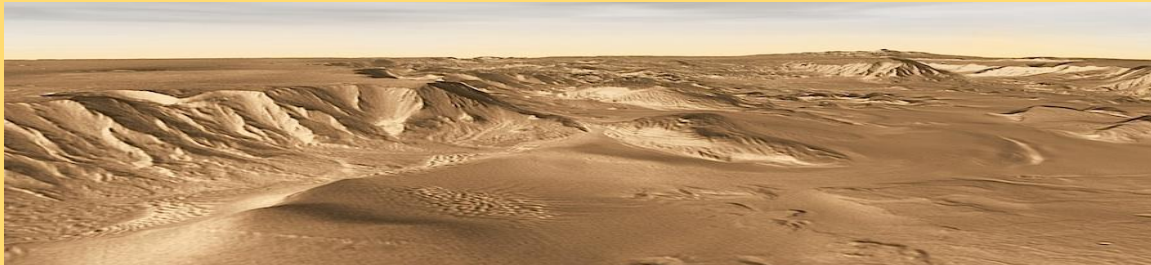


English 369

Red Mirror: Mars Literature and Film

Instructors:

Dr. Paul Cook Prof. Peter Goggin Prof. Joe Lockard



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<<https://www.goodreads.com/book/show/32468751-how-to-make-money-on-mars>>

<<https://www.sciencedirect.com/science/article/abs/pii/S016073831930129X>>

<<https://businessnes.com/how-to-earn-on-colonization-of-mars/>>

