

KEYNOTE

Homo sapiens extraterrestris: Man Is the Man in Space

by Helga Zepp-LaRouche

July 20—Ladies and gentlemen, dear friends of the Schiller Institute, today we celebrate a very joyous moment, the 50th anniversary of the first Moon landing. This is a truly universal event, an event which unites all of humanity. In 1969, 500 million people watched that Moon landing. It caused incredible inspiration and excitement at the time. You can be sure that today, when communication is so much better, where already in the last several weeks, there were millions of people watching programs from the past, documentaries, so it will again be hundreds of millions of people, who will unite and celebrate this incredible event. In 1969, it was every seventh human being on the planet [who watched the Moon landing].



Helga Zepp-LaRouche EIRNS

The reason space exploration is so absolutely important is because it has everything to do with mankind's identity. As my late, beloved husband Lyndon LaRouche said, space travel is the proof that the humans are not Earthlings; we are spacefaring, we all have the divine spark of reason which makes sure that each of us is capable of limitless self-perfection to study and discover, ever better, the laws of the physical universe. Or, as our dear friend, the great space pioneer Krafft Ehrlicke said, it's the

Homo sapiens extraterrestris; Man is the man in space.

The Extraterrestrial Imperative

The joyous thing is that today, after five decades of a hiatus, of cutting back in funding for NASA, and the very poor funding of the European Space Agency, the perspective of the industrialization of the Moon and a colony on Mars is fully back on the agenda. President Trump announced the United States will put a man and a woman on the Moon by 2024.

The Chinese, for the occasion of this 50th anniversary, just re-activated their *Chang'e-4* lunar mission rover and *Yutu-2* lander on the far side of the Moon.

Today, also postponed until this date, a *Soyuz MS-13* launcher has lifted off from the Baikonur Cosmodrome in Kazakhstan, carrying a Russian, an American, and an Italian to go to the International Space Station for the next period. The Italian—Luca Parmitano—will be commander on the ISS in the second part of this mission. He said, “What we do on the ISS is for the Earth, it's for all of humanity.”



White House/Shealah Craighead

NASA Administrator Jim Bridenstine briefs President Trump and Vice President Pence on the Moon-Mars mission, at the commemoration of the 50th anniversary of the Apollo 11 Moon Landing, in the Oval Office at the White House on July 19, 2019.

Also for this occasion, the Indian *Chandrayaan-2* mission to the South Pole of the Moon, which will investigate the ice in the craters of the South Pole on the Moon, was slightly postponed, but it's supposed to land on the Moon in September.

Also from Russia, Dmitry Rogozin, the head of Roscosmos, sent his congratulations to NASA head Jim Bridenstine, praising the three original NASA astronauts—Neil Armstrong, Buzz Aldrin, and Michael Collins—and all the great space pioneers before them, because they “dared to set off on a journey to the unknown in order to push the boundaries of the reachable world for all of humanity.”

If one thinks about the vastness of the universe, what is known so far through the pictures of the Hubble Space Telescope, is that there are at least two *trillion* galaxies. Recently, the proof was found that Einstein's assumption about gravitational waves is, indeed, the reality. And also that it has now been proven that Einstein's assumption that black holes indeed are at the center of each galaxy, which means we are living in a relativistic universe. It is very clear, and this last example is the final proof if you needed one, because the imaging of the horizons of these black holes could only be accomplished because eight countries from across the globe put their radio telescopes together, to be able to make such an image.

The most important message, therefore, is that space research and travel require international cooperation, cooperation and not confrontation. Therefore, we should not be involved in a “race” to the Moon or “race” to Mars. This is the unique chance for progress beyond the geopolitical competition among countries. We have to look at the future in space from the standpoint of the common interest of all of humanity.

There are several reasons for the absolute necessity of space research and travel and colonization. From the negative side,—well, one single large asteroid would be enough to eliminate all of civilization and everything beautiful mankind has ever produced, from the

great dramas of Shakespeare to the great compositions of Beethoven. Therefore, we need the Strategic Defense of Earth, the international cooperation of all nations.

But the positive side is that if you look at the long arc of human evolution, how man—in a relatively short period of time, compared with the years of the universe—has developed from a cave dweller using stone axes to kill his fellow man, to the kind of reasonable international cooperation which we have seen on the ISS for a long time. It is in international

cooperation in space—which is also therefore the next phase in the evolution of mankind,—where we as the human species develop from rowdy teenagers to beautiful souls in the sense of Friedrich Schiller, that freedom and necessity, duty and passion, are one and the same thing. Or as Krafft Ehrlicke said, man is guided by the extraterrestrial imperative.

The True Image of Man

Now, space research and travel, and colonization, has everything to do with the image of man and the cultural optimism which is the basis for his creativity and true freedom. It is the

most powerful proof that we are not living in an Earth-bound system, with limited resources. This idea of an Earth-bound system is the entire basis for the existence of the so-called ecology movement, which recently has turned into an extinction hysteria movement, causing complete cultural pessimism and despair.

Let's look back to 90 years ago. In 1929, the German film director Fritz Lang made this incredible movie, *Frau im Mond* (*The Woman in the Moon*), which was a beautiful, polemical argument against all backwardness and anti-technological sentiment. The scientific advisor of this film was Hermann Oberth, one of the outstanding pioneers of rocketry, and space and astronautics. This movie was the inspiration of many of the space pioneers to follow. One of them was the outstanding Krafft Ehrlicke, who himself





NASA

Apollo 11 astronauts (left to right): Neil A. Armstrong, Commander; Michael Collins, Command Module Pilot; and Edwin E. "Buzz" Aldrin, Lunar Module Pilot. May 1969.

became an important contributor to the Atlas rocket. He was the director of the Centaur program, which delivered the first rocket stage to fly using liquid hydrogen and liquid oxygen as propellants. Already in the 1950s and 1960s, he developed an incredibly far-sighted vision of the Moon as the stepping-stone to the colonization of Mars, and then finally, the entire Solar System.

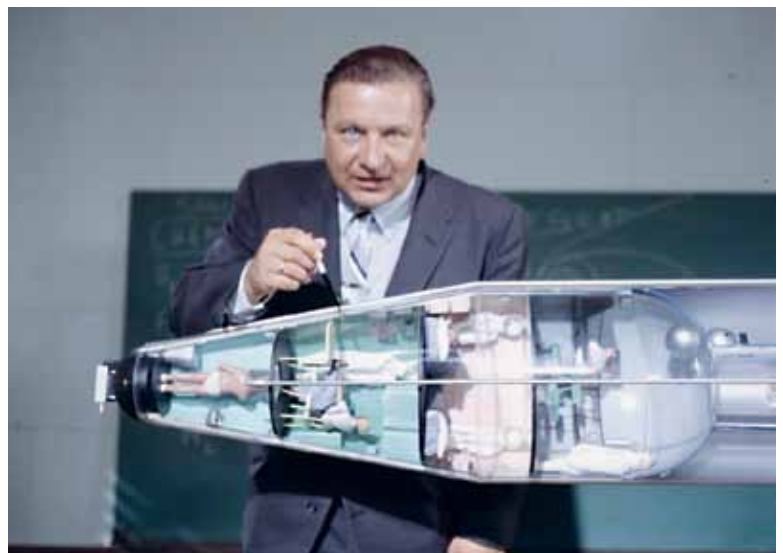
Forty years after *The Woman in the Moon*, the event took place which we celebrate today—the landing of Apollo 11 on the Moon, which indeed marked a great leap for mankind. But interestingly, yesterday, Mike Collins—the astronaut who did not get to walk on the Moon, but remained in the Apollo 11 command module in lunar orbit—made the point that for him, an even bigger turning point was the flight of Apollo 8, in which for the first time a human being had completely escaped Earth’s gravity into space. This is something worth reflecting on, because the fact that man was able to leave the surface of the Earth and get out into space, is not a self-evident question. Already that is the absolute proof that we are not living in an Earth-bound system.

The Oligarchy Strikes Back

That first human being walking on the Moon caused, at the time in 1969, a great explosion of optimism throughout the world. But it was also very clear that the international oligarchy was not amused, because their power is based on the idea that the masses of population must think of themselves as underlings, pessimistic about their future. So already in 1964, various studies and polls started to investigate “the impact of space programs” on the different sections of the population.

One famous such report originally under the direction of Robert N. Rapaport, an anthropologist from Northwestern University and the Committee on Space, was “Second-Order Consequences: A Methodological Essay on the Impact of Technology.” Rapaport’s thesis was that the space program had produced a dangerous outbreak of cultural optimism—the belief that creative scientific thinking could solve any problem on the planet.

The oligarchy immediately launched the Club of Rome against this optimism, and their fraudulent book, *Limits to Growth*, with the idea that man is bound by the Earth, that resources are limited, and we have to go into a zero-growth mode. At the same time, Harris and Gallup produced polls supposedly showing that Americans opposed the continued expenditures of



SDASM/Atlas Collection

Krafft Ehricke with a model of the Atlas Manned Space Station in 1958.



Lyndon LaRouche addressing the Krafft Ehrlicke Memorial Conference in Reston, Virginia on June 16, 1985.

manned space flight. These polls influenced the election campaign between 1970 and 1972. The scaling back of the funding of the space program became an election issue.

That all led to a relative standstill, at least concerning the American space program. In June of 1985 the Fusion Energy Foundation and the Schiller Institute co-sponsored a [Memorial Conference](#) in honor of Krafft Ehrlicke, who had just passed away, who had become in the meantime a very close friend and collaborator of the Schiller Institute. My husband and some of the conference participants discussed picking up on Krafft Ehrlicke's idea of a permanent colony on Mars, which Lyndon LaRouche then presented in an absolutely incredible [movie](#) 1988. This conference began with the beautiful opening minutes of that movie, *The Woman on Mars*. The script was first drafted in 1987. One year later, after the Krafft Ehrlicke Memorial Conference, the National Commission on Space adopted a plan to develop a decade-long program for the colonization of Mars, which was then endorsed by President Reagan.

Lyndon LaRouche said that the Mars colonization project would—and this was a hopeful prediction—would be part of the State of the Union address of the next President of the United States in 1989. But as it turned out, it was George Bush, Sr. who was that President, so no such thing occurred. Instead, Bush was very

instrumental in not only putting Lyndon LaRouche in jail, but with him, the entire body of ideas he represented.

A Colony on Mars

Lyndon LaRouche developed in many writings including *The Woman on Mars*, the beautiful vision of having a colony on Mars by 2027. He also said, had the NASA program after the Apollo landing not been scaled down, a colony on the Moon would have been possible by 1986. Then he defined the next 40-year perspective of how to step-by-step get the necessary breakthroughs for this plan.

That perspective required a breakthrough in thermonuclear fusion, because to get to the Moon takes three days, but by conventional means, to get to Mars is eight months, which the human body cannot withstand. To decrease the travel time to a manageable limit, requires continuous acceleration until the halfway point of the journey, and then continuous deceleration for the second part. It requires a breakthrough in lasers and other directed electromagnetic pulses as a basic tool; the development of optical biophysics and more powerful computer systems; higher energy-density on Mars itself for terraforming; the creation of domes; an artificial atmosphere; and the second generation for thermonuclear fusion.

He outlined six phases: the industrialization of the Moon; self-sustaining supplies of foodstuffs and materials from the Moon; agricultural and industrial development; linked satellites in the orbit around Mars; a complete astrophysical observation complex; a Mars orbit space terminal for delivery of materials for the construction of a permanent habitation on the surface of Mars.

Lyndon LaRouche was thinking two to three generations ahead, with the idea that this project would require eventually tens of thousands of scientists and engineers to build such a colony. And eventually, to build colonies on the scale of important cities on Earth, millions of people.

News Science

China builds Mars base in Gobi desert to show citizens future in space



That is, in principle, where we are now—what President Trump has announced to soon raise the American flag on Mars. He also promised international cooperation. This is what China is about to launch next year, testing if terraforming is possible on Mars. The Chinese already have a model of this Mars colony in the Gobi Desert, where the Chinese astronauts had “landed.” It’s called the Mars Base #1. It’s a model space station which has living quarters, recycling, growing of plants for food. Nearby training centers are being erected, and hotels, because Chinese young people are tremendously excited about this and about getting involved in space research and travel.

The Great Optimism in Space Collaboration

Lyndon LaRouche had a vision of international space cooperation; it develops the spark of reason, like no other activity, the idea that each

useful idea is for the benefit of all of humanity. He also was absolutely optimistic about the idea that space travel increases goodness in people and improves moral character. Krafft Ehricke was so fond of the Schiller Institute, because he recognized that aesthetic education was absolutely crucial to accompany technological and scientific progress for the ennoblement of the human being. In numerous writings, Lyndon LaRouche was very optimistic that through space, the moral development and intellectual development of our grandchildren and great-grandchildren would be of a much better quality than the people living today. It is only through the colonization of the Moon, Mars, the Solar System, that man can become an im-

mortal species.

There are two important lessons from the last 50 or even 90 years of space research and development. First, we absolutely must have the sufficient continuous fund-

ing to never have again such setbacks as we have experienced over the last 40 years. And, we must absolutely have a united space alliance, international cooperation, and overcome confrontation forever.

Let us take this moment to celebrate the optimistic image of mankind, the only creative species known to us in the universe so far; that it is our task to multiply and subdue—no, not the Earth—but the entire Solar System, and maybe beyond. Why should we do that? Because we are human: We have in us an innate goodness, a capacity for agapē, and all the evil in the world is only the result of a lack of development, which we will remedy through space travel. Thank you.



White House/Andrea Hanks

Apollo 11 astronaut Michael Collins shakes hands with President Trump in the Oval Office of the White House on July 19, 2019.