Space-4 All 18th SDG : Volodia Ring and Artificial Planets to meet the Sustainable Development Goals 2030 Agenda

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Abstract : Small artificial planets constructed using materials from the asteroids and energy from the Sun are an upcoming reality. They can be built cooperatively by the industrial military establishment of the world for the successful sustainable development of Planet Earth.

Keywords : Asteroids, Artificial Planets, United Nations, Sustainable Development Goals, Apollo-Soyuz

It's a long Story

More than 13 billion years ago, there was a big bang, and there was light, and the energy turned into particles and atoms, and there were stars that lived and died, and from the ashes of the defunct stars, new stars were borne, and so on and so on, and a long time after, in our corner of the galaxies, a small star was born, and it was our Sun. It was made of hydrogen and already many other things. It was burning hot, and boiling and throwing out smoke and ashes of a great variety of very thin particles that due to something called gravity were accreting together to form dust and pebbles, and rather big things that we call asteroids.

Now that we can count them, we estimate there are more than one million asteroids larger than one kilometer orbiting around the Sun, and by the way, I did not explain who is "we". That is not a simple question, but let's try. It just happened, that's evolution, that when enough asteroids had pulled together, the heat produced made them melt into balls and form what we call planets. On the third one from the Sun, by chance there was also water which makes it easier for things to move, and some molecules found the nice trick to form a pouch with a double lining to select what was coming in and out, and this was a cell, three and half billion years ago, it was LUCA, our Last Universal Common Ancestor.

Another plenty of adventures and a few dinosaurs later, some of the most successful mixtures of molecules and cells made their ways around Mother Earth until some of them found a better way to continue growing and feeding themselves by planting rather than hunting, and this was eventually the birth of modern mankind.

Advanced societies invented language, mathematics, technology and Industry and they filled the Earth. We have now crises with too many people, depleting the fossil energy resources and rare hard to find minerals.

The situation of life on the surface of planet Earth today is comparable to the situation of the chicken in the egg with no more space and no more food after twenty-one days of incubation. Just before hatching.

To be AND not to be

In 1957, Vladimir Syromiatnikov worked with Serguei Korolev to launch Sputnik-1, the first artificial satellite of the Earth. In 1961 Youri Gagarine was the first human to escape gravity and circle round the mother planet. In 1969, Neil Armstrong was the first astronaut to walk on the Moon, making a big step for Mankind.

In 1975, Gerry O'Neill wrote a popular book about the High Frontier and the possibility for the Earthlings to leave the home planet and settle into the Solar System, and visionaries like Jeff Bezos, Elon Musk or Richard Branson began working for making this dream into a reality of our time. There are estimations that by the end of the 21st century, humans can develop settlements in the Earth-Moon environment for millions of people with livable space extending a thousand time the inhabitable surface of the home planet.

On 15th September 2023, a futuristic organization called Space Renaissance and a number of world space organizations presented the United Nations with a proposal for an 18th Sustainable Development Goal to help Planet Earth to meet its major challenges by the year 2030, and Guy Pignolet, Ambassador for Reunion Island, presented a proposal to develop a first artificial planet before the end of the decade, for 10,000 inhabitants and workers at a Lagrange point, close to the Earth and the Moon, to manufacture orbital Space Power Plants and develop new artificial planets. This is the Volodia Ring Project, developed by a group of young engineers who think that with proper international cooperation, it may be built before the year 2030.

Fig.1 – Guy Pignolet, of Reunion Island, presenting the Volodia Ring concept at the United Nations, 15/09/2023

Technically, the Volodia ring, is related to the Stanford Torus concept, with a 2-km overall diameter, and a diameter of 150 meters for the main tube. That size compares with large aircraft carriers or large cruise ships that are currently built for the tourist industry.

When in 1961 President John Kennedy proposed the Apollo project, he said it would be done in less than ten years, and that challenge was met, at a time when the digital economy did not exist, and when artificial intelligence was just a science-fiction dream. Today, we have the tools.

The industries that have the capability to build the Volodia Ring are the major military industries who mostly manufacture war material for extended destruction international activities. But it needs not to be so. For long decades, for instance, France and Germany have been deadly fighting each other, and they are now fruitfully cooperating together within the European Union.

We could also mention the GOBBSS experiment sponsored by the Planetary Society, built and flown in space in 2003 on board of the ill-fated Columbia STS-107 flight by Israeli and Palestinian students to demonstrate that peaceful cooperation was possible in space even when national governments were war-minded.

The name Volodia Ring derives from the familiar name of Vladimir Syromiatnikov who in 1975, at the times of the Cold War, had been the leader of the ASTP Apollo Soyuz Test Project for a shake-hands in orbit between Americans and Soviets. Later he was the adviser or the Sputnik-40-Years high-school satellite project, and he recognized himself as a Reunionese Engineer of Russian origin. When he died, to honor his memory, La Reunion made a monument named the “Gate of the Worlds”, to celebrate the great art of “living together”.

Fig.2 – Night illumination of the “Gate of the Worlds” monument to honor the memory of “Volodia” Syromiatnikov in Reunion Island
This symbolic representation of the APAS Apollo-Soyuz docking system is a call to make friends for peace and sustainable development

One of the main activities of the Volodia Ring artificial planet settlers might be the construction of Space Solar Power systems, a most promising solution to the world energy problems beyond fossil fuels that is currently considered by many countries in the world, including the laboratories at the University of Reunion.

Reunion Island is a singularity on the Blue Marble Planet, and because of its history, its geography and its exceptional culture, it is a world champion of diversity, which will facilitate the contribution of the Reunionese into the design of the Volodia Ring and other future space settlements.

Happy End is Possible

Especially since World War II, manufacturing war equipment and destruction tools has been a major source of profit for the military industrial business, but there is now a growing dissatisfaction among a majority of the people who live in our world, who suffer from this state of things and who fear runaway global disasters.

This is one of the reasons that led Space Renaissance International, the National Space Society, and almost one hundred space oriented organizations to call the attention of the United Nations to the importance of establishing rapidly space settlements to facilitate the realization of the Sustainable Development Goals for the 2030 Agenda.

Would the major companies of the industry military complex shift their activities from war to the development of “Space-4-All” and artificial planets, this would definitely change our world for the best, with little change to the economic organization of our world. No need to change the means, just change the goals !

If in 2024 arrangements can be made and starting in 2025 American, Russian, Ukrainian, European, Chinese, Iranian, Israeli, Palestinian, Arabic, Indian, South African, Brazilian, Japanese, Corean, etc, etc, businesses may cooperate and start working together for the construction of a Volodia Ring, by the year 2030 it may be completed and operational . . .

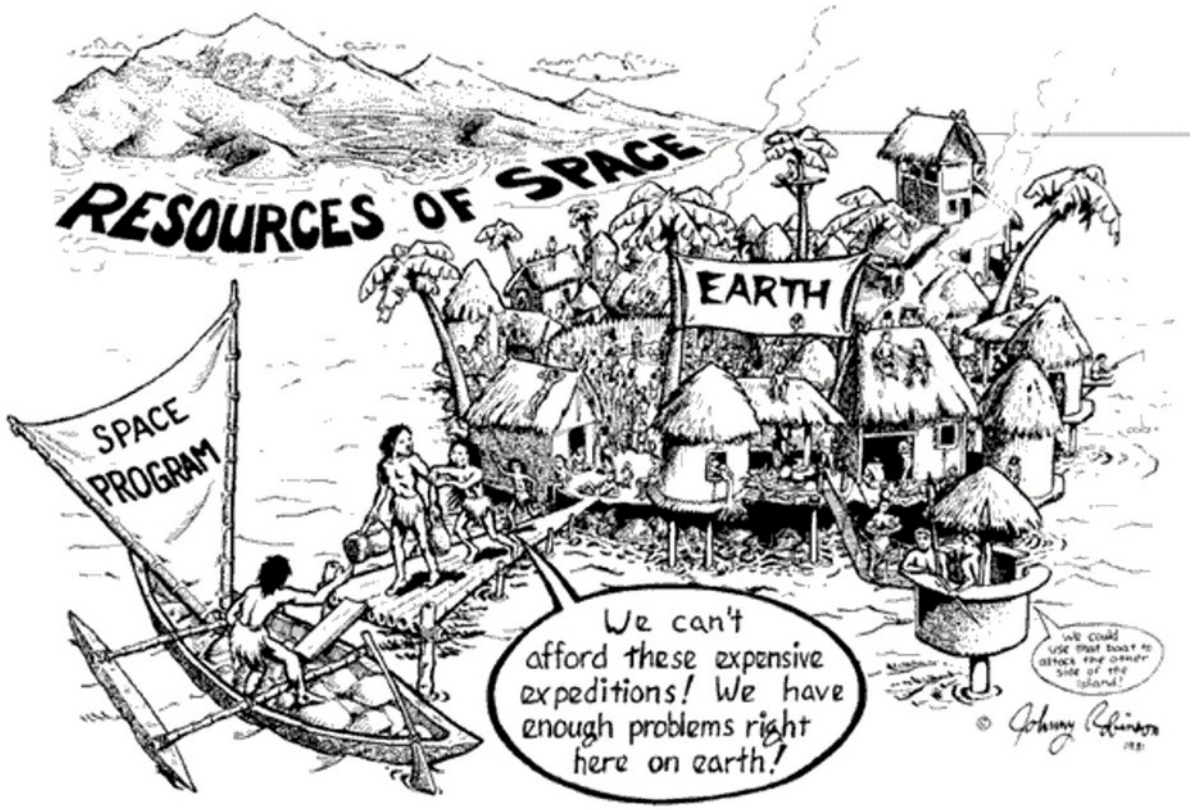

Fig.3 : L-5 Society illustration 1981 – The Resources of Space – Space Programs and problems right here on Earth
Caption on lower right corner says “We could use these boats to attack the other side of the island!

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References

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Wings of Fire, *an Autobiography of A.P.J. Abdul Kalam***, written by him and Arun Tiwari**

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Space4All, 18th SDG - - - Space Renaissance Initiative - - - https://spacerenaissance.space

"Space4All enhances the development of science, technology, peace, business, education, and inspiration for all citizens, and extending it on Earth and beyond is a key to our ecosystem survival, progress, responsible legacy, and space Renaissance for our future," says Bernard Foing, President of Space Renaissance International.

Alfred Anzaldúa, National Space Society (NSS), Board of Directors Member, NSS UN COPUOS Coordinator: "A Space 18th SDG would be a beacon to guide Earth-Life into space to help fulfill the 17 SDGs in the long-term. The Earth's resources are finite, while space and its resources are virtually infinite. Only by expanding human communities and their supporting life forms into space can we achieve *long-term sustainability* for humans and supporting life forms everywhere, including on Earth."

Adriano V. Autino, Founder of Space Renaissance International: "The five years from 2025 to 2030 could be the most critical period in human history, in which several social, economic, and environmental processes will come to a combined breaking point. Against the many bleak prospects, the only perspective capable of giving hope and psychological power to the good willing peoples of Planet Earth is to kick off expanding civilization into outer space, before 2030. This is the profound meaning of the Space 18th SDG."

Learn how to join the Space18thSDG coalition and support the proposal:

https://space18thsdg.space/

Follow the 15th September Panel on YouTube:

https://youtube.com/live/3dyrsT5jtaM

Sign the petition for #Space18SDG on Change.org:

https://www.change.org/space18sdg

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