

## **OVERVIEW**

- STATUS OF THE CIVILIZATION
- HUMAN NEEDS
- STATUS OF AWARENESS / WHAT TO DO
- TO FOUND A NEW RENAISSANCE
- THE 1500 RENAISSANCE
- THE NEW RENAISSANCE ACADEMY (?)

# ECNOLOGIE FRONTIERA

## STATUS OF CIVILIZATION

We assist to the continuous growth of symptoms, more and more evident, of the crisis of the closed world ideologies.

#### STATUS OF ECONOMY AND SOCIETY

- After the failure of the collectivist utopia, with the collapse of the eastern bureaucracies, we entered by now, if not the definitive failure, the likely worst crisis of the liberalist utopia.
- The development of China and India suddenly has to face the narrowness of the planet's material and energetic resources.
- The fanciful strategies of the speculative finance (sub-prime loans crisis), and the warmongering policy of the planetary powers, are making the globalized economy fall into a crisis compared, for intensity, to the 1929 great depression.
- Fuel prices keep on rising, leaving alone the one of the metallurgic raw materials and copper, feeding the inflation.
- The resource crisis is nowadays showing itself at the level of alimentary resources, whose price is constantly increasing.
- Wheat and rice, the traditional food stuff of the poorest populations, are scarce, and in Africa famine and hunger raise again their head with renewed violence.



### **HUMAN RIGHTS, ETHICS AND CULTURE**

- China violently clames rights of territorial dominion on Tibet.
- "Matter of life or death", stated the Chinese government, ready to sweep away an ancient spiritual and pacific culture the Tibetan Buddhism of which the world would have a great need.
- Slavery is sadly practiced in the heart of the so called advanced countries.
- 4 or 5 deaths on the job per day (in Italy) is an unbearable continuous holocaust.
- Violence against women and children is news of everyday.
- Old and new conflicts make thousands of casualties in the whole world, and war is still seen by the politic leaders as a "solution" or even a "resource" for economy.
- Culture is jeopardized by trash commercial productions in all the fields.
- Justice is jeopardized: criminals charge the judges, damaged people cannot claim their right the justice is loosen in thousand of guibbles and delays.
- The whole establishment seems aimed to educate the people to the idea of a huge holocatome.
- We demand quite another kind of education!
- We need an improvement of ethics and culture, not a worsening!

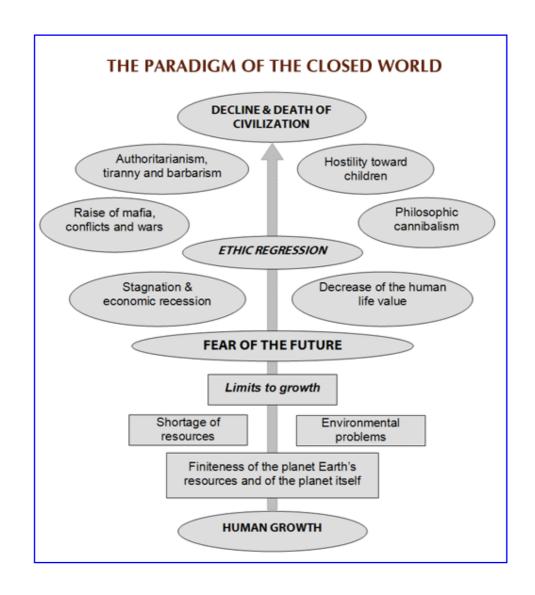


### PROSPECT OF CIVILIZATION

- Sticking on fighting for the possession of the more and more scarce resources of this planet, we can only fall into a continuous ruin, that will end with the end of our civilization!
- If the world remains closed:
  - Shortage of resources and energy will raise an increasing number of conflicts.
  - Authoritarian involution and regression to pre-democratic government models will be the normal agenda, both in post-industrial, pre-industrial and emerging countries alike.
  - Any aim to lighter governance models will be an unreachable dream.
  - Our civilization will collapse on itself, maybe before reaching 10 billion inhabitants.
  - The demographic collapse will cause a vertical fall of science and technology.
  - Illnesses, natural and environmental catastrophes will strike what will remain of human kind.
  - Humankind itself is at risk of extinction, not only civilization.
- If the world remains closed, it will look like a big jail, where our children will be prisoner since their birth.

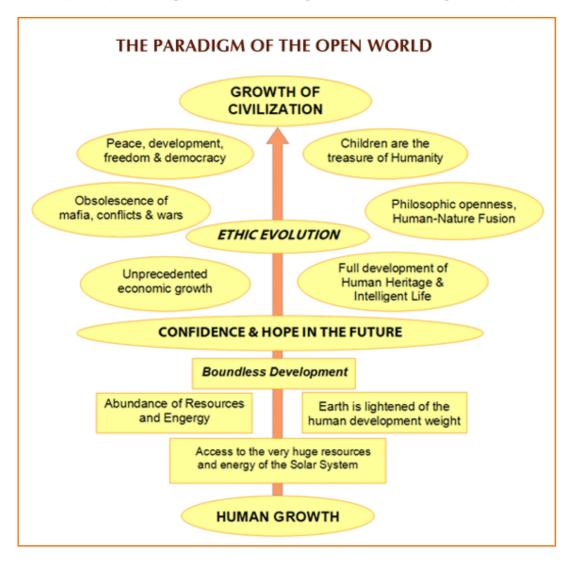


## THE PARADIGM OF THE CLOSED WORLD





### THE PARADIGM OF THE OPEN WORLD





## LADY EARTH IS GOING TO GIVE BIRTH?





## **HUMAN NEEDS**

- The world has an extreme need to finally deliver the XX Century' ideologies to history.
- A new vision of the world is extremely urgent, able to include at least the Moon and the Near Earth Asteroids
- The new dimension of development should finally allow to start the exploitment of the enormous energies and raw materials of the solar system.
- Only a space faring society will have the possibility to complete the long voyage, from the animal status to a full human status.
- A new, great, Renaissance is in our range!
- The decision is up to us, almost seven billion intelligent beings, which populate the third planet of the Solar System!
- The prize will be a really wealthy, fully inclusive society of free individuals and communities, where the famine and the underdevelopment will be only a chapter in the past history.



### STRIVING FOR FREEDOM

- When a new degree of freedom is identified, the risk is:
  - to start behaving as we were already free
  - but our ethics is slower than our thought
  - space and resources are limited
  - the experiment fails (something we learn, sometimes...)
- Freedom needs the acknowledgement of failures and mistakes
- Freedom needs wide space, abundant resources, ethics
- Ethics needs awareness, study, culture, evolution
- FREEDOM NEEDS PROJECTS, CULTURE, EVOLUTION

# TECNOLOGIE FRONTIERA

#### TECHNOLOGIES OF THE FRONTIER, SISTER ORGANIZATIONS AND FRIENDS

## WHAT TO DO? SOME POSSIBLE WAYS

- INFORMATION / OUTREACH APPROACH
- Keep on issuing web magazines based on voluntary effort
- holding international meetings every two years
- holding seminars on key topics every six mounths

POLITICAL / IDEOLOGICAL APPROACH



- Try to federate the pro-space organizations world wide
- Make a world wide movement, maybe a political party

ENTREPRENEURIAL APPROACH



Make a company, or a consortium, in the segment of space tourism technologies and/or commerce

CULTURAL / PHILOSOPHICAL APPROACH



- Promote education and studies on the open world and extraterrestrial expansion concepts
- Create an institute or academy
- Give birth to a foundation, in order to collect funds, and gain support to our cultural current
- To make a concrete global education programme

# TECNOLOGIE PRONTIERA

#### TECHNOLOGIES OF THE FRONTIER, SISTER ORGANIZATIONS AND FRIENDS

### INTERESTING TOPICS FOR STUDIES & OUTREACH

- Ehricke's Moon Industrialization studies
- O'Neill space engineering studies
- Space Option or Extraterrestrial Imperative
- Robert Pirsig: a new humanist
- Earth is not sick: she's Pregnant!
- Giacomo Leopardi: an astro-humanist in advance on his time
- Julian Simon: a paradigm of growth
- Maria Montessori: education for freedom and peace
- Ehricke, Pirsig, Wolfe, Darwin, Montessori: evolution and life industrialization
- Space Age Philosophy: Tsiolkowsky, Clarke, Harris, Asimov, Heinlein, Butler, Brunner
- Luigi De Marchi: the Human Cosmic Revolution
- The failure of Space Agencies to reduce the Cost to Orbit, Space Tourism (Collins)
- The Civil Aviation approach to Astronautics (Ashford, Collins)

## ECNOLOGIE FRONTIERA

#### TECHNOLOGIES OF THE FRONTIER, SISTER ORGANIZATIONS AND FRIENDS

## KRAFFT EHRICKE, GERARD O'NEILL, JULIAN SIMON

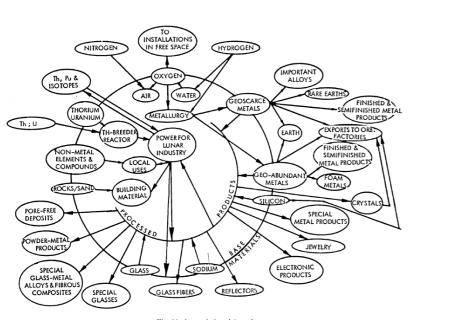
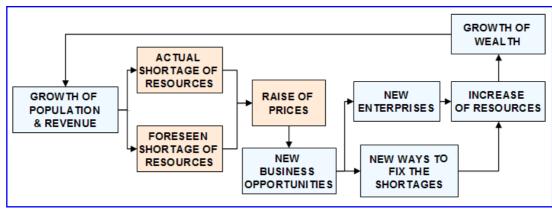




Fig. 11. Lunar industrial products.





## TO FOUND A NEW RENAISSANCE

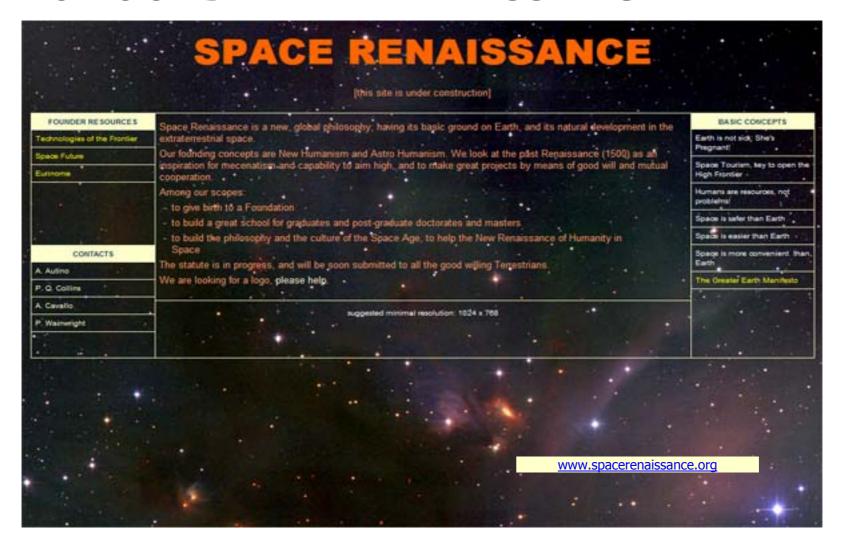
- Nowadays we have, in the world, some interesting and fertile sprouts of patronage (Diamandis and Maryniak, founders of the X-Prize, Paul Allen, minority partner of Microsoft, Google and others).
- Human civilization should finally exit the Middle Age of the flat self-targeted economism, giving a new impulse to the ethical and social growth of humans.

#### WHAT IS MISSING?

- The practical and technical approach of the modern patronage can seem essential at first sight, and exempted from "useless chatters".
- In reality our epoch is dreadfully **lacking of the cultural and philosophical dimension**, without which any development can only remain, in perspective, tied up to the momentary taste of the fashions and the various media opinions leader.
- We need, therefore, to found an institute for a new renaissance, or for the space renaissance.
- Such institute will finally setup the studies, the education, the cultural, philosophical and scientific search which we cannot anymore keep on missing.



## TO FOUND A NEW RENAISSANCE



#### A NEW RENAISSANCE



### THE 1500' RENAISSANCE - DIFFERENCES & SIMILES

- As new-humanists and astro-humanists, we look with interest at those historical ages, before the current one, which have seen the development of humanist philosophies.
- One of the most interesting periods, from this point of view, is the Florentine Renaissance of 1500. Our age shows numerous common points with that period:

#### 1500

- the "new world" was discovered,
- the banking system saw the light
- the international trade begun.
- Philosophically, the Renaissance' season saw the development of the new-Platonism, the focusing on the man, and the aim to the universe and to the infinite.
- The enlightened patronage of the Medici family assured the material bases for the development of the Renaissance culture.

#### **NOWADAYS**

- a new world has been "discovered" (since 1969) and it is in our range: the Moon and the Geo-Lunar system,
- economy is globalized,
- a new communication tool exists: the internet.
- Astro-Humanism retakes, in some measure, the platonic values, reaffirms with strength the centralness of humans, aiming to a transcendental fusion between man and nature, and expanding the borders of the human activities at least to the solar system, in perspective to the endless universe.
- Where is the patronage?

#### A NEW RENAISSANCE

### THE NEED FOR A NEW CONCEPT OF PATRONAGE

- Unfortunately, often the owners of good ideas do not own... many money!
- It was observed that the main difference between nowadays and 1500, is that:
  - we don't have a Medici
  - the rich people of today are greedy and not interested in the progress of civilization
  - we are in presence of a real moral question

#### But:

- The number of rich people, both in absolute number and in percentage, is incomparably higher
- We have a communication mean, that can help us: the internet
- Two things we need:
  - to gain visibility, in order to get the attention of possible benefactors
  - to draw a detailed project and planning, of what we want to do

## Tecnologie FRONTIERA

#### A NEW RENAISSANCE ACADEMY

## A DRAFT PROGRAMME

- WP1 Design an excellent programme of studies, lectures and activities
- WP2 Get manifestations of interest by lecturers
- WP3 Get a certification of the cultural high level of the initiative, by a well known international authority
- WP4 Make a "trusted" fund
- **WP5** Found the academy

## TECNOLOGIE FRONTIERA

#### CONCEPTS FOR A NEW RENAISSANCE ACADEMY

## THE RENAISSANCE' CULTURAL RANGE

#### INHERITANCE

- Ancient humanist and astro-humanist seeds (Sumerians, Egyptians, Greeks, ...)
- The 1500 Renaissance
- The birth of the modern scientific philosophy
- History of science, scientific thought and scientists
- Enlightenment, technological and industrial revolutions
- Forerunners of the open world philosophy
- The XX Century ideologies (a critical review)

#### PRESENT AND FUTURE

- Contemporary humanist and astro-humanist philosophers
- The electronic society (an up to date, detailed, social analysis)
- The institutions' failures: governments and agencies made a long chain of mistakes
- The space age philosopy
- A real and concrete astronautic development

# PRESENT AND FUTURE

THE SPACE AGE CULTURE IS NOT FOR THE FUTURE

THE SPACE AGE PHILOSOPHY IS FOR TODAY

THE SPACE AGE SHALL BE TODAY, OR IT WILL NEVER BE!

## TECNOLOGIE FRONTIERA

#### CONCEPTS FOR A NEW RENAISSANCE ACADEMY

### DOES SOMETHING LIKE THAT ALREADY EXIST?

- The International Space University has only masters in scientific and management matters.
- Space Agencies don't have a structured education section.
- IAF and IAA don't have a structured education section.
- The earthly scientific universities have space related matters, but only on scientific subjects (with some exceptions, e.g. university of Firenze on space architecture).
- Space Philosophy and Astronautic Humanist Culture are not addressed at all.
- Space scientists and agencies managers are not "naturally inclined" to teach philosophy, whatever they believe or sustain!
- Lacking of an up-to-date philosophy, the agencies do not have practical strategies suitable to take the Earthly Civilization over the season of Pregnancy.



### A SOUND ASTRONAUTICAL CULTURE

- After the first travel to the Moon, Humankind wasted 40 years.
- The cost to orbit is still intolerably high (20.000,00 \$ / Kg), compared to the public investment on space agencies!
- The high frontier is not open to private enterprises.
- The above situation is the result of a shamely big lack of *humanist philosophy*.
- We shall give birth to a new philosophy, but we can't afford to spend years in this task, "waiting for better times" in practice.
- None two-times-strategy is allowed!
- Therefore we shall take to high priority the themes and activities to ignite a real Space Economy as soon as possible:
  - Civil Aviation approach to Mercatile Astronautics
  - Development of Space Tourism
  - Colonization of the Moon and the Near Earth Asteroids



## **SOME AUTHORS TO STUDY**

Alfred E. Van Vogt	"NON-A"
Alfred Korzybski	"General Semantics"
Amartya K. Sen	"Inequality Reexamined"
Charles Darwin	"On the Origin of Species by Means of Natural Selection, or the Preservation of Favoured Races in the Struggle for Life"
Charles L. Gerlach	"Profitably Exploiting Near-Earth Object Resources"
Galileo Galilei	
Giacomo Leopardi	"Operette morali", "Il Copernico", "La Ginestra", "L'infinito"
Giordano Bruno	"De l'infinito universi et mondi" (Bruno ackowledges for the first time the variety of worlds of the universe, beyond the Copernico's and Galilei's heliocentrism)
Immanuel Kant	"Critique of Pure Reason"
Isaac Asimov	"Change!"
Julian Simon	"Population, the ultimate resource"
Konstantin Tsiolkovsky	"Outside the Earth","The aims of astronautics"

Krafft A. Ehicke	"The extraterrestrial imperative: Why Mankind Must Colonize Space"
Luciano De Crescenzio	"History of the Modern Philosophy"
Mahatma Ghandi	
Maria Montessori	"Education and peace"
Muhammad Yunus	"Banker to the Poor"
O'Neill, Gerard K.	"The High Frontier: Human Colonies in Space"
Octavia E. Butler	"Parable of the Sower"
Olaf Stapledon	"The Stars Maker"
Robert A. Heinlein	"The Moon is a Harsh Mistress"
Robert M. Pirsig	"Zen and the art of maintenance of the motorbike","Lila, an inquiry into morals"
Sir Martin Rees	"Our Final Hour"
Thomas Jefferson	"The unanimous Declaration of the thirteen United States of America" (July 4th 1776)"



## **OUR CONCEPTS TO DEVELOP**

The Space Economy The Economy of Space Tourism The failure of the Space Agencies to reduce the Cost to Orbit The Civil Aviation approach to Astronautics	Patrick Q. Collins
The Space Option Inflatable Technologies for Space Applications	Marco C. Bernasconi
The Evolutionary Impulse	Steven Wolf
Astrobiology, Astronomy, Space Age Philosophy, Outreach	Michael Martin- Smith
The SEEDS concept, Space Art	Arthur Woods
Reunification of culture: scientific and humanistic, western and eastern A Minimal common Ethics for everybody	Alberto Cavallo
Spaceflight or Extinction	Michael Huang
Concepts and Studies for Lunar Settlements	H. H. Koelle

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Lunar Space Power	David Criswell
Defence from, and use of, Near Earth Asteroids	Jonathan Tate
Space Age Philosophy	Stephen Ashworth
Space Age Science and Philosophy	Giancarlo Genta
The truth on the so called Climate Changes Astronomy and Astrophisics Asteroids	Vincenzo Zappalà
Astronomy and Astrophisics	Piero Galeotti
Gaian Science, Gaian Philosophy	David Buth
Space Age Philosophy	Philip R. Harris
New-Humanism & Astro-Humanism The Human Heritage and the value of our big number Space is easier and more convenient than Earth, Space is safer than Earth	A. Autino

## A DRAFT ARCHITECTURE

**SPACE RENAISSANCE ACADEMY** 

POST DEGREE MASTERS, Ph.D's

#### **HISTORY of**

Science, Astronautics, Technology, Economy, Earthly Philosophic Thoughts

#### **EXO ARTS**

Theatre, Music, Painting, Computer Art, Literature

#### **SPACE ECONOMY**

Space Tourism, Space Commerce, Mercantile Astronautics, Space Marketing, Business and Legal Issues, Aviation & Astronautics

#### **COMPARATIVE STUDIES**

Aero and Space Engineering, Human expansion, Earthly and Space Frontiers

#### **EXO SCIENCES & TECHNIQUES**

Exo-Biology, Exo-Engineering, Exo-Agricolture, Life-Protection, Astronautic Technologies, NEA Mining, SPS, LPS, Moon Industrialization, Exo-Psichology

#### **SPACE AGE PHILOSOPHY**

Exo-Sociology, Exo-Metaphyisics, Exo-Ethics, Cosmic Ecology, Human Safety, Human Evolution, New-Humanism, Open World

#### **QUALITY & MATURITY**

Project Management, Standards Razionalization, Process Maturity

#### **BASIC SCIENCE & ENGINEERING**

Living in zero-G and Vacuum, Basic Astronomy, Orbital Mechanics



ENTERPRISES, COMMERCE, TOURISM

ARTISTS,
CULTURAL ENTITIES,
MEDIA, ENTERTAINMENT

SPACE AGENCIES, IAA, IAF







### **END OF PRESENTATION**

# Thanks for your courtesy...

...Aim high!

