

“Mars and an Open Future”

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Dr Michael Martin-Smith, MRCP, BSc,
FBIS, of Hull, UK

INTRODUCTION

- Open vs Closed Future - Closed has a Price!
- “Saving the Planet” –is Humanity the Problem?
- Humane Civilisation is at risk from three crises, and anti-human proposals to cope
- Human Mind is a new stage, rare, and worthy of development!

The Planet in Danger??

- Earth , in 4.57 billion years, has suffered much
- 4.52 billion years BCE, Moon formed by Mega Collision
- 3.9 Billion years ago, Late Bombardment of Moon , Earth, Mercury
- 4.2-3.8 billion years- Life began several times
- 2.3 Billion years BCE- oxygen- the greatest pollution event ever!

More Earthly Ruin?

- 635 My ago- Snowball Earth
- 440 My ago, Ordovician Mass extinction (Gamma Ray Burst?)
- 251 MY ago- Permian mass extinction- Volcanic Traps +/- cosmic impact?
- 65 My ago K-T mass extinction- cosmic impact
- 55 My ago Palaeocene/Eocene Thermal Max-methane/greenhouse
- 12,900 years ago- Younger Dryas event-?comet

The Real Threat

- Earth and Life are not at risk
- But Human(e) civilisation is, beyond doubt, in danger from such extinction events .
- 1994 Comet Shoemaker-Levy9 killed the idea of Earthbound “sustainable” human civilisation beyond argument.
- But some do not want Civilisation to survive and would welcome its demise

Three Crises for our Times

- Economic – Depression threatens our ability to face the other Two, and risks tyranny and war
- Neo-Malthusian- population 9-10 billions by 2050. Energy/Resource shortages risks as above
- Ecological Climate Change and proposed measures- risk economic collapse /loss of freedoms , or even an Ice Age .

Principles for Action

- Planets are common (330 and counting), and Robust
- Life is probably widespread
- Mind and Human(e) civilisation is fragile and possibly even unique at this stage of cosmic evolution
- Its preservation and further development is an absolute duty for us.
- Environmentalism must serve this goal, not the converse

Human(e) Civilisation

1. c. 30 civilisations are known to us
- 2 These were mostly built on slavery, superstition or absolutist dogma
- 3 The Scientific revolution has enabled a worldwide civilisation in which more (1.5 billion) have greater freedoms and opportunity than any precursor.
- 4 Science offers the first self-correcting system of thought in human history
- 5 “Provisional Truth” is a truly radical concept
- 6 The Telescope is more revolutionary than the Kalashnikov!

The Grand Inquisitor

- Dostoyevsky's warning; freedom for bread / security; the Inquisitor/despot's bargain
- Fear, Guilt, and insecurity invite totalitarian answers
- Recent calls for totalitarian/Police State measures "To Save the Planet". Green = Red?

Possible Danger and Historic Certainty

- Costs and effects of climate change are uncertain
- 2008, UN estimated 300,000 deaths per year
- Totalitarian States have a proven track record, viz.
- Mendacity, Fraud, Thought control, Corrupt elites, legalised Theft, Mass Murder, and in the extreme, global war
- 200 millions killed in the 20th century

Can it Happen?

- Given a malignant Ideology + extreme socio/economic stress, yes.
- Seven NSDAPs took Germany in 14 years . A few Russian socialists grew to 20,000 zealots who enslaved a great Empire
- The above two fought for Race and Class
- Some Religious and Environmentalist Extremists oppose, respectively, human(e) civilisation and Humankind itself.

What is to be Done?

- Mind and Human(e) Civilisation should be defended and promoted as procreative steps in cosmic evolution
- Anti-human misanthropy is to be seen as opposed to Gaia and Nature
- The prospect of a neo-Malthusian future, +/- climate change, and totalitarian regimes will only be accepted if no alternative is offered.

What can Space contribute 1?

- Solar energy – 1 part in 2 billion reaches Earth
- 160+moons, thousands of asteroids/KBOs
- Billions of Comets and this is just OUR solar system...
- We are going to the Moon , by 2020-5. SPS could follow “naturally” from this
- Energy underpins all civilisation

What can Space Contribute 2?

- Aten Class asteroid (Amun!!) is near, and carries 30 times the Iron mined in all human history. It is not alone...
- New frontiers, and opportunities for the children of a technological civilisation
- Above all, hope; totalitarianism thrives on fear, guilt and a sense of a hopeless future.
- An antidote to anti-humanism – Space's greatest contribution of all?

How can Space offer all this?

- Present launch costs do not help!
- Private enterprises- Space X, Bigelow Aerospace, Reaction Engines Skylon- all point to lower costs and commercial operations.
- Within 10-15 years , Space Elevator may not be funny anymore...

Mars as a New Frontier

- Mars offers a “new Earth” in land area
- Mars offers 0.38 g, and V_e of c 18,000 kph
- Mars offers astrobiological, geological research
- Mars is rich in water, minerals, CO₂ and nitrogen
- ISRU and local industry available
- Mars is a good “home planet” for Cosmic Diaspora
- Only a dispersed human(e) civilisation can survive, grow and evolve to true potential

Conclusion

- Current woes and future crises threaten a closed future of dictatorships and collapse
- Human(e) civilisation is in danger
- A New, open, Frontier is needed for our youth
- Mars is a good place to Start

A New World



A Water rich past

