

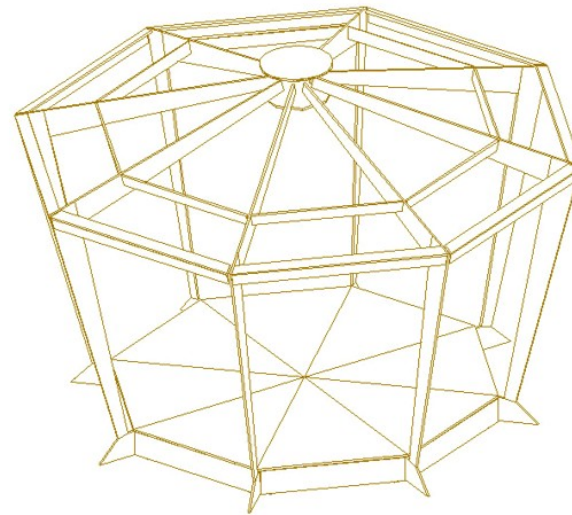
Financing Mars 2020 vs. Moon 1969: Policy, Science, Culture

About an Earth Project

EMC9 – European Mars Society Conference
Bergamo, IT – 17. Oct. 2009

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<http://mars-rocks.de>



Financing Mars 2020 ...

- **Challenges**
 - **Technical -**
 - Established techniques in most fields
 - **Organisational ~**
 - International cooperation
(ISS, ITER ...)
 - Competition?
(Xprize, OpenMoon ..)
 - **Long-term financing +**
 - Several government periods
 - How to maintain funding?

.. vs. Moon 1969

- **Factors in favor of long-term political support**
 - **Cold war competition**
 - **Sputnik shock**
 - **Juri Gararin**
 - **Leading-edge technology development**
 - **A popular leader's promise**
 - **.. and JFKs dramatic death**
- **Are these factors applicable for Mars 202x?**

Gaining support for Mars 202x through public culture

- **Public Culture challenge**
 - The sum of perceptions, beliefs and communications in a society
 - Gain public trust for a huge project that has no direct benefit
 - Accompanying process to scientific and political promotion
- **Strategies**
 - Break down bigger visions to publicly accessible events and experiences
 - **Marketing: sensing and forming of trends**
 - connecting industry and public communication
 - **Art: invention, illustration, inductive strategy**
 - small scale projects – fast to realize
 - social experiments

Marketing: 'Mars Show'

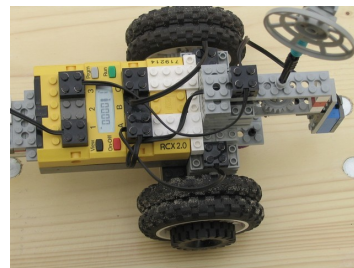
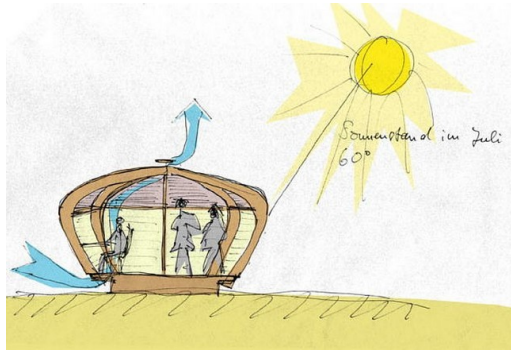
- **Proposal to finance a Mars mission with advertising income**
- **Compared with**
 - Olympic games
 - F1 racing
- **'Mars Show' paper,
Giorgio Gaviraghi, Milano 2003**

Art: 'Mars rocks' Berlin 2004

- **Background:** MS Germany discussions on PR strategy
- **Project properties:** small scale, low budget, independent
- **Location:** Berlin center, near former border ('Oststrand')
- *Earth project*
- **Elements:**
 - **Fine arts:** Sculpture - life on the beach, Rocksette - higher than wall
 - **Music:** electronic music, Berlin community (software, artists, events)
 - **Performances** (origami ship)
 - **Simulation of life and work under reduced space and comfort**
 - **robotic contest - edutainment** (first prize: flying vehicle)
 - **Internet connection, WLAN mesh**
 - **Internet live forum about technology outlook** (H. Griebel MS)
 - **Habitat at the center**

Habitat *Mars rocks* 2004

- **Cultural habitat – not pressurized**
- **Gesture: Just arrived - how to survive in a no mans land?**
- **Design goals:**
 - **Futuristic design**
 - **More stable (habitat-like) than a tent**
 - **Readily available materials, low cost**
 - **dis-/assembly in one afternoon with 2**
 - **Transportable with a van**
- **Architecture AutoCAD construction, details constructed onsite**
- **Weather save, multi-purpose**



Mars rocks 2008

- **Next phase:
Entering the habitat of an existing community**
 - **Inhabitants overcame the obstacles already**
 - More space, more safety
 - Infrastructure can be used
 - **BUT: New visitors have to 'fit in'**
 - Conflicts arise when first generation realizes changes of the social situation
 - Difference between official support and real commitment



Lessons learned

- Active cooperation with authorities to overcome bureaucratic obstacles
- Cooperation with local leisure businesses
- Business model - Acceptance to work without budget
- Mars is inspiring to artists
 - Mars is open space, belongs to no one, has a future
 - Artists networking and mutual inspiration with science/business

ESA experience

- **Background: Trying to connect to similar projects around Europe**
- **ILA 2008: Visiting the ESA exhibition booth**
- **ESA-appearance is (also) public-oriented**
- **"We are your competitor, we're also fighting for budgets"**
- **Analysis:**
 - **ESA has a social function as selecting personal for leading-edge projects**
 - **.. and moderating the careers of scientists as well as executives**
 - **Still they seek to monopolize the public perception of space projects**
 - **The taxpayer could criticize this attitude, but ...**
 - **=> Forget ESA**
it's not our problem, let's build our own network

Culture / Science relation

- **Science**
 - Clear set of rules
 - Grown structures / community
Universities, nations, ...
 - Quest for funding
- **Culture / Marketing**
 - Evolutionary processes
 - Interested in trends based on emotions/beliefs
 - mix of open communications and closed-circle strategies
- => **Cooperation based on mutual understanding and respect**

Conclusions

- **Mars mission needs broad support**
 - Beyond scientific community
- **Mars works as a cristallisation core**
 - For technology, interdisciplinarity cooperation, social development
- **Connected works**
 - Futurism II – 100 anniversary of Marinetti's manifesto – in Milano
enduringfuturism.org
Reggio Emilia Dec 12, 2009
 - mars-rocks.de/SCN
Space culture network initiative

Epilog – a lightweight project

- A little illustration of the concept of *lightweight projects*:

Alien Technology UFO

- Technologies – in a toy - made available within the last 5 years:
 - SMD μ -Controller
 - Gyroscopic piezo sensors (3 axis) for stabilization
 - Lithium-Polymer battery

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