

Archipel

Prospective of space exploration ...

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NEXT STEPS ...

A preliminary question remains however : how to justify space exploration ? Is the adventure too expensive, too dangerous, too elitist ? Are there more crucial questions to solve on Earth before ? Is it the Man destiny to stay on his mother planet, space remaining a forbidden "territory" ? ... many of these objections illustrating the "Prometheus complex " described by Gaston Bachelard, or neglecting objective and immediate realities.



Shuttle 2 - Image O.Boisard

The first interest of this debate is to question society : if dream in itself is not seen a sufficient argument to motivate space exploration, the same question may logically be asked to many sectors of economic activities, such as media, entertainment, or tourism, generating each year billions dollars of sales, and creating millions of jobs, with very similar motivations.

The debate is however not facilitated, where remain imprecise, unrealistic, or false ideas. **It would not be reasonable, for instance, to see space colonization as a solution to problems of overpopulation on Earth.** For a long time, the "extraterrestrial" fraction of humanity will stay modest. The prospectivist Thierry Gaudin estimates that the population of the Earth "should stabilize towards 2120 around 13 billions inhabitants", and notes : "the agronomists say that the Earth could feed 30 to 40 billions inhabitants and not 13, but certainly not 30 to 40 billions illiterates, nor even 13 billions illiterates". The question is of another nature, another urgency, another scale.

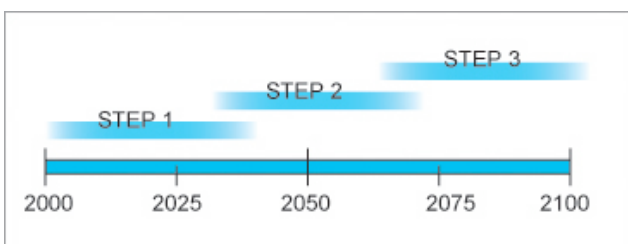
It may be deplored, but scientific research is not the first motivation for space conquest. It was just a consequence during programs like Apollo - born from the cold war – with generally modest budgets compared to strategic, military, or commercial applications.

Conversely, it would not be fair to quantify the cost of space industry without integrating its considerable repercussions in terms of Research and Development. Great civil or military programs, related to space, structure whole sectors of economy beyond the only field of space industry. They produced major technological developments, such as hydrogen fuel cells, GPS positioning systems, observation and communication satellites, nano-technologies... or microwave ovens.

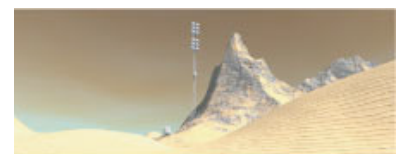
Space exploration offers a new viewpoint to watch the Earth, and the reality of its environment in the solar system. Which are the next steps of this adventure? The game of prospective is fragile, but based on scientific facts, logical deductions, and plausible assumptions.

The story proposed proceeds in three "steps", each one of 30 to 40 years - maybe a little more, maybe a little less. Main tendencies determine them : "Exploration and profitability", "Permanence and settlement", "Autonomy and expansion". Three steps for an adventure to be invented...

CHRONOLOGY :



STEP 1 :
Exploration and Profitability...



STEP 2 :
Permanence and Settlement ...



STEP 3 :
Autonomie and Expansion ...

