



PROSPECTIVE ...

*The sky is an ocean.
The Earth is an island.
And the solar system,
an archipelago...*



Earth ...

The Greek etymology of the word "cosmos" returns to the concept of order, and space is often assimilated to the void. But is this ocean as uniform and immutable as it seems to be ? Astronomical numbers are necessary to describe it, which does not mean that they exceed the human experience, but that they occupy all the possible scales, from the very large to the very small, including familiar ones : the galaxies gather billions of stars, in a space measuring thousands of light-years, but to understand some phenomena, it is necessary to consider sub-atomic particles of a lifespan not exceeding infinitesimal split seconds. In the same time, explosions of supernovae may occur in only a few days, and elsewhere, on other planets, storms, tides, and seasons, proceed like in Earth.

There are thus, in space, other spaces, and beyond the Earth other territories. For mankind, nomad during a million years of evolution, it was logical to take a very particular glance on these "new" spaces. A place for new conquests ?

Literature, before science, was interested by this question. During the twentieth century, thanks to the development of technology, it became reasonable to speculate on what would be this adventure. *The question then, was: which would be the motivations of space exploration, the benefits, the technologies, the machines? The architectures ?*



Andromeda

To draw the future, different methods can be used. The simplest one consists in continuing and extrapolating the tendencies observed in the past : the man walked on the Moon in 1969, he will be back probably one day, then pursue his journey to Mars, and beyond. The colonization of space is inevitable, like the conquest of America a few centuries earlier, the day Christophe Colomb accosted on the new continent for the first time.

But is History always continuous? And how anticipate the different "steps" of this adventure ? **All the difficulty, to build scenarios of futurology, consists in identifying the "invariants" of history, and the questions today "indecidables".**

The invariants correspond to "heavy" tendencies : if space responds to objective political or economic interests, the space conquest is inevitable ...In the same time, facts currently "indecidables" will direct the future towards a trajectory or another, at singular bifurcations of history : the scenarios of the future will be different if ice fields, for instance, are discovered on the Moon; if forms of primitive life are discovered in the depths of Mars; or if the climatic drifts observed today on Earth are finally controlled - or at least anticipated.

The novelist and scientist Arthur C. Clarke, scenario writer of 2001 a Space Odyssey, stressed that futurology often tends to overestimate the possibilities of the short term, but to underestimate those of the long term. It is true if we look back on the speculations of the seventies, when the colonization of the Moon was very seriously imagined before the end of the century. This rule has also exceptions : a veteran astronaut tells that, dreaming of spaceflights when he was a teenager, he only feared to be too old the day the adventure would become accessible. Hardly a few years later, he had been almost too young to join the team of the first seven astronauts of the Mercury program...

One is reminded that futurology is actually dealing more with the present than with the futur. The best moment anyway to train imagination ...

CARTOGRAPHY ...



SPACESHIPS ...



NEXT STEPS ...

